

Resource Material for Homestead Food Gardeners

Chapter 6: Handouts (isiZulu)

- Handout 1 Ukuthuthukiswa komhlabathi wakho (Improving your soil)
- Handout 2 Ukwemboza (Mulching)
- Handout 3 Umquba wezitshalo wezilwane kanye nongamanzi (Brews for plant nutrition)
- Handout 4 Indlela yokuzakhela i - trench bed (Trench beds)
- Handout 5 Ukukhiqizwa wezithombo (Seedling production)

1. Ukuthuthukiswa komhlabathi wakho



Umhlabathi ophilile

Umhlabathi onempilo umhlabathi ophilile . Unezinto eziningi eziphilayo. Uyashona, uthambile ,kulula ukuwugumba futhi ugcwele umoya kanye namanzi.

Umhlabathi ophilayo uxube izinto eziningi:

- ❖ Inxenye encane yesihlabathi, umhlabathi ocosakele nebumba, okuyizinhlobo ezahlukene zomhlabathi.
- ❖ Inxenye yezinto ezibolayo, amacebhe, utshani, umquba.
- ❖ Okungaboliyo okufana namatshe.
- ❖ Amaminerals afana ne(potassium).
- ❖ Umoya namanzi.
- ❖ Izibolisi: lezi izilwane ezincane zincane kakhulu ukuthi ungazibona futhi zihlala emhlabathini. Zivundisa umhlabathi ngokuthi zindle okubolayo zikushintshe kube ukudla okunothile kwesitshalo. Izilwanyane ezincane ezinjengo msundu, nezinye izilwane



From: Lessons from Nature

nazozihlala emhlabathini.

Izinhlobo zomhlabathi

Umhlabathi wakhiwe ngokuvithizeka kwezithako zemvelo kanye nokusansimbi okuvela emhlabeni. Lokhu kutholakala kuyisimo sedwala. Esikhathini eside esandlula amadwala avithizeka aba izinhlaiyane ezincana lokhu kwenziwa izulu, umoya kanye nelanga lihlangene nomoya kanye namanzi. Lokhu kuphenduka kube umhlabathi okwanzi ukusiza izitshalo kanye nezinto ezibolisayo ukuthi zikhule. Njengabantu izitshalo azikwazi ukukhula ngaphandle kwamanzi, umoya kanye nokudla.

Wonke umhlabathi unxube isihlabathi, inzika yodaka kanye nobumba. Umehluko okhona ngenani lesihlabathi, inzika yodaka kanye nobumba yikho okusho indlela umhlabathi obamba ngayo amanzi. Izibonelo zezinhlobo zomhlabathi yilezi isihlabathi, isihlathi esigadenzima, igadenzima, ubumba olugadenzima kanye nobumba.

Ishlabathi senza umhlabathi ube uthambe.

Inzika yodaka iyihlabathi esicolisakele. Ibamba amanzi kanye nokudla kwesitshalo kangcono kunesihlabathi esihhayekile, kodwa lugezeka kalula emhlabathi.

Ubumba inxenye yomhlabathi ebambelelayo ngakho-ke ibamba amanzi iwahlanganise ndawonye. Ibamba amanzi njengesipontshi.

Umhlabathi omuhle ilowo obizwa ngokuthi igadenzima ngoba uxube izinto ngokulingana isihlabathi, inzika yodaka kanye nobumba.

Izimo zenhlabathi:

Umhlabathi oyisihlabathi	
Izinto ezinhle ngalomhlabathi	Izinto ezimbi ngalomhlabathi
<ul style="list-style-type: none"> ❖ Kulula ukuwugubha nokusebenza ngawo ❖ Uyashesha ukushisa entwasahlobo ngemuva kobusika ❖ Muhle ezitshalweni ezimila ngaphansi komhlaba ❖ Amanzi nomoya kungena kalula emhlabathini oyisihlabathi 	<ul style="list-style-type: none"> ❖ Uyashesha ukoma ❖ Akuyigcini imvundiso yomhlabathi ❖ Akuwabambi amanzi kahle
Ugadenzima inxube yesihlabathi kanye nobumba	
Izinto ezinhle ngalomhlabathi	Izinto ezibi ngalomhlabathi
<ul style="list-style-type: none"> ❖ Ubamba amanzi kahle ❖ Muhle ekukhuliseni izimpande ❖ Unezinto ezibolisayo 	<ul style="list-style-type: none"> ❖ Lomhlabathi uyaqina uma womile
UBUMBA	


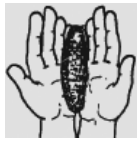
Tse ntle ka mobu ona	Tse seng ntle haholo ka mobu ona
<ul style="list-style-type: none"> ❖ Ubamba amanzi kahle amanzi isikhathi eside ❖ Ubamba imvundiso kahle 	<ul style="list-style-type: none"> ❖ Kunzima ukusebenza ngawo; uyasinda ❖ Uthatha isikhathi ukuthi ushise entwasahlobo ❖ Uyabambelela uma umanzi ❖ Uqinile uma womile


Ungabona kanjani ukuthi unjani umhlabathi wakho

Ungabona kanjani ukuthi singakanani isihlabathi, inzika yodaka kanye nobumba emhlabathini emhlabathini wakho lokhu ungakwenza ngokuwuzwa umhlabathi wakho. Manzisa umhlabathi bese uwenze ibhola phakathi kwezandla zakho. Phendula lelibhola libe njengevoso. Ungakwazi ukubona ukuthi nhloboni yomhlabathi ngokubuka itebula elingenzansi .

Kubalulekile ukwazi ukuthi uwuhlobo lini umhlabathi wakho. Lokhu kungakusiza ukuthi wazi ukuthi kumele wenzenjani uma ufuna ukuthambisa noma ufuna ukucubuza inhlabathi yakho. Ukucubuza inhlabathi noma ukuthambisa inhlabathi yakho kuyasiza ekutheni inhlabathi ikwazi ukubamba amanzi kanye nomoya omningi, okuyilokho izitshalo ezikudingayo ukuze zikhule. Ukwenza inhlabathi yakho icubuzeke kumele uqubeke ufake umquba omningi, ikhomposi kanye nesembozo. Ungalokothi uhambe lapho usutshale khona okukakhulu kazi uma kumanzi.

Isihlabathi sidinga ukuthi ufake izinto ezibolayo ezengeziwe ukuze sizokwazi ukubamba amanzi kanye nokudla kwesitshalo. Ubumba ludinga ukufakwa izinto ezibolayo ezengeziwe ukuzelikwazi ukubamba umoya ngokwengeziwe bese likhulula ukudla kwesitshalo okukulo. Lonke uhlobo lwenhlabathi ludinga okubolisayo ukuze lithuthukise ukuvunda, noma ukudla kwesitshalo.

Ubukeya kanjani umhlabathi	Izwakala kanjani inhlabathi	Uma uyiphendula ivoso		Umhlabathi unje:
Uyisihlabathi kakhulu	Ihhayekile kakhulu	Ayiphenduki ivoso		Uyisihlabathi kakhulu
Uyisihlabathi nje	Ihhayekile	Iyaphenduka ivoso kodwa kodwa		Isihlabathi
Inxenye iyisihlabathi inxenye ilolongekile	Ihhayekile	Ivoso liyagobeka kancane		Isihlabathi esiyigadenzima
Ilolongekile okukakhulu kazi	Isihlabathi esincane ukulolongeka nje kodwa ayinamatheli	Ivoso likiyagobeka indlela engangohhafu ojikelezayo		Igadenzima noma inzika eligadenzima

Ilongekile okukakhulu kazi	Isihlabathi esincane ukulolongeka nje kodwa iyanamathela	Ivoso lisakwazi ukujika indlela engaphezu kukahhafu		Ubumba olugadenzima noma isihlabathi esiyibumba
Ilongekile	Ilongekile futhi iyanamathela	Ivoso liyagoba lifane nelingi		Ubumba

Ukuvunda komhlabathi

Zonke izinto eziphilayo zinezithako zemvelo ezivela emhlabeni. Izitshalo zinezinto ezifana ne hydrogen, carbon, nitrogen, phosphorus, potassium nokunye okunciyane okwe magnesium, sulphur kanye ne calcium kanye nezinye izithako zemvelo ezincinyane.

Izitshalo zidinga lezinhlalo ezintathu zokudla:

- ❖ **I-Nitrogen (N)** – Yamacembe kanye nesiqu esiphilile iphinde isize nasekukhuliseni;
- ❖ **Phosphorus (P)** – Yezimpande eziphile kanye nokwakheka kwezithelo;
- ❖ **Potassium (K)** – Yempilo kanye nezimbali eziphilile kanye nezithelo.

Izinhlavu ezinkulu zamagama ezikubakake (N, P, kanye no K) zimbizwa ngokuthi izinkombisa zobuthi. Uma uthenga izivundiso noma obunye ubuthi, kusetshenzisa izinhlamvu esikhundleni samagama aphelele.

Zonke lezinhlalo ezintathu zokudla zitholakala ekhomposini kanye nasemqubeni. Ungakwandisa lokukudla emhlabathi ngokuthi wemboze ngamacembe emidumba (njengo bhontshisi, uphizi, uphizi wamajuba kanye nomgambi (isihlahla esinamacembe anameva) comfrey, usebenzisa umanyolo ongamanzi, umsundu kanye nezinto ezibolisayo. Kumele usebenzise umsundu ube izinto ezibolisayo ngokushesha. Lezi izindlela ezahlukene zokuvundisa umhlabathi wakho.

Ezinye zezindlela zokuthuthukisa umhlabathi wakho

Umquba

Zonke izinhlobo zomquba wezilwane ungasetshenziswa. Lokhu kufaka izinkomo, iziklambu, izimbuzi, izigulube, kanye nezinkukhu.

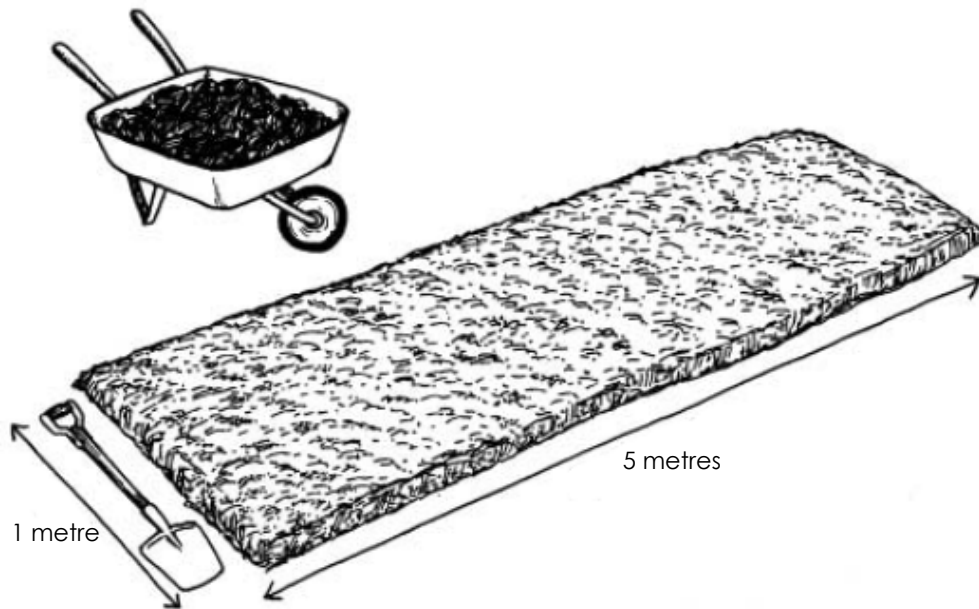
Ukusebenzisa umquba

Umquba omuhle ongawusebenzisa ilowo oxutshe notshani kanye nomcamo otholakala esibayeni. Shanela lokhu ukubeke iqumbi okungenani kanye ngesonto, bese ukwemboza ngotshani noma ngopulasitiki.



Umquba ungafakwa ngezindlela ezahlukene:

- ❖ Ungawusebenzisa uma utshala izithombo, ngokuthi unxube izandla ezimbili kuya kwezintathu zomquba emgodini lapho utshala khona izithombo.
- ❖ Ungambelwa emhlabathini ukuze uthuthukise ukuvunda komhlabathi. Lapha udinga ukusebenzisa ibhala eligcele (okungango 50 kilogram) embhedeni olingana nemitha eliphindwe kahlanu.



- ❖ Ungasetshenziswa embhedeni oshisayo. Lapho umbhede umbiwa ushone kangango 30 cm, lokhu kulingana nobubanzi besipeto. Bese kumbozwe ngomquba omusha into elingana no 10cm ukushna ngaphansi. Lokhu kulingana nobubanzi besandla sakho. Utshani, ukhulakanye nokubolayo kungafakwa ngaphambi kokuba uvale umgodi ngenhlabathi yaphezulu kuphela. Omunye umquba noma ikhomposi kungahlanganiswa nomhlabathi ngaphambi kokuthi utshale.
- ❖ Lokhu kubizwa ngokuthi imibhede eshisayo ngoba umquba uyashisa ngenkathi ubola emhlabathi. Lokhu kushisa umhlabathi embhedeni wakho. Lokhu kuyangcomeka ezindaweni ezinobusika obubandayo.
- ❖ Umquba ungafufuzelwa phezu komhlabathi kanjenge sembozo. Lokhu kunobuhle bokuthi bandisa ukudla kwezintshalo. Umquba ungafakwa enqumbini yekhomposi lokhu kwenza ikhomposi enhle kakhulu.

Ikhomposi

Ikhomposi inxubevane yezitshalo ezimanzi nezomile kanye nomquba obolile lokhu

Izinto ezinhle ngekhomposi

- ❖ Ikhomposi iyisidlo sesitshalo esesilungile, ayidingi ukuvithizwa izinto ezibolisayo kuqala.
 - ❖ Ikhomposi ayidali ukhula oluningi, kanjengomquba wezilwane.
- ❖ Ungathola ukudla okuhle ngaphandle kokusebenzisa imali eningi uthena izikhuthazi.

Izinto ezimbi ngekhomposi

- ❖ Ikhomposi inomsebenzi omningi wokuyilungisa nokuyisebenzisa.
- ❖ Ubungakho bekhomposi buncike ekutheni yakhiwe kanjani nokuthi yini esetshenzisiwe. Uma ingakhiwanga kahle, ngeke ibe ukudla okuhle kwesitshalo.
- ❖ Kungaba nzima ukuthola izinto ezibolayo ozidingayo ukuze wakhe ikhomposi.

kwenza ukudla okunothilekwesitshalo. khomposi iyasiza ukuthi umhlabathi ukwazi ukubamba amanzi uphinde ugcine izitshalo zingenazo izifo.

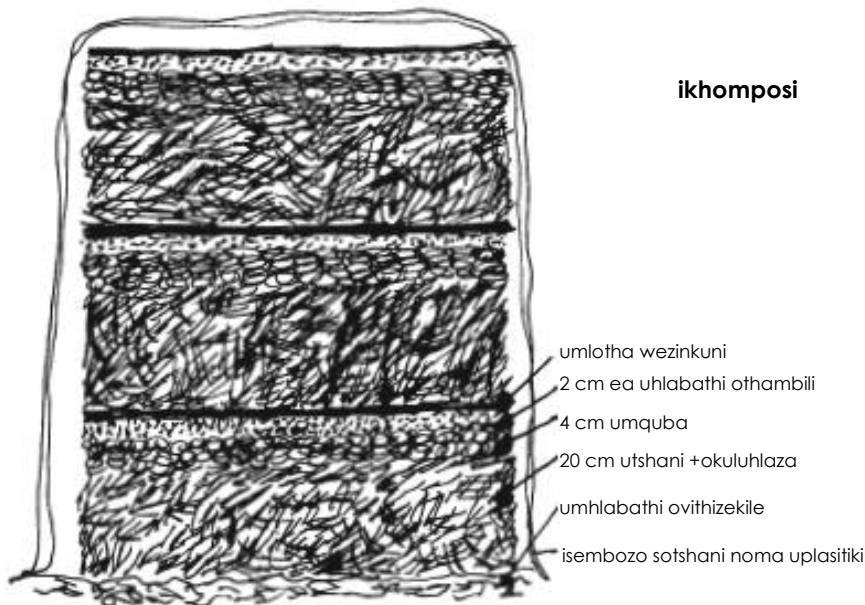
Ini oyidingayo ukuze wakhe inqumbi yekhomposi?

Kumele uqoqe lezintoezilandelayo:

- ❖ Izinhlanga zommbila noma kwezinye izivuno. Lokhu kubizwa ngokuthi insalela yesivuno.
- ❖ Utshani (obungenayo imbewu)-bungaba hlaza noma obomile.
- ❖ Amacembe ekhabishi kanye nokhula (aluhlaza noma omile) angenayo imbewu.
- ❖ Umquba wezilwane.
- ❖ Umltha wezinkuni.

Ezinye izinto ongazifaka equmbini yekhomposi yilezi: umquba wezinkukhu, amanzi okuwasha, izibi ezitholakala ebaleni, izilwane ezifile, amathambo, uboya, izimpondo kanye nempaphe kubalulelike ukuvaka ucomfrey equmbini yekhomposi.

IZINTO OKUMELE UNGAZIFAKI: Uplasitiki, igilazi, insimbi, ukhuni, amabhulethi amadalanoma enye into engaboli (lokhu kusho into engavithiki emhlabathini).



Ungayakha kuphi inqumbi yekhomposi yakho

- ❖ Endaweni esethunzini kodwa hhayi eduze kwesiqu sesihlahla.
- ❖ Ivikeleke emoyeni omkhulu.
- ❖ Emhlabathini oqondile.
- ❖ Eduze nengadi yakho naseduze kwamanzi.
- ❖ Kude nezilwane (okukakhulu kazi izingulube, izimbuzi kanye nezinkukhu).

Ungayakha kanjani inqumbi yekhombosi

Isinyathelo sokuqala 1:

Khetha indawo yakho bese uphendula umhlabathi ngeflolongo noma ngekhuba. Indawo kumele ibe ngango 1 mitha uyiphinde ngo 2 mitha (ubude besipeto esisodwa nobubanzi obungangezipeto ezimbili ubude)



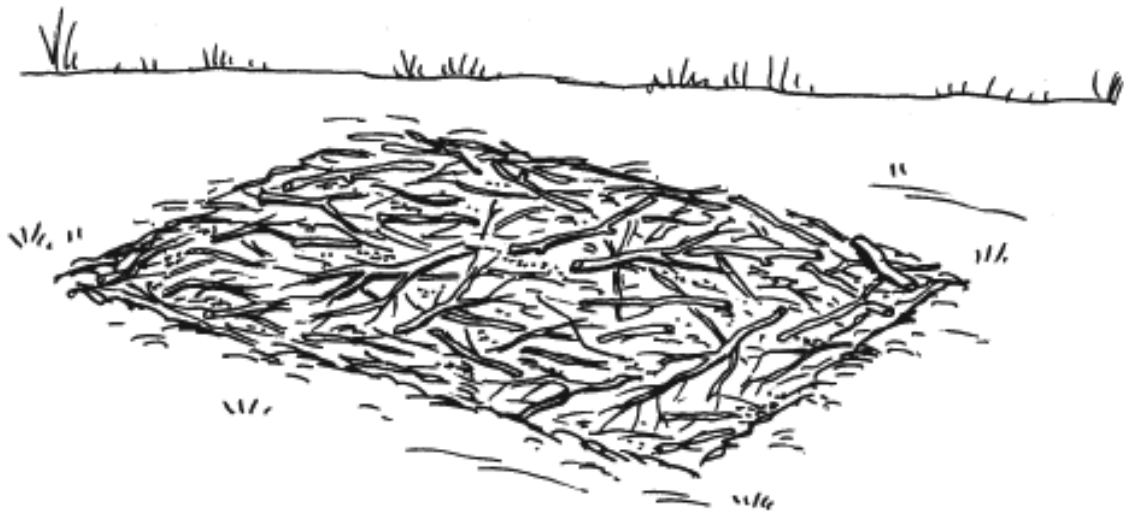
Isinyathelo 2:

Qoba izinsalela zamacembe esivuno, utshani, kanye nokhula ukwenze kube kuncane. Lokhu kufaka I comfrey, ikhabishi, amacembe, ukhula kanye neziqu zommbila. Kumele kuqotshwe kube kuncane kube ngango 10cm ubude. Lokhu kukulingana nobubanzi besandla sakho sivaliwe. Lokhu kungenza ikhomposi isheshe ilunge.



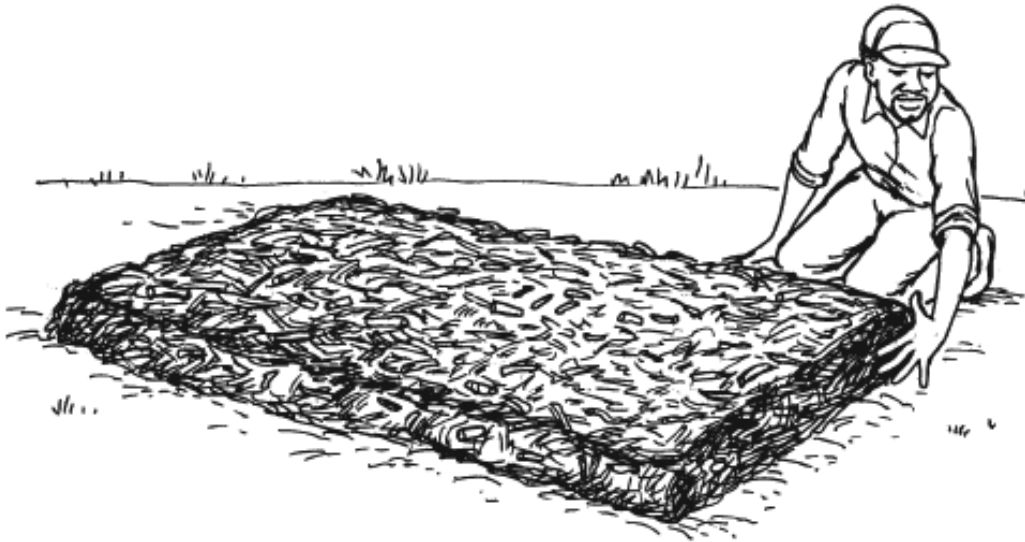
Isinyathelo 3:

Ndlala amahlanvu kanye nezinkunyane phezu komhlabathi owuphendulile.



Isinyathelo 4:

Yemboza lokhu ngenxube oyiqobile, kulingane no 30cm ukushona. Lokhu kuyisandla esisodwa ukushona. Uma unokudala kwasekhishini, kungavakwa lapha.



Isinyathelo 5:

Thela umquba phezulu okungango 4cm ukushona. Lokhu kunobubanzi obungangeminwe embili.



Isinyathelo 6:

Thela umhlabathi phezulu komquba okulingana no 2cm ukushona –ububanzi bomunwe.



Isinyathela 7:

Fafa umlotha wezinkuni ngaphezu komhlabathi. Ungafaka ne lime, bonemeal noma tshe lephosphate, lokhu ku ngafafazwa phezulu.



Isinyathelo 8:

Faka amanzi kule nqumbi aze amanzi avele ngaphansi kwenqumbi.

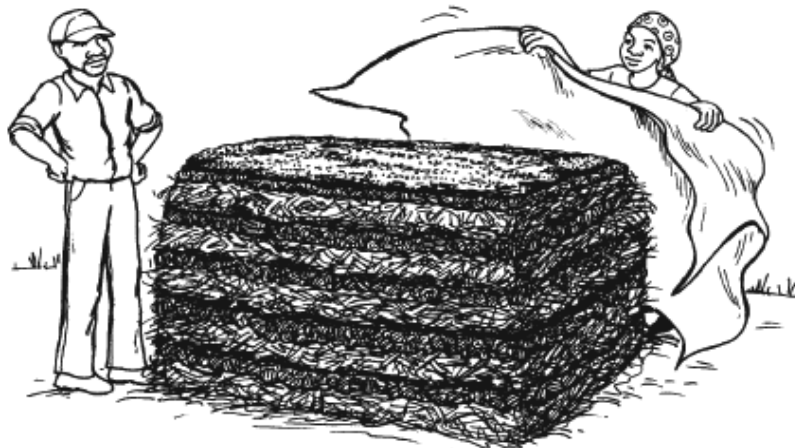


Isinyathelo 9:

Qubeka wakhe inqumbi yakho, ulokhu uphinda ufaka ezinye izinto ngaphezulu, kuze kulingane nesifuba sakho.

Isinyathelo 10:

Kunconyiwe ukuthi uyemboze inqumbi yakho, ungayemboza ngopulasitiki noma amaqungwa noma utshani. Lokhu kusiza ekutheni kugcineke amanzi nokushisa bese kukwazi nokubola. Kuyasiza ekutheni izinkoma zingayihliphizi inqumbi yakho ziyibulale.



Kuhle ukuthi uyiphendule inqaba yakho ngemuva kwamaviki amabili. Uma inqumbi yakho yomile, kumele ufake amanzi. Uma wenza lokhu ikhomposi yakho ingalunga ngemuva kwamaviki angu 6 ehlobo ebusika emavikini angu 8-9 ezindaweni ezineqha, kudingeka uyemboze inqumbi yakho – kungenjalo ngeke kwenzeke lutho.



Inini lapho ikhomposi ilunga khona?

Uma kusekhona intushana ephuma emaqubeni lokhu kusho ukuthi inqumbi iyabola. Ikhomposi uma isimnyamana lokhu kusho ukuthi isilungile ibukeka ifana nomhlabathi onomswakama. Ngeke libe khona iphunga (uma inephunga futhi ishisa, chabobo akusiyo ikhomposi leyo).

Ukuphathwa kwekhomposi

- ❖ Isitshalo isithombo ngo 2-3 izandla ezigcwele zekhomposi.
- ❖ Mbela ikhomposi emhlabathini: phendula umhlabathi uthambise ukushona okungangesipeto esisodwa. Fafaza izipeto ezingu 4 zekhomposi endaweni engango 1 square metre. Mbana kancane bese uyatshala.
- ❖ Sebenzisa ikhomposi njengesembozo ngokuyifafaza yonke indawo emibhedeni.

