

AGROFORESTRY

Nkoitei E Nkiritata e nkop- Nkutoduaroto ana neikoni teneitubuluni Ikeek to Ichampai



Food and Agriculture
Organization of the
United Nations



global
environment
facility
INVESTING IN OUR PLANET

LOPENY SIRAT EAST AFRICAN WILD LIFE SOCIETY, 2025

Sirat Naing'ua: Mukaido. A. Okumu, J. oo Fibanda, V. (2025} Agroforestry : Nkoitei e Nkiritata e nkop- Nkutoduaroto ana neikoni teneitubuluni Ikeek to Ichampai.

NKIBOOROT

Koree ana palai na kepirita nkutushulata e mbulunoto olkeek oo ramat ee Ikeek long, anayio. Koree kulo kigerot o sira tene keidim na meibalunye nduamunot anaa nkipirita oo nkitashoto ee FAO ana sii GEF.

AABALUNYE

Kore ana sirare na keidimaki te reteto o leng'on ee Global Environment Facility (GEF) eimu Food and Agriculture Organization e United Nations (FAO-Kenya) tekop 'Restoration of Arid and Semi-arid Lands (ASAL) e Kenya aimu bio-enterprise development o nkulikae kishoroot The Restoration Initiative.'

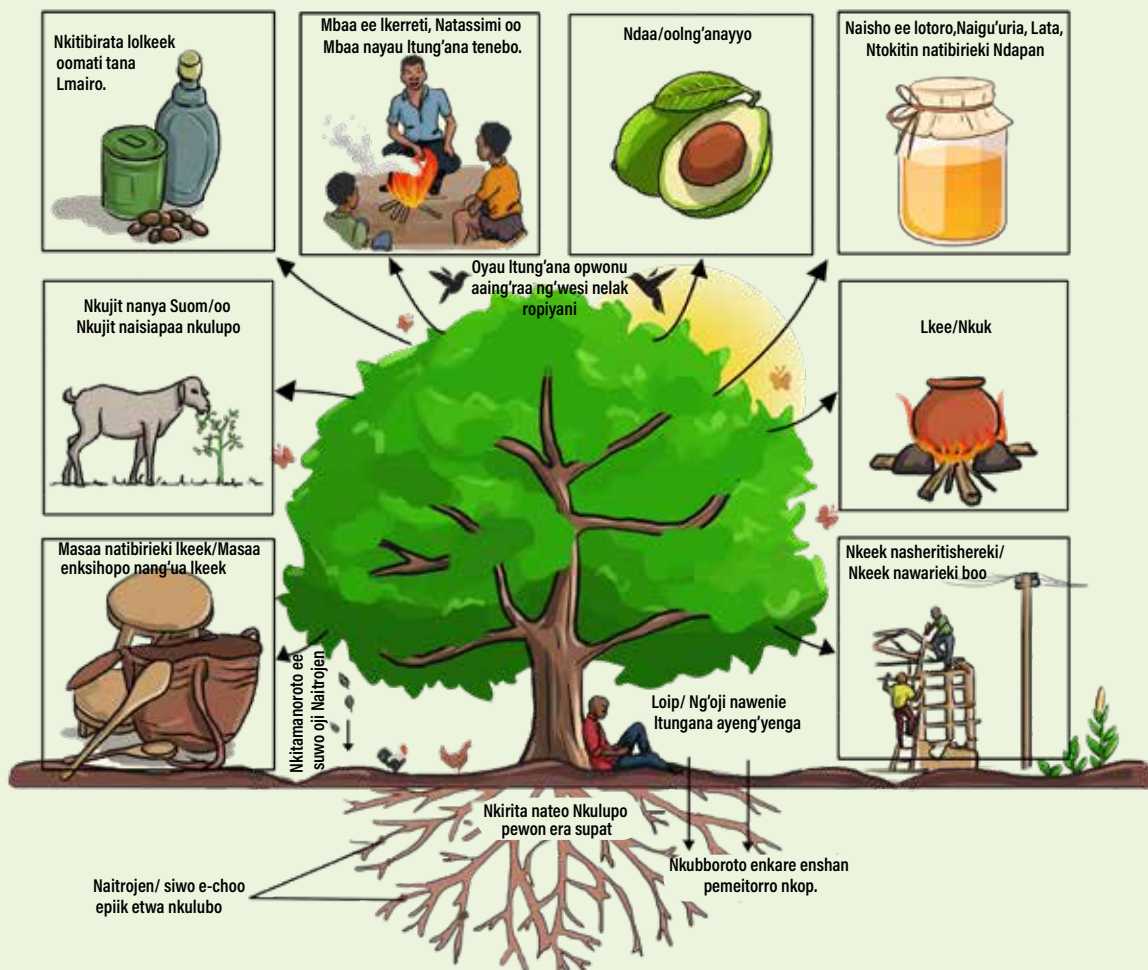
Kore EAWLS keshamaa siai o sia supat etaasa Iturrur oti, Jabes Okumu, Ann Mukaindo oo Vincent Fibanda lootisira kulo sirat. Kore EAWLS keiballie sia supat oo nkishooroto oo ntakano ee Iturrur le FAO-KE: Meshack Muga, Elijah Mboko, Pauline Akolo oo Ikitarii Joseph Othieno; eta Lkitarii Riziki Mwadalu le Kenya Forestry Research Institute (KEFRI) oo Earnest Kinyanjui le Jomo Kenyatta University ee Agrikalcha oo ramat e Teknoloji Enterprises Limited (JKUATES). Keshori Nache George Okello to mpichai oo nkasiri oo supatisho embuku.

AGROFORESTRY- NKOITEI NANG'IRI NKOP



Kore Agroforestry naa nkoitie nikintang' ana sii aitushul mbulunoto elkeek oo lkeek loolnganayio oo ramat esuom.

MPUKUNOT SUPATI EE AGROFORESTRY



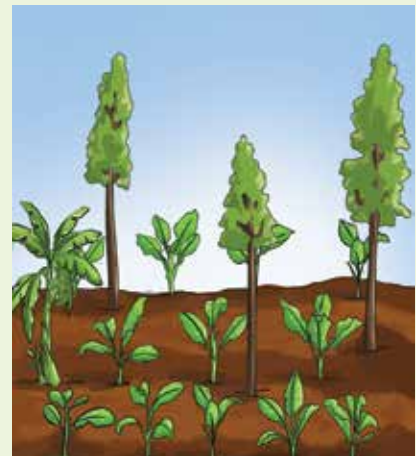
NKOITEI NAITUBULUNYEKI LKEEK



Aijipaa atwa wuata elshamba lino



Agellu ng'oji nintubulunye Taatwa Ichampa lino.

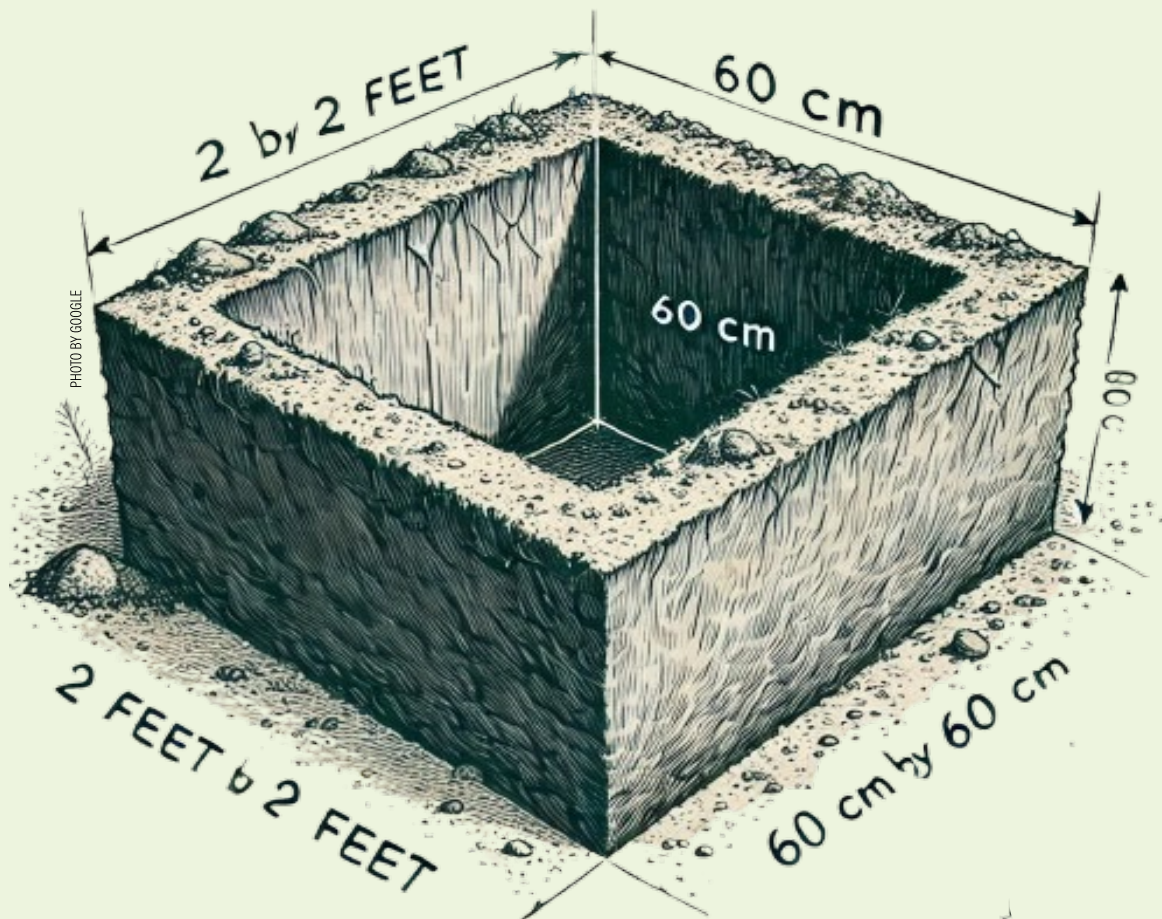


Atwa Ichampa lino, Ntalama lkeek pemeeorro oo lkeek lendaa oldama oo Nkare.

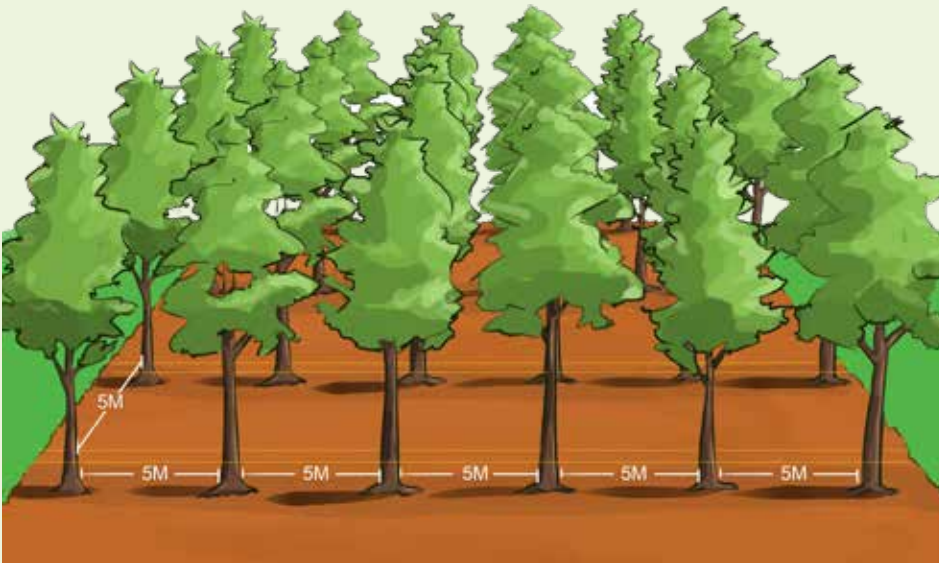
NEYEUNI TE NKITUBULUNOTO

a) Lkule keek le Agroforestry-Nkitananyukoto e gravelia oo Lmarubaini.

Noowwa lumwa niturr- 60cm ana sii mputii a-re tambat pooki oo nturoto e mputi are te guton ou lalai ina udotoa.



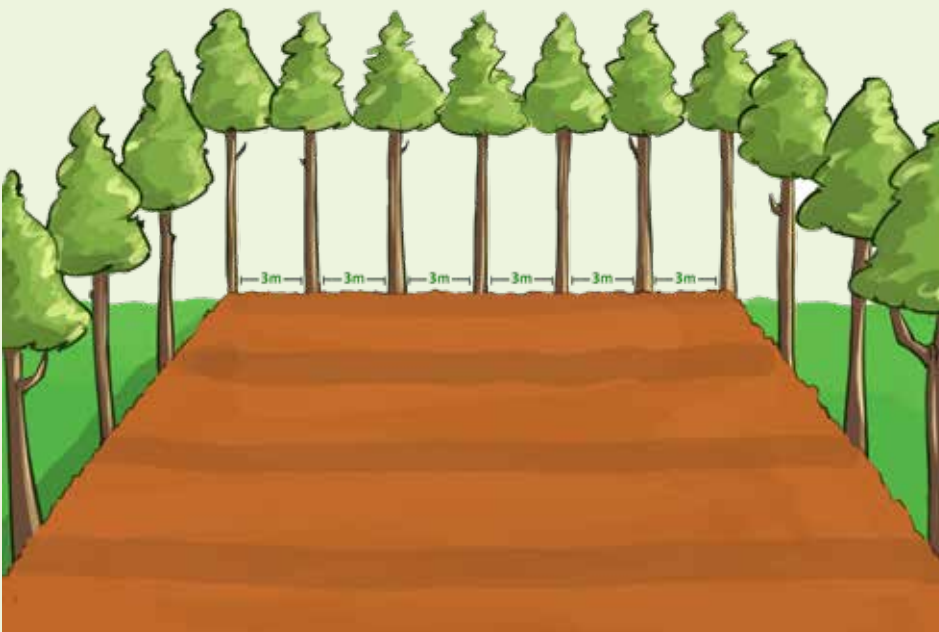
NEYEUNI TE NKITUBULUNOTO



Nkitalamata - Nabana nintalam lkeek

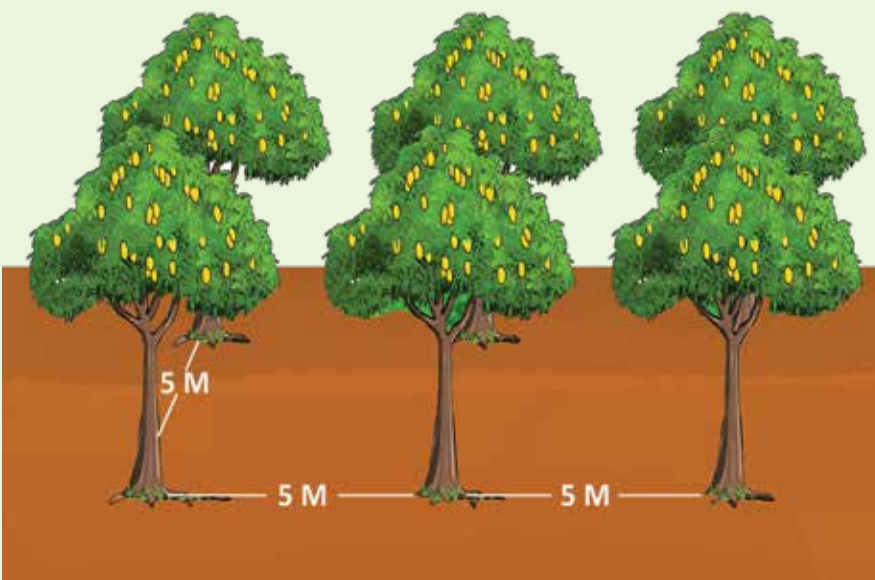
Lkeek otii atwa

Lchampa: Ntalam te Mitai 5 too lkererin oh motwa dorrop (Mitai 5 oo mitai 5).



Njiparie suntan

elchampa ana wuata: Ntalama te Mitai unii e lkererin.



b) Lkeek lolg'anayo:

Nouwa udot niturr te Lkeek lolg'anayio: Tuturo udot e mputi 2 oo 2 te lalai enturotto.

Nkitalamat: Nchoo nkitalamata ee Mitai imet tatwa lkererin oo terishat lkererin (Ning'uraa sii ajo intushul ndaki to lchampa lino te ng'amata naado, ng'urai sii ajo intalal lakwani te mitai 7 oo mbata engai 7 mitai).

NEIKUNARII NKITUBULUNOTO

1

Mbae ekwee: Nteng'la motua ee nkulupo nintubullunye lkeek, kore ng'oji nitegelua woi peera kitok airirikinere tenetubulutwa lkeek.

2

Mbae eare: Tudung'o lkeek Niworr peaku Nkiwancha.

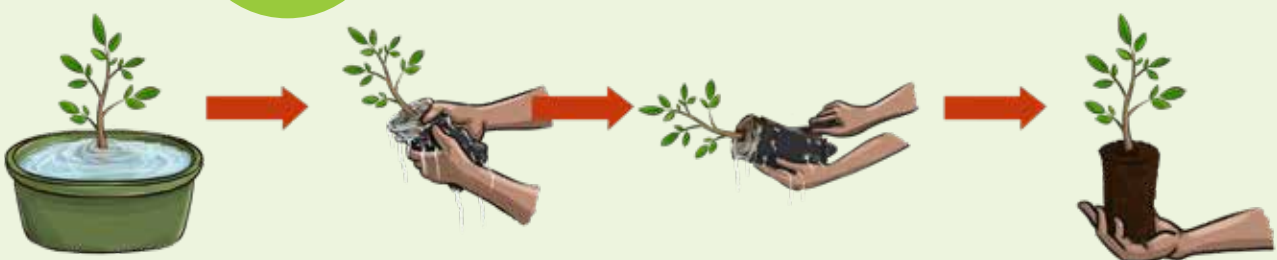
3

Mbae ee uni: Tuturo lumwa nairikinere lkeek. Tooroi nkulupo ee keper oo naatwa nkop. Ntushula nkulupo ee keper te ldepe obo le nkulupo ee abori (kilo 20) ooh Itlugumi loo suom nibukoki atwa lumwa natii Ichani.



4

Mbae eong'wan: Rebukie ntana olchani owon eitu intodoki atwa lumwa naitubulunyeeki. Nintai mpalai narrinari nimentai nkulupo pii ntodoki eeta nkulupo enyena.





ana ake metabau
keperr



5

Mbae e imet: Tipika
Ichani lintubulu nkiji
eudoto nitututro.

6

Mbae e ille: Tunakaki nkulupo ilo chani
oo metabau natii duo mpalai ninteinye.
Iritta mipik nkulupo ana metabaike
Ichani koon--- Kore tinipik nkulup
aitalang' natii mpalai enye keidom ilo
chani naeisamisu ntana.

7

Mbae e sapa: Ngerenye Ichani nkulupo
perichiu nkare abaka nkata nacha nchan.



MPIKATA EE NKARE

8



Mbae ee isiet

- Kore ake piindip atipika lchani nkop tipika nkare asioki na tipika nkare naitiemu peetum ntana aibung'ata oo nkulupo. Kore ana pikata e nkare e kwe, keata tipat amu keitei suwo taatwa nkulupo peetum ntana aibung'ata oo nkulupo. Kore tanaa nkata nemeetai nchan tipika litai tomon lenkare kore woleng' lkeek lolng'anayo.
- Kore ta ng'amata enchan tipika litai imet le nkare.
- Kore mpikata e nkare, mimpidaki nkeper olchani amu keidim aitorroi nkulupo natii tekop lchani ana sii eitorwo ntana elchani lino. Tipika nkare tokop lchani akitii.
- Kore Nkata enchan, tipika nkare kini anaa si ing'waa mipik nkare amu ketum nkare enchan. Kake kore te nkata pooki ng'urai nchalan e nkulupo te nkaik inono ingu'raa

rebuke e nkulupo abaki inch nabo. Kore tana kotoyio tipika Nkare kake Mincho eiloglogo nkare te nkulupo.

- Kore Mpikata enkare woi piipik tasiran anaa sii teipa pememat ndama nkare nitipika. Tung'ae mipik nkare nkata pooki tenetubutwa ntana pooki elchani lino ing'uraa mwaa elchani lintubulwa netiu nkulupo nintubulunye and si netiu siwo le nkop.
- Ng'urai ninko tinintaa nkare kiti nimentasheyie nabo kata ina pikata e nkare.
- Kore te lkeek lolng'anayo, keyeuni ake nepiki nkare te ng'amat abaki etubulwa ilo sheni, kore woleng tenerrek ntapukai oo nkata nebulu Ing'anayo. Tipika litai onom te lchani obo lolng'anayo. Tipika nkare teinia ng'amata pemeibiru Ing'anayo (Arroyo owon eitu oku Ing'nayo)

MULCHING (NKUJIT OO NYOORTE NATOITO)



9

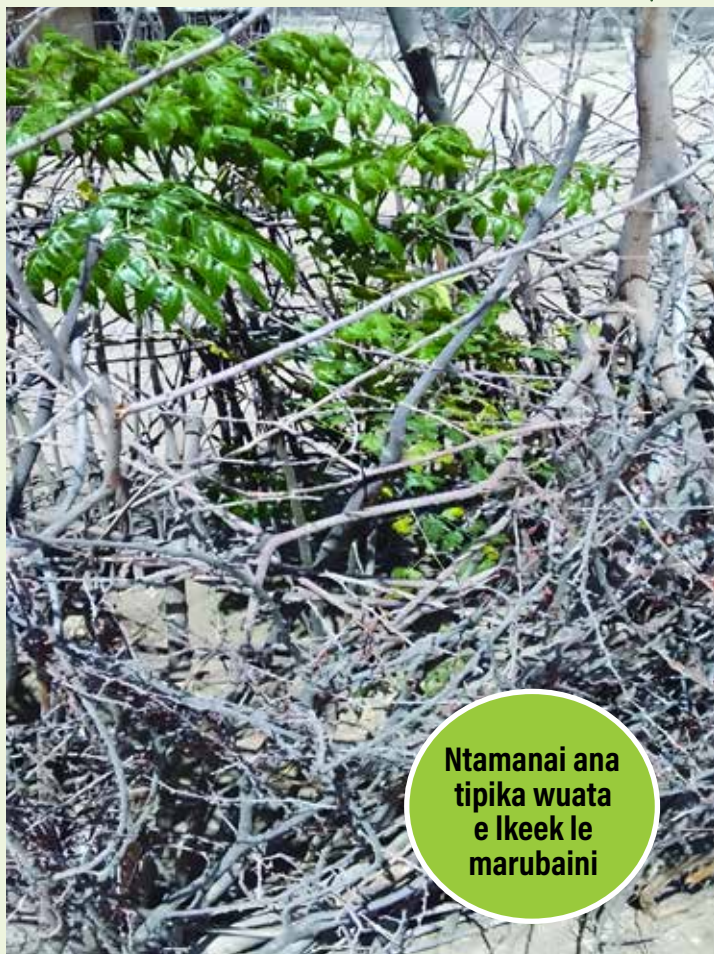
Mbae e saal: Tipika tokop Ichani lino nkujit oo nyoorte nkujit oo nyoorte, nirishie nkiji elchani. Petum rebuk oo nkirobi ee nkulupo netodou nkirewaj oo nkare naya Idama.

Ngilie Ikeek pooki ning'uraa nabaalalama Ikeek likae oo likae, oo Ikererin naiko tenelama.

MBAE KITOK

- Kore Ikeek lolng'nayo ntalama te mitai 3.
- Ntai mpalai nairinare Ichani te grafting etulusoyie lapa obo
- Ritta mintushul Ikeek oitubuluni oo ndaki nintubulu taatwa Ichampa lino ana, Ikeek lo lng'anayio oo lpayak, oo mpuka ana Sipinach, Suguma wiki. Kenere pintubulo tenebo oo ndaki ee nkaji e marakwe.

NEIKUNARI RAMAT



Ntamanai ana
tipika wuata
e lkeek le
marubaini

PHOTO BY ANN MUKAINDO

Nkirritaa e lkeek kutitii: Tipika wwata naigeru lkeek leleru pemanya siom. Ntubulu lkeek kutitii tatwa ng'ooji nawwaro. Tirichie siom ng'oji nitegelwa aitubulu lkeek kutitii.



PHOTO BY GOOGLE

Mpikata E nkare: Tipika nkare lkeek leleru ng'amata pooki naishakino. Taasa mbaa pooki nikintomoki tana palai. Ng'oru loseeg limboku nkare enchan nkata nacha. Tenemeetai nkare nintumia Itupan lopikeki nkare.

Ndeti: Ntei ndeti tenkolo lkeek linono leleru, pemeloj te nkare oo ndaa ee nkulupo tenebo.

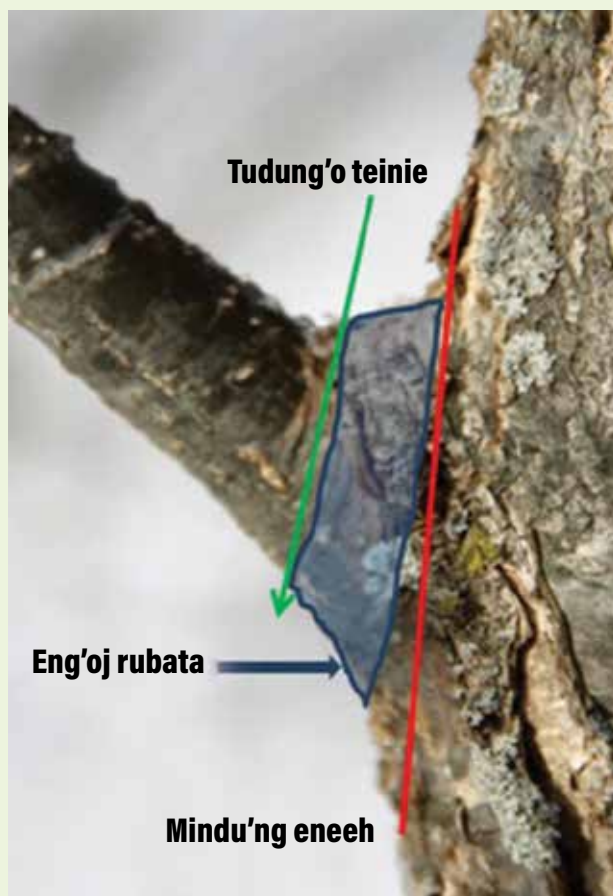
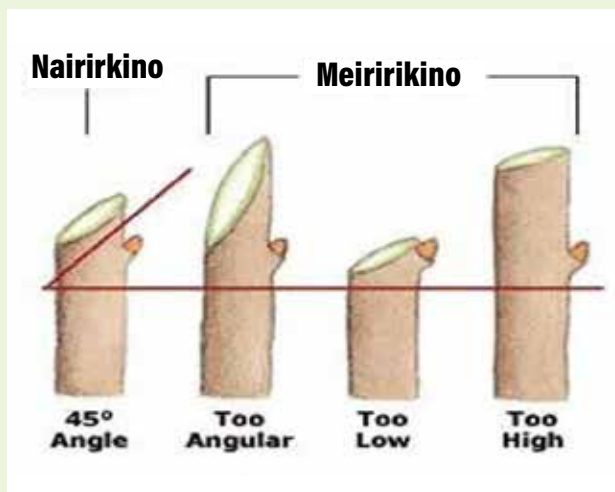
NEIKUNARI RAMAT



Ng'asulata ee Ikeek: Tang'asula Ikeek amu keret Ibulunye oo sapuko e Ichani peeleeleku ramat oo supatisho elchani. Kerertoo nkibooroto e moyanitin o Ikeek oo Ikukuuni oonya Ikeek. Nitai sii sura aikata nataa moiyan. Kore sii too Ikeek eenya siom kepanu mbene naanya siom.

Ming'asul Ikeek ng'amata ee nkolong' Kore to Ikeek leleru lolng'anayo, tang'asula sura ebata pemeeroo sura ndaa.

Tusula Sura Ikeek



Ming'asul ng'oji nanyekie, Kore inie keidim neg'waki nkiporoi Ichani neboloki abaki moiyantini elkeek.

NEIKUNARI RAMAT

Ramat e nkulup natii taabori Ichani

Kore lkeek lolng'anayio kenere peramati nkuluponi lapatin ile eidipaki aitubulu. Niramati aishoo Itulugumi nkatitin kumo. Tipika lkeek Itulugumi supat nkata indipa aitei lng'anayio. Tipika Itulugumi ng'oji naata loip tokop Ichani. Kore inia naa keidimie mataas te ropiyani kutii woleng' tinikintanyanyukie nkibooroto elkuukuuni. Kore tinikintubulu ndaki eshula naa

keret aiboyo lkuukuuni. Ntei ropot elkuukuuni oo moyianitin nitodwaa te lshampa lino te larikook le ldirkashani. Kore anaa na keretoo ntana kutitii petum atamat nkare oo ndaa aishaki. Kore piipik Itulgumii tipikaa nkare naitemu inia ng'oji. Kore inia na keretoo petumm lkeni atumoki matata endaa enye petum atabai atwa ntana enyena pebulu Ichani oota loirien supat.



Ramat elkuukuuni oo moyianitin elkeek
Taasai Lchampa lino aig'uraa lkuukuuni oo moyianitin, Iramatishere mbaa shake naibokieki moyiantin oo lkuukuuni te nkoito naningore nkishon e par pooki. Kore nkoitoo eshake naaramatishereki anaa; Aitushul Ipilipili oo kitunguu saumu oo lata nayerishereki tenboo oo sabuni. Keidongi saumu oo lipili oo lata nayerishereki anaa sii sabuni Pee epanu

nkurrusha tenipiki ngalo lkeni. Kore ana oitei na menya ropiyani kumok tinintanyanyuk oo nkule oitoo naiboorieki lkuukuuni . Kpre nkutushulata ee lkeek oo ndaki naa keibooyo moyianitin.

Tilikoi mbaa olkukuuni oo moyianitin te nkolo ldirkashani likinyikita.

NKITAINOTO OO LG'ANAYIO OOTO

1

MBAA NIAS OO SI NIMIAS

Ntai Ing'anayio nkata naoto amu ina katai eeshamanye aishaki near supat iniakata. Ninko Tiniyelou ajo keoto Ing'anayio linono: Kore Ing'anayio nyoriji namismis keng'asu atum nyoriji newong; ana eaku darleyio Imachungwani; Partasim duo mpukunoto enye, kore Imachungwai lowo na kemelok neropili newong' mwaa enye. Kore Imachungwa mekuueidipaki aitei to Ichani lenye, kore naa neiteini ooto te Ichani. Lmaperai: Keiwatwata enyori neaku darleiyo anaa nenyoruju aimismis anaa enyoruju aong'u.



Mipipir
Ichani

2

Akiti ntai Ing'anayio te sura. Miosh Ing'anayio te soito anaa sii apirpir Ichani nkata nantae Ing'anayio. Kore tiniosh and tinimpirpir, ketum Ichani nkuporo neitanyamal lbulunye lenye oo supatisho ee Ing'anayio anaa sii eitarwuo lchani. Tiniata masaa naitanyeki Ing'anayio sucha pemeyau Iduruk.

MBAA NIAS OO SI NIMIAS

3

Kore te Imachungwani, ntae tenebo oo nketa enye naibunguta, tung'ai centimitai 3 anaa si ong'wan enchata naibung'uta Ing'anayoi. Kore inia na keret Ing'anayoi metibiko eitu orroyo.



Kore ng'amata ninteng'el tudung'o inia keta naitenyenyeki Ing'anayoi metaa sentimita nabo.. Kore anaa na keret nkare natii atwa Ing'anayoi pemeroyo netumui ng'oji naibun'gi pemaiseyieki nkeper elng'anayoi. Nerishie Ing'nayoi Mincho epejori neaku supat.



4

Nteng'la tee te Ikreti oisucha; mintirich Ing'anayio tininteng'el tatua Ikreti. Amu kepik nkuporo neitoroo Ing'anayio.

5

Ng'urai tanaa ketii lkuukuuni Ing'anayio owon eitu intei te Ichani.

6

Tirishie ong'aan eldama nincho metumuo suwo aitibiraki.

7

Tirinyo Ing'anayio linono te ng'oji nairobi netoyio.



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Riara Road, Off Ngong Road Kilimani, Nairobi, Kenya P.O. Box 20110-00200, Nairobi, Kenya
Mobile: + 254 (0) 722 202 473 / + 254 (0) 734 600 632 | Tel: + 254 20 3874145 | info@eawildlife.org | www.eawildlife.org