



# Kutanga Kuchengeta Nyuchi Chinyorwa 1



*Chinyorwa ichi chakanyorerwa vachengeti venyuchi vamangwana.  
Chakabudirira kunyorwa nekuda kwerubatsiro rwakabva kuvachengeti venyuchi  
vemuAfirika kunyanya vemubatanidzwa weNkhata-Bay Honey Producers  
Cooperative wekuMalawi.*

**Munyori: Pam Gregory**

Mari yakashanda pakuburitsa chinyorwa chino yakabva ku

[thewaterloofoundation\\*](http://thewaterloofoundation.org)

Chinyorwa chino chakashandurwa kubva muchirungu kuenda kushona na  
Luke Jimu

Gay Marris weku UK National Bee Unit (Fera) akabetsera nekupenengura pamwe  
nekugadzirisa chinyorwa chino.

## MASHANDISIRWO ECHINYORWA CHINO



Iyezvino chave chinhu chinobvumwa kuti kuchengeta nyuchi kunokwanisa kupa vanhu vanogara mumaruwa mari pamusoro peyavanowana kubva mukurima. Zvisinei, kuchengeta nyuchi hakusi nyore nguva dzose. Nyuchi dzinopfonda uye hadzisi nyore kuziva zvadzingaite panguva ipi neipi. Goho reuchi rinoenderana nezvinhu zvakawanda zvakaita semamiriro ekunze uye kuve nemusika weuchi wakanaka. Uchi hunotipa mari yakawanda hunofanira kuve uchi hwemhando yepamusoro. Wakisi imwe yezvinhu zvinokosha zvinobva munyuchi zvisinei nekuti vanhu vazhinji vanoirasa.

Chinyorwa chino chakagadzirirwa vadzidzisi venyuchi vemumaruwa vari muAfurika. Rakanyorwa richisanganisa mifananidzo pamwe nemavara mashoma. Chinyorwa ichi chinosanganisa zvinhu zvinokosha zvinodiwa kuti munhu atange bhizimusi rekuchengeta nyuchi. Chinopawozve ruzivo rwutsva kuitira kubetsera vachengeti venyuchi kuti vazvimiririre vachikwanisa kuzvigadzirira zvinhu zvinodiwa vachishandisa zvinhu zvinowanikwa munzvimbo mavo. Ndinovimba kuti chinyorwa chino chichabetsera vava vanoda kuvamba kuchengeta nyuchi zvisingavadhuriri uye zvichivapa mukana wekuti vaedze zvimwe zvinhu zvitsva.

Mifananidzo inotaridza dzimwe dzenzira dzakawanda dzinoshandiswa navanhu kuchengeta nyuchi. Izvi zvakaitirwa kuti zvibetsere hurukuro uye kugovana ruzivo, zvobetsera vanhu kuti vazvipedzere matambudziko munzvimbo mavo. Chinyorwa chino chinonyanya kubata zvine chekuita nekuchengeta nyuchi kuchishandiswa mukoko wembando yetumapuranga tunovakirwa mizinga (top bars) asi dzidziso idzi dzinokwanisa kushandiswa nevanoshandisa mikoko yedu yechinyakare kana vava vanoshandisa mikoko yemazuva ano.

Zvirikutarisirwa kuti vava vanodzidzisa kuchengetwa kwenyuchi vachakwanisa kubvisa ruzivo rwuri munechino chinyorwa vachirwuisa mumutauro unonzwikwa nevanhu vemumaruwa mavanoshandira. Rutendo rwukuru nerubatsiro rwakabva kuWaterloo Foundation. Chimwe chinyorwa chinemifananidzo chichauya mugore ra2010. Ichi chinyorwa chichanangana nekuchengeta nyuchi kwemhando yapamusoro uye kuzvipedzera matambudziko akasiyanasiyana akanangana nekuchengeta nyuchi. Chimwezve chinyorwa chinokwanisa kuwanikwa kana makanyorera Pam Gregory. Tapota nyorera *paemail*: [pamgregory@phonecoop.coop](mailto:pamgregory@phonecoop.coop)

Pam Gregory akatanga kuchengeta nyuchi kubva mugore ra1974. Akashandira UK National Bee Unit kubva muna 1976 kusvika muna 2003. Ane chitupa che UK National Diploma chekuchengetwa kwenyuchi pamwe nechitupa cheMSc cheOverseas Rural Development. Ave nemakore gumi nemaviri achishanda nevachengeti venyuchi vemu sub Saharan Africa.

*Ivai ne e kuchengeta  
nyuchi kunemufaro  
Pam Gregory June 2009*

# Upenyu Hwenyuchi



**Nyuchi yashanyira ruva.**

Mimwe yemifananidzo yakabva kuna Margaret Cowley, Ged Marshall, Adrian Waring, Claire Waring pamwe naMax Westby

**Nyuchi dzinoita mushandira pamwe kuitira kuti dzirarame. Nyuchi twupukanana twunorarama semhuri imwe. Muboka rega rega mune mhando nhatu dzenyuchi uye mhando yega yega in basa rayo.**



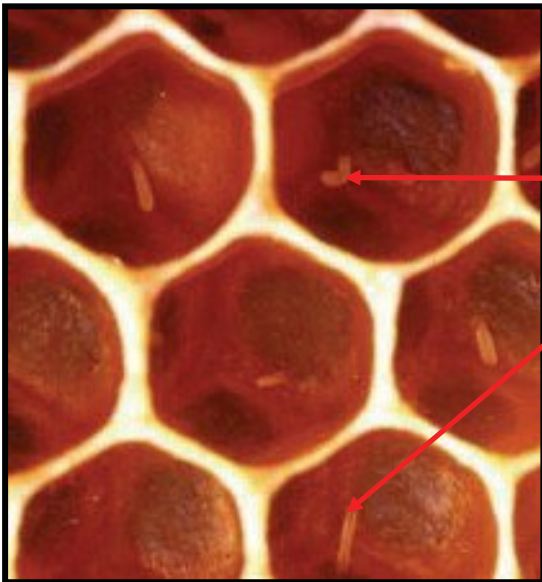
**Iri ndiro zimai. Munongova nezimai rimwechete mumukoko wega wega kana kuti pese panenge pakaungana nyuchi. Basa raro nderekukandira mazai anozochechenya kuita nyuchi itsva. Zimai iri rinokwanisa kukandira mazai anosvika chiuru (1000) pazuva rega rega munedzimwe nguva dzegore.**



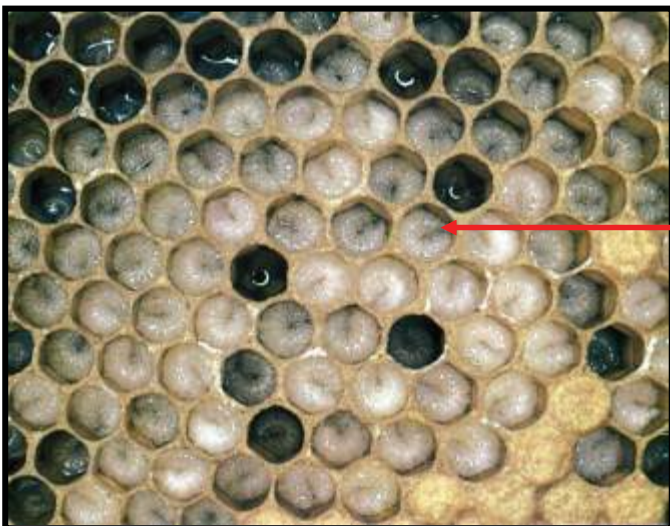
**Nyuchi hono. Basa radzo nderekusangana nezimai. Muboka rega rega renyuchi munokwanisa kuita nyuchi idzi dzingangosvika mazana mashanu (500) munguva idzo chikafu chinenge chakawanda. Dzinodzingwa mumukoko munguva idzo chikafu chinenge chashomeka.**



**Nyuchi mushandi. Pamasikirwo, iyi nyuchi ihadzi asi haikandiri mazai. Inoita mabasa mazhinji mumukoko. Mumukoko, nyuchi idzi dzingasvika zviuru makumi mana (40 000) kana kupfuura kunyanya munguva dzinogadzirwa uchi.**

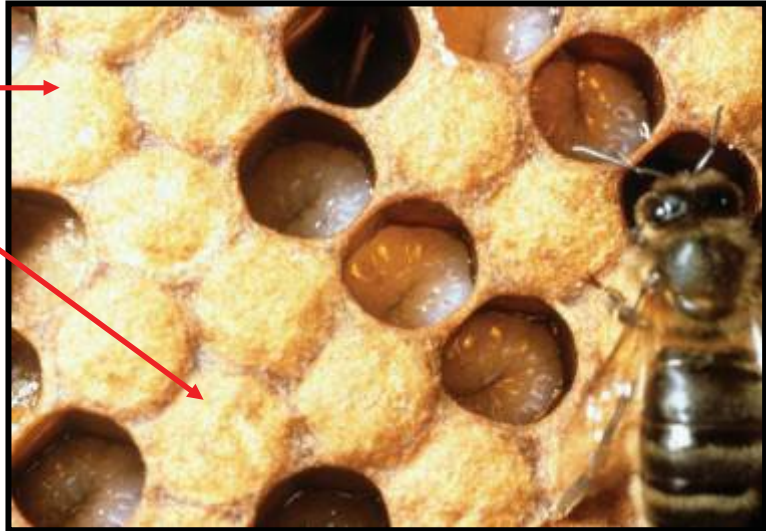


**Zimai rinokandira zai rimwe mukamupanda kamwe.**



**Mazai anochochonya kuita mazana.**

**Mazana  
anovharirwa  
mutwumipand  
a kuti akure  
kuve nyuchi.**



**Nyuchi yerudzi  
rwemushandi  
inobuda  
mumupanda.**



**Nyuchi dzinobuda  
mumukoko dzonotsvaka  
maruva, pfuma pamwe  
nenekita kuitira  
kugadzira uchi. Nyuchi iyi  
iri kutora nekita kubva  
paruva remugamu.**

**Nyuchi dzinobetsera kuti goho rezvirimwa zvakaita semango, kofi, maranjisi, magwavha pamwe nemimwe michero kuti rikure.**



**Iyi nyuchi yaunganidza pfuma nenekita. Imwe yenyuchi dzinochengeta pamukana wemukoko yaburitsa rurimi kuti inzwe mhando yenekita.**



**Nyuchi dzinochengeta pfuma nenekita mumizinga.**

**Kusiyana kwamaruva kunoita kuti kutaridzika kwepfuma kusiyane.**



**Nyuchi dzinoshandisa mapapiro adzo kufuridza mvura kuti itapudzike munekita uye kuparadzira hwema.**

**Iyi nyuchi irikutaridza girandi rehwema hunoshevedza dzimwe nyuchi.**

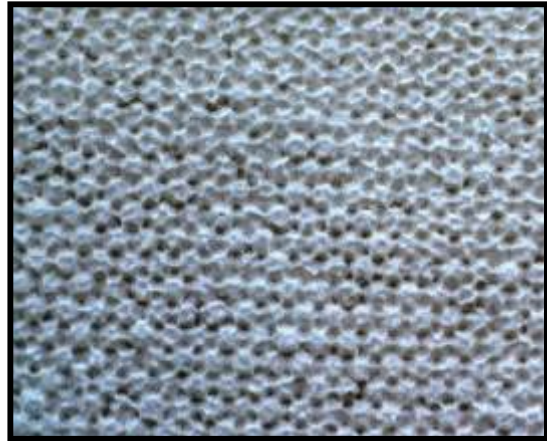
**Nyuchi idzi dzirikupanana chikafu uye hwema.**



**Nyuchi idzi dziri kutamba tamba iri nzira yekutaurirana nezve mhando uye divi rekunemaruva kurikutorwa nekita.**



**Nyuchi dzavhara uchi uhu zvakanyakisa. Uchi uhwu ndehwe mhando yepamusoro uye hwatosvika panguva yekumorwa.**



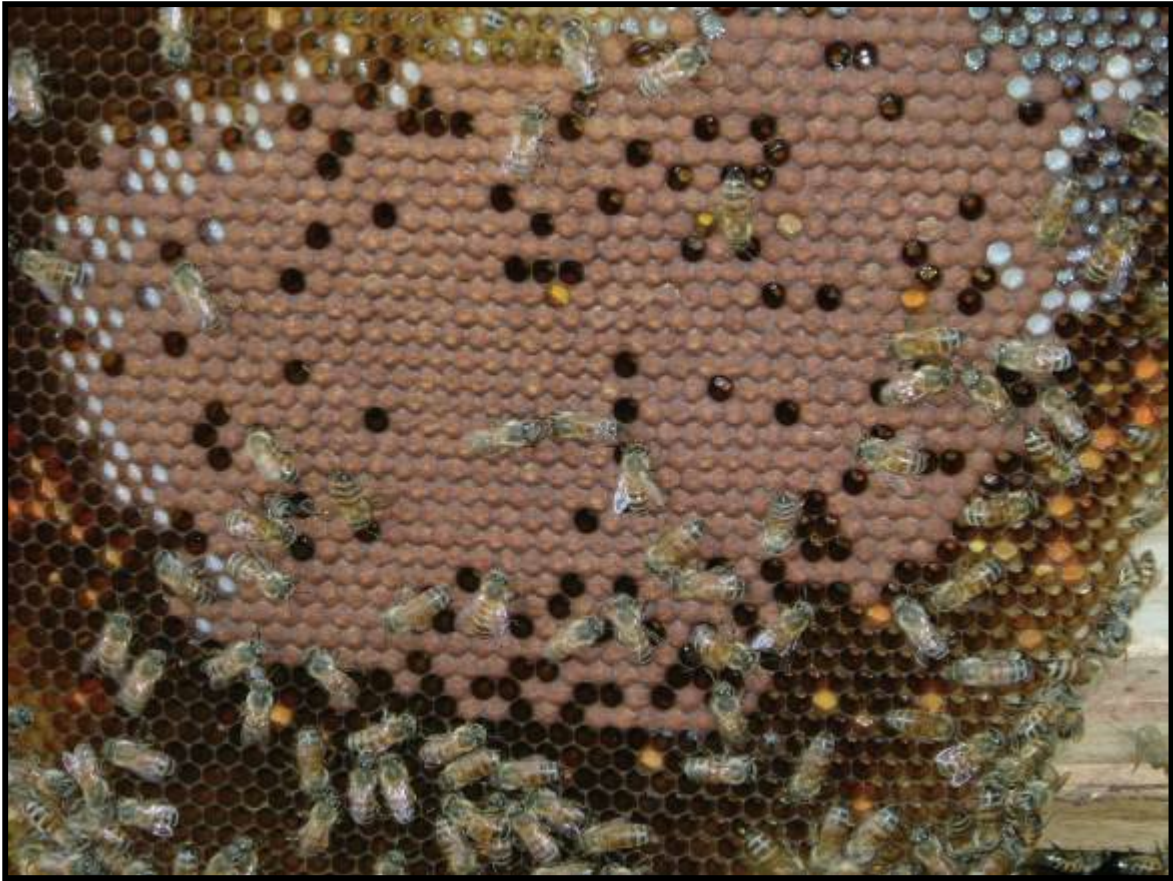
**Nyuchi idzi dziri kuuya nenamo mumukoko. Namo inonama uye inotorwa kubva mumiti. Inoshandiswa kunama makatsemuka uye kuti mumukoko mugare makashambidzika.**



**Nyuchi iyi irikuchengetedza pamusuo wemukoko. Nyuchi dzinopfonda kuedza kuchengetedza musha wadzo. Mushure mokupfonda, nyuchi yacho inobva yafa, izvi zvinoita kuti nyuchi dzisafarira kupfonda pese pese.**



**Nyuchi dzemuboka revashandi ndidzo dzega dzinopfonda. Painongopfonda nyuchi inobva yatofa. Nekudaro, nyuchi hadzipfondi pasina chikonzero.**



**Mungaedza here kudoma zvinhu zviru pamuzinga uyu?**

**Tsvakai zvinotevera:**

- **Nyuchi dzemuboka ravashandi**
- **Mazana akavharirwa mutwumipanda**
- **Mazana asina kuvharirwa mutwumipanda**
- **Twumipanda twusina chinhu**
- **Twumipanda twushoma twunenekita**
- **Twumipanda twunepfuma**

# Kushanda Nenyuchi zvisina njodzi

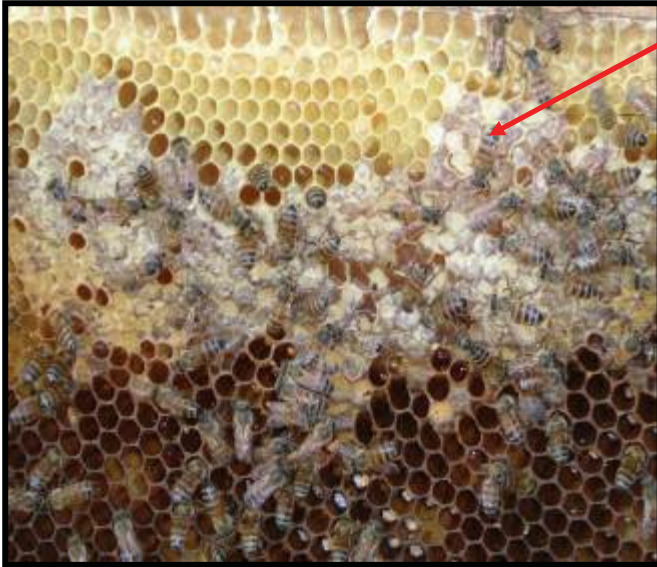


**Salome anobva kuKenya akapfeka zvipfeko zvekudzivirira kupfondwa nenyuchi zvakagadzirwa nyore.**

Mimwe yemifananidzo yakabva kuna Paul Latham

## Uorera hwenyuchi

Nyuchi dzinopfonda uye izvi zvinenjodzi. Nekudaro, munokuridzirwa kushanda nenyuchi zvakanaka.



### RANGARIRAI

- Imwe neimwe yenyuchi idzi ineurera.
- Uorera hune hwema hunoudza dzimwe nyuchi nezvenjodzi.
- Hwema uhu hunokwezva dzimwe nyuchi kuti dzipfonde nzvimbo imwecheteyo.
- Furidzirai utsi panzvimbo yapfondwa kuti hwema husasvika kunedzimwe nyuchi.
- Kana mapfondwa, bvisai uorera nekukurumidza.

## Mbatya dzekudzivirira

Pfekai mbatya dzinodzivirira muviri wose. Mbatya idzi dzinogona kugadzirwa kubva muzvinhu zvisingadhuri uye zvinowanika muruwa:





**Chengetai mbatya dzenyu dzakachena nguva dzose kuitira kuti hwema hweurera hubve.**

## **Kupfavisira nyuchi**

**Utsi hunokosha pakupfavisira nyuchi. Kune nzira dzakawanda dzekufuridzira utsi uye kunemhando dzakawanda dzezvekufuridzira utsi:**

**Zvidzivirirei. Furidzirai utsi hwakawanda kuti mupfavisira nyuchi.**





## Musashanda nenyuchi murimoga

Endai kunyuchi dzenyu nemumwe munhu. Cherechedzai kuti zvekushandisa zvenyu zvakagadzirirwa.



### RANGARIRAI

- Musangovhuri mukoko pasina chikonzero.
- Vhurai mukoko wenyu zvinyoronyoro.
- Shandai nekukurimidza pasina ruzha.
- Shandisai utsi hwakawanda.
- Vhurai mukoko wenyu pakunenge kuchitonhorera.
- Nguva chaidzo dzingava mangwanani kana manheru.
- Kuvhura mukoko manheru kunobetsera kuti nyuchi dzive neusiku hwose hwekuti dzigadzikane zvakare.

# Mungagadzira Sei Vheiri Zvirinyore

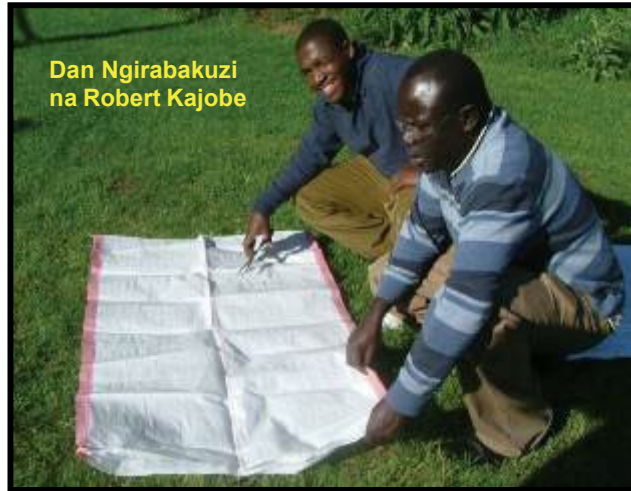


**Varimi venyuchi veku Kisoro, Uganda vakazvigadzirira mavheiri avo.**

Mimwe yemifananidzo yakabva kuna Dan Ngirabakuzi

## TINGAGADZIRA SEI VHEIRI ZVIRINYORE

Zviri nyore kugadzira vheiri kuitira kuzvidzivirira kuti tisapfondwa kumeso nemusoro. Saga reupfu rakasimba uye haridhuri.



Chekai saga nepakati. Chekai chidimbu chacho kuti chiite zvidimbu zvitatu. Chidimbu chimwe nechimwe chinogadzira ngowani yevheiri imwe.



Munokwanisa kugadzira mavheiri matanhatu kubva pasaga rimwe kana mukaricheka nemazvo.





**Saga iri rinorudunuka nyore saka zvinokosha kuripetera mukati nekurisona kuti izvi zvisaitika.**

**Cherechedzai mupendero wesaga iri wakarudunuka.**



**Sonai chidimbu chega chega kuti chigadzire ngowani.**



**Mushure meizvi, isai sefa kana kuti mumbure wekudzivirira umhutu.**



## Zvinofanira kuita seizvi:



**Wedzerai jira mosonerera pavheiri kuitira kudzivirira chipfuva uye musana. Isai shinda yekubatanidza jira rekuwedzera iri.**



**Kana muchipfeka mbatya yekuzvidzivirira kubva kunyuchi, tangai kupfeka vheiri kozetevera dzimwe hembe. Kana musina mbatya idzi, pfekai chikweshe chekudzivirira mvura pamusoro pevheiri.**

# Tingagadzira Sei Mukoko WeKTB

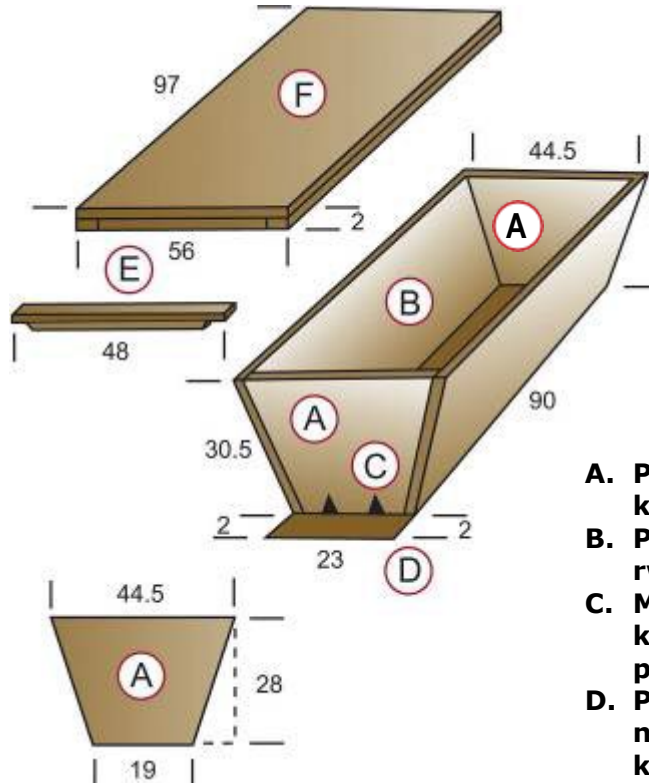


**Vakadzi veboka reNessuit vemuRifiti Vhari kuKenya varikunama mukoko wemhando yeKTB nendove pamwe nedhaga.**

Mifananidzo yakabva kunaRoy Dyche na Paul Latham

Kutanga kuchengeta nyuchi, Chinyorwa 1: Tingagadzira sei mukoko weKTB (© Pam Gregory)

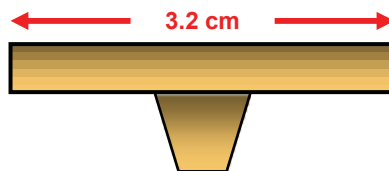
Magadzirirwo emukoko weKTB akataridzwa pazasi. Mikoko yakakura zvakafanana inoita kuti zvive nyore kumuchengeti wenyuchi kuti abvise mizinga yenyuchi kubva mumukoko kuendeswa munemumwe. Izvi zvinobetsera kuti kutarisira nyuchi pamwe nekumora uchi kuve nyore.



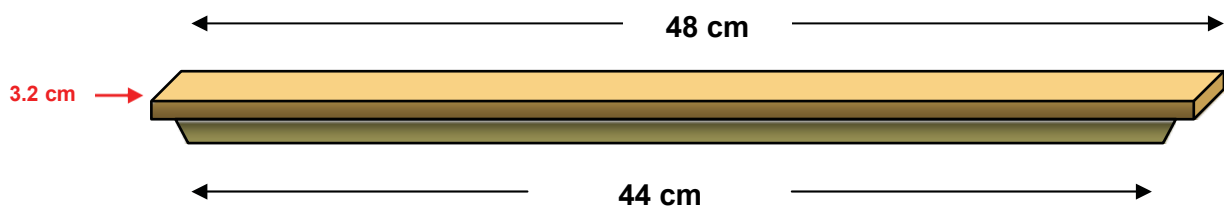
- A. Puranga rekumucheto kwemukoko
- B. Puranga rerutivi rwemukoko
- C. Mukova (haufaniri kupfuura 8 mm pakukura)
- D. Puranga repasi (pamwe nekapuranga kanomharwa nyuchi kasingapfuuri 2 cm)
- E. Puranga rinovakirwa muzinga nyuchi
- F. Denga remukoko

**Zvinokosha** kuti twumapuranga twemizinga twuve twakakora 3.2 cm:

#### MUCHETO WEKAPURANGA KANOVAKIRWA MUZINGA



#### RUTIVI RWEKAPURANGA KANOVAKIRWA MUZINGA



## 1. KUGADZIRA MUKOKO NEMAPURANGA

**Chekai mapuranga enyu kusvika aenzana. Akataridzwa pazasi apa mapuranga emurutivi rwemukoko.**



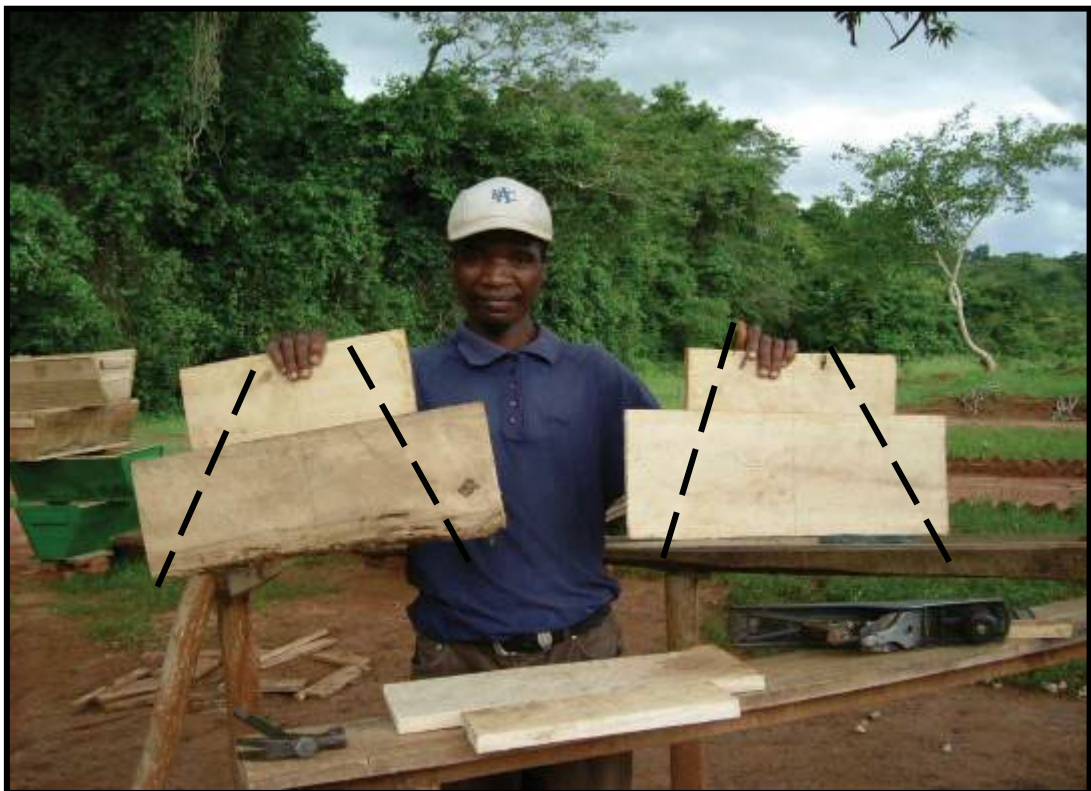
**Mapuranga angada kukwenenzverwa kuti anyatsopindirana.**



**Mapuranga maviri mapfupi anobatanidzwa nezvipikiri mukugadzira zvekuvharisa shure uye mberi kwemukoko. Chekai musoro wechipikiri kuitira kuti chipinze mativi ose. Muchishandisa sando, batanidzai mapuranga maviri aya.**



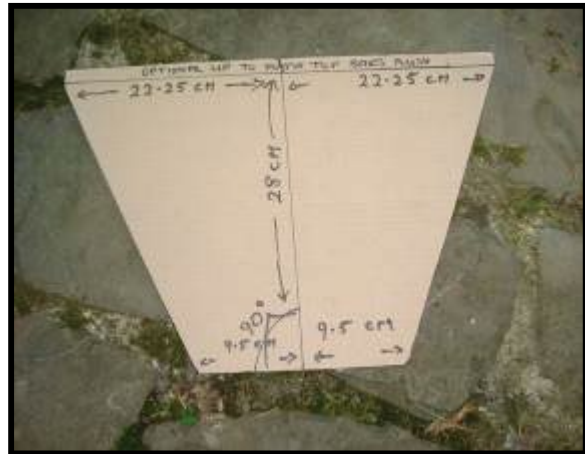
**Mapuranga anenge abatanidzwa anopedziswa kugadzira zvekuvharisa shure uye mberi kwemukoko.**



**Chekai mapuranga amabatanidza kuti anyatsokwanirana neshure kana mberi kwemukoko.**



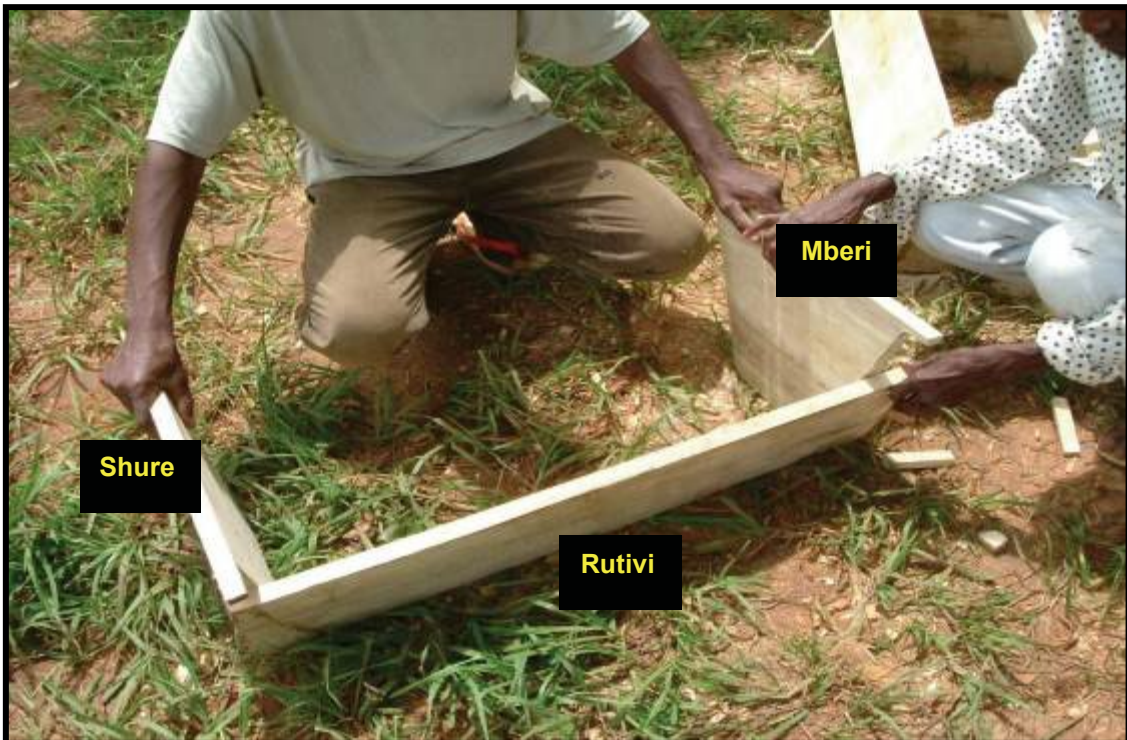
**Shandisai muenzaniso kuti zvekuvharisa izvi zvinyatsobuda. Zvekuenzanisira izvi zvakagadzirwa nekadhibhokisi. Kuera muchibva nechapakati kunoita kuti makona anyatsobuda zvakanaka.**



**Boorai buri rekuti nyuchi dzikwanise kupinda. Buri iri ringatora mavakirwo akaita 'V' kana denderedzwa risingapfuuri kukura kwechinyoreso. Buri iri harifanirwi kupfuura 8mm pakureba kuitira kuti tupukanana twusapinda.**



**Kana mapitsi ese emapuranga avepo mavekukwanisa kugadzira mukoko wenyu. Pano tinoona mativi akasiyana siyana arikubatanidzwa. Pasi pemukoko ndipo panopedzisirwa kuroverwa.**



**Kugadzira mukoko.**



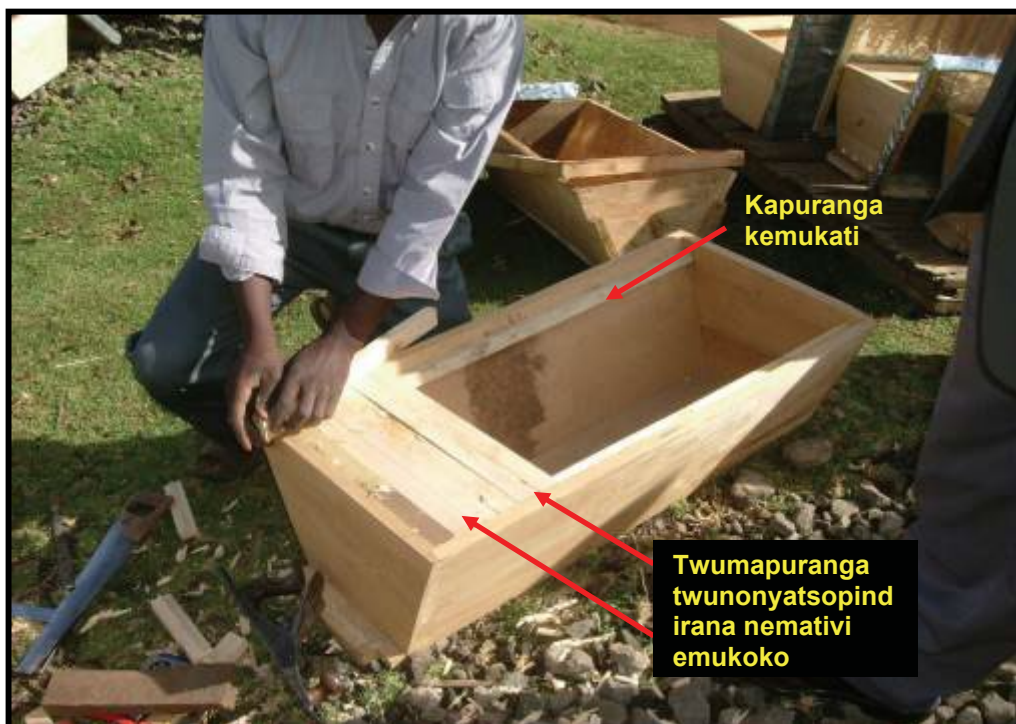


**Vamwe vanogadzira shure nemberi kwemukoko kwakati kwirirei kupfuura mativi kuitira kuti twumapuranga twunovakwirwa mizinga twusadonha.**



**Twumapuranga twunovakirwa mizinga twunonyatsogara nekuda kwemativi akakwirira eshure nemberi kwemukoko.**

**Vamwewo vanoisa twumapuranga mukati memukoko kuitira kuti twuwane pekugara.**



## 2. KUGADZIRA MUKOKO TICHISHANDISA ZVINHU ZVISINGADHURI UYE ZVINOWANIKA MURUWA

**Mikoko inogona kugadzirwa nezvinhu zvisingadhuri. Zvinhu zvakawanda uye zvinowanika nyore zvinokwanisa kugadzira mikoko. Yakashandiswa pano irafia.**



**Munokwanisa kugadzira shure kana mberi kwemukoko muchishandia mapuranga asisina basa. Uyu mukoko wakagadzirwa netwumatanda twakatwasanuka.**



**Uyu mukoko unonzi 'Grande Ruche' wakagadzirwa zvine ungaru kuCongo pasingashandiswe zvipikiri kana mapuranga. Zvakashandiswa apa zvakapfava uye zvakabatanidzwa netwumiti twakapinza.**



**Makwanza anosara mumukoko wemushenjere uyu anofanira kuvharwa nezvinhu zvakakodzera kuitira kuti twupukanana twusapinda.**



**Uyu mukoko wekuUganda wakagadzirwa nemashanga wakazonamwa nemusanganiswa wedhaga, dota pamwe nendove yemombe.**



**Uyu mukoko wekuUganda wakasimba zvikuru uye wakagadzirwa nembariro.**



**Pasi uye mativi emikoko iyi munofanira kunamwa kuti mukati muite rima uye kudzivirira masvosve pamwe netumwe tupukanana kuti twusapinda.**





**Denga remukoko harifanirwi kugadzirwa nezvinhu zvinodhura. Chinokosha kudzivirira mvura kuti isapinda.**



**Denga iri rakagadzirwa netsanga dzakarongwa dzakaita kuturikidzana. Pakati pakaiswa purasitiki kudzivirira mvura. Pamusoro pakavharwa nepurasitiki.**

**Denga iri rakapfirirwa sezvinoitwa dzimba. Kumucheto kunoiswa uswa hwakaomarara kuitira kudzivirira twupukanana uye denga iri rine zvekubata kuti zvive nyore kurisimudza.**





**Denga remukoko rinokwanisa kugadzirwa nemashenjere akatsemurwa napakati sezvakaitwa denga rechivakwa ichi chekunyika yeKenya.**

**Mashenjere anotsemurwa napakati orongwa sezvakaita marata. Mashenjere aya anokwanisa kuvharwa nepurasitiki kuitira kuti mvura isapinda.**

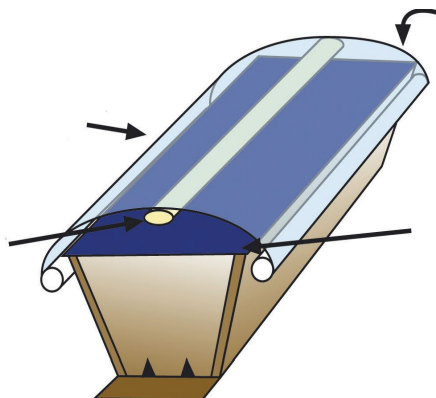


**Denga rinokwanisa kugadzirwa nyore kubirikiridza nekushandisa purasitiki rakasungirirwa pamapango mumativi. Huremu hwemapango hunotsimbirira purasitiki panzvimbo.**

#### 4. Pamusoro

panokwanisa kuvharwa nemashizha emabhanana kana mamwe mashizhawo zvawo.

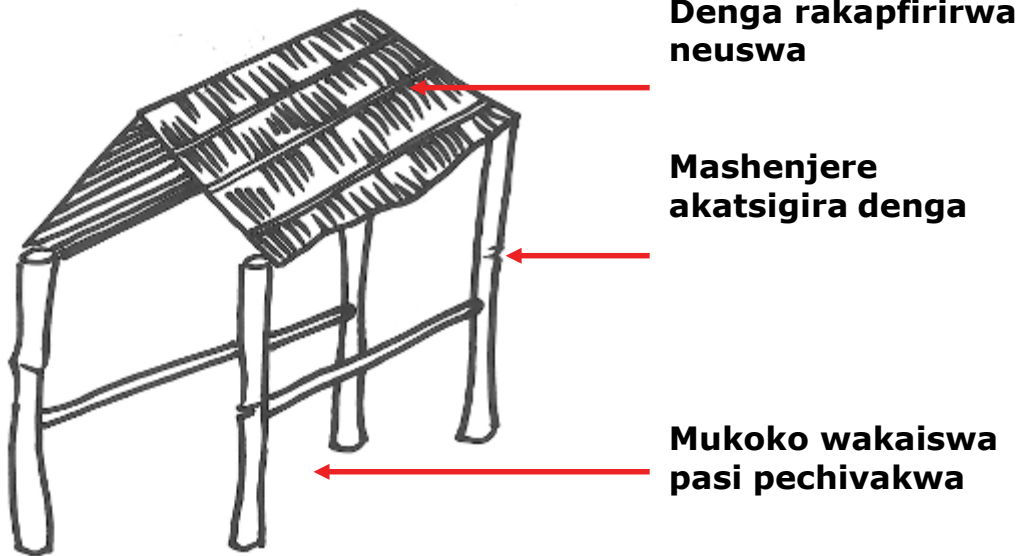
2. Mushenjere wakabatira purasitiki panzvimbo uye unoita kuti mvura iyerere ichienda pasi.



3. Purasitiki nemashenjere maviri akaritsimbirira.

1. Pepa repurasitiki pamusoro pemapuranga anovakirwa mizinga.

**Kana zvisingagoni kuti muise marata kuvhara mikoko yenyu, munokwanisa kushandisa denga rakapfirirwa neuswa kudzivirira zuva uye mvura.**

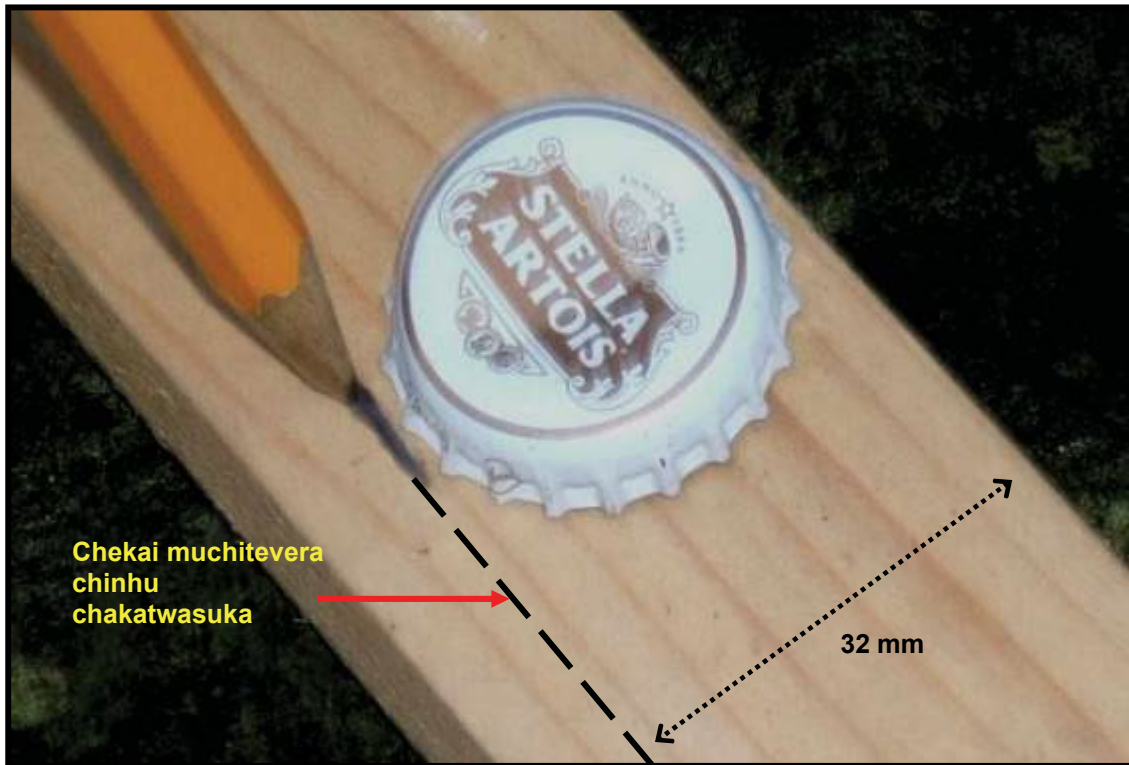


**Mukoko uyu wakasimudzwa nemapango maviri akaiswa mumativi kwave kuzosungira waya. Izvi zvinoita kuti zvive nyore kusungirira mikoko. Mukoko unobviswa nekuusimudza kubva pamapango maviri. Izvi zvinoita kuti zvive nyore kukamura nyuchi kuti dziite mapoka maviri.**



### 3. KUGADZIRA TWUMAPURANGA TWUNOVAKIRWA MIZINGA

Kucheka twumapapuranga twunovakirwa mizinga nyenuchi ndicho chinhu chinonetsa uye kudhura pakugadzirwa kwemukoko. Zvinokosha zvikuru kuti twuve twakafara kuita 32 kana 33 mm (3.2 kana 3.3 cm). Munogona kupima kufara uku muchishandisa muvhano webhotoro rezvinwiwa.

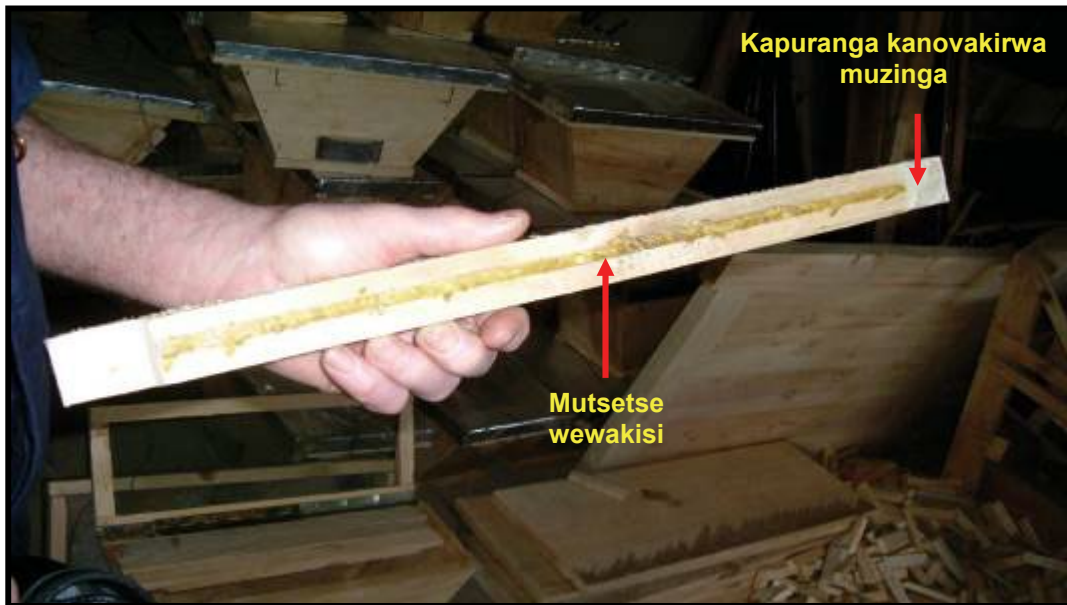


Twumapuranga twunovakirwa mizinga twunokwanisa kugadzirwa nezvinhu zvakachipa uye zvinowanikwa muruwa. Twumapuranga utwu twurinyore kucheka zvichienzaniswa netwemapuranga. Aka kakagadzirwa nerafia.





## Kapuranga aka kakatwasuka.



**Twumiti, mashenjere kana zvimwe zvakakodzera zvinokwanisa kuchekwa kugadzira tumapuranga twemizinga.**

**Mutsetse wewakisi unokwanisa kugadzirwa newakisi inobva mumakenduru.**



Cherechedzai pikicha inotevera. Munokwanisa kukurukura pamwe nevamwe vachengeti venyuchi pamusoro pemufananidzo uyu. Twumapuranga twakagadzirwa nemashenjere akazadzwa wakisi inzira yamunokuridzirwa kuedza. Zvisinei, nyuchi dzinonetseka kuvaka muzinga pakapuranga sezvo mishenjere iyi yakakura zvakasiyana.



Tumiti tusina kunyatsochekwa nditwo twunokonzera matambudziko mazhinji anowanika kana kuchishandiswa mhando yemikoko iyi.

Kana twumiti utwu twusina kunyatsochekwa uye kuiswa wakisi, nyuchi dzinovaka muzinga mumwechete pakapuranga kamwechete. Izvi zvinoita kuti zvivenyore kumora uchi uye kubvisa muzinga kubva mumukoko kuendesha kune mumwe.



# Tingaitei Kuti Tive neApiyari Yakanaka



**Apiyari yakanaka iyi yakaiswa mudondo kuMalawi.**

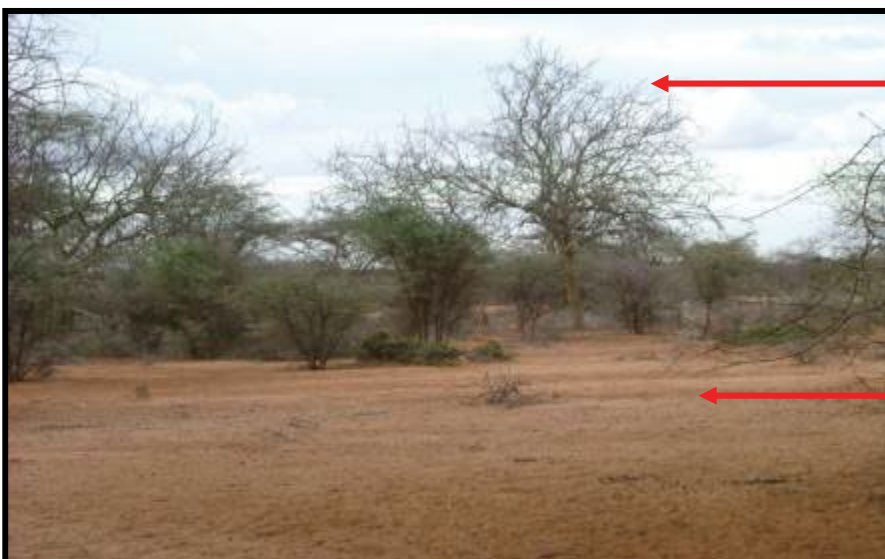
**Uchi hwakanaka hunobva muapiyari yakanaka. Apiyari inzvimbo inochengeterwa mikoko.**



**Kuti muve neapiyari yakanaka, munofanirwa kucherechedza zvinotevera:**

**1. Sarudzai nzvimbo:**

- **Iri nyore kusvika;**
- **Iri kure navanhu uye ruzha, kure nembavha;**
- **Pedyo nemvura kuti nyuchi dziwane mvura pedyo;**
- **Pedyo nemaruva pamwe nemiti inoita maruva;**
- **Yakavhariridzwa kubva kuzuva nemhepo;**
- **Inogona kuve nzvimbo isinakukodzera kuitwa zvimwe zvinhu zvakaita sekurima zvirimwa zvakasiyana siyana.**



**Miti yakawanda kuitira mumvuri uye kuturika mikoko. Miti inoita minzwa semuenzaniso mugove yakanaka kunyuchi. Dhaga iri harina kunakira zvimwe zvakaita sekurima.**

## 2. Tarisirai apiyari yenyu nekuita zvinotevera:

- Kubvisa marara pamwe nemiti uye uswa panzvimbo ine mikoko kuitira kuti muwane mafambiro;
- Kudzivirira vashanyi vasingadiwi vakaita sembavha uye mhuka huru;
- Kudyara mbeu dzinopa maruva kuti nyuchi dziwane nekita.



**Kusakura pasi kunobetsera kuti tupukanana twakaita sema dzvinyu twusapinda mumikoko.**

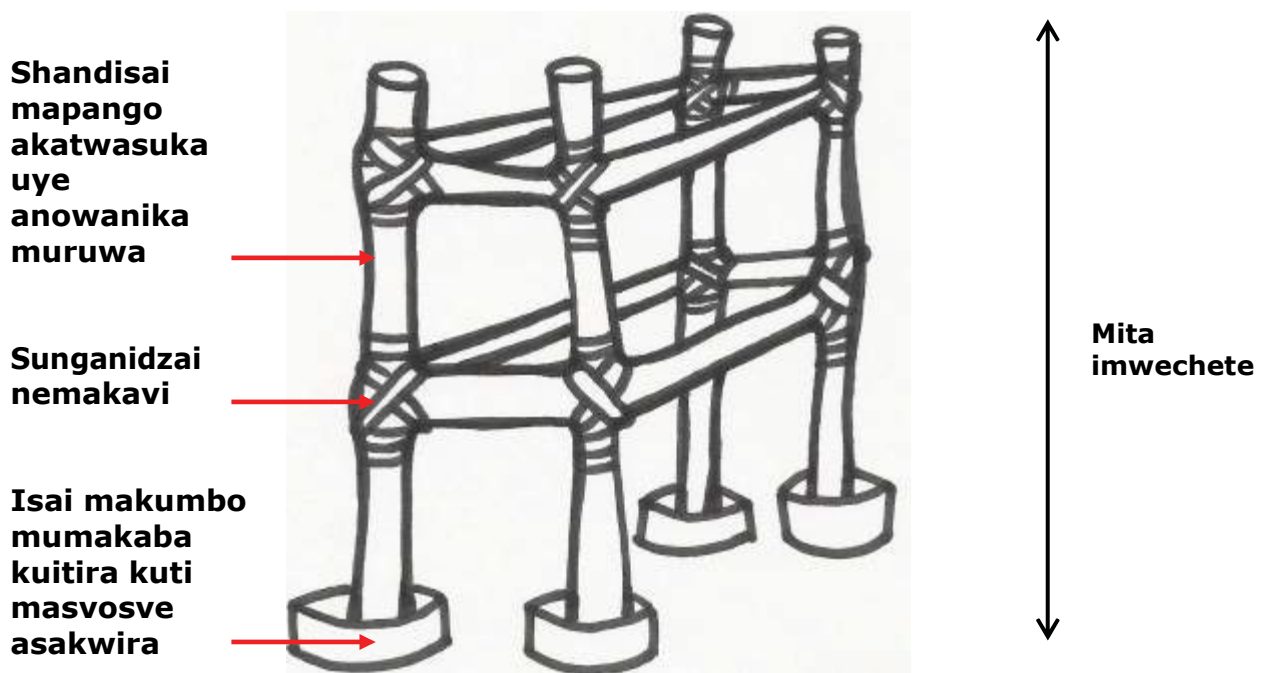
## 3. Turikai mikoko:

- Nenzira inoita kuti isasundumara;
- Vamwe vanovaka nzvimbo dzekukurika mikoko;
- Vamwe vanoturika mikoko vachishandisa waya;
- Panoturikwa mikoko panofanirwa kunge pakareba mita imwe kana kupfuura;
- Panogadzikwa mikoko apa panofanirwa kunge pakagadzirwa nemiti yakasimba kuitira kuti pasakurumidza kuparara;
- Panogadzikwa mikoko apa kana pari pemitu mipenyu hapasi nyore kuparara; nekudaro shandisai miti inokasira kubata uye kukura nyore;
- Miti inogadziriswa makumbo yepanoturikwa mikoko apa inofanirwa kuzorwa girizi kana kugadzikwa mumagaba kuitira kuti masvosve asakwira.



**Panoturikwa mukoko pakareba 1m kubva pasi-cherechedzai kuti pakareba kuenzana negokora remurume uyu.**

## Panoturikwa mukoko pakagadzirwa zviri nyore:



- Shandisai waya kana tsere dzichinetsa;
- Waya idzi dzinofanirwa kudzivirira mhuka dzinoda kukanganisa mukoko;
- Waya idzi dzinofanirwa kuzorwa girizi kuitira kuti masvosve asakwira;
- Mikoko inofanirwa kuturikwa pakakwirira mita kana kupfuura.



- Siyai gwanza rakafanira pakati pemikoko kuitira kuti zvive nyore kushanda, musingakanganise nyuchi dziri mune mimwe mikoko;
- Itai kuti misuwo yemikoko isatarisa kunzira kunopinda navanhu;
- Itai kuti mikoko iri muapiyari yenyu isapfuura gumi.



#### 4. Kuti nyuchi dzipinde mumukoko munofanira kushandisa hwezvo:

- Mikoko inofanirwa kuve yakachena uye iine hwezvo inokwezva nyuchi kuti dzipende uye kugaramo;
- Shandisai wakisi yakawanda kunama mukati uye pamukova wemukoko;
- Kapuranga kemuzinga kakanamwa mutsara wewakisi kanokwezva nyuchi. Nyuchi dzinoda muzinga unevana zvakanyanya;
- Nyuchi dzinodawozve mashizha kunyanya anonhuwira ndimu. Mashizha aya anokwanisa kushandiswa kukwezva nyuchi. Dzimwe hwezvo dzinosanganisa doro rinobikwa muruwa, mufarinya, upfu uye makanda emabhanana.



**5. Tarisai mikoko yenyu nguva nenguva kuti muone kana nyuchi dzapinda:**

- Kana musina nyuchi onai kuti mikoko yenyu yakachena uye kuti yakaoma pamwe nekuti hamuna tupembenene twakaita semasvosve, makonzo uye madandaude;
- Wedzerai wakisi sehwezvo kana izvi zvirizvo zvinodiwa kuitwa;
- Nguva yakakodzera kuti nyuchi dzipinde mumukoko inguva idzo nyuchi dzinenge dzichizvipatsanura kuita mapoka akasiyana;
- Kurukurai nevaya vave nenguva vachichengeta nyuchi kuti vakuudzei nguva chaidzo dzinopinda nyuchi mumikoko.

**6. Paapiyari penyu ngapave neutsanana uye pakachengetedzwa kuburikidza ne:**

- Kubvisa uswa pamwe nezvimwe kubva pamikoko;
- Kana zvichikodzera dyarai miti inodiwa nenyuchi muchitenderedza apiyari yenyu.



Iyi apiyari haina kuita zvakanaka nekuti hapana miti inodzivirira zuva uye kuita maruva ekuti nyuchi dziwane chikafu. Hapana mukoko mumwe zvawo wakapindwa nenyuchi.



# Tingachetedza Sei Nyuchi Dzedu



**Vachengeti venyuchi vekuNigeria varikuongorora mukoko werudzi rweKTB.**

Mimwe mifananidzo yakabva kuna Mike Brown, Brian Durk na Claire Waring

## **KURONGA BASA.**

**Shanyirai apiyari yenyu nguva nenguva. Itai mushando mumwe badzi pamunoshanya pese uye ivai nehurongwa hwebasa renyu hunoendera nenguva yegore. Cherechedzai mienzaniso yehurongwa inotevera:**

**1. Ivai nechokwadi chekuti nzvimbo inotenderedza mukoko yenyu yakashambidzika uye kuti mikoko yenyu yave nenyuchi pamwe nekuti nyuchi dzenyu dzakachengetedzeka.**

**2. Cherechedzai mukati memikoko kuti muone kana:**

- **Nyuchi dziri kuvaka mizinga zvakanaka (mizinga mumwe pakapuranga kamwechete);**
- **Zimai riri kuita basa raro namazvo;**
- **Muchidonha mvura;**
- **Muine twupuka twakaita semasvosve uye madandaude;**
- **Muine hurwere hurikukanganisa nyuchi.**

**3. Pakumora:**

- **Morai uchi hunenge hwaibva chete;**
- **Musamora nemazana;**
- **Musauraya nyuchi;**
- **Siyai humwe uchi kuti nyuchi dziwane chikafu.**

**4. Mushure mekumora:**

- **Buritsai mizinga yakare uye isina chinhu;**
- **Rongai patsva mizinga yasara kuitira kuti pasare makwanza pakati payo;**
- **Siyai umwe uchi kuitira nyuchi;**
- **Ipai nyuchi dzenyu chikafu kana zvakanakodzera.**

**5. Kana nyuchi dzaramwa mukoko:**

- **Torai mizinga yose kuitira kuti mugowana wakisi;**
- **Itai kuti mukati memukoko wenyu muve makachena;**
- **Bvurai mukati kuitira kuti twupuka pamwe nezvirwere zvirimo zvitsve;**
- **Isai mitsara yewakisi patwumapuranga tunovakirwa mizinga nenyuchi modzosera mumukoko wakachena.**

# CHIKAMU CHINO CHICHAKUBATSIRAI KUTI MUKWANISE KUONGORORA MUKOKO ZVISINA NJODZI UYE KUNZWISISA ZVAMUNOONA MUKATI.

## 1. Pfekai mbatya dzinokudzivirirai.



**Veiri**

**Chipfeko chekumusoro**

**Magorovhosi**

**Chipfeko chezasi**

**Shandisai mhando yeshangu dzisingapindi mvura kana mapepa akasungirwa patsoka uye akasungwa muzvitsitsinho**

## 2. Ivai nechokwadi chekuti zvinoda kushandiswa zvese zviripo. Zvakanaka kuve nemumwe anokubetserai.



**Magorovhosi epurasitiki**

**Mudziyo wekuisa uchi**

**Mapanga, uye chishandiswa chemukoko**

**Chipfungaidzo uye zvipiswa zvacho**

**3. Batidzai chipfungaidzo kuitira kuti pave nechiutsi chakawanda. Miguri yechibage, uswa hwakaoma uye huni dzakaora zvinogona kushandiswa muchipfungaidzo.**



**Chipfungaidzo chisingadhuri chinokwanisa kugadzirwa muchishandisa gaba rakaboowa pasi.**

**4. Pfungaidzai pamukova wemukoko mombomira zvishoma kuitira kuti nyuchi dzigadzikane.**



**5. Pfungaidzai pasi pedenga remukoko zvoteverwa nekubviswa kwedenga iri.**



**6. Tsvakai panenyuchi nekugogodza patwumapuranga tunovakirwa mizinga. Ruzha runotaridza divi risina nyuchi.**



**7. Simudzai kapuranga kanovakirwa muzinga kekutanga zvinyoronyoro.**



**8. Tsekedudzai muzinga unotevera wacho zvishoma kuitira kuti uve nyore kubisa.**



**9. Simudzai muzinga wega wega zvinyoronyoro muchi cherechedza kuti wakaita sei.**



**Vachengeti wenyuchi  
ava vari  
kucherechedza  
zvirikuitwa nenyuchi  
pamwe nezimai kuti  
vagutsikane kuti  
nyuchi dzirikuwanda.**

**10. Simudzai muzinga mumwe panguva imwe.**



**11. Cherechedzai mavakirwo akaitwa muzinga nenyuchi dzemusango uku kwakada kungofanana nemavakirwo emizinga mumukoko weKTB.**



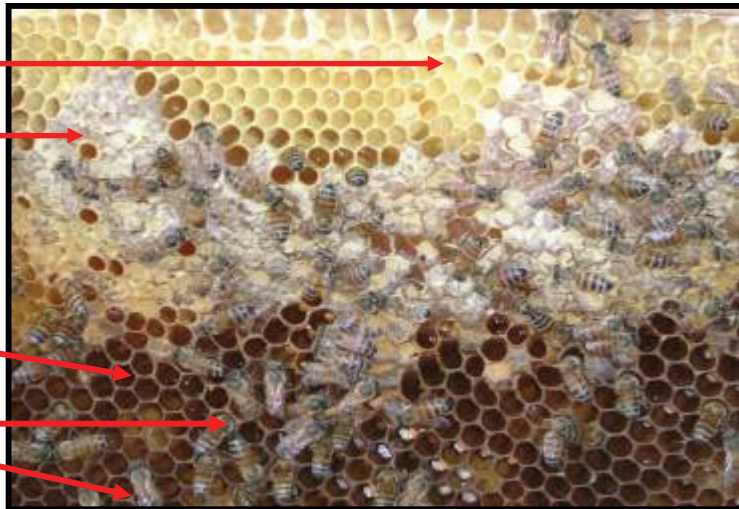
## 12. Nyuchi idzi dziri kuchengeta uchi pamwe nepfuma.

**Pfuma**

**Uchi  
hwakavharwa**

**Uchi husina  
kuvharwa**

**Nyuchi dzerudzi  
rwevashandi**



## 13. Nyuchi idzi dziri kuvaka muzinga munyowani dzichishandisa wakisi.

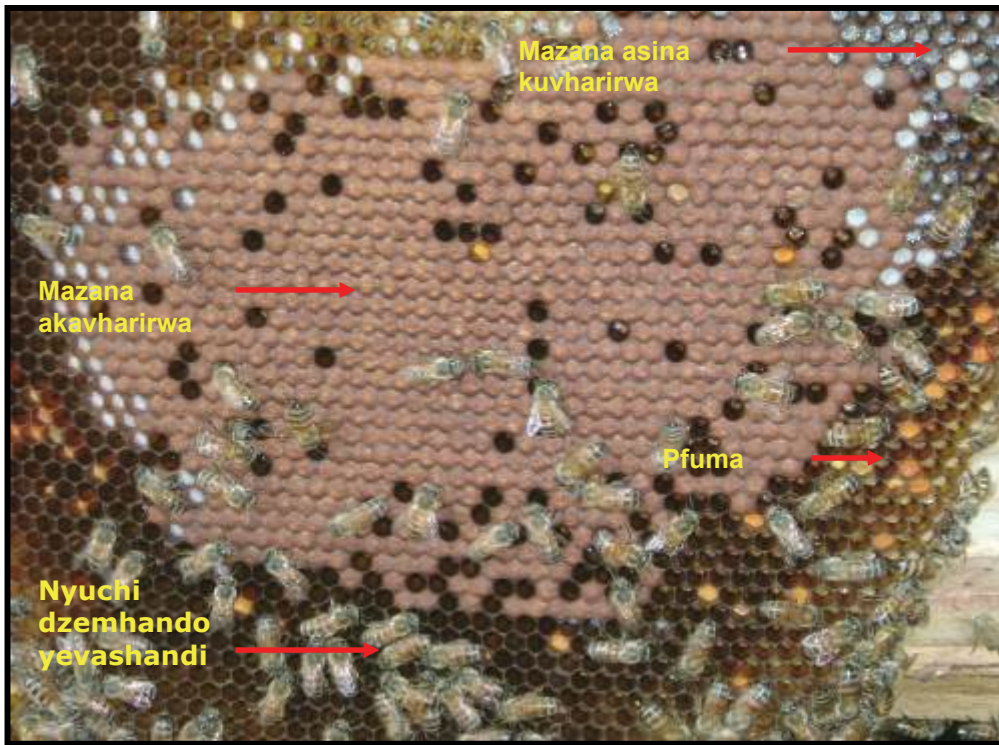
**Nyuchi  
dzinogadzira  
wakisi**



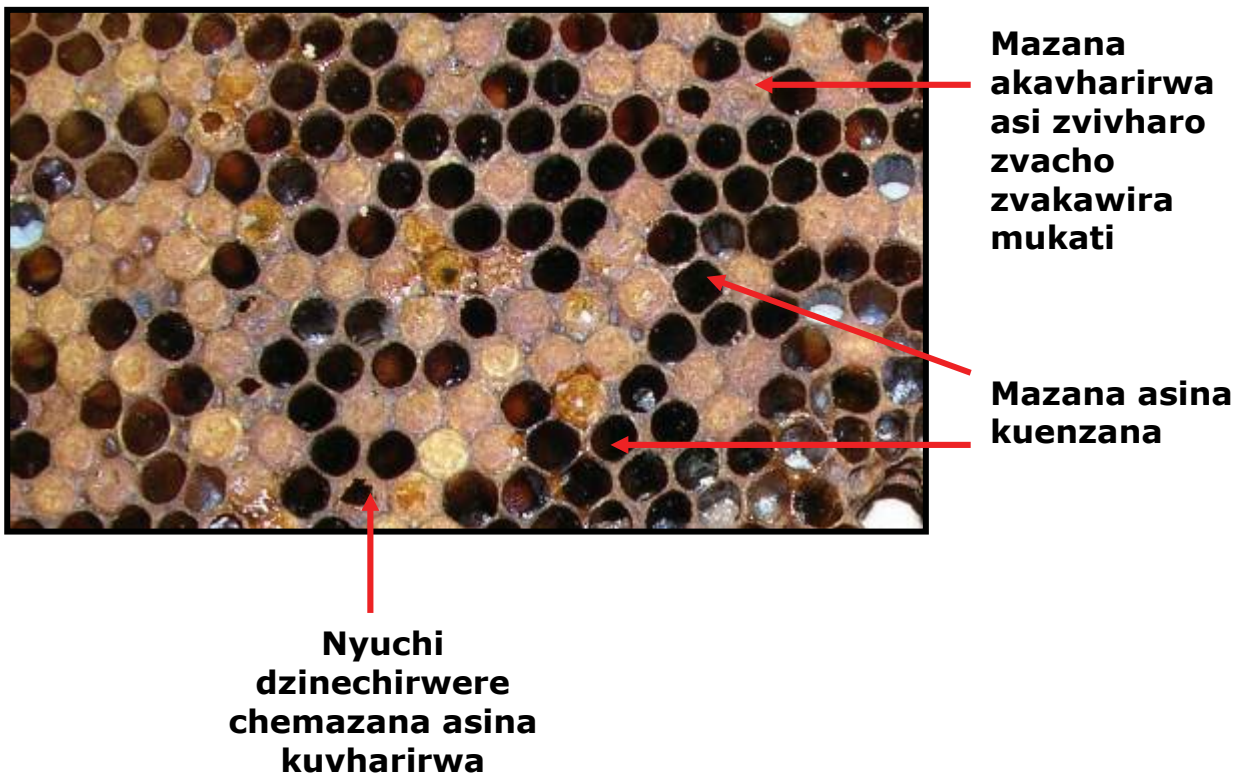
## 14. Mukoko uyu wakazarisa nyuchi saka unoda kumorwa.



15. Nyuchi idzi dziri kuchengeta mazana. Mungaziva here mazana akavharirwa, mazana asina kuvharirwa, nyuchi dzemhando yevashandi uye pfuma mumufananidzo unotevera?



16. Nyuchi idzi dzine chirwere chakaipa saka dzinofanira kuparadzwa kuburikidza nekupisa mizinga.





# Mungamora Sei Uchi Hwemhando Yepamusoro



Mimwe mifananidzo yakabva kuna Len Dixon pamwe ne  
National Bee Unit (Fera)

Kumora uchi hwakawanda uye hwemhando yepamusoro kunokosha. Uchi hwakanaka hunogara kwenguva ndefu uye hunounza mari yakawanda. Zvinokwanisika kumora mikoko kanopfura kamwe pagore. Nguva dzekumora uchi dzinosiyana siyana zvichienderana nenzvimbo. Vachengeti venyuchi vemunzvimbo ndivo vaneruzivo urwu saka ndivo vanofanirwa kubvunzwa.



Mukoko uyu wakazara uchi uye unoda kumorwa. Zvisinei, zera retwumapuranga twemizinga harisiro nekudaro mizinga yakavakwa ichibatanidza twumapuranga utwu zvoita kuti kumora kutore nguva ndefu. Izvi zvinoita kuti mhando yemikoko yeKTB isaite senzira yakanaka yekuchengeta nyuchi.



**Kuve nemuzinga mumwe pakapuranga kamwe kunoita kuti kumora kuve nyore.**



**Kuitira kuti zvisava nenjodzi, morai muine mumwe anokubetserai.**



**Munoda zvishandiswa izvi pakumora nyuchi.**





**Furidzirai utsi kuti nyuchi dzigadzikane. Kazhinji uchi hunochengeterw a kure kwazvo kubva kumukova wemukoko. Pano mukova uri kuno mberi saka uchi huzhinji hunowanikwa shure kwemukoko.**

**Tsvakai kune nyuchi movhura mukoko zvinyoronyoro.**



**Tsvairai nyuchi idzi muchidzidzoserwa mumukoko**

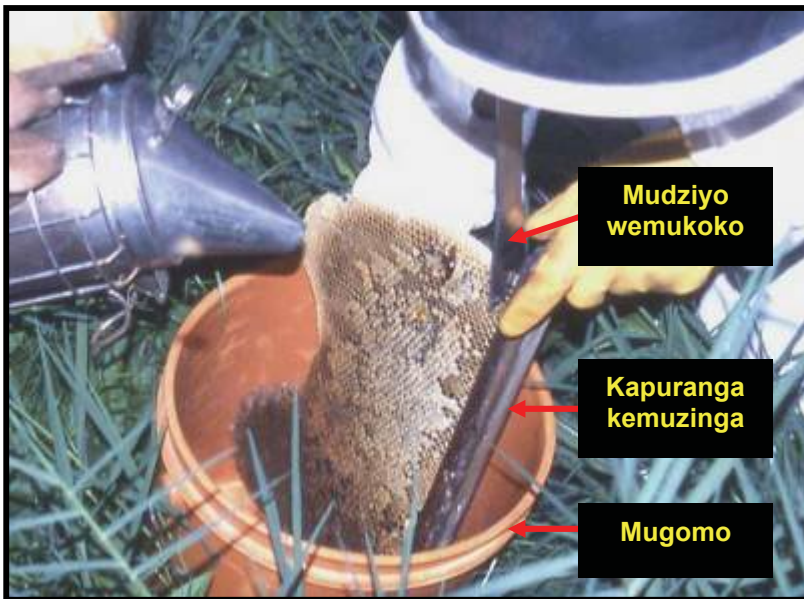
**Tsvairai nyuchi dziri pamuzinga zvinyoronyoro muchidzidzoserwa mumukoko. Munokwanisa kushandisa mutsvairo wakagadzirwa neminhenga kana uswa.**

**Pakumora, sarudzai mizinga ine uchi hwakavharwa. Zvakanyanyokosha kumora nyuchi dzenyu munguva dzemanheru kwavekutonhorera, kuitira kuti nyuchi dzamunenge makanganisa dzigadzikane muhusiku hunotevera.**



**Uchi hwakanyatsovhariwa**

**Kumora usiku kunoita kuti zvisave nyore kuona kana uchi huri kumorwa hwakanaka. Kumora uchi mvura ichangobva kunaya kunoita kuti mvura iri muuchi iwande zvoita kuti hunaku hweuchi uhu hudzikire.**



**Chekai muzinga kubva pakapuranga muchiisa mumugomo wepurasitiki wakachena. Muvharo wemugomo uyu unofanirwa kuvharwa kuitira kuti nyuchi dzisapinda.**

**Mugomo wakachena une muvharo wakanaka unodiwa kuitira kuti nyuchi dzisapinda muneuchi uye izvi zvinodzivirira mwando zvoita kuti huwandu hwemvura husawedzera muuchi.**



**Morai muzinga wegawega kusvika masvika kumizinga ine mazana. Siyai mutsara wewakisi kuti nyuchi dzikwanise kuvaka mumwe muzinga. Humwe uchi hunofanira kusara kuti nyuchi dziwane chikafu. Mukasadaro, nyuchi dzinokwanisa kuramwa kana kufa.**



**Kana muchida kuchengetedza nyuchi dzenyu, mazana haafanirwi kumorwa.**



# Kusvina Uchi Hwemhando Yepamusoro



**Brighton Chitenje anoendesa uchi hwake kuNHPC iri kuNkhata Bay Honey Coop. Mufananidzo unotevera unotaridza uchi hunowanikwa muUganda.**



Mimwe mifananidzo yakabva kuNational Bee unit (Fera)

**Munofanirwa kuve nemigomo yepurasitiki miviri, jira rekusvinisa uchi rakachena uye nzvimbo isina njodzi yekupfondwa nenyuchi yamunobvisira uchi kubva pamizinga.**

**Jira rekusvinisa**



**Zvinoshandiswa zvese kunyanya maoko, zvinofanirwa kuve zvakachena.**

**Uchi hunosvinwa nejira rakachena. Wakisi inosara mujira.**

**Wakisi**





**Muzinga unodamburwa kuita zvidimbu zvidiki kuitira kuti uchi hubude.**



**Mushure mokudambura, uchi hunosvinirwa mumudziyo wepurasitiki huchipinda nemujira rakachena.**

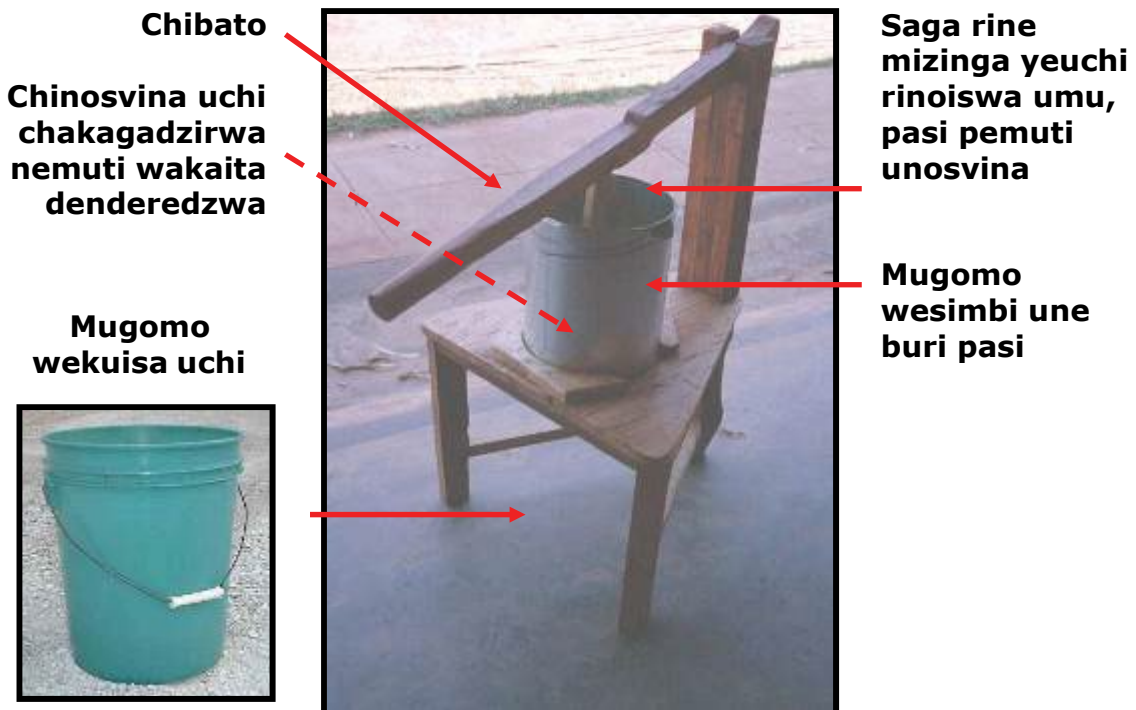


**Mugomo unovharwa uchi hosiiwa huchidonheramo kusvika uchi huzhinji hwave mumugomo. Uchi hunosarira hunogona kusvinwa kubva mujira nemaoko akachena. Maruva kubva mumiti yakasiyana siyana anotipa uchi hunotaridzika uye huno nhuwira zwakasiyana siyana. Mhando dzeuchi dzakasiyana siyana dzinofanirwa kuchengeterwa pakasiyana.**

**Vanhu vane mikoko yakawanda vanokwanisa kusvina uchi hwavo vachishandisa muchina uyu.**



**Muchina uyu munokwanisa kuugadzira zvakachipa nenzira inotevera.**



**Mudziyo wesimbi une nhivi dzakatwasuka une buri pasi. Mugomo wepurasitiki unoiswa pasi kuitira kuti uchi hunenge hwasvinwa hupinde. Pakati pane chisviniso chakagadzirwa nemuti wakaita denderedzwa. Mizinga inoda kusvinwa inoiswa musaga kana jira yoiswa pasi pechisviniso chemuti. Chibato chinoshandiswa kusvina uchi huchibuda mujira huchipinda mumugomo wepurasitiki uri pasi.**

# Tingakohwa Sei Wakisi



**Wakisi yakanyatso cheneswa iyi ndeyekuMalawi.**



**Zvinhu zvakagadzirwa newakisi yekuUganda. Zvinhu izvi zvakabva kuHives Save Lives Africa.**

**Wakisi inokosha zvekuti inokwanisa kushandiswa kugadzira zvinhu zvakasiyana siyana. Nokudaro haifanirwi kuraswa.**



**Isai mizinga yabviswa uchi pakasiyana nemizinga yakare uye yakasviba, ine mazana.**



**Gezai mizinga yakabviswa uchi kuti ichene.**



**Gezai mizinga mumvura kusvika musisina tsvina neuchi. Putirai wakisi pajira kana saga mosunga neshinda. Dziisai mvura mupoto yamusisashandise. Isai jira kana saga rinemizinga mupoto tevere mvura.**



**Tsimbirirai jira mumvura**

**Saga**

**Poto inemvura inopisa**

**Rambai muchidziisa mvura zvishoma nezvishoma. Haifaniri kufashaira. Rambai muchidzvanya saga kusvika mizinga yese yanyungudika. Wakisi yanyungudiswa inobuda nemumaburi esaga yoenda pamusoro pemvura.**



**Svinai saga kuti wakisi ibude**

**Wakisi inoerera ichipinda mumvura**

**Svinai wakisi yasarira musaga ramunoisa pakati pezvimiti zvamunotenderedza. Ngwarirai nekuti saga iri rinopisa. Wakisi inooma pamusoro pemvura painotonhora.**

**Wakisi yakaoma inofanirwa kucheneswazve kubvisa tsvina yasarira:**



**Damburai wakisi kuita zvidimbu zvidimbu.**



**Nyungudusai wakisi mugango rakaiswa munerimwe gango rine mvura iri kufashaira.**



**Gango  
rekunze  
rine mvura**

**Moto**

**Gango  
rine  
wakisi**



**Mvura  
inofashaira**

**Wakisi  
yanyungudika**

**Dziisai kusvika wakisi yanyungudika. Onai tsvina iri pasi pegango yabva muwakisi iri mumufananidzo uyu.**

**Marara  
pasi  
pegango**



**Dururirai wakisi yakanyungudiswa kuti iyerere ichipinda napajira kuti tsvina ibve. Jira resikipa rakachena rinokwanisa kushandiswa kuita basa iri.**



**Chikombore chepurasitiki chinoita kuti wakisi yenyu ive yakaumbwa zvakanaka. Zorai chikombore chenyu nesipo kuitira kuti wakisi isanamira painenge ichioma.**



**Kuzora mukati mechikombore nesipo kunodzivirira kunamira kwewakisi.**



**Wakisi inotonhora iri muchikombore inokwanisa kubviswa kanayaoma. Marara anosara mujira. Jira rinokwanisa kugezwa roshandiswazve.**



**Wakisi iri kutonhora**



**Jira rinenge rasviba rinokwanisa kushanda zvakare**



**Wakisi yakaomeswa**

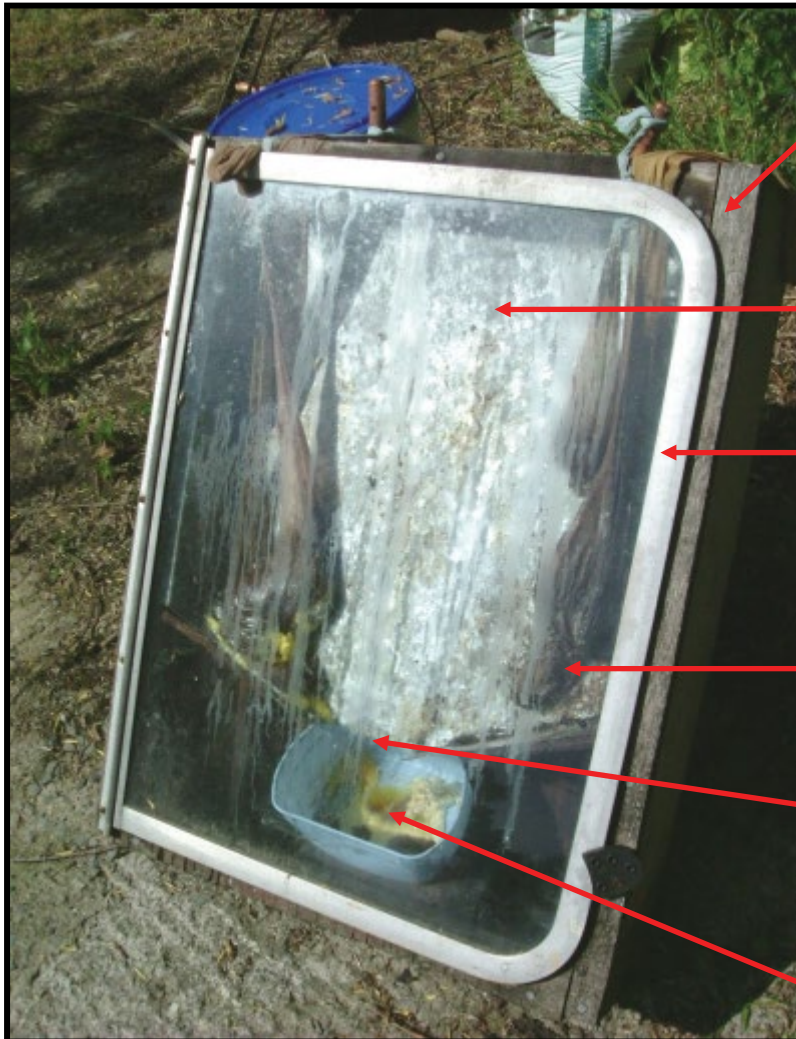
**Gezai zvishandiswa zvose kana mapedza.**

**Wakisi irikutengeswa iri muzvidimbu zve 1/2 uye 1 kg (yakacheneswa neNHPC yekuMalawi).**



## DZIMWE NZIRA DZEKUCHENESA WAKISI

1. Kuchenesa wakisi muchishandisa zuva: Kupisa kwezuva kunokwanisa kushandiswa kunyungudisa wakisi. Wakisi inoiswa musaga yoiswa parata riri mubhokisi rakavharwa negirazi roiswa pazuva. Karata kakapetwa kanobetsera kuti wakisi inenge yanyungudika iyerere ichipinda mugaba. Ngwarirai kuti wakisi yenyu isanyanya kutsva sezvo zvichiita kuti isvibe kana kubvira.



**Bhokisi rakagadzirwa nemapuranga**

**Rata rinodziiswa nezuva**

**Girazi kana purasitiki rinoita kuti mukati mupise**

**Saga rine wakisi**

**Wakisi inoerera ichipinda mugaba**

**Wakisi yakaungana mugaba**

2. **Kuchenesa wakisi muchishandisa mvura inofashaira: Wakisi inokwanisa kucheneswa muchishandisa utsi hunobva mumvura inenge ichifashaira. Saga rinemizinga rinoturikwa pamusoro pemudziyo wesimbi wakagadzikwa pamusoro pemvura iri kufashaira. Wakisi inenge yanyunguduka inodonha kubva musaga ichipinda mugaba. Ngwarirai kuti mvura isapwa.**

