



**THINK NAMIBIA**  
Sustainable Forest  
Management

*Sitambo sosimbapira esi kwa gava mafwatururo kuhamena unandima woyimenwa moNamibia ntani mauwa gomuzangu gorunone rowiza.*

## YINKE YINA KUTANTA UNANDIMA WONSITWE NOYIMENWA?

Unandima wonsitwe noyimenwa kutanta asi ngendeseso zetakameso, nokupaka po ekaro kumwe ntani ukanguki wowiza. Awo kukwafa mokugwederera muzangu goyitji ndi runone peke romowiza, ntani simpe kuvatera mokugava marunduruko monkarapamwe, nomparukiso zoyinamwenyo mowiza mokukuna yitji ndi yimenwa yowiza. Unandima ou kuurugana nonkedi zokutapeka yitji ndi yimeno nositambo sounagesefa ndi mokutura wiza wankenye gumwe (mpongasani). Kwa yi tulisa po pankediyereko zonderu, nye kapi zetamunono momunene ngwendi egunda silli. Nampili ngoso kuyitura namunye muvali pansitwe ndi payimenwa. Mokukwama nawa-nawa muteku gounandima ou kwa kwataka etapeko yitji yoyipe, kuyipakerasinka mokulinapa yi gwane mema nompepo, kuhoramo yitji, ntani muteku gokuwapeka evhu.

*Sitafurafaneko 1: Mauwa ga kara mounandima ou*

Nkarapamwe	Yikw'eparu	Pansitwe
Kuwapeka mokugwederera muzangu gomonkarapamwe gu kare gomunzi ntani gomauwa.	Kuvapa nompito doyiwezamo kupitira moyirandesa yitji, yitare nonomuzangu dimwe ngoso. Mauwa goyikw'eparu kapi taga moneka pausimbu, nye mwaza siruwo mauwa taga moneka.	Kwa kara nomulyo gokuwapeka utungi nomparukiso zoyimeno, ntani yipo yimeno yilivhukise momavango gena ya dira kukara.
Kuretesa po nompito nokukorangeda vanamukunda mokuvanongwenesa umwenya wegunda lyawo norunone.		

## ESANSEKO LYOUNANDIMA OU MONAMIBIA

Unandima ou kwa vareka momvhura 1894, moruveze rwEpangero lyoVandovesi (German), nomavangokungiro gowiza murongo (10) mosirongo mudima momvhura 1910. Elihameseremo lyelikwamo eli kwa kere nositambo sokukwafa mavango gena ga kere noyitji yomuzangu goyipirangi.

Monomumvho douhura do- 1990 ntani ketameko lyomvhura 2000 yipo lyavarekere elikwamo eli lyaNamibia Finland lyekungowiza wompongasano mekwateso lyEpangero lyaFinland va vareke kuwapeka malikwamo gokurugana yitapekwa yoyitji ntani egendeso monaruwa marunone gowiza. Elikwamo lyangesi lyaretere egano lyokudika mautara gokukara yitji ponomberewa dekungowiza

## SIMBAPIRA SOUSILI KUHAMENA KO:

# Unandima woNsitwe ntani Yimenwa yoWiza

nomononkarapamwe. Yangesi, udigu wakere po wou asi erwameno kwa litulire moyitji yenyango yelike ngwendi sitji soSiguava, sitji soSimango, ntani sitji sEguni (lemon).

## UDIVI WOUNANDIMA OU MONOMUKUNDA

Elikwamo nosirugana sounandima ou kapi va u diva nawa-nawa vantu womonomukunda, morwa va ruganesa nokuzonagura rurone rowiza mononyuku dina ka pita mokaruwo tupu kokasupi. Udivi wounandima ou kapi va kara nawo vanamukunda. Yangesi, vanamukunda nawo kuvhura kugwana udivi wangesi kupitira mokuhanesera nombudi:

- **Eruganeso runone rowiza:** Vanamukunda kuvhura kugava mauzera goyiruganeso yokulisiga-siga gomarunone muna kwatere nomutji, nondya, ntani kudingisa ko. Mauzera aga mulyo unene mokurugana efaneko lyounandima ou mokutokora asi rudi musinke royimeno no demenena pokukuna/ kutapeka.
- **Ehaneso lyomarudi goyimenwa:** Vakurona womonomukunda kuvhura kugava mauzera kuhamena nomvhura, ntani ukaro wekuro lyoyimenwa mevhu lyevango/ mukunda. Mauzera aga mulyo unene morwa taga ku pe etokoro lyouhunga yipo o dive asi unandima ou yimenwa musinke no kuna mevango kusikura ukarompepo wevango neyi naye vhura kupumbwa. Sihonena, egungu yiso simwe va hara vantu mokukara nondya dopambo ntani kugwanena mo yiwizamo mokurandesa, ngamoomu egungu lyomupapama kapi ali paruka koyihako yomupapama kwelike, nye nokoyihako yimwe yokulikarera yoyitji peke, ngoso yimo nye va yi diva vanamukunda.

## NKARERO ZOUNANDIMA OU MONAMIBIA

Namibia, posiruwo esi kapi a kara nerwameno lyokurugana unandima ou, morwa vasesu vana kara noudivi wokugendesa sirugana esi momawiza gonkarapamwe, kwato yitji yokuzangura yipirangi va kuna. Yalikida nare asi rudi royitji yokuzangura yipirangi kuna kusesupa monsitwe, sinene po koruha roMuzogopumezuva gosirongo.

## Nompito dina ka kara po pwangesi

Matara-tara ndi mavango gokukunina gomonomukunda nonomberewa va hetekera ko mokukuna yimwe yomarudi, rambangako yimenwa yomarudi goyitji yoyipirangi, nye kwato yatomboka morwa yimenwa eyi ayo kukura kuliwora, eyi ya ninkisa vantu va kune nokutapeka yimenwa yenyango, noyitji yomundwire. Mokuhanesera mo vakonentu novakonakoni tayi vatere mokunongona mparukiso zoyitji mevango poruveze rorukukutu.



Efano 1: Evangotapekero yitji moKatima Mulilo

## Nompito domakonakono doUnandima ou moNamibia

Kukwama makonakono gonongedeseso dowiza, kwa tanta asi sitambo sene-sene soUnandima ou moNamibia sesi asi, "Va rugane makonakono mokuretesa po yiruganeso/ yimenwa yokuvhura kuparuka mevhu lyorukukutu moNamibia". Kuyitura mosirugana kuyirugana moyihorokwa yokulisiga-siga.



Ruhafano 1: Nontamboviyauko dokuvhura kukwama pokurugana makonakonofaneko gowiza (MAWF, 2011)

Siruwo segendesofaneko rwa pita nye vana kutura yiviyauka yongandi moyirugana. Nombudi nomauzera gangesi kuvhura kugapungura mokugaruganesa komeho moproyeka zounandima womarudi gomonkarapamwe aga naga liza noukarompepo wemevango lina.

## MULYO GEPAKEROMBILI UNANDIMA OU MONAMIBIA

Nonkedi dokulisiga-siga mepakerombili unandima ou, sinzi sayo nayinye kuyiretesa po kukwama maudigu gomaukarompepo gomosirongo saNamibia ntani unzi woyikara mo. Yipo nye asi mulyo unene mokunongonona muteku nepakerombili noureru kukwama

siviha soyimenwa monsitwe. Yipo nye asi sirugana sangesi kukwafa vanamukunda wokulikarera va guse ko sihonena rambangako nomavango gekungowiza pwavene va kare nosinka sokunomena egendeso lyowiza momuwa. mokufanayika unandima wangesi, mbinga zimwe zokukoneka zezi asi erwameno unandima woyimenwa ndi erwameno mwa za egunda mokureta marunduruko ekuro lyoyitji. Mulyo unene mokukoneka asi pokutura efaneka lyounandima ou, pwa hepa kukara mafwatururo gana gwanene yipo asi egwano mauzera liyukilire mefaneko.



Ruhafano 2: Etarururo lyomauzera gana pumbwa momafaneko gounandima monkareso zongwa

## Epakerombili lyevhu kuruganesa mundiro

Eyi kupakesa evhu liliwapukurure mowiza ndi mokulipirura. Ekandano lyomundiro ogu kwa lididilika mokulirugana poruveze routenda komakwedi gokufu (Kudumonkuru-Pembankuru) kuninkira asi pomakwedi gopyu mundiro kukara gomunene ntani upyu unene ogu agu zonagura nsitwe noyimenwa. Rudi royitji ngwendi Mauguva (*Pterocarpus angolensis*) monsitwe kwa pumbwa mundiro yipo si hoke. Nampili ngoso kwa yi dimburura asi ayo kuhoroka unene poruveze nsene guna pi mundiro agu ninkisa rudi rositji esi yi livhare noku livhukisa. Mundiro gokupya nkenye ruveze mudona, morwa kuzonagura mbuto zoyitji ntani kuzonagura mboresa zevhu.



Efano 2: Emoneko lyowiza konyima zokupya mundiro (Mufaneki: V. De Cauwer)

Ediwo lyomodeura, vana mukunda kuvhura kurugana sirugana sokulifana ntani sokuwika mounandima ngwendi omu ayihoroka mo Kavango ntani Zambezi. Ekeverero nefirosinka lya hepa kukara po mokukandana elihano lyomundiro komavango ogo gana dili kuhama.

## Ewapukururo lyetapeko

Sinka esi kwa hamena kokukuna mbuto mevangotapekero kumwe noku yi tapurura va ka yi tapeke kevango yina fire. Eyi kuvhura kuyirugana pankedi zimwe zokuvhura kuvhukisa yimeno momuwa ndi mokuzerura mulyo gomarudi goyimeno yokukura kuliwora. Eyi kuvhura yi kare nye mokuhorowora kukwama yitji yoyipirangi ngwendi: Manguva (*Pterocarpus angolensis*), Mauhahe (*Baikiaea plurijuga*), Mausivi (*Guibourtia coleosperma*), Mutundungu (*Burkea africana*), nomarudi goyikwawo yimwe ngoso moyikwaeparu lyonkarapamwe kumwe nomparukiso zonsitwe.

Marudi goyimeno ava ruganesa mewapukururo kukuna ya hepa kugava mukaro goupungwiso ou nava kwama:

- Yipirangi yoyiwa ndi enyango lyewa lyetovara
- Kukura kugenderera
- Sitji sokuyima mbya nenyango nkeny'apa
- Ure wokusika kupi asi paruka monsitwe.
- Si kare sokuparuka moukara wompepo
- Kapi tasi likana koyimbumburu
- Sinene po yitji yompo, morwa kwato evango nomema aga ngasi vhura kugwana, ngwendi mema gosikama (ndombe).

## Eyukilirokuno lyombuto

Kurugana mokukuna ndi kumwaga mbuto mevango eli vana hara kukuna rudi royimeno yoyitji. Ngendeseso zangesi za hepa kurerupa mokuzirugana momavango gokonomukunda kwa kara mavango goudigu wokumena yimeno. Sihorokwa sangesi sa hepa etuliso po kuhwika evango nomundiro konyima zosinema somufu/ utenda, kuvatera mokugwana mpito zokukuna yimeno.

Efrosinka lya hepa kukara po mokunomena asi mbuto kuna kuzitakamesa monaruwa mevango olyo vazi kuna. Yitji yonomutayi omega kwa hwa kumena nokukara mevhu lyonkarapamwe.

## Ezereso lyegunda

Ezereso yimenwa muna kwatere masigo gepakerombili lyowiza, kupena, kupaka ruhoho, ntani kupondagura, kuyirugana mokusikisa mo ukanguki wowiza ntani mokugwederera sivaro nomuzangu goyitji yoyipirangi. Sitambo sokupena sokuvatera asi yitji yi kure nawa nomarutu gomawa mokuzangura. Magunda gomoNamibia kapi mpatu kapi taga pumbwa kugapena nkenye apa.

Ezereso lyoyitji kulirugana mokupondagura. Eyi kuyirugana mokupondagura nomutayi yipo asi yitji yi gwane mpepo yi kure kuyukilira marutu gayo. Yitji eyi ava vhuru kupondagura yeeyi yomarudi goyipirangi, kuhamena yoyinunu (Diamita zoure worutu kungungunikira po 20 cm), yi kare norutu rokuyukilira rorukanguki. Mokugweda ko pokupondagura yitji mosinema sorukukutu kapi

kuruganesa nzimbu ndi ekuva, morwa kuvhura kuzonagura sitji. Sirugana sangesi kusirugana moyikando yokuliruguruka monsitwe ntani moyimenwa yowiza.

## MAUDIGU POKUVAREKA KUTULISA PO UNANDIMA OU MONAMIBIA

	<u>Nkarapamwe ntani</u> <u>Mavangodewiro</u>	<u>Mavangonsitwe</u>
<b>MAUDIGU GA KARA PO</b>	<ul style="list-style-type: none"> <li>• Po li li eyereko mosirongo kuhamena sirugana sounandima ou moyirugana.</li> <li>• Mokugweda ko, mavango gokuruganena makonakono gounandima masesu mosirongo.</li> </ul>	<ul style="list-style-type: none"> <li>• Yikorama yomonsitwe nayo kutanganesa sirugana sounandima ou morwa yimenwa kukura mevango lya hana epopero.</li> <li>• Usesu womboresa mevhu ntani usesu womema pevango (Evhu), sinene po momavango gowiza gokoMuzogopumezuva simwe soudigu naso.</li> </ul>
<b>NGENDESESO ZOKU GA KANDANA PO</b>	<ul style="list-style-type: none"> <li>• Eyi kuvhura kuyitjindja/ kuyirundurura mokugava madeuro kuhamena unandima ou kovarugani novanamukunda.</li> <li>• Kudika tumberewagona tomakonakono ponomberewa domakungirowiza (Directorate of Forestry) noyitumbukira mokukonakona yirugana younandima ou ntani nokuyitura moyirugana.</li> </ul>	<ul style="list-style-type: none"> <li>• Kutulisa po nonkedi dekandano mundiro mokusesupika ezonauko lyowiza ntani mbuto zoyitji.</li> <li>• Kukorangeda mokuvarekesa po etapeko ndi kukuna yimeno si kare sosinunu ndi sosinene, kuninkira kurerupa mokugendesa nokunomena yimeno.</li> </ul>

## EHAGESO

Unandima ou wa kara nomauwa nakauke mokugava marunduruko momuzangu goyimenwa ntani egendesoyukiliro lyowiza, sinene po monomukunda donkarapamwe. Nampili ngomu asi elikwamo lye pe moNamibia, vantu kuvhura kuvadeura kuhamena mauwa gounandima ou mononkarapamwe dawo ntani pontambosirongo. Mulyo unene asi mberewa zekungowiza (Directorate of Forestry), kumwe tupu nomberewa zokurugana makonakono, ntani nomaruha gekwatesoko mokugusa sirugana sokuhanesa mapukururo nokuronga kuhamena unandima ou. Elikwatakano eli lya hepa kukara noupungwiso lyoruveze norunone momakonakono gounandima ou moNamibia. Mafwatururo ga hepa kuzuvhika nevhuliko nokugava nokonda edi nadi kwafa mokurugana matokoro mokutulisa po sirugana sounandima ou.

## MAFWATURURONKANGO

### Kuyukilisa kukuna [Direct seeding]:

Kukuna kuyukilisa mbuto mepya ndi mevango.

### Ewapukururo yimeno [Enrichment planting]:

Kutapeka/ kukuna marudi goyitji yina vana horowora mevango vana rongikida yi livhukise.

### Ewapukururo lyetapeko [Stand tending]:

Kurugana mokuwapeka emoneko lyoyimeno nekaro lyowiza monsitwe.

### Etekuro yitji [Tree breeding]:

Kuwapeka nkarero zoyimenwa yipo yi gave runone romulyo oru vana hara vantu.

### Unzi womema [Water retention capacity]:

Likare evhu lina lyokukwata mema sivhulise gokonhi zevhu.

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