



# Kuweta Njuchi Buku 1



***Buku ili laperekedwa kwa alimi a njuchi amawa. Tikuthokoza kwambiri alimi a njuchi onse mu Africa amene atenga nawo mbali kulemba bukuli, makamaka a ku Nkhata bay Honey Producers Cooperative, Malawi.***

**Wolemba Pam Gregory**

thewaterloo<sup>\*</sup>foundation

*Woyang'anira kalembedwe ka buku ili ndi Gay Marris, UK National Bee Unit (Fera)*



*Chichewa translation provided by Lenson Simumba - Small Beekeepers Development and Research Association (SBDARA) Nkhata bay Malawi. Contact [nhpc\\_nb@yahoo.com](mailto:nhpc_nb@yahoo.com)*

# Nanga Tingagwiritse Bwanji Ntchito Bukuli



Tsopano Kwavomerezewa kuti ulimi wa njuchi ukhoza kupereka ndalamina kwa anthu a ku midzi. Komabe kuweta njuchi sikophweka nthawi zonse. Njuchi zikhoza kuluma ndiponso sizimadziwika. Kukolola kwa uchi kumatengera zifukwa zambiri, monga nyengo ndiponso kukhala ndi mtsika wabwino. Uchi wa mtengo wapatali uyenera kukhala wabwino. Sera ndi chinthu chabwino koma anthu awononga kwa nthawi yayitali.

Bukuli lakonzedwa kuti alangizi a kumudzi wokhala mumbali mwa chipululu kumpoto kwa Africa adzigmwiritsa ntchito. Bukuli lili ndi zithunzi zooneka bwino ndi mawu pang'ono. Pali mapunziro a luso labwino ofunika kuwasata mukafuna kuyamba ntchito yoweta njuchi amene ali mbukuli. Bukuli lilinso ndi nzeru zatsopano zothandiza alimi kuti adzilimire paokha popanga zipangizo zaho kuchokera ku zipangizo zimene zikupezeza wamba. Ndichikulupiro changa kuti anthu adzayamba kuweta njuchi pa mtengo wotsika, ndiponso mwina kuyetsa zipangizo zatsopano.

Zithunzi zikuwonetsa njira zosiyanasiyana zomwe anthu amatsata poweta njuchi. Zili choncho potukula kukambirana ndi kugawana nzeru pothandiza anthu kuthana ndi mavuto amene amapezana nawo kumadera awo. Kwenikweni bukuli likunena zambiri zakawetedwe ka njuchi mung'oma wotchedwa Timatabwa Tapamwamba koma tingagwiritse ntchito luso ndi nzeru zimenezi poweta njuchi mnjira za makolo ndi mung'oma wa thabwa.

Pali chikhulupiro chakuti alangizi adzathanthauzira maganizo amenewa muchilankhulo chawo. Tikuthokoza a Waterloo Foundation, buku linanso lofotokoza momveka bwino lidzakhala lilipo mchaka cha 2010. Bukuli lidzafotokoza za luso la pamwamba lakasamalidwe kanjuchi ndi kuthana ndi mavuto. Buku linanso la alangizi, mukalifuna likupezeza ndi Pam Gregory limene likufotokoza 'Chifukwa chiyani' kapena 'Nkofunika bwanji'. Chonde lembelani ku: [pamgregory@phonecoop.coop](mailto:pamgregory@phonecoop.coop)

Pam Gregory wakhala akuweta njuchi kuyambira 1974. Iye wakhala akugwira ntchito ku UK National Bee Unit kuchokera mchaka cha 1976 – 2003. Pamaphunziro ake ali ndi diploma mu ulimi wa njuchi ndiponso MSc in Overseas Rural Development. Wakhala zaka 12 akugwira ntchito ya ulimi wa njuchi mu sub Saharan Africa.

**Sangalalani ndi ulimi wa njuchi.**  
**Pam Gregory June 2009**

# Moyo Wa Njuchi



**Njuchi ikuyendera maluwa**

Zinthuzi zowonjezera zinaperekedwa ndi Margaret Cowley, Ged Marshall, Adrian Waring, Clairw Waring and Max Westby

**Njuchi zimakhala mu magulu. Pogwira ntchito pamodzi membala la gulu imakhalabe ndi moyo kapena kukhalakobe kudziko ndi kubweretsa ubwino kuposa poyamba. Pa gulu pali mitundu itatu ya njuchi ndi ntchito zosiyananso.**



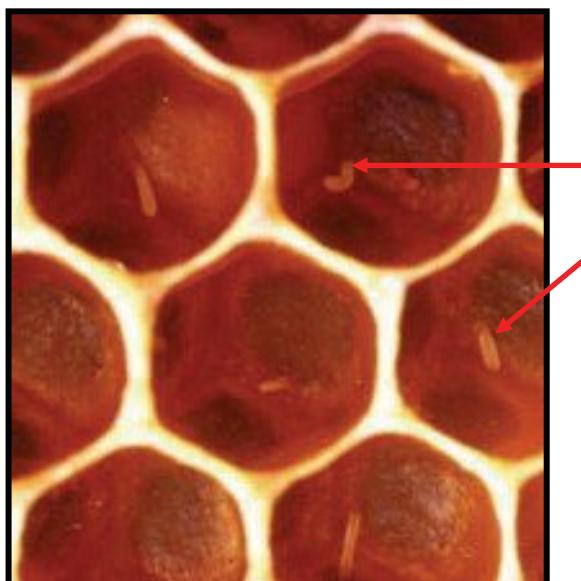
**Uyu ndi make njuchi (manthu). Pa gulu la njuchi amakhala yekha. Ndi make mung'oma. Ntchito yake ndi kuyikira mazira amene amatswa njuchi za tsopano. Manthu akoza kuyikira mazira 1000 tsiku lililonse munthawi yina pachaka.**



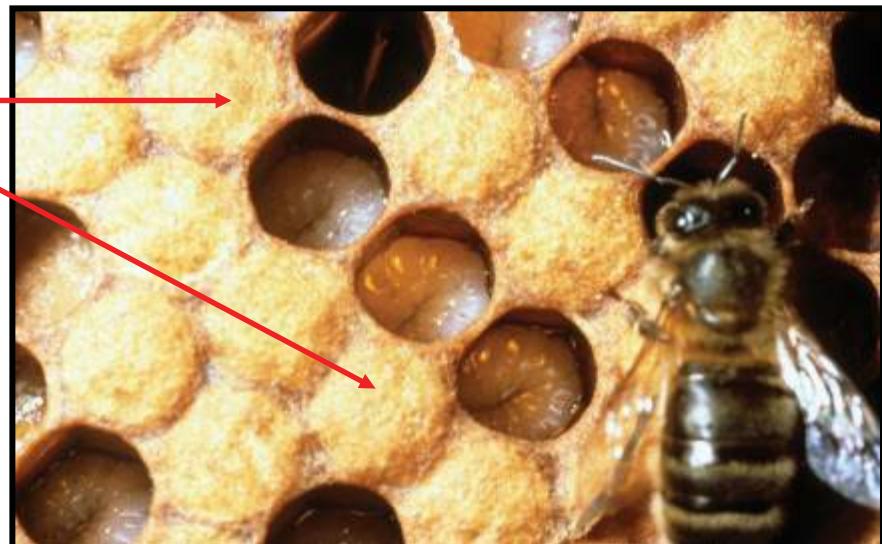
**Uyu ndi zunguya. Ntchito yake ndi kukwatana kapena kugonana ndi make njuchi watsopano. Nthawi ya chakudya chambiri a zunguya amapezeka papfupipfupi 500 mumng'oma. Nthawi yosowa chakudya amathamangitsidwa.**



**Uyu ndi wantchito. Ndi njuchi yayikazi koma siyikira mazira. Njuchiyi imagwira ntchito ina yiliyonse mumng'oma. Nthawi yotolera maluwa antchitowa akhoza kupitirira 40,000 mumng'ma.**



**Mphutsi  
zatsekedwa  
mutzipinda  
kuti zikule.**



**Wa ntchito wa  
tsopano  
akutuluka  
mukachipinda.**



**Antchito akusiya  
mng'oma kukayendera  
maluwa, kutenga mungu  
wosakhwima ndi timadzi  
tokoma tamuzomera  
tomwe njuchi  
zimagwiritsa ntchito  
popanga uchi. Wantchito  
uyu akutenga timadzi  
tokokma kuchokera mu  
bulugamu.**

**Njuchi  
zimabwerets  
a ubwino ku  
mbewu  
kuchokera ku  
mango, khofi,  
zipatso,  
gwafa, ndi  
zina zambiri.**



**Wa ntchito uyu  
wanyamula  
mungu ndi  
timadzi tokoma.  
Imodzi mwa  
njuchi yatulutsa  
lilime lake  
pakhomu pa  
mng'oma  
kuyesa ubwino  
wa timadzi  
tokoma.**



**Antchitowa  
akusunga mungu  
(usinda) ndi  
timadzi tokoma  
mzisa.**

**Maluwa akhoza  
kukhala ndi  
mungu wa  
mitundu  
yosinasiyana.**



**Njuchi zimakupiza  
mapiko awo  
pochotsa madzi  
mutimadzi  
tokoma ndi  
kufalitsa uthenga  
wa pfungo.**

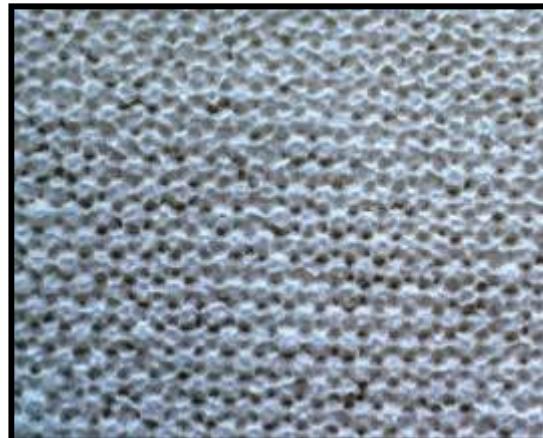
**Njuchi iyi  
ikuonetsa  
pambalambanda  
chiwalo  
chonukhisa  
kuitana zinzake.**

**Antchitowa  
akugawana  
chakudya  
ndi pfungo.**



**Antchito akuvina  
polumikizana za  
ubwino ndi njira  
yomwe kuli gwero  
la timadzi tokoma.**

**Antchito atseka  
uchi wokhwima  
bwino. Uchi ndi  
wakupya bwino  
kudikira nyengo  
yokolola.**



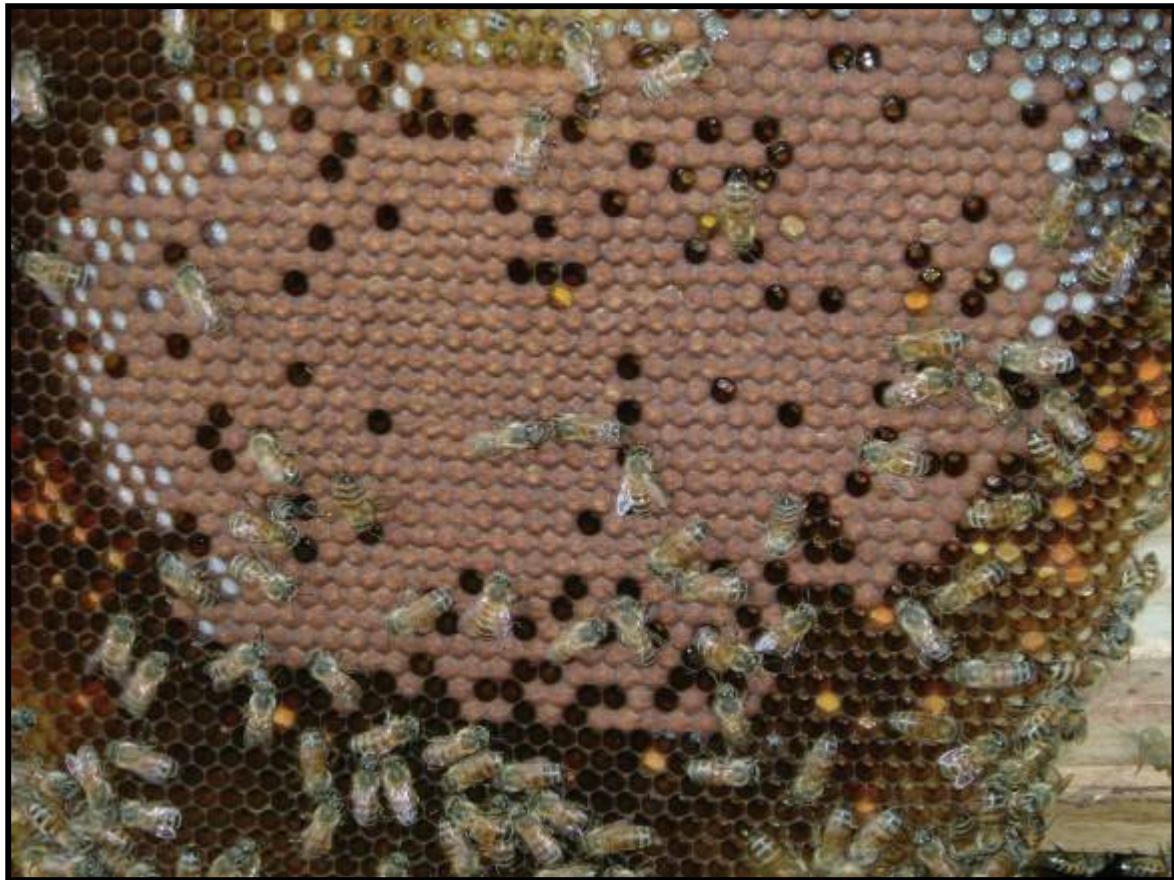
**Antchito awa  
akubweretsa  
phula  
mumng'oma.  
Phula ndi myata  
yotengedwa ndi  
njuchi kuchokera  
kumitengo. Phula  
limagwiritsidwa  
ntchito pomata  
mong'ambika ndi  
kuyeretsa  
mumng'oma.**



**Wa ntchito akulondera pakhomo.  
Njuchi za ntchito zimaluma poteteza  
nyumba yawo. Zikaluma zimafa  
ndiye zimanyinyika poluma.**



**Antchito okha ndi  
amene amaluma.  
Akaluma amafa. Njuchi  
siziluma popanda  
chifukwa.**



## **Mukuonapo chiyani pa chisa ichi.**

### **Pezani:**

- **Antchito**
- **Ana antchito omatidwa.**
- **Mphutsi zosamatidwa mutzipinda**
- **Tzipinda topanda kanthu.**
- **Tzipinda tochepa timene tili ndi timadzi tokoma.**
- **Tzipinda tosunga usinda (mungu wosakhwima).**

# Tingazitchinjirize Bwanji Poweta Njuchi



**Salome wa ku Kenya, wazitchinjiriza ndi zobvala zopangwidwa kumudzi**

Zinthuzi zoonjezerapo zinaperekedwa ndi Paul Latham

## Mbola za njuchi.

Njuchi zikhoza kuluma ndiponso mbola zikhoza kukhala zoopsa. Samalani njuchi bwinobwino ndiponso mwaulemu nthawi zonse.



### KUMBUKIRANI

- Njuchi ya ntchito yiliyonse ili ndi mbola.
- Njuchi yiliyonse ikaluma imatulutsa pfungo kuchenjeza njuchi zinzake ku choopsa.
- Pfungo limakopa njuchi zina kuluma pamalo amodzi.
- Popelani utsi polumidwapo kuteteza njuchi zina.
- Msangamsanga chotsani mbola pa thupi.

## Zobvala zozitetezera.

Nthawi zonse zitetezeni ndi zobvala za bwino zovindikira thupi lanu lonse. Zozitetezera izi zopangwidwa kuchokera ku zipangizo za lokolo.





**Ngati simungathe kupanga chozitetezera, pangani chophimba chosavuta chimene chikuoneka pa gawo la pafupi.**

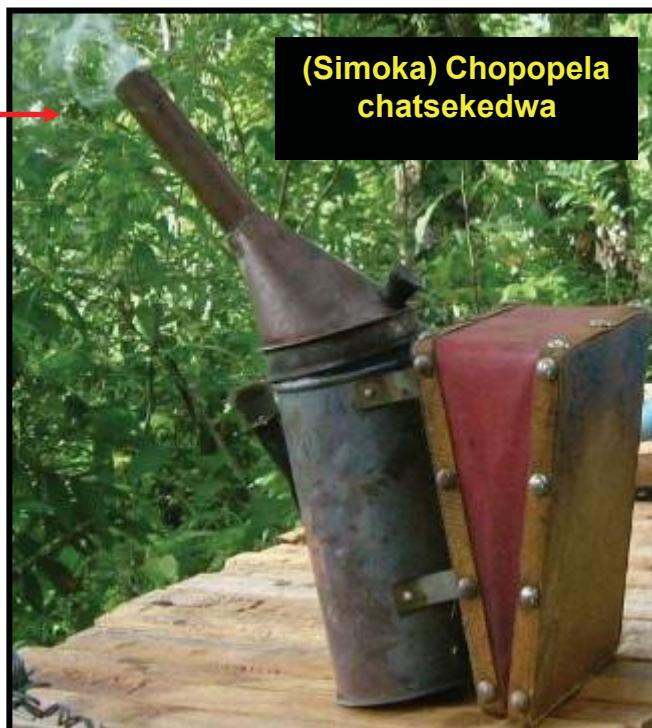
**Bvalani zovala zokhutala.**

**Chapani zobvala pochotsa pfungo la mbola.**

## **Gonjetsani njuchi.**

**Utsi ndi wofunikira pogonjetsa njuchi. Pali njira zambiri zofukiza utsi ndiponso mitundu ingapo ya zopopela utsi (Simoka).**

**Gonjetsani  
njuchi  
popopel  
utsi wambiri  
kuti  
muziteteze  
nokha.**





## Musagwire ntchito nokha.

**Nthawi zonse pitani ku njuchi ndi munthu wina. Onetsetsani  
kuti zipangizo zanu zonse zakonzedwa.**



### KUMBUKIRANI

- **Musatsegule mng'oma popanda chifukwa chenicheni.**
- **Fatsani potsegula mng'oma.**
- **Gwirani ntchito msangamsanga ndi mwakachetechete.**
- **Popelani utsi wambiri.**
- **Tsegulani mng'oma nthawi yozizira.**
- **Kawirikawiri kudzikhala ku mamawa ndi ku madzulo.**
- **Kutsegula ku madzulo kumapereka mwayi kuti njuchi zikhazikike usiku wonse.**
- **Zitetezeni.**

# Tingapange Bwanji Chophimba Chophweka



**Alimi a njuchi a ku Kisoro, Uganda apanga zophimba zawo**

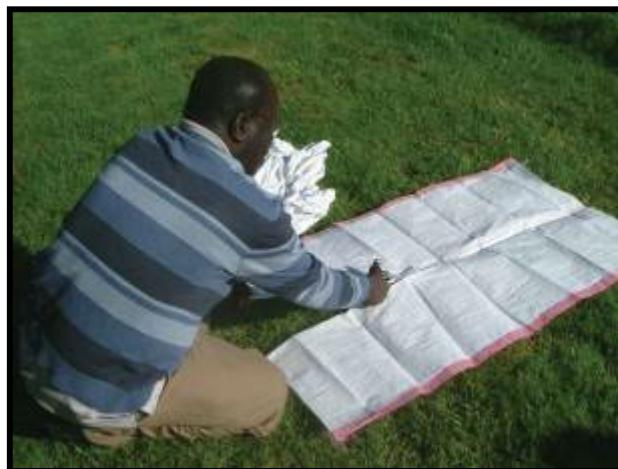
Zinthuzi zoonjezerapo zidaperekedwa ndi Dan Ngirabakuzi

## **TINGAPANGE BWANJI CHOPHIMBA CHOPHWEKA.**

**Nkonsavuta kupanga chophimba cha kumaso ndi kumutu poziteteza kulumidwa ndi njuchi. Thumba la ufa wa chimanga ndi lolimba ndiponso ndilotsika mtengo.**



**Dulani thumba pakati mulitali. Dulani zidutswa zitatu pa theka lililonse. Chidutswa chimodzi chipanga mbali imodzi ya chophimba.**



**Nkotheka kupanga zophimba zisanu ndi chimodzi kuchokera ku thumba limodzi mukalidula bwino.**



**Thumba silichedwa kukulumbutsuka, poteteza pindani m'mbali ndipo musoke.**

**Zindikirani  
kukulumbutsuk  
a m'mbali mwa  
thumba.**



**Sokani ngodya chidutswa chilichonse.**



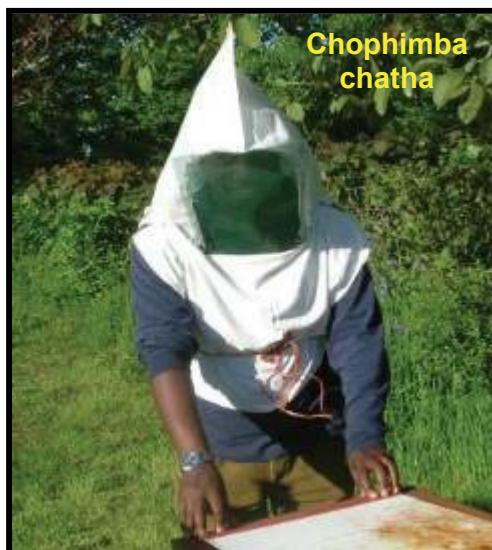
**Kenaka lumikizani meshi. Uconde wa udzudzu uli bwino.**



## **Chioneke motero.**



**Sokelerani meshi pa maso pa chophimba ku maso ndi ku mutu kuti chikutchinjirizeni pa chifuwa ndi ku msana. Sokelerani zingwe zomangira mbali zonse zinayi.**



**Mukamavala zozitchinjiriza ku njuchi, choyamba bvalani chophimba pamene mwabvala zobvala zokhutala thupi lanu lonse. Ngati mulibe chozitetezera bvalani zoyenera zomwe zingakutetezeni ku njuchi.**

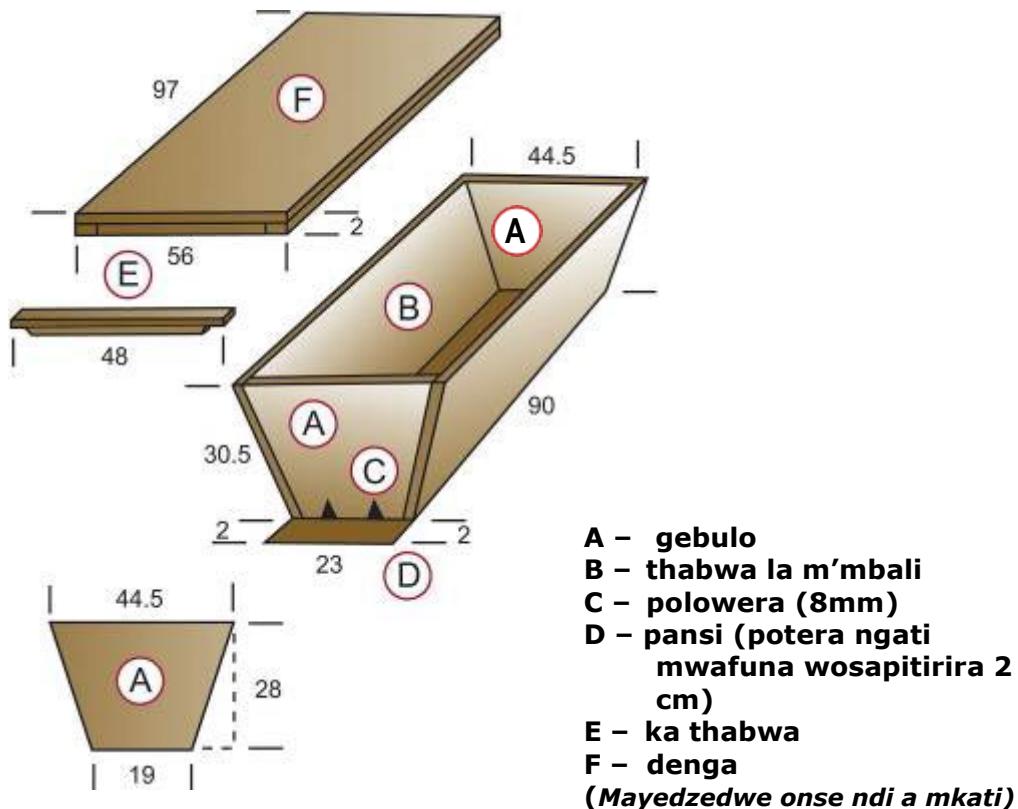
# Tingapange Bwanji Mng'oma Watimatabwa Tosuntha Zisa



**A zimayi a ku Nessuit Project (Rift Valley, Kenya), a kumata mng'ona ndi ndowe za ng'ombe ndi dothi.**

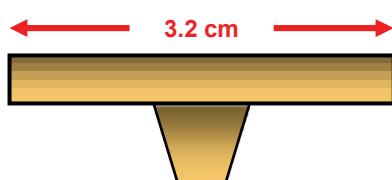
Zinthuzi zoonjerezerapo zidaperekedwa ndi Roy Dyche ndi Paul Latham

**Ndondomeko iyi ikuonetsa ka pangidwe ka mng'oma. Milingo yabwino imathandiza mulimi kusinthitsa timathabwa kuchotsa pa mng'oma wina ku kaika pa winanso. Choncho kusamalira njuchi ndi kukoloka uchi sikuvuta.**

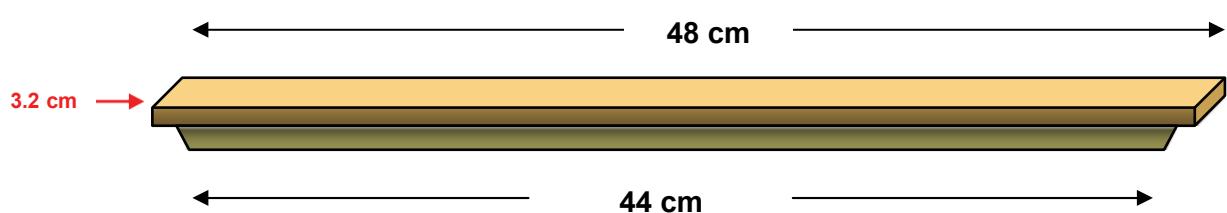


**Monga mwachizolowezi timathabwa tidzikhala todulidwa bwino. Nkofunikira kuti mulingo wa timathabwa uzikhala ndendende 3.2 cm mulifupu.**

### KAONEKEDWE KAKE



### KAONEKEDWE KA MUMBALI



## 1. KUPANGA MNG'ONA WA MATABWA

**Dulani matabwa molingana. Matabwa awa ndi a mulitali.**



**Palani matabwa kuti mulumikize bwino.**



**Lumikizani timatabwa tiwiri tatifupi kuti mupange gebulo (ya ku tsogolo ndi kumbuyo). Dulani mutu wa msomali (kapena wongolani msomali pamwala ndi nyundo) kuti mbali zonse za msomali zikhale zosongoka. Polumikiza khomelani timatabwa ndi msomali woongoka konsekone.**



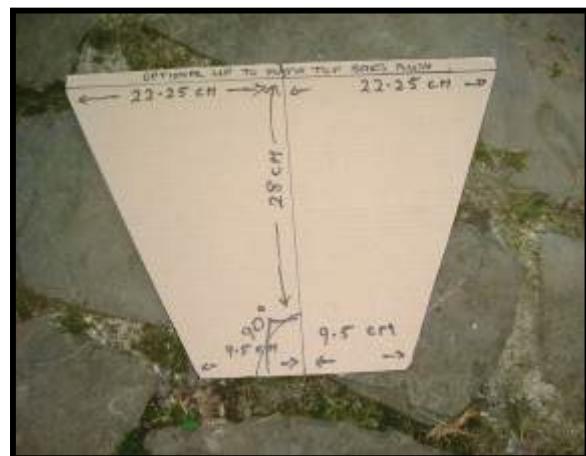
**Amakhala wokwingwinyala matabwa akalumikidzidwa (kutsogolo ndi kumbuyo).**



**Dulani mbali zokwingwinyala kuti zikhale zolingana.**



**Gwirtsani ntchito muyeso wabwino. Ichi chidapangidwa kuchokera ku katoni. Kuyedza kuyambira pakatikati kumathandiza kupeza ngodya zabwino.**



**Boolani kapena dulani ngati 'V' (lisakule kupyola kukula kwa cholembera) polowera mbali imodzi mulifupi. Popewa tizirombo tolowa mumng'oma musakulitse polowera (isapitirire 8mm m'mwamba).**



**Mng'oma ndi wosavuta kulumikiza zonse zikatha. Apa mng'oma ukulumikidzidwa ndi misomali. Kenaka yikani thabwa la pansi.**



**Kupanga mng'oma wathunthu.**



**Anthu ena amapanga ming'oma yotalika magebulo pang'ono kusiyana ndi matabwa a mumbali kuti zigwirane bwino ndi timatabwa tapamwamba.**



Chifukwa cha katalika magebulo timatabwa tapamwa mba tikukwanira bwino.

**Anthu ena amayika timatabwa mumng'oma kuti tapamwamba tikwanire bwino mumbali.**



Timatabwa tapamwamba tikufanana ndi matabwa amumbali

## 2. KUPANGA MNG'OMA KUCHOKERA KUZIPANGIZO ZOPEZEKA WAMBA.

**Sikofunika kupanga mnq'oma kuchokera ku matabwa okwera mtengo.** Zipangizo zambiri zopezeka wamba zikhoza kugwiritsidwa ntchito mwa pamwamba zedi. Uwu ndi mtengo wa chiwale (kanjedza).



Mukhoza kupanga magebulo ndi zidutswa za matabwa, ndipo mumbali ndi pansi gwiritsani ntchito zipangizo zopezeka wamba. Mng'oma uwu wapangidwa ndi timitego towongoka bwino.

Timitego towongoka bwino.

Gebulo lopangidwa ndi tizidutswa tamatabwa.



**Mng'oma uwu wa timatabwa pamwamba wapangidwa mwaukatswiri popanda misomali kapena matabwa kuchokera kwa "Grande Ruche" wa ku Congo. Zipangizo zofewa zikumangidwa pamodzi ndi timitengo tosongola.**



**Kupewa tizirombo tolowa mumng'oma wa nsugwi mipata iyenere kutsekeda.**



**Mng'oma uwu wa ku Uganda wapangidwa kuchokere ku mapesi. Ndiwomatidwa ndi dothi lotsakanidza, phulusa ndi ndowe.**



**Mng'oma uwu ndi wolimba wa ku Uganda walukidwa kuchokera ku nsugwi.**



**Pansi ndi mumbali mwa ming'omayi muyenera kumatidwa kuti mukhale mdima ndi keteteza nyerere ndi tizirombo tina kulowa mkati.**



**Sikoyenera kupanga denga ndi zipangizo zokwera mtengo, bola dengalo likuteteza mng'oma ku mvula. Dengali lakutidwa ndi pulasitiki.**



**Dengali lapangidwa ndi timatabwa ndi mphatsa. Pakati payalidwa pulasitiki, kuthandiza kuti madzi asalowe. Pamwamba pake pakutidwango ndi pulastiki.**



**Dengali la foleredwa ngati nyumba za lokolo. Mumbali ndi lolimba koteri njoka ndi tizirombo tina sitingalowe, ndiponso ndilosavuta ponyamula.**



**Denga la mng'oma lingapangidwe ndi nsugwi zong'abidwa –  
monga denga la nyumba iyi ya lokolo ya ku Kenya.**



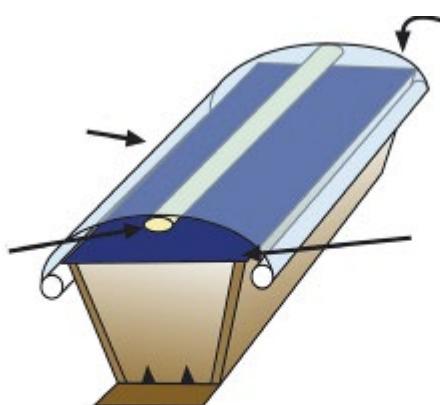
**Nsugwi za ng'ambidwa pakati ndiponso za yalidwa pamodzi motere -chimodzimodzi ngati lata. Kutirani nsugwi ndi pulasitiki powonjezera chitetezo.**



**Denga lophweka lingapangidwe kuchokera kupulastiki yayikulu ndi mitengo iwiri yomangiridwa mumbali mwa pulasitiki. Mitengo ikukokera pulastiki pansi.**

4. Vindikirani pamwamba ndi masamba a nthochi kapena masamba ena.

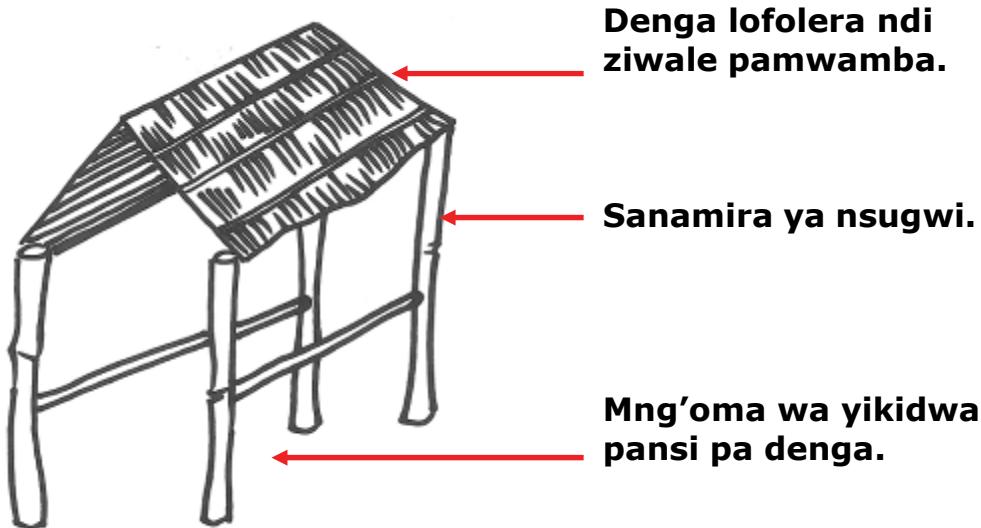
2. Nsugwi yothandidzira pamwamba pa pulasitiki, kuti madzi adzingotaikira mumbali mwa denga.



3. Pulasitiki ndi mitengo yokokera pansi.

1. Pulasitiki ya vindikira pamwamba pa timatabwa.

**Kufolera kutha kuteteza ming'oma ya njuchi ku dzuwa ndi mvula ngati simungathe kupanga denga lokwanira bwinobwino.**

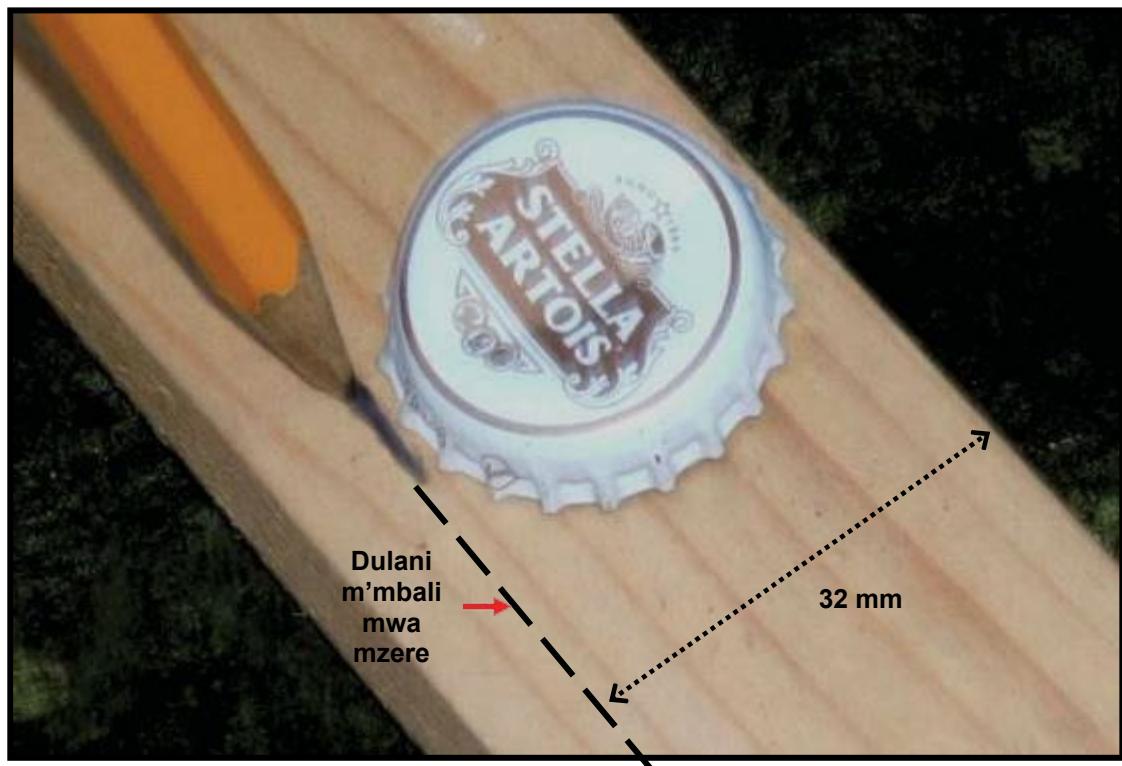


Mng'oma wopangidwa ndi timitengo wapachikidwa pa nthandala ya timitengo tomangiriridwa pamodzi komwe mawaya amagwira. Ichi chimathandiza kuti ming'oma isaonongeke. Ming'oma ikhoza kusunthidwa ponyamula kuchotsa pa nthandala, kupeputsa pogawa njuchi.



### 3. KUPANGA TIMATABWA TAPAMWAMBA

Mbali imodzi yovuta kwambiri ndi yokwera mtengo popanga mung'oma ndi kudula timatabwa tapamwamba. Nkofunikira kuti timatabwa tikhale 32 kapena 33 mm (3.2 kapena 3.3 cm) mulifupi. Gwiritsani ntchito chitsekerelo cha fanta poyedza timatabwa tamwamba mulifupi.



Timatabwa tambiri tili ndi mphako pakati. Ngakhale, anthu ambiri apambana kupanga timatabwa tapamwamba kuchokera kuzipangizo zopezeka wamba kusiyana ndi matabwa. Kata bwa aka kapangidwa kuchokera ku chiwale kapena kan jedza.



**Katabwa kapamwamba aka kopanda mphako. Kadulidwa mosalala.**



**Timitengo, nsugwi kapena chinthu chilichonse chiyenera chidulidwe bwino.**



## Mzere ungapangidwe ndi kandulo wa sera la njuchi.



**Wonani chithunzi ichi. Kambiranani ndi alimi anzanu. Timatabwa tapamwamba iti tapangidwa kuchokera ku nsugwi Kudzadza sera, imene ili nzeru yabwino kuyetsa. Ngakhale, mlimi adzapeza vuto kuti njuchi zimange chisa chimodzi ku kathabwa kamodzi chifukwa ndi tolakwika.**



**Kudula molakwika tapamwamba ndi chifukwa chachikulu chomwe chingabweretse mavuto pogwiritsa ntchito mng'oma wa timatabwa tapamwamba.**

**Ngati tapamwamba tadulidwa moyenera ndi khuthilidwa sera njuchi zidzamanga chisa chimodzi ku kapamwamba kamodzi. Ichi chizathandiza mlimi kukolola mosavuta ndi kusuntha zisa pakati pa ming'oma ndi kusamalira njuchi mwanjira imodzi ngati mng'oma wamatabwa.**



# Tingakonze Bwanji Malo Abwino Owetera Njuchi



**Thengo la bwino mowetera njuchi ku Malawi**

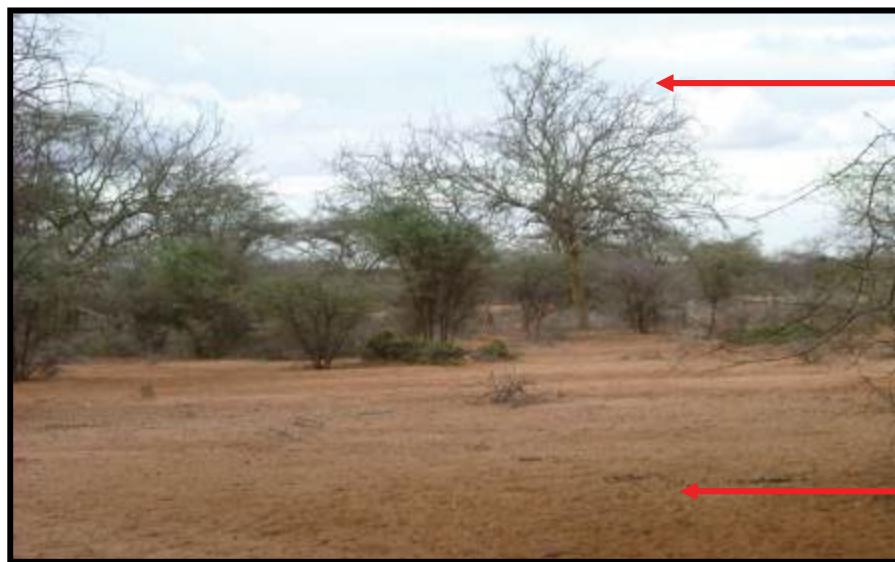
**Chiyambi cha uchi wabwino ndi kukhala ndi malo abwino owetera njuchi. Kowetera njuchi ndi malo omwe magulu a ming'oma ya njuchi imapachikidwa.**



**Zinthu izi nzofunikira pokonza malo abwino owetera njuchi:**

**1. Sankhani malo:**

- Omwe ndi osavuta kupidako;
- Kutali ndi anthu, phokoso ndi kotetezedwa kwa akuba;
- Pafupi ndi madzi;
- Pafupi ndi maluwa; ndi mitengo yotulutsa maluwa;
- Otetezedwa ku duwa ndi mphepo;
- Opanda ntchito zina monga kulima mbewu.



**Kukhale  
mitengo yambiri  
ya muthunzi ndi  
yopachikapo  
ming'oma.**

**Keshya wa  
maluwa ndi  
mitengo  
yabwino ku  
njuchi.**

**Nthaka yoyipa  
ndi yopanda  
ntchito.**

## 2. Potero konzani malo owetera njuchi:

- Lambulani zotchinga ndi zomela kuzungirira ming'oma;
- Tetezani akuba ndi nyama zazikulu;
- Bzalani mitengo yotulutsa timadzi tokoma kupatsa njuchi chakudya.



**Kulambula malo  
kumathandizanso  
kuchotsa  
tizirombo monga  
kafadala, achule  
ndi abuluzi.**

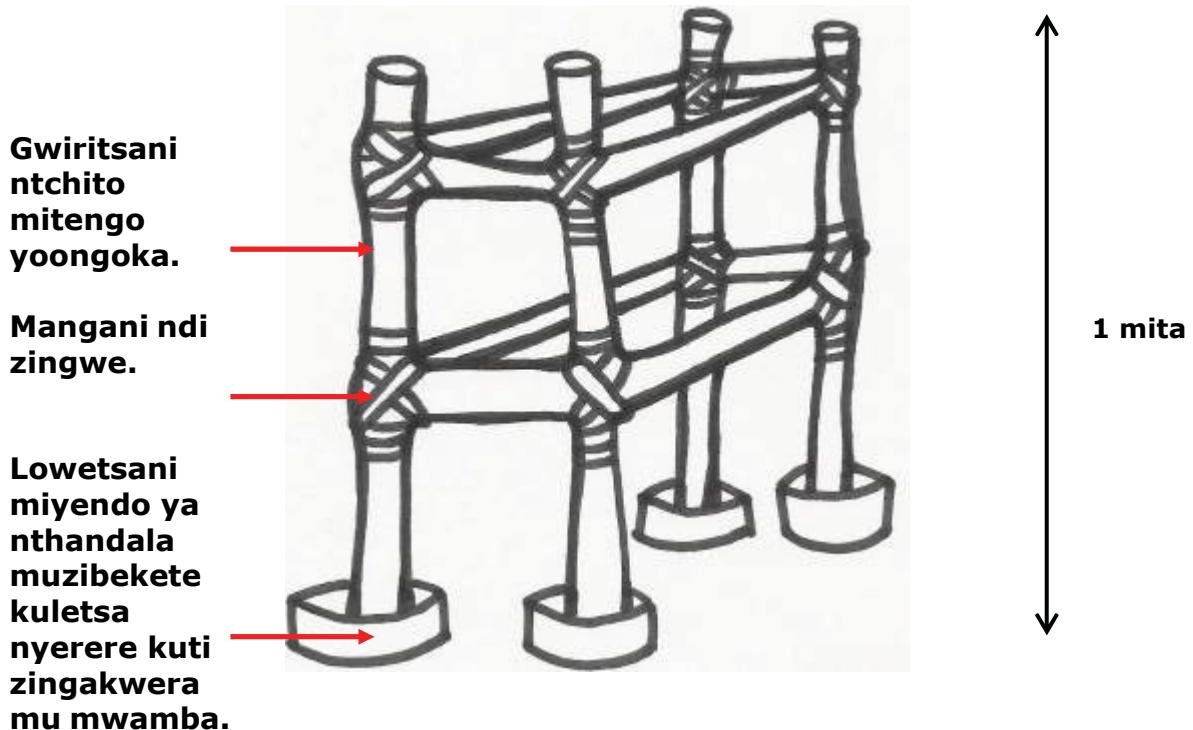
## 3. Pachikani ming'oma kuti:

- Yonse ikhale yofanana;
- Anthu ena amagwiritsa ntchito nthandala - Enanso amagwiritsa ntchito mawaya popachika ming'oma;
- Nthandala isapitirire mita imodzi kuchokera pansi;
- Yikhale ya mitengo yolimba, yotsatha msanga;
- Mitengo ya moyo siidzaola – gwiritsani ntchito mitundu ya mitengo yomwe imamera msanga yikakwiriridwa pansi;
- Pakani girisi miyendo ya nthandala kapena yikani muzibekete za mafuta kuti nyerere zisakwere mumng'oma.



**Nthandala mita imodzi  
kuchokera pansi– dziwani  
ingatalike malingana ndi  
mawondo a munthu.**

## Nthandala ya chidule:



- Ngati chiuli akuopsya mangilirani ndi mawaya;
- Mng'oma udzigwedera kuteteza ku nyama zoononga;
- Pothamangitsa nyerere pakani girisi mumawaya;
- Ming'oma ikhale mita imodzi kuchokera pansi;



- **Siyani mipata yokwanira pakati pa ming'oma kuti musasokoneze njuchi muming'oma ina mukamagwira ntchito;**
- **Onetsetsani kuti khomo la mng'oma lisayang'ane kunjira;**
- **Malo owetera njuchi ming'oma isapitilire khumi (10).**



#### 4. Gwiritsani ntchito “nyambo” pokopa njuchi mumng'oma:

- **Ming'oma ikhale yoyera ndiponso yisunge nyambo yabwino kukopa njuchi kuti zikhalemo;**
- **Pakani sera wambiri mung'oma ndi polowera njuchi;**
- **Kathabwa kapamwamba ka mzere wa sera watsopano ndi kabwino kwambiri kukopa njuchi. Njuchinso zimakonda chisa cha ana kwambiri;**
- **Njuchi zimakonda masamba ena, makamaka ngati akhunukira pfungo la ndimu, nthawi zina zikhodza kugwiritsidwa ngati nyambo. Nyambo zina zopambana ndi mowa wa lokolo, ufa wa chimanga kapena chinangwa, kapenanso makoko a nthochi.**



## 5. Yendelani ming'oma kawirikawiri kufufuza ngati njuchi za lowamo:

- Ngati mulibe njuchi fufuzani muming'oma ngati muli moyera kapena mouma ndiponso mulibe tizirombo, monga nyerere, mbewa, ndi akangaude;
- Wonjezerani sera wambiri ngati nyambo ngati kuli kutero;
- Nthawi yabwino yolowera njuchi muming'oma ndi pamene njuchi zikupanga nthenje ndi kusamuka;
- Kambiranani ndi alimi anjuchi aluntha nthawi yabwino yolowera.

## 6. Samalirani malo owetera njuchi ndipo atetezedwe choncho:

- Lambulani udzu ndi zomela zonse pa malo a mung'oma;
- Ngati nkotheka bzalani mitengo yomela ngati mupanda wabwino ku njuchi kuzungulira malo owetera.



**Malo awa okanika kuweterako njuchi chifukwa alibe mitengo yoperekwa muthunzi kapena chakudya cha njuchi. Njuchi sizidalowe mumng'oma ndi umodzi womwe. Palibe mitengo – palibe njuchi, palibe uchi , palibe ndalamu.**



# Tingasamalire Bwanji Njuchi



**Alimi a njuchi ku Nigeria akuyendela ming'oma**

Zithunzi zoonjezerapo zinaperekedwa ndi Mike Brown, Brian Durk  
ndi Claire Waring

## KUKONZEKERA NTCHITO

**Yendelani malo owetera njuchi pafupipafupi. Chitani chinthu chimodzi poyendela, ndiponso khalani ndi ndondomeko ya ntchito zogwirizana ndi nyengo pa chaka. Mwachitsanzo izi ndi ndondomeko za ntchito:**

**1. Lambulani mozungulira ming'oma ndipo fufuzani ngati mwalowa njuchi ndiponso ndi zotetedzedwa.**

**2. Yang'anani mkatи mwa ming'oma ngati:**

- **Njuchi zikumanga zisa molondola (chisa chimodzi pa kathabwa kamodzi);**
- **Make njuchi akugwira ntchito yake molondola;**
- **Mukundontha nthawi ya mvula;**
- **Mwalowa zosafunikira monga nyerere, kafadala kapena akangaude;**
- **Muli matenda owononga njuchi.**

**3. Kololani uchi:**

- **Kololani uchi wokhwima okha okha;**
- **Musakolole ana;**
- **Musaphe njuchi;**
- **Siyani uchi pang'ono ngati chakudya cha njuchi.**

**4. Mukatha kukolola:**

- **Chotsani zisa zakale, zopanda kanthu;**
- **Yalani zisa zotsara osasiya mipata pakati pa zisa;**
- **Siyani uchi wina pang'ono wa njuchi;**
- **Dyetsani njuchi ngati nkotheka kapena nkofunika.**

**5. Ngati njuchi zathawa:**

- **Kololani zisa zonse kuti mutengeko sera;**
- **Chotsani zoipa ndi zinyalala mumng'oma;**
- **Mosamala iphani tizirombo ndi matenda mumng'oma pogwirtsia ntchito moto;**
- **Pakaninso mzere wa sera ku tapamwamba ndi kutibwezera mumng'oma woyeria bwino.**

## **GAWO ILI LIKUTHANDIZANI KUTI MUYENDERE MNG'OMA BWINO NDI KUDZIWA CHOMWE MWAONA**

### **1. Bvalani zozitetezera.**



### **2. Onetsetsani kuti muli ndi zipangizo zonse. Ndi bwino kukhala ndi mnzanu kuti muthandizane.**



**3. Yatsani chopopela kuti chikhale ndi utsi wambiri wozizira. Zisononkho za chimanga, udzu wouma ndi mitengo yoola zonsezi zimatulutsa utsi wabwino.**



**4. Popelani bwino polowera ndipo dikirani kuti njuchi zifatse.**



**5. Popelani bwino mkati muchotsekera ndipo chotsani chotsekeracho.**



**6. Fufuzani komwe kuli njuchi pogogoda tapamwamba. Pomwe pakulira mokweza pakusonyeza kuti mum'ng'oma mulibe kanthu.**



**7. Pang'ono pang'ono chotsani kapamwamba kopanda kanthu.**



**8. Chotsani chisa china pang'ono pang'ono momasuka.**



**9. Nyamulani chisa chimodzi chimodzi kuti muone.**



**Apa alimi  
akuyang'ana ntchito  
za antchito ndi make  
njuchi kuonetsetsa  
kuti njuchi  
zikumanga  
molondola.**

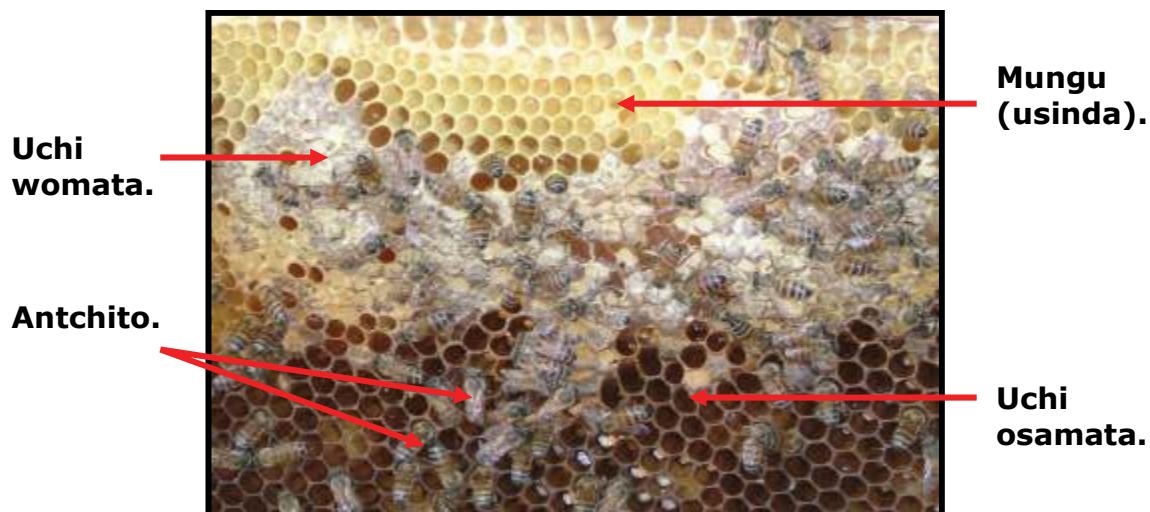
**10. Sunthani chisa chimodzi pa nthawi imodzi.**



**11. Onani maonekhedwe achilengedwe a chisa cha njuchi za  
muthengo ngati zikufanana ndi chisa cha mumng'oma wa  
timatabwa tapamwamba.**



**12. Antchito awa akusunga uchi ndi mungu wosakhwima (Usinda).**



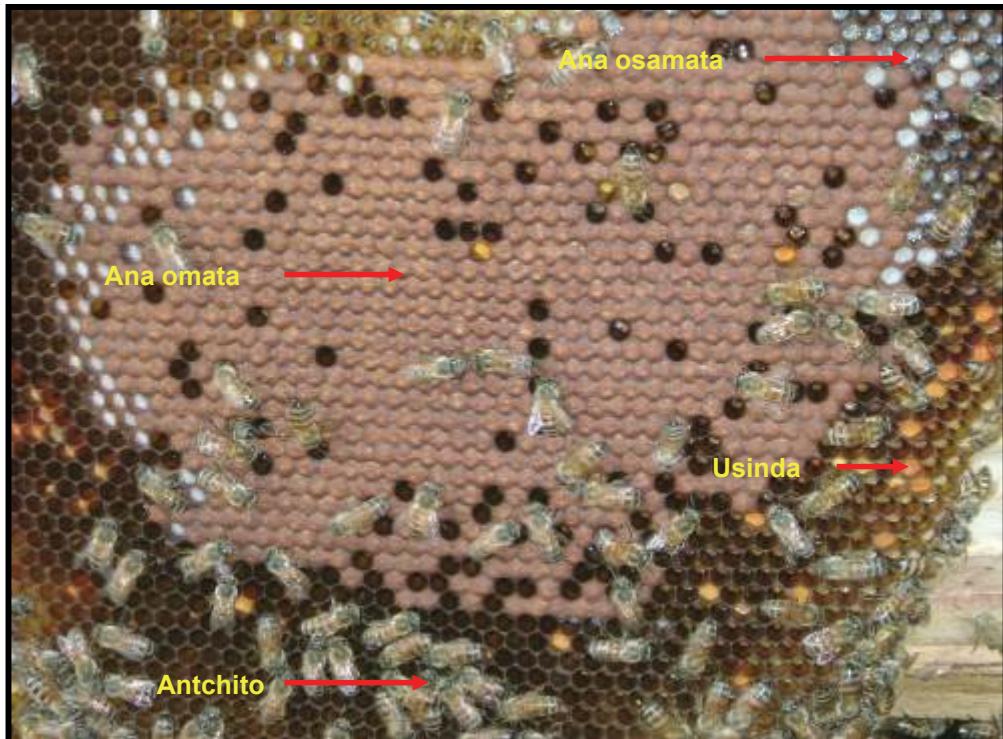
**13. Antchito awa akumanga zisa ndi sera watsopano.**



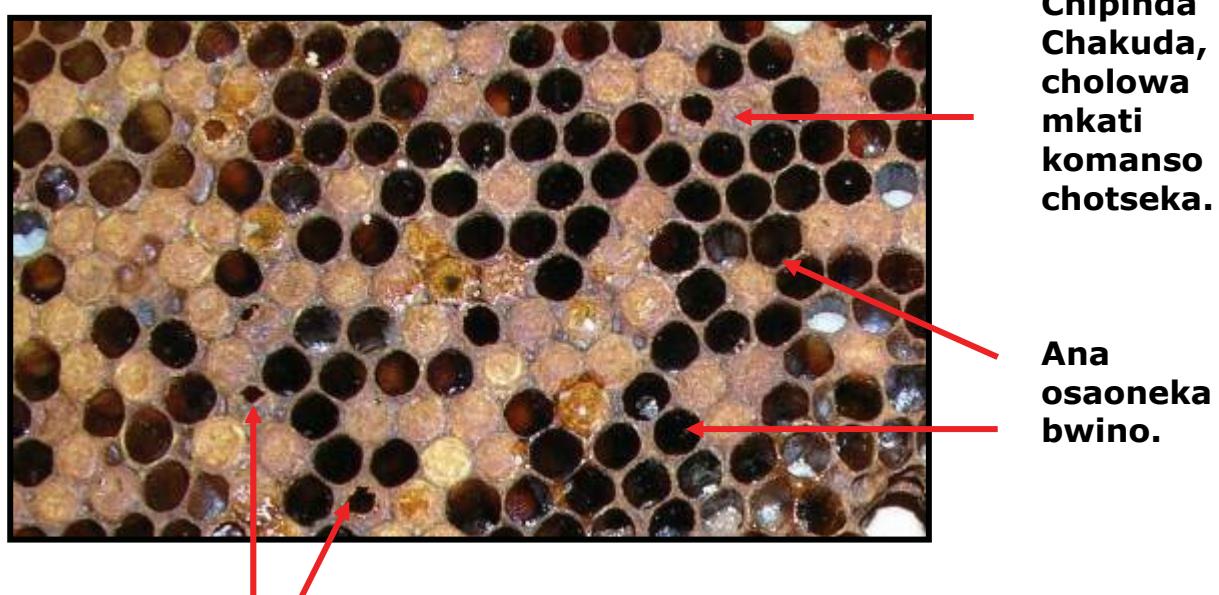
**14. Mng'oma uwu wadzadza kwambiri ndipo ukufunika kukolola.**



**15. Antchito awa akuyang'anira ana (ana anjuchi asanaswe). Mungasonyeze ana omata, ana osamata, antchito ndi usinda pa chithunzi ichi?**



**16. Njuchi izi zili ndi matenda oipa ndipo zisa zonse ziyenera kuotchedwa ndi moto.**



**Njuchi  
sizinamate  
tizipinda ta  
matenda.**

**Chipinda  
Chakuda,  
cholowa  
mkatim  
komanso  
chotseka.**

**Ana  
osaoneka  
bwino.**

# Tingakolole Bwanji Uchi Wabwino



Zithunzi zoonjezerapo zidaperekedwa ndi Len Dixon ndi  
National Bee Unit (Fera)

**Nkofunika kukolola uchi wabwino. Uchi wabwino umasungika ndipo umapeza mtengo wokwera. Zikhoza kutheka kukolola uchi kangapo pa chaka chimodzi. Nyengo yokolola uchi ikhoza kusiyana malingana ndi malo momwe alili. Alimi wamba akhoza kudziwa zambiri.**



**Mung’oma uwu wadzadza ndi uchi ndipo ukufuna kukolola. Ngakhale tapamwamba ndi tolakwika muyeso ndiponso zisa zamangidwa molakwika ndipo patenga nthawi kuti ntchito yokolola ithe. “Kumanga zisa molakwika” kumapangitsa mung’oma wa tapamwamba kuti ukhale wovuta.**



**Chisa chimodzi pa kamwamba kamodzi kukolola kumakhala kophweka.**



**Kuti muziteteze ndi kukolola mosavuta gwirani ntchito ndi mnzanu.**



**Zida zofunika pokolola uchi.**



**Popelani utsi kuti njuchi zifatse. Kawirikawiri uchi umasungidwa kutali ndi khomo la mng'oma. Apa khomo lili pothera gebulo la kutsogolo ndiye uchi udzasugidwa kumbuyo kwa mng'oma.**



**Fufuzani komwe kuli njuchi ndipo tsegulani mng'oma mofatsa.**



**Mofatsa bwezerani njuchi zonse mumng'oma zimene zili ku chisa ndi burashi. Mukhoza kugwiritsa ntchito burashi yopangidwa kuchokera ku nthenga la nkhuku kapena burashi yopangidwa kuchokera ku udzu.**



**Pofuna kukolola sankhani zisa za uchi womata zokha zokha. Ndi bwino kukolola uchi nthawi yozizira ku madzulo, kuti njuchi zosokonekera zikhazikike usiku. Kukolola usiku nkovuta kuti udziwe kuti uchi umene watenga ndi wokhwima.**



**Kukolola mvula ikagwa kumaonjezera mnyontho mu uchi kenaka kuchepetsa ubwino wa uchi.**

Dulilani uchi muchidebe choyer a kuchokera ku kathabwa kapamwamba. Kuti njuchi zisalowe, vindikirani chidebe msangamsanga mutangodula chisa ku kapamwamba.



**Chidebe choyer a ndi chivindikiro chabwino ndi chofunika kuti njuchi zisalowe mu uchi, ndiponso chimachepta chinyontho mu uchi.**



**Kololani chisa chimodzi chimodzi mpaka mutafika kuli zisa za ana. Siyani mzere kuti njuchi zimange chisa chatsopano. Siyani uchi wina ngati chakudya cha njuchi kuti zisathawe kapena kufa.**

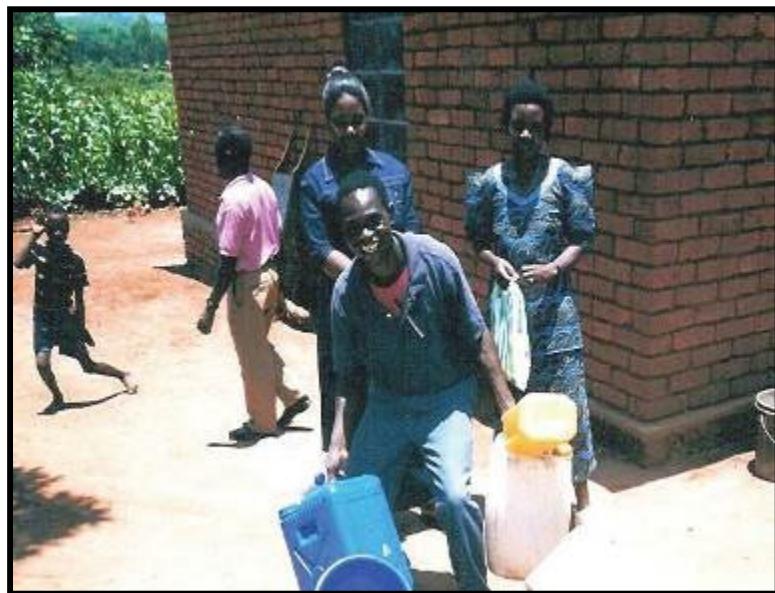


**Ngati mukufuna kuteteza umoyo wa njuchi, musakolole zisa za ana.**





# Tingafinye Bwanji Uchi Wabwino



**Brighton Chitenje akuperekera uchi ku Nkhata Bay Honey Producers Coop (NHPC) - Pansi apa, pali uchi wosankhidwa wa ku Uganda**



Zithunzi zoonjezerapo zidaperekedwa ndi a National Bee unit (Fera)

**Funani zidebe ziwiri, nsalu yofinyira yaukhondo ndiponso pezani malo abwino otetezeka ku njuchi mukamafinya uchi kuchokera muzisa.**

**Nsalu  
Yosefera.**



**China chilichonse, makamaka manja, ayenera kukhala awukhondo.**



**Uchi  
udzasedewa  
ukadutsa pa  
nsalu yosefera.  
Sera idzatsarira  
pamwamba pa  
nsalu.**

**Sera.**



**Zisa za uchi zadulidwa mutizidutswa tating'ono ting'ono kuti uchi udzituluka.**



**Kenaka sefani potsanulira pa nsalu ya meshi yaukhondo muchidebe cha chiwiri.**



**Vindikirani chidebe ndipo dikirani mpaka uchi wambiri utachucha. Finyani uchi womalidza munsalu ndi manja aukhondo pa mapeto. Mitengo yosiyanasiyana imatulutsa mitundu ya maluwa osiyanasiyana ndi kakomedwe ka uchi kamakhala kosiyananso. Sungani mitundu ya uchi mosiyana.**

**Anthu amene ali ndi ming'oma yambiri akhoza kufinya uchi pogwiritsa ntchito makina ofinyira uchi.**

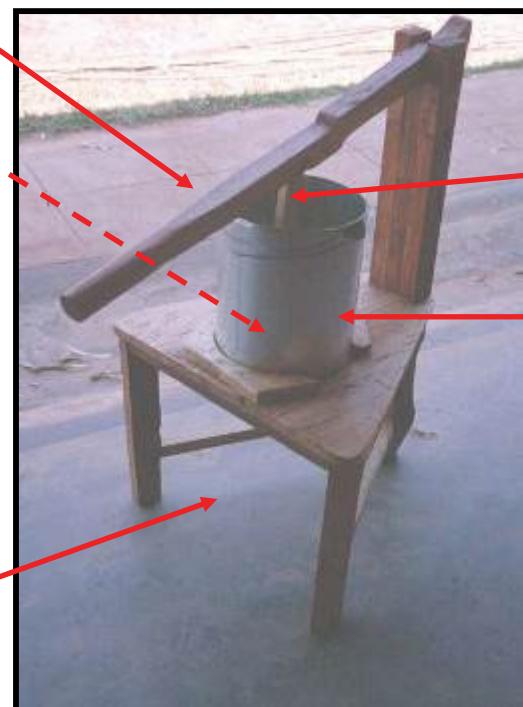


**Mwanjira ina ya pafupi mukhoza kupanga chosakwela mtengo monga ichi.**

**Chogwirira  
pofinya.**

**Pakati pa  
chofinyira  
pazunguriridwa  
ndi matabwa.**

**Chidebe  
chopanda kanthu  
chimaikidwa  
kunsi kuti uchi  
uzigweramo.**



**Mu thumba  
mwaikidwa  
zisa za uchi  
kuti ufinyidwe  
awuika mkati,  
pansi pa  
chofinyira.**

**Chidebe cha  
chitsulo  
chowongoka  
mbali zonse  
chobooledwa  
pansi.**

**Chidebe choongoka cha chitsulo chilli ndi tizibowo pansi. Chidebe china chimaikidwa kunsi kuti uchi uzigweramo. Chosindikiza cha pangidwa kuchokera kumatabwa. Yikani zisa za uchi pa nsalu kapena mu thumba zimene zifinyidwe ndipo yikani kunsi kwa chosindikiza ndipo kanikizani. Ntchito ya chogwiririra ndi kuthira mphamvu ku zisa za uchi mu thumba pofinya uchi.**

# Tingakolole Bwanji Sera/Inta



**Sera/Inta yayeretsedwa kuchokera  
ku Malawi**



**Sera ya ku Uganda ali pa  
malonda, kuperekedwa  
ndi Hives Save Lives  
Africa**

**Sera ndi chinthu chofunika kwambiri chomwe chingagwiritsidwe ntchito popanga zinthu zosiyanasiyana. Sera isatayidwe.**



**Sungani sera yokololedwa kuchokera ku zisa za uchi padera ndi sera yokololedwa kuchokera kuzisa zakuda kapena zakale zimene zinali ndi ana a njuchi pa yokha (mphutsi za ana a njuchi zimene zisanaswe).**



**Chisa choyerá chomwe mwakololamo uchi chimatulutsa sera ya bwino.**



**Sukani ndi madzi zisa zimene mwafinyako uchi mpaka litsiro ndi uchi wonse zichoke. Ikani mu thumba labwino ndipo mangani ndi chingwe. Tenthetsani madzi mupoto yophikira yakale. Ikani thumba la zisa mupoto ndipo kanikizirani pansi pa madzi.**



**Kanikizani  
thumba pansi  
pa madzi.**

**Thumba.**

**Poto yophikira  
ili ndi madzi  
otentha.**

**Tenthetsani madzi pang'ono pang'ono. Madzi asawire. Pitirizani kukanikiza thumba mpaka zisa zitasungunuka. Sera yosungunuka idzatuluka mu thumba ndi kuyandama pamwamba pa madzi.**



**Finyani  
thumba  
kuti sera  
yituluke.**

**Sera  
yikutuluka  
mu  
thumba  
kugwera  
m'madzi.**

**Pomalidza finyani thumba ndi timitengo tiwiri kuti sera yomaliza ituluke. Samalani, thumba ndi lothentha. Sera idzauma pamwamba pa madzi akamazizira.**

**Sera youma iyenera kukonzedwa kachiwiri pochotsa litsiro:**



**Sera yakuda  
imakhala ndi  
zinyalala**

**Dulani sera yakuda mu tiziduswa tating'ono ting'ono.**



**Sungunulani sera mupoto waung'ono woikidwa mupoto yayikulu yomwe ili ndi madzi otentha.**



Poto yakunja  
yomwe ili  
ndi madzi.

Moto.

Poto wamkati  
womwe uli ndi  
sera.



Madzi otentha.

Sera  
ikusungunuka.

**Tenthani mpaka sera yonse isungunuke. Mukhoza kuona litsiro lochokera ku sera pansi pa poto muchithunzi ichi.**



Zinyalala  
pansi pa  
poto.

**Thirani sera yosungunuka pa nsalu kuti muchotse litsiro. Nsalu ikhale yoyera bwino.**

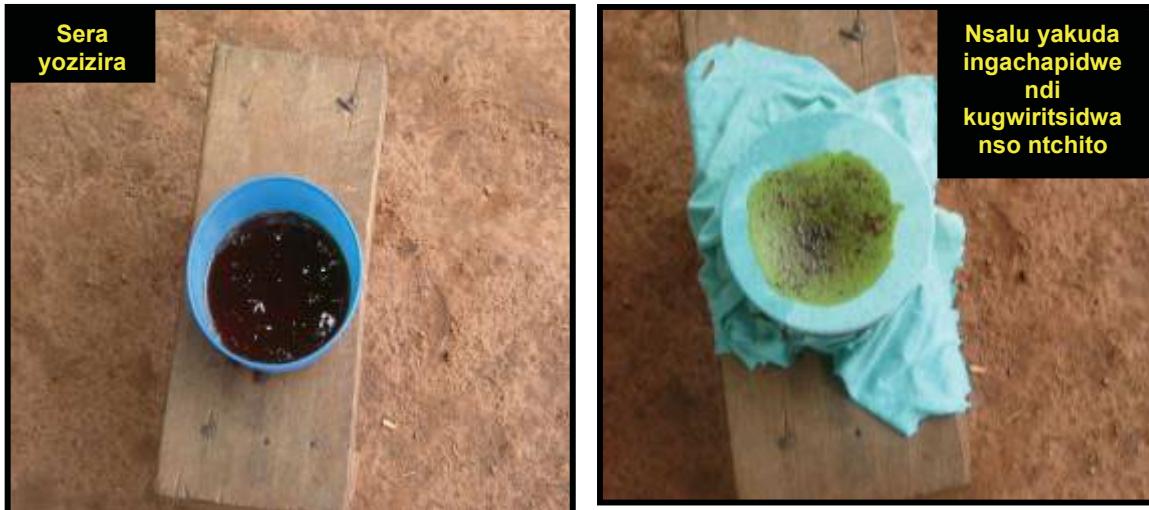


**Chikombole cha pulasitiki chotsangalatsa ndiponso chofunikira. Pakani sopo muchikombole kuti sera isakakamire ikamauma.**



**Kupaka sopo  
muchikombole  
kumaletsa sera  
kukakamira.**

**Sera imazizirira muchikombole ndipo imatulutsidwa ikalimba. Litsiro limasalira pamwamba pa nsalu. Nsalu ikhoza kuchapidwa ndi kugwiritsidwanso ntchito.**



**Sukani zonse pa mbuyo pake.** **Sera ya malonda mu  $\frac{1}{2}$  ndi 1kg zidutswa, yoyeretsedwa ndi NHPC, Malawi.**



## NJIRA ZINA ZOTOLERA SERA

- Sola: Mphamvu ya duwa ikhoza kugwiritsidwa ntchito posungunula sera.** Sera imakidwa mu thumba ndi kuika pa lata ndi kuika mubokosi lotsekeda ndi galasi ndi kuika pa duwa. Lata limatsogolera sera kugwera mu chidebe. Samalani kuti sera isathenthe kwambiri ndi kuda kapena kupserera.



Bokosi  
lopangidwa  
ndi zidutswa  
za matabwa.

Lata  
lotenthedwa  
ndi duwa.

Galasi kapena  
pepala la  
pulasitiki  
lotsekera  
kuonjezera  
mphamvu ya  
duwa.

Thumba la  
nsalu yo  
sefera ili ndi  
sera.

Lata  
kutsogolera  
sera kugwera  
mu chidebe.

Chidebe  
chogweramo  
sera.

- 2. Mpweya wotentha: Sera ikhoza kuyeretsedwa pogwiritsa ntchito mpweya wotentha. Thumba la sera kapena zisa lamangidwa pamwamba pa beseni loyandama m'madzi otentha. Sera ikudontha kuchokera mu thumba kugwera mu beseni. Samalani, madzi akamawira asaphwe.**



