IKHOMISHANI YOCWANINGO LWAMANZI

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LOKULETHWA KWAMANZI NOKUCHITHWA KWENDLE

-labaholi bomphakathi-

(emadolobheni namaphethelo)

LIDIDIYELWE NGABAKWA
PALMER DEVELOPMENT GROUP

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October 1994

Report No. TT 68/95
ISBN 1 86845 132 1

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Kenilworth
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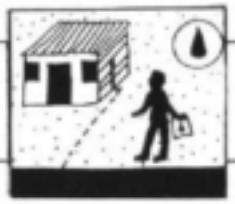
1. Isingeniso



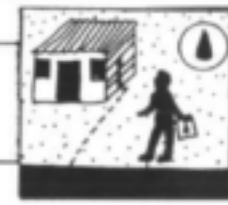
1

Uma uhlala eduze noma phakathi edolobheni, lelibhuku lizokulekelela ukuba uqondisise kangcono ezinye zezindlela umphakathi wakini ongathola ngazo amanzi okuphuza nokuwasha ahlanzekile. Libuye lichaze ngezindlela eziphephile ezingasetshenziswa ukuthutha indle. Uzobona futhi ukuthi izindlela okulethwa ngazo amanzi emadolobheni amancane kanye namakhulu, kakhulukazi endaweni yakini, iyosho ukuthi ndlela yini yokuthutha indle ezosetshenziswa.

Ngokwejwayelekile omasipala noma ohulumeni basekhaya baxhuma amanzi futhi bathathe izinqumo ngohlobo lokuchithwa kwendle olungasetshenziswa. Lelibhuku libuye lichaze ngamaphuzu amahle namabi ezindlela ezehlukene zokufakwa kwamanzi nokuthuthwa kwendle. Injongo yethu ukukusiza wenze izinqumo mayelana nezindlela ezifanelekile nezishibhile zokulethwa kwamanzi nokuchithwa kwendle endaweni yakini. Sinethemba ukuba lolulwazi luzokusiza ekuxoxisaneni nohulumeni wasekhaya ukuze kutholakale amasu angcono okwenziwa kwalomsebenzi.

Kulelibhuku uzofunda ngokulandelayo:

* **Amanzi angena kanjani empompini**
* **Indle ithuthwa kanjani futhi iyaphi**
* **Izindlela izinhlobo zamanzi asetshenziswayo nezinhlobo zokuthuthwa kwendle okuncike ngayo kokunye nokunye**
* **Izindlela ezahlukene zokulethwa kwamanzi nokusebenza kwazo**
* **Izindlela ezahlukene zokuthuthwa kwendle nokusebenza kwazo**
* **Ngubani okumele enze umsebenzi wokulethwa kwamanzi nokuthuthwa kwendle**
* **Ukufakelwa amanzi ekhaya nokuthuthelwa indle**
* **Abantu basebenzisa amanzi angakanani**
* **Abiza malini amanzi nokuthuthwa kwendle**
* **Ngubani okhokhela amanzi nokuthuthwa kwendle**
* **Ulwazi oludingayo uma uzoxoxisana ngomsebenzi wokulethwa kwamanzi nokuthuthwa kwendle**



Lesisihloko singaba yindida ngenxa yamagama amakhulu asetshenziswayo. Amagama anjengo **"ukulethwa kwamanzi", "ukuchithwa kwendle"** ayasetshenziswa kakhulu kulelibhuku.

Ukulethwa kwamanzi esithi phecelezi "**water supply**" kusho ukuthunyelwa kwamanzi ahlanzekile ezindlini noma eduze nezindlu zabantu lapho angatholakala khona kalula. Lamanzi avamise ukulethwa ngamapayipi kodwa angalethwa ngezinqola noma ngemigqomo.

Ukuchithwa kwendle esithi phecelezi "**sanitation**" kusho ukuthuthwa kwendle okuphephile, okuvikela izimpilo zethu nemvelo. Ukuze iphephe futhi ihlanzeke indlela yokuthutha indle kufanele ivikele abantu ekuthinteni indle, nokuhlala kwezimpukane endleni, kungabi nephunga. Ngaleyo ndlela kusho ukuthi kufanele kusetshenziswe izindlu zangasese.

Igama "**sewage**" lisho indle yabantu nokunye okulahlwayo okuphuma endlini noma endlini yangasese okuhanjiswa ngamanzi.

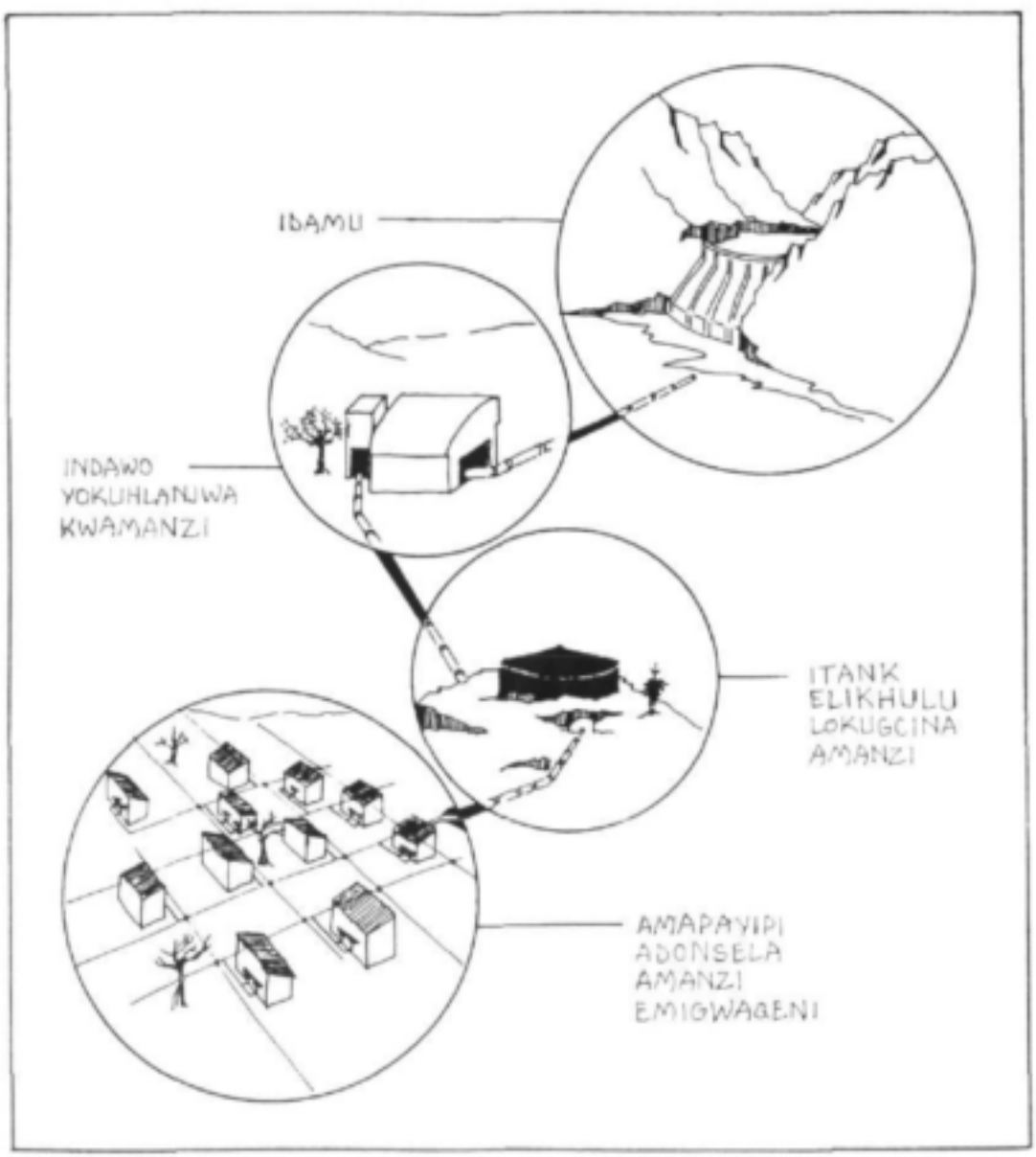
Amagama **isiza** kanye **nesitende** asho indawo ethengwa ngabantu ukuba kwakhiwe kuyo.

Siza uqaphele ukuthi ezindaweni zasemaphandleni amanzi atholwa ngezindlela ezahlukile kunasemadolobheni. Yingakho okuchaziwe kulelibhuku kungeke kubasize abantu abahlala emadolobheni amancane noma emafamu.

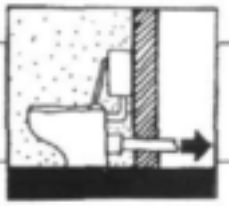
2. Kungabe amanzi afika kanjani empompini

Lesisithombe sikhombisa ukusuka kwamanzi emfuleni aze afike empompini ekhishini lakho. Ukwakha amadamu namachibi namapayipi okuletha amanzi ngendlela efanelekile kumba eqolo. Lelibhuku lichaza ukuthi ukufaka amanzi kubiza malini futhi akhokhelwa kanjani.

Idamu lakhiwa emfuleni ukukhongozela futhi ligcine amanzi. Amanzi agobhoza esuka edamini aye emapayipini bese eya lapho ayohlanzwa khona. Amanzi asehlanzekile athelelwa kumathange akhiwe- eduze nezindawo zokuhlala abantu emalokishini ukuze agcineke. Abe esedonswa ngamapayipi ahamba eduze nemigwaqo yasemalokishini. Lamapayipi abizwa nge-**"reticulation"**. Amapayipi amancane abe esewadonsela empompini lapho engasetshenziswa khona ngabantu.

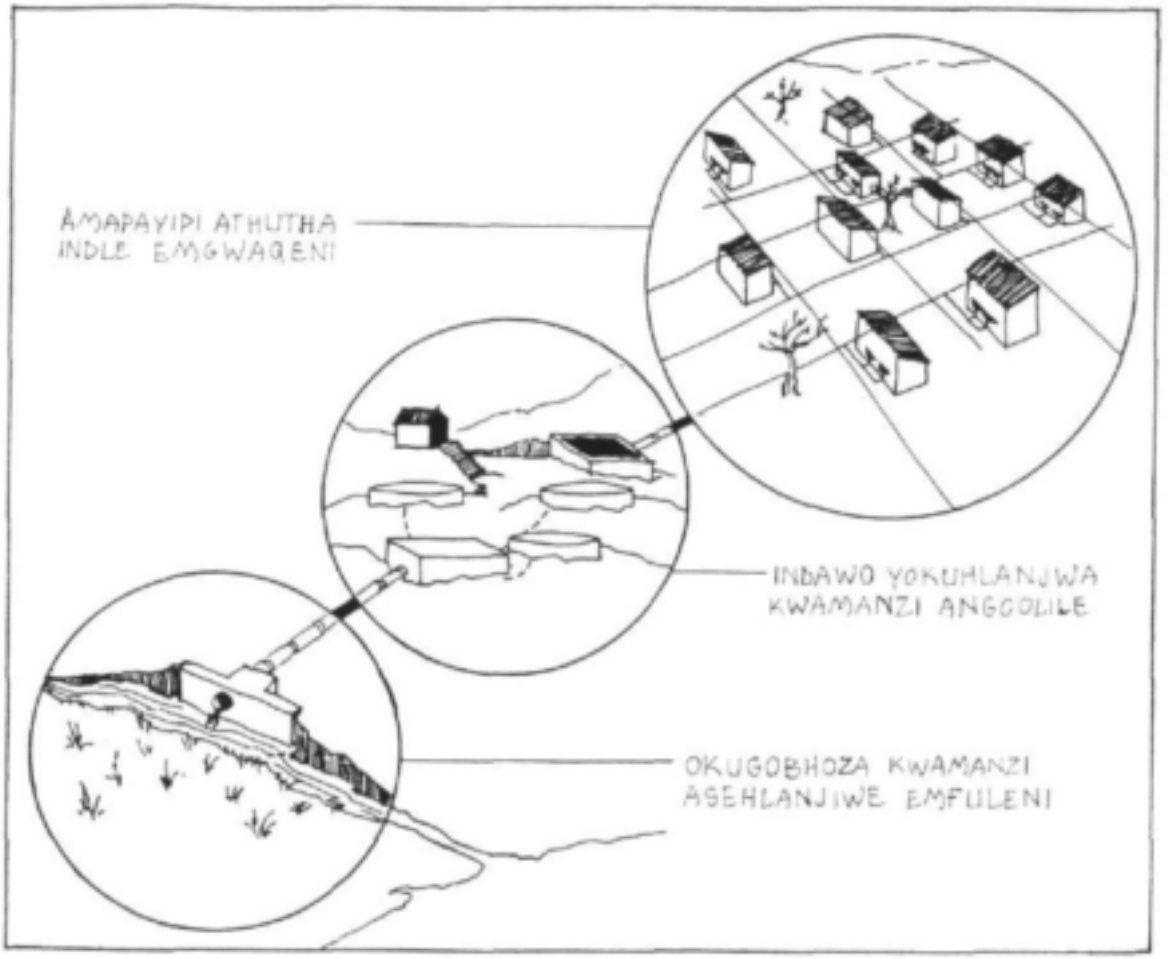


3. Indlela esuswa ngayo indle nalapho iya khona



Zimbili izindlela zokuthutha indle. Eyokuqala i"sewer system" eyesibili kube i"on-site sanitation system".

a. I-sewer systems -uhlelo lwamapayipi athutha ukungcola

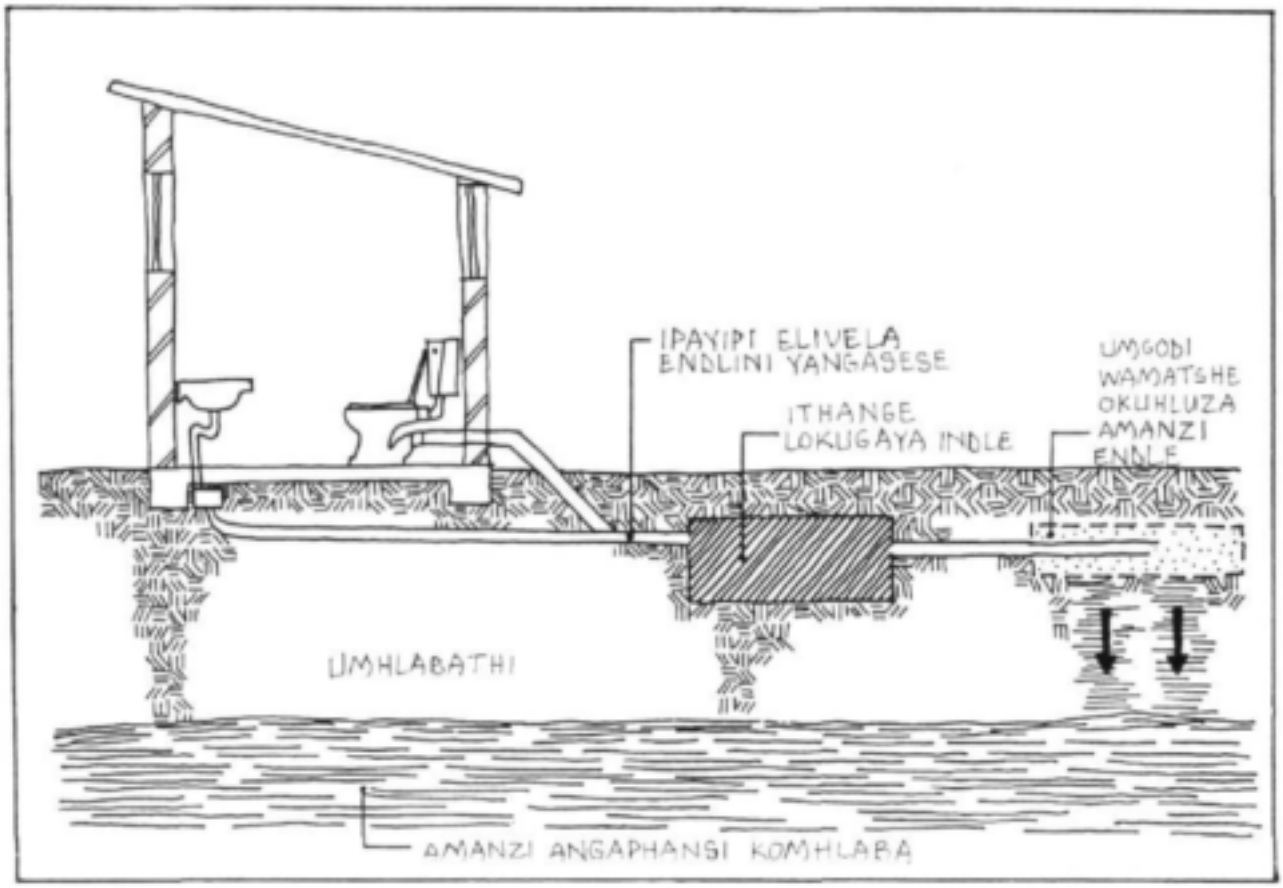


Ukuxhunywa kwamapayipi kuyabiza yingakho kusemqoka ukuba uma esefakiwe abhekwe ngendlela efanele. Uma amaphayipi evaleka noma indawo lapho kuhlanjwa khona amanzi ingasebenzi kahle, amanzi angahlanziwe angangena emifuleni bese iyangcola.

Loluhlobo lokuthuthwa kwendle ludinga indlu yangasese eyehliswa ngamanzi noma efulashwayo. Emuva kokufulashwa, amanzi nokungcola kugeleza epayipini elingaphanzi komhlabathi. Lokhu kuba sekuthunyelwa emapayipini axhunywe emgwaqeni. Nxa sekuze kwafika epayipini elikhulu, esingathi phecelezi i-outfall sewer. Lelipayipi lixhumene nendawo lapho amanzi angcolile afike ahlanzelwe ukuba abuyele emfuleni.

b. I-on-site sanitation systems -uhlelo lokuncibilikisa ukungcola esizeni

Loluhlobo lokuthuthwa kwendle, indle ayihambi ngamapayipi, ihlanzelwa ethangeni noma emgodini. Isibonelo: Amanzi aphuma lapha afika emhlabathini esehlanzekile kunangesikhathi engena ngoba okuningi ukungcola kuncitshilikiswa ethangeni/emgodini phakathi. Abe esegeleza njalo aze afike emanzini angaphansi komhlaba. Kusengenzeka ukuba amanzi ngaphansi komhlaba angcoliseke kodwa lokhu akwenzeki kakhulu.



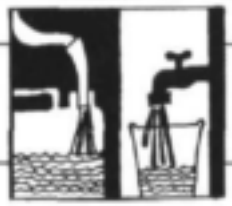
4. Kungabe kuhlangana kanjani ukulethwa kwamanzi nokuchithwa komonakalo wendle

Indlela okulethwa ngayo amanzi endaweni yakini iyathintana nokuthi indle izothuthwa kanjani. Uma kusetshenziswa indlela elula yokuletha amanzi, kusho ukuthi indlela okuthuthwa ngayo umonakalo wendle nayo ifanele ukuba ilungelane nobucayi bamanzi. Zine izindlela zokuhlukanisa izinhlobo zezindlela zokuletha amanzi nokuchithwa komonakalo wamanzi angcolile. Okungatheni, okulingene, okumaphakathi nokuphelele okuthe ncimishi.

Lezizinhlobo ziboniswa eshadini elingenzansi. Eziningi zalezizindlela azidingi ukwaziwa ngoba ziyadida. Ezinye zezindlela kusemqoka ukuba zaziwe ngabaholi nomphakathi ukubasiza ekuthatheni izinqumo ezithize mayelana namanzi nokuchithwa kwendle. Okumele kwaziwe ngamanzi kuyatholakala emakhasini alandelayo:

Uhlobo	Ukulethwa kwamanzi	Ukuthuthwa kwendle
Olungatheni	- Abathengisi bamanzi - Ukulethwa kwamanzi ngamathange - Izitodlwana zoku thengisela amanzi - Ompompi abakude nga-mamitha angaphezu kwayikhulu nezindlu	- Indlu yangasese yomgodi - Indlu yangasese - yebhakede
Olulingene	- Ompompi abangaphansi kwamamitha alikhulu nemizi	- Ophungalutho - Izindlu zangasese ezifulashwa ngokusebenzisa amanzi amancane kakhulu.
Oluphakathi	- Umpompi eyadini - Ithange eyadini	- Indlu yangasese ethutha umonakalo wendle - Indlu yangasese enethange loku-bolisa indle - Indlu yangasese ese benzisa amanzi athelwa ngebhakede
Oluphelele noma oluncimishi	- Ompompi abaxhunywe ezindlini	- Indlu yangasese efulashwayo esebenzisa amanzi anele

5. Izinhlobo zokulethwa kwamanzi *nokusebenza kwazo*



a. Abathengisi bamanzi

Lababantu bathengisa amanzi imizi ngemizi ngamathangi nangezigubhu bese beyakhokhelwa. Lamanzi avame ukubiza kanti futhi lendlela isetshenziswa uma ingekho enye indlela yokuthola amanzi.

b. Izinqola zamathangi amanzi

Amanzi angalethwa ngenqola eduze noma ekhaya lakho. Lenqola ivame ukuthunyelwa ngumasipala lapho ingekho enye indlela yokuthumela amanzi yize nje ibiza.

c. Izitodlwana ezithengisa amanzi

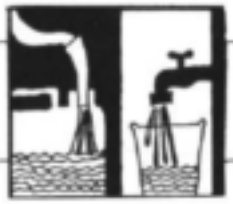
Ngumasipala othumela amanzi ngamapayipi kulezizitodlwana bese evumela inoma ngubani athengise amanzi. Abantu kufanele balande amanzi bese bewakhokhela. Umdayisi wamanzi okunguye oqoqa imali esitholakale ngalendlela ube eseyigcina kuye enye imali, enye ayithumele kumasipala. Umasipala uletha amanzi ngalendlela kuphela uma amanzi asetshenziswa umphakathi engenele noma engeke abhekane nezindleko zokuxhunywa kwamapayipi. Ingalinganiselwa ekhulwini elilodwa imindeni ethenga amanzi endlwaneni ngayinye. Lokhu kusho ukuba lingalinganiselwa emakhulwini amabili nesihlanu amamitha ibanga elihanjwa ngabantu uma beyokha amanzi.

Amaphuzu amahle ngaloluhlobo lokuthunyelwa kwamanzi

* Abantu bathola amanzi ahlanzekile
* Ivula amathuba emisebenzi
* Abantu bakhokhela kuphela amanzi abawasebenzisayo
* Umasipala uyakhokhelwa ngamanzi awalethayo

Amaphuzu amabi ngaloluhlobo

* Amanzi ayabiza
* Abantu bahamba ibanga elide ukuze bathole amanzi

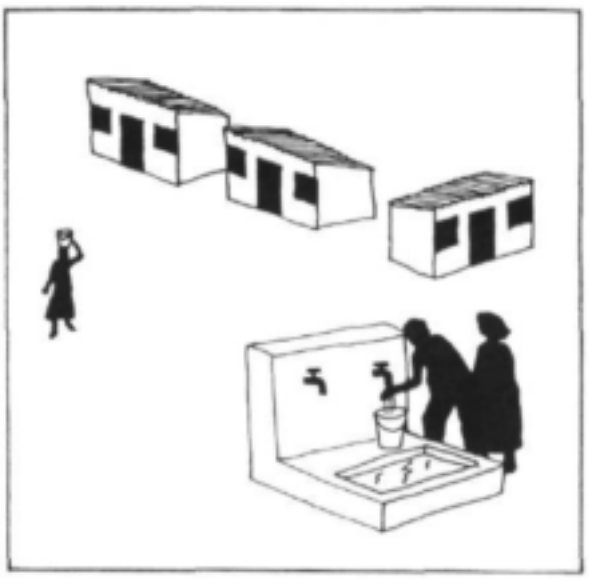


d. Ompompi abasetshenziswa ngumphakathi

Laba ompompi abasetshenziswa imindeni ehlukene emphakathini kanti futhi usizo lwayo luncike kakhulu esibalweni sabantu abayisebenzisayo nebanga elihanjwayo ukufika kulabompompi. Ngomthetho owejwayelekile izindlu ezingamashumi amabili nanhlanu zisebenzisa umpompi owodwa. Uma izindlu ezingamashumi amabili nanhlanu zisebenzisa umpompi owodwa, okusho ukuthi asibi khona isidingo sokuba abantu bahambe ibanga elingaphezu kwamamitha ayikhulu ukufinyelela ezikhungwini zamanzi. Ukusetshenziswa kompompi owodwa yimizi engaphezu kwamashumi amabili nanhlanu kuyinkomba yohlelo olunganele lokulethwa kwamanzi emphakathini. Kubukhuni impela ukuba amanzi akhokhelwe kuloluhlobo. Kodwa zintathu izindlela ezingasetshenziswa ukwenza lokhu:

i) Yonke imizi ingakhokha imali elinganayo zonke izinyanga.
ii) Ukuba abantu bathenge amanzi ngekhuphoni ibhakede elilodwa.
iii) Kube khona ozobheka umpompi futhi athengise amanzi.

Lezizindlela ezimbili zokugcina zokukhokhela amanzi ezichazwe ngenhla ziyabiza ngalamaphuzu alandelayo. Abathengisi bamanzi noma abaqoqi bamakhuphoni kumele bakhokhelwe amaholo abo. Ngakhoke intengo yamanzi isuke isihlanganise nalemali okwenza amanzi abize kakhulu.



Amaphuzu amahle

* Ukuxhunywa kwalompompi akubizi kakhulu okwenza intengo yamanzi ngenyanga ibe ncane kakhulu

Amaphuzu amabi

* Amanzi athuthwa ngabantu ngezigubhu
* Kubukhuni ukuhlela intengo yamanzi ngendlela elingene nengakhalisi muntu.

e. Ompompi abafakwa eyadini/esitendeni somuzi

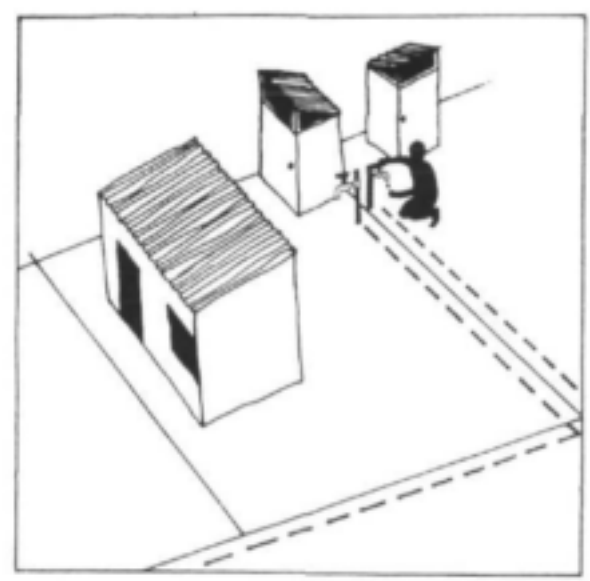
Itholakala emizini noma esizeni ngasinye. Lempompi ingaxhunywa ngaphandle kwendlu encane noma komuzi. Lamanzi adonswa emapayipini ahamba emigwaqeni yasemalokishini.

Lamanzi angakhokhelwa ngezindlela ezimbili:

i) bonke abantu bakhokhe imali elinganayo njalo ngenyanga

ii) kungasetshenziswa imishini yokulinganiswa kwamanzi ngamalitha umuzi ngomuzi ukhokhele inani lamanzi eliwasebenzisile ngaleyonyanga.

Indlela yokuqala ilula ukuyihlela kodwa kusho ukuthi abantu abamosha amanzi nabawongayo bakhokha imali efanayo. Indlela yesibili iyabiza futhi ibukhunyana ukuyihlela ngoba emva kokuxhunywa kwamamitha kumele kuqashwe abantu abazowafunda ukuba kwaziwe inani lamanzi asetshenziswe; bese kuposwa izincwadi ezisho isikweletu okufanele sikhokhwe. Kodwa kuyindlela engcono ngoba isiza abaphethe, ukuthi bakwazi ukuhlela ukulethwa kwamanzi kangcono.

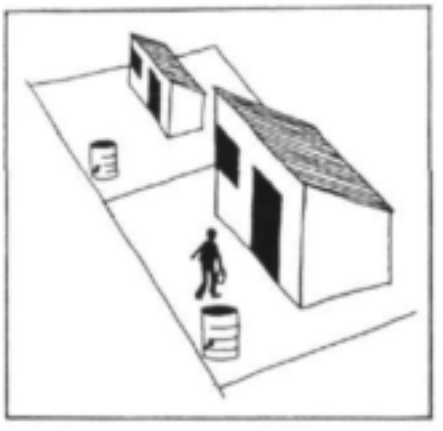


Iphuzu elihle
Amanzi atholakala esizeni ngasinye

Iphuzu elibi
Loluhlelo luthe ukubiza kunompompi womphakathi, ngoba kuyabiza ukuletha amanzi esizeni kanti futhi nabantu basebenzisa amanzi amaningi.

f. Amathange eyadini

Loluhlobo lutholakala ezindaweni ezimbalwa zaseThekwini, kodwa masinya luzotholakala nakwamanye amadolobha futhi. Indlu ngayinye inikezwa ithange elimumatha amalitha angamakhulu amabili amanzi. Uma ufuna amanzi enyanga yonke, ukhokha kanye imali yenyanga yonke ukuze ithange lakho ligcwaliswe kanye njalo ngosuku ngumuntu oqashwe ngumasipala ukwenza lomsebenzi.



Amaphuzu amahle

* Amanzi ahlale ekhokhelwa
* Abantu bayakwazi ukubona amanzi abawasebenzisayo nokuthi bawakhokhela malini.

Amaphuzu amabi

* Kufanele kube khona umuntu njalo ekhaya uma kufika oqashwe ngumasipala.
* Amanzi angasheshe aphele emathangeni uma esetshenziswa kakhulu

g. Ompompi abaxhunywe ezindlini

Ngalendlela amanzi angadonselwa ekhishini, endlini yengasese neyokugezela. Lamanzi adonswa esuka emapayipini axhunywe emigwaqeni. Uma sebethunyelwe abafundi bamamitha emizini ehlukene ukuba babheke amakhilolitha amanzi asetshenziswe kube sekuthunyelwa ama - akhawunti umuzi ngomuzi.

Amaphuzu amahle

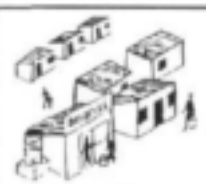
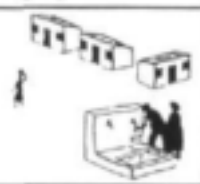
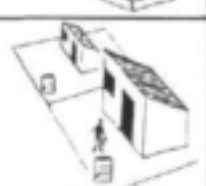
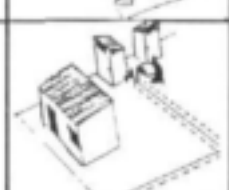
* Lokhukuxhunywa kwamanzi ezindlini kulusizo olukhulu

Amaphuzu amabi

* Abantu bagcina sebesebenzise amanzi amaningi kakhulu bese bekhokha izimali ezinkulu

Lelishadi elingezansi likhombisa zonke izinhlobo ezihlukene zokuletha amanzi, okukhulunywe ngazo ngenhla.

- Kulelishadi ungabona ukuthi inani lamanzi asetshenziswa ngabantu liyashintsha, kuya ngokuthi bona basebenzisa luphi uhlelo.
- Ungakwazi futhi nokubona ubungako babantu abasebenzisa ingxenye ethile yamanzi.

		Isilinganiso samanzi (amalitha)	Ibanga elihanjwayo	Ukusetshenziswa yimindeni
Umthengisi wamanzi		5-50	alikho	
Amathange omphakathi		5-50	alikho	
Isitodlwana samanzi		5-20	250m	1:100
Umpompi womphakathi		20-50	100m+	1:25
Ithange eliseyadini		50	alikho	1:1
Umpompi oseyadini		50-100	alikho	1:1
Ukuxhunywa kwamanzi endlini		100+	alikho	1:1

6. Izindlela ezahlukene zokuthuthwa komonakalo wendle nokusebenza kwazo

a. Indlu yangasese yomgodi eyejwayekile

Lendlu yangasese eyejwayelekile inomgodi ovalwayo kanye nesihladlwana abantu abahlala kuso. Ngokwejwayelekile kuye kube nompheme, ukuze umuntu ongaphakathi angabonakali. Loluhlobo lwendlu yangasese luyasetshenziswa kakhulu eNingizimu aFrika ikakhulukazi emaphandleni lapho kungekho khona amanzi athunyelwa ngamapayipi. Loluhlobo akuvamisile ukuthi lusetshenziswe emadolobheni.

Amaphuzu amahle

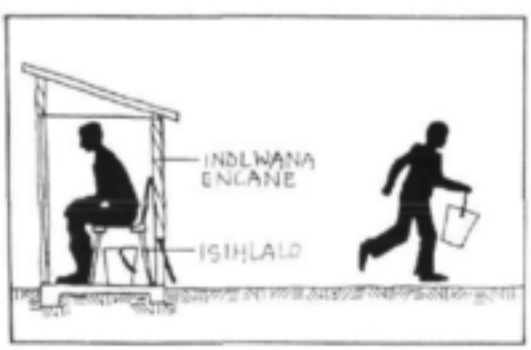
* Abantu bangazakhela bona lezizindlu zangasese, futhi kungcono ukuba nazo kunokungabi nalutho.

Amaphuzu amabi

* Isivalo somgodi, indawo yokuhlala kanye nompheme kuvamise ukuthi kwakhiwe kabi.
* Ayikho indlela yokulawula iphunga
* Azivimbeki izimpukane ukuba zingene emgodini okwenza lenzidlu zingabi nokuhlanzeka

b. Indlu yangasese esebenzisa ibhakede

Baningi abantu eNingizimu aFrika abasebenzisa loluhlobo lwezindlu zangasese zamabhakede, Ibhakede libekwa ngaphansi kwesihlalo ukwamukela indle. Umasipala uqasha abantu okuyibo abathutha futhi bachithe lamabhekede kanye noma kabili ngesonto.



Amaphuzu amahle

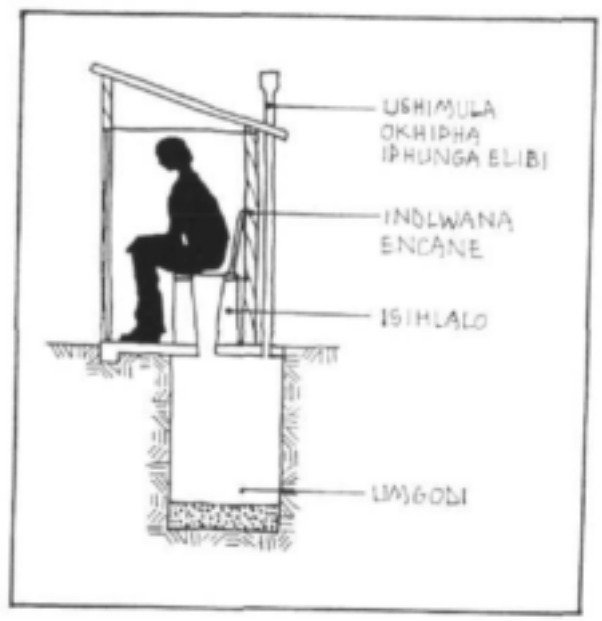
* Awekho

Amaphuzu amabi

* Izimpukane ziyazingenela nje emabhakedeni
* Kuba nephunga elibi
* Ibhakede liyashesha kakhulu ukugcwala uma bebaningi abantu abalisebenzisayo ekhaya
* Abaphathi bakuthola kunzima ukugcina futhi nokunakekela lezizindlu

c. Uphungalutho

Loluhlobo lwendlu yangasese lwakhiwe ngokhonkolo ukuvimba amanzi ukuthi angangeni emgodini. Kunesihlalo esihlalisa kahle futhi esinesivalo. Indlu uqobo yakhiwe kahle futhi imnyama ngokwanele. Ushimula wakhelwe ukukhiphela iphunga ngaphezulu kwendlu. Kuthatha iminyaka emihlanu ukuba lomgodi ugcwale. Kanti futhi uma usugcwele umgodi kukhona inqola ethile ekuyiyo empompa umgodi.



Iphuzu elihle

* Loluhlobo lwakhiwa kalula, lushibhile futhi luhlanzekile

Amaphuzu amabi

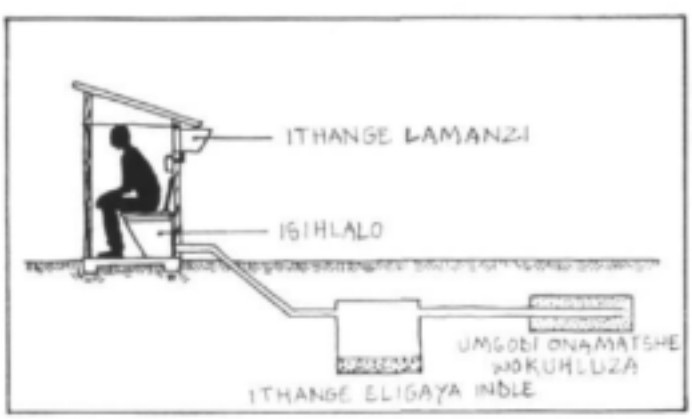
* Kumele lakhiwe emnyango
* Kungaba nezinkinga uma indawo inamatshe noma igcwele amanzi

d. I- Aqua- privy egaya futhi ichithe indle

Loluhlobo lwendlu yangasese ebizwa nge-aqua-privy lwakhiwa izinkampani ezehlukene kodwa zisebenza ngokufana yize zibizwa ngamagama ahlukene. Isibonelo ezinye zibizwa Atlas, HS, Calcamite neBiotag kodwa zivamise ukuqanjwa ngenkampani ezakhayo. Amanzi agcinwa ethangeni elincane elishaywayo, futhi kunendawo yokuhlala evamise ukwakhiwa

ngoplastiki. Lamanzi agcinwayo angangelitha, asetshenziselwa ukuhambisa ukungcola. Ukungcola loku kuthutheleka ethangeni elibizwa nge-"digester" okusho indawo yokugaya. Kulelithange kunezilwanyana ezincane ezingebonwe ngamehlo ezibizwa ngamabhakuthiliya (bacteria) okugaya umonakalo indle. Ukudliwa kwendle yilezi zilwanyana kungafaniswa nomuhlwa udla ukhuni. Okungagayekanga okubizwa nge-"digester effluent" kube sekuphuma ethangeni sekuhluzwa endaweni ebizwa nge-"soakaway" lapho ehla njalo emhlabathini aze afike emanzini ngaphansi komhlaba. Ibhakuthiliya elitholakala emhlabathini liyasiza ukudla konke lokukungcola okusalile yikhona lamanzi ezohluzeka bese egeleza emanzini angaphansi komhlaba.

"Isoakaway" umgodi noma umsele ogcwaliswe ngamatshe wase uyavalwa, okuyilapho kuhluzwa khona ukungcola. Ukungcola kube sekwakheka kuze kugcwale ithange kancane kancane. Ukumoma lokhukungcola: inqola ethile iyafika imunce konke lokhukungcola. Imigodi emincane ehluzayo ingadinga ukuthululwa njalo emva kwezinyanga ezintathu, kodwa omkhulu uthatha iminyaka emihlanu ukugcwala.



Amaphuzu amahle

* Uhlobo lwama Aqua-privy lushibhile futhi kulula ukulixhuma

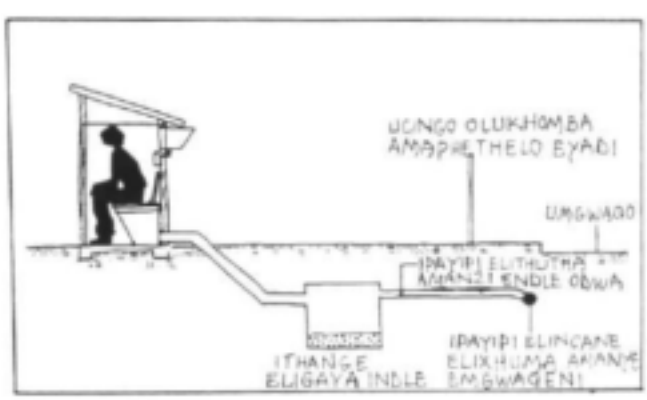
Amaphuzu amabi

* Amanzi kumele athuthelwe emathangeni
* Umgodi wokugaya (idegester) nomgodi wokuhluza (isoakaway) kungadingeka kumonywe njalo
* Uma loluhlobo lungaxhunywanga kahle imigodi yokuhluza ingeke isebenze kahle, lokhu kungenza ukungcolo okungadliwanga izilwanywana kuphumele ngaphandle

e. I Aqua privy ethutha ukungcola okumanzi kuphela

Kwesinye isikhati kuyekungabi lula ukuthi kube nendawo yokuchitha ukungcola esizeni. Izibonelo: uma kunendawo enganele esizeni, noma umhlabathi unamatshe amakhulu okungenza ukuthi umgodi wokuhluza ungakheki, noma amanzi asemhlabathini edinga ukuvikeleka. Ngenxa yalezizathu, kwakhiwa indlu yangasese evumela ukuthuthwa kwendle esigayiwe yaba amanzi. Umgodi wokugaya (digester) usebenza ngokufanayo nalona oshiwo ngenhla kodwa umehluko ukuthi ukungcola okungamanzi kungena epayipini elithatha okungamanzi kuphela. Lelipayipi lixhumene nelinye elisemgwaqeni elikuthatha likuyise lapho kugaywa khona. Ukungcola kuyakhela endaweni yokuhluza, kudingeka ukuthi kumonywe uma sekugcwele.

Lamapayipi, yize enza loluhlobo lwendlu yangasese ibize, enza kubelula ukuchitha indle ngoba ubuncane bawo benzelwe ukuthutha indle engamanzi yodwa.



Amaphuzu amahle

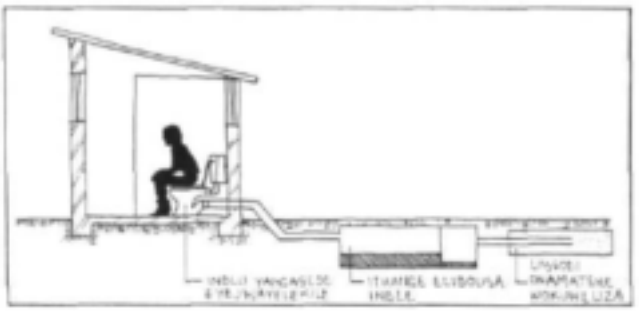
* Amanzi asetshenziswayo ukufulasha mancane kakhulu
* Umgodi wokuhluza awudingeki ngakho isimo siba ngcono esizeni

Amaphuzu amabi

* Ithange lokugaya indle liyadingeka kakhulu yize noma libuye ligcwale udaka lwendle

f. Indlu yangasese enethange elibolisa indle (septic tank)

Loluhlobo lwendlu yangasese lusebenzisa amanzi amaningi okulishaya. Isakhiwo saloluhlobo lwendlu yangasese siyafana ne Aqua privy enendawo yokuchitha ukungcola esizeni. Umehluko ukuthi ithange elibolisa indle lisebenzisa amanzi amaningi uma lifulashwa (alinganiselwa emalitheni ayisithupha kuya kwayishumi nesihlanu). Kanti futhi idinga umgodi omkhulu wokuhluza indle okuthiwa isoakaway.
Uma ukungcola kushiya indlu yangasese kungena ethangeni elibolisa indle okungelinye igama lomgodi wokugaya (digester). Ukungcola okungamanzi nakho kuya emgodini wokuhluza (soakaway) bese kungena emhlabathini.



Iphuzu elihle
* Loluhlobo lingaxhunywa lapho kungenamapayipi athutha indle

Iphuzu elibi
* Ludinga indawo enkulu futhi luyabiza kuna manye ama on-site systems

g. Indlu yangasese esebenzisa amanzi alingene (namapayipi okuthutha indle)

Indlu yangasese eyejwayelekile esebenzisa amanzi angamalitha angaphezulu kwayisithupha njalo nxa isebenziswa. Izinhlobo ezintsha zamanje zisebenzisa amanzi angamalitha angaphezulu kancane nje kwamathathu.

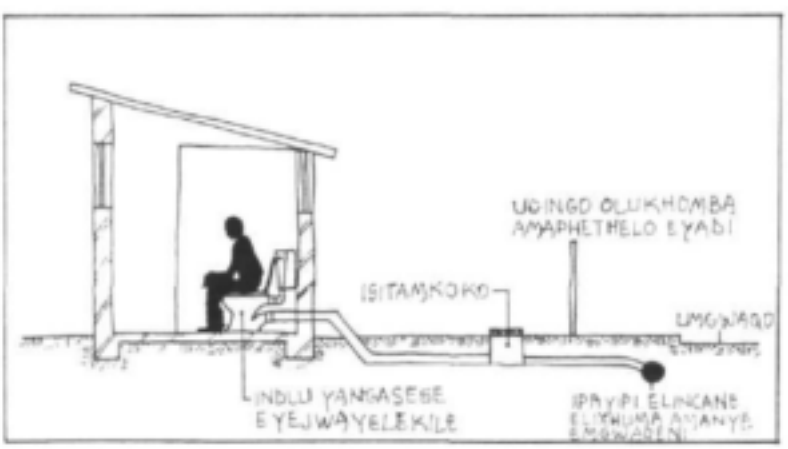
Lendlu yangasese ibizwa nge intermediate flush sanitation. Ukuchithwa kwamanzi ngamapayipi nokuhlanzwa kwawo kuyafana nohlobo olusebenzisa amanzi amaningi.

Iphuzu elihle
* Uhlobo olushaywayo kodwa olusebenzisa amanzi amancane ngakhoke lushibhile

Iphuzu elibi
* Isakhiwo sesihladlwana kanye nendlela yokulishaya akukahlolisiswa kahle

h. Indlu yangasese esebenzisa amanzi amaningi (namapayipi okuthutha indle)

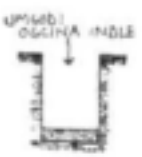
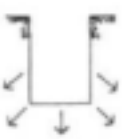
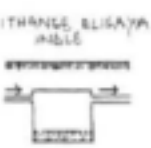
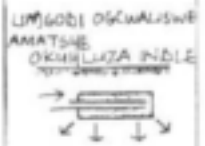
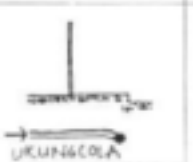
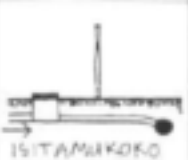
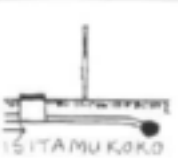
Loluhlobo lujwayelekile eNingizimu aFrika futhi lungaxhunywa ngaphandle nangaphakathi ezindlini.Ukungcola kwendle kugeleza njalo kwamukelwe amapayipi aseyadini akuthumela kulawa asemigwaqeni. Emuva kokuhlanzwa lamanzi abe esechithelwa emifuleni yethu. (bheka isithombe ekhasini lesine-4).



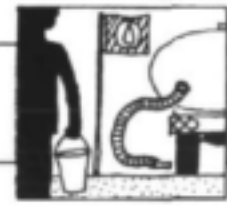
Iphuzu elihle
* Indlela ehlangabezana nezidingo zabantu kakhulu kunezinye izindlela.

Iphuzu elibi
* Kuyabiza ukuyakha futhi isebenzisa amanzi amaningi kakhulu

Lelishadi likhombisa izindlela zokuchithwa kwendle eNingizimu aFrika. Likhombisa kahle inani lamanzi elidingekayo ukusebenzisa indlela ngayinye.

Uhlobo lwendlela		Amanzi adingekayo ukufulusha (ngamalitha)	Ukuhlanzwa kwamanzi esizeni	Ukuchithwa kwendle emanzi	Ukuchithwa kwendle eqinile
Ibhakede		alikho			
Uphun-galutho		alikho			
Aqua privy		1			
Aqua privy with solids free sewer		1			
Ithange elibolisa indle		10-20			
Esebenzisa amanzi alingene		3-6			
Esebenzisa amanzi amaningi		10-20			

7. Ngubani okumele alethe amanzi achithe nendle?



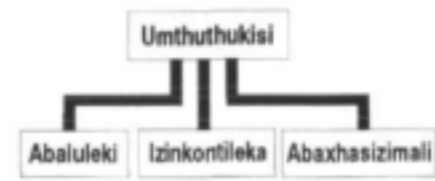
Lombuzo ungaphenduleka ngokuwahlukanisa izigaba ezimbili. Isigaba sokuqala: Ngubani onesibopho sokuhlela nokwakhiwa kwamasu okulethwa kwamanzi nokuchithwa komonakalo wendle? Isigaba sesibili: Ngubani onesibopho sokulondolozwa nokugcinwa kwalemisebenzi?

a. Ngubani onesibopho sokuhlela nokwakhiwa kwamasu okulethwa kwamanzi nokuchithwa komonakalo wendle?

Izinhlangano ezisemqoka ezingabamba iqhaza ekuhleleni nasekwakhiweni kwalemisebenzi/nalezizinhlelo ngumphakathi , umthuthukisi, abaphathi basekhaya kanye nabaxhasizimali. Iqhaza okufanele libanjwe yilezi zinhlangano liyachazwa ngezansi:

<u>Umphakathi</u>
Igama umphakathi lisho okuningi kubantu abahlukene. Ngomqondo wohlangothi lwezokuthuthukisa,mabili amaqembu asemqoka emphakathini. Iqembu lokuqala yizakhamuzi ekuyizo ezamukela lezizinhlelo. Iqembu lesibili uhlaka olumele noma oluyizwi lomphakathi. Loluhlaka lungenziwa ikomidi elibhekene nokuxazululwa kwezinkinga ezithile kuphela, noma inhlangano yokuxazulula futhi iphathe leyondawo. Kwesinye isikhathi izinkampani ezimele noma abagcinimafa (trust) bayamiswa umphakathi ukuba babhekane nokuthuthuka endaweni. Uhlaka olumele umphakathi kumele lukhethwe ngentando yeningi yabantu bomphakathi futhi kuqikelelwe ukuba lumela umphakathi emsebenzini eluwenzayo.

<u>Umthuthukisi</u> wakha amacebo noma amasu okulethwa kwamanzi nezindlela zokuchithwa kwendle. Izinkampani ezizimele, uhulumeni wasekhaya, nezakhiwo ezimele umphakathi zingaba abathuthukisi. Bonke lababantu bayebadinge ukuxhaswa ngeminye iminyango ehlukile ukuba bafeze umsebenzi wabo. Bayeke baqashe abahleli bamadolobha , onjiniyela nabahloli bezindawo ukuba babe ngabaluleki. Izinkontileka zisetshenziswa kakhulu emisebenzini yokwakha. Izinkontileka lezi ziziqashela abaphathi beziza, izimfolomane, abadwebi kanye nabasebenzi bazo, kodwa zisengaxoxisana nomphakathi ukuba abantu bomphakathi baqashwe kweminye imisebenzi. Kubalulekile ukuba abathuthukisi babe nolwazi olunzulu, nobungcweti namasu ukufeza lomsebenzi ngendlela efaneleyo. Lokhu kuzosiza ukuba bathole ukuxhaswa ngezimali.



Abaxhasizimali izinhlangano ezixhasa noma eziphana ngezimali. Ziningi izinhlangano ezingenza lokhu isibonelo izinhlangano ezimele uhulumeni njengeBhodi lesifunda elibhekene nezindlu, i-IDT,Ikhansela elibhekene nezinhlelo zokuthuthukiswa kwesifunda, uhulumeni wasekhaya, izinhlangano zokuthuthukisa zamazwe angaphandle kanye namabhange.

Lezizimali zingabolekisa noma kuphiwane ngazo. Ezibolekisayo ziyezikhokhwe emuva kwesikhathi esithile esibekwe phansi yimigomo yokukhishwa kwezimali zalezizinhlangano. Ukuxoxisana indlela yokuqikelela ukuba lemigomo iyalandelwa/iyaqondakala futhi ngendlela efanele.

Umphathi wasekhaya : lomphathi kungaba ikhansela ledolobha elakhethwa ngemigomo yezifunda ukuba libhekane nezidingo zomphakathi. Mayelana nezidingo ezihambelana namanzi nokuchithwa kwendle, mithathu iminyango okungaxoxiswana nayo engaphansi kukahulumeni wasekhaya.

Umnyango wokuhlelwa kwamadolobha
Lomnyango uhlela isakhiwo sedolobha lonke bese uthatha izinqumo ngokwakhiwa kwezindlu nemigwaqo. Umhleli wedolobha nguye ophethe lomnyango.

Ummnyango wonjiniyela bedolobha
Lomnyango ubhekene nokuhlelwa kwezinto ezimelwe ukwenziwa nsukuzonke nokuxhunywa noma ukulethwa kwezinhlelo zokuthuthukisa. Unjiniyela wedolobha nguye ophethe lomnyango.

Umnyango wokugcinwa kwezikhwama
Lomnyango ugcina futhi ucaze izimali eziya eminyangweni eyehlukene. Umgcinisikhwama wedolobha nguye ophethe lomnyango.

b. Ngubani onesibopho sokulondoloza nokugcinwa kwemisebenzi yokuletha amanzi nokuchithwa kwendle

Ukugcinwa nokulungiswa kwalezizinhlelo kungumsebenzi womphakathi nomphathi wasekhaya. Abantu abasemphakathini yibona abavamise ukubona kuqala izinkinga ezindaweni zabo. Umphakathi kumele wenze izikhalo noma izidingo zawo zaziwe kumasipala noma umphathi wasekhaya ngabantu abamiselwe ukumela umphakathi noma abayizwi lomphakathi. Loluhlaka olumele umphakathi kumele liqikelele futhi lubheke ukuba uhulumeni wasekhaya uphendula ngendlela efaneleyo. Umphathi wasekhaya umiselwe ukukhanda futhi agcine lezizinhlelo.

8. Ukufakelwa kwamanzi nezindlela zokuthutha indle umakwakhiwa izindlu

Ukuxhunywa kwalezizinhlelo kudinga ubuchwepheshe obukhulu futhi kungenziwa ngezindlela eziningi ezehlukene. Ezindaweni ezisemadolobheni eNingizimu aFrika lokukufakwa kwezindlela zokuthutha indle namanzi kwenziwa ngesikhathi izindlu zakhiwa.

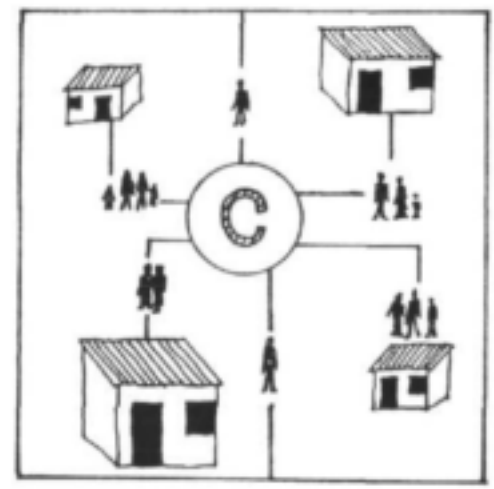
Igama "ukwakhiwa kwezindlu" lisinikeza imiqondo emithathu

i. umhlaba okwakhiwe kuwo indlu
ii. indlu uqobo lwayo
iii. nezinhlelo eziyizidingo ezixhunywa ezindlini.

Kusemqoka ukukhumbula lokhu ngoba ukuhlela nokwakhiwa kwalezizinhlelo kuhlanganiswa nesamba sendlu.

Ukuze umphakathi wakho ufumane izindlu esezixhunyiwe ngamanzi nendlela yokuchithwa kwendle okuvela ezindlini, kumele kulandelwe lezizinyathelo.

Isinyathelo

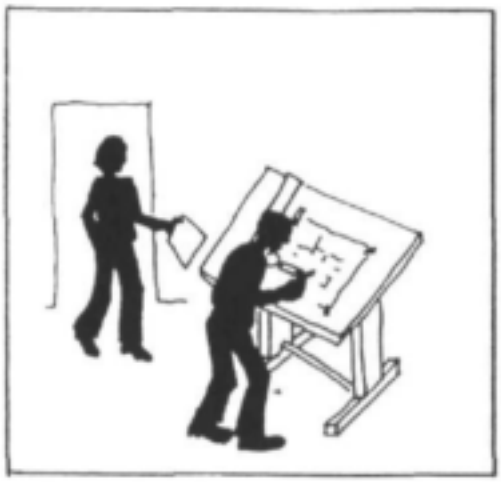


* **sokuqala**
- Ukukhetha isakhiwo somphakathi esiyizwi futhi esimele bonke abantu emphakathini

* **sesibili**
- Ukuhlangana nomphathi wasekhaya, abanamandla okuthuthukisa nabezimali. Lokhu kusho ukuthi zonke izinhlangano ezizoletha amanzi kanye nezinhlelo zokuthuthwa kwendle. Ezinye zezinto okufanele zenziwe kuqala ukuxoxisana ngokuthi imali izovelaphi

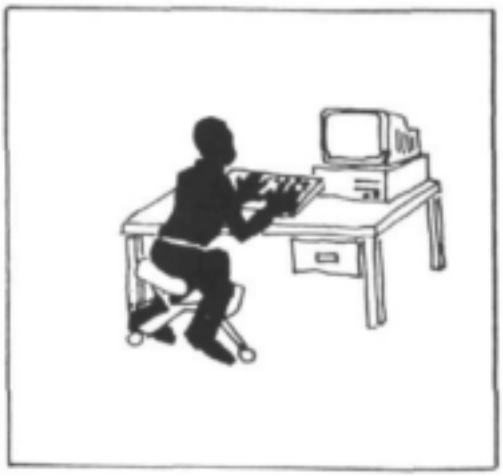
* **sesithathu**

- Ipulani yohlelo: kulesisigaba, kufanele kube nemidwebo ekhombisa izindlela ezihlukene zokwakhiwa kwezinhlelo eziyisidingo ebantwini.
Kufanele kubhekwe nemidwebo enohlakalwedolobha. Izinga lezinhlelo zisemandleni omphakathi kuyadingeka ukuba kuvumelwane ngazo



* **sesine - ukwenziwa kohlelo**

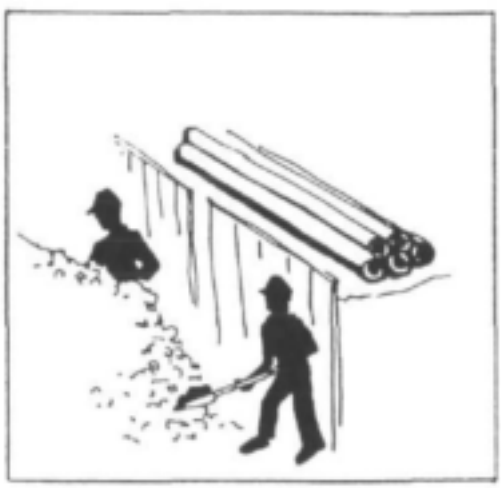
- Umfanekiso wokwakheka kwalezizinhlelo ezihlongozwayo wenziwa ngumluleki unjiniyela oqashwe ngumthuthukisi. Kulesisigaba kwakhiwa umdwebo onemeninginwane yezinto okumele zakhiwe; ukhombisa amapayipi, izindlu ezincane, amadamu akhiwayo nokunye okumelwe kwakhiwe. Izincwadi ezikhombisa imininginwane nezimiso zesivumelwano senkontileka ezibizwa ngokuthi "specifications and conditions of contract" zibe sezinikezwa inkontileka ukuyikhombisa ukuba kuzokwakhiwa kanjani kuphi?



* **sesihlanu**

- Ukwakhiwa

Inkontileka eqashiwe ngabathuthukisi ibe isiqala ukwakha. Ukuqina kwesimo noma uhlobo lwesakhiwo luyabhekisiswa ngaphambi kokuba abantu bangene ezindlini



* sesithupha

- Ukusetshenziswa nokulondolozwa

Uma abantu sebeqalile ukusebenzisa lezizinhlelo uhulumeni wasekhaya ube esegcina futhi agade ukulungiswa kwalokhu. Ekulethweni kwamanzi uhulumeni wasekhaya umelwe yilokhu:

a. ukuvula amaphampu namavaluva ukuba amanzi afinyelele kubantu.
b. bakhande amapayipi, amamitha, nokunye okufile.
c. bafunde amamitha akhombisa umthamo wamanzi asetshenziswe, bese be-thumela ama-akhawunti okuyiwo azosho imali okumelwe ikhokhwe.
d. ukuqiniseka ukuthi abantu bayazikhokhela lezizinhlelo.

Okumele bakwenze ekuxhunyweni kwezindlela zokuchithwa kwendle.

a. Ukuthululula udaka oluvimba amathange okugaya indle uma esegcwele.
b. Ukuvula amapayipi avalekile nokukhanda afile.
c. Ukuthumela ama-akhawunti bese bemukela izimali ezikhokhelwa lezizinhlelo.

9. Mangakanani amanzi esiwasebenzisayo?

Ubungako bamanzi asetshenziswa umuzi onompompi alinganiswa noma akalwa ngemitha lamanzi. Imitha lokulinganisa ubungako bamanzi lixhunywa epayipini lapho kungena khona amanzi ebaleni lomuzi. Isimo sesilinganiso esesetshenziswayo amakhilolitha. Ikhilolitha elilodwa lilingana namalitha ayinkulungwane eyodwa (1000 litres). Umnyango wamanzi kanye njalo ngenyanga uthumela umuntu ukuba afunde amakhilolitha amanzi asetshenzisiwe bese kubalwa imali ekweletwayo.

Kusemqoka ukwazi ukuthi mangakanani amanzi esiwasebenzisayo usuku ngosuku ngoba amanzi ayabiza. Ungasebenzisa ishadi elingezansi ukuze ukwazi ukuzibalela ukuthi cishe mangaki amakhilolitha okufanele uwakhokhele ngenyanga. Khumbula ukuthi ikhilolitha elilodwa lingamalitha ayinkulungwane. Ishadi elingezansi likhombisa: i) Isilinganiso samanzi esiwasebenzisa usuku nosuku.
ii) Isilinganiso samanzi angasetshenziswa ngumuntu oyedwa.
iii) Isilinganiso samanzi angasetshenziswa emuzini onabantu abahlanu.

a. Isilinganiso samanzi asetshenziswa usuku nosuku

Ukufulasha indlu yangasese eyejwayelekile	- 8-15 amalitha
Ukufulasha uhlobo lwe-Aqua Privy	- 1 ilitha
Ukusebenzisa ubhavu	- 80-120 amalitha
Ukusebenzisa isisefo	- 50-90 amalitha
Ukugeza izandla esinkini	- 4-8 amalitha
Ukuwasha izingubo ngesandla	- 25-75 amalitha
Ukuwasha izingubo ngomshini	- 130-200 amalitha
Ukugeza izitsha	- 10-30 amalitha

b. Mangakanani amanzi asetshenziswa umuntu oyedwa?

Ubungako bamanzi angasetshenziswa ngumuntu ngamunye lincike ezintweni eziningi. Isibonelo kungabe uyisebenzisa kangakanani indlu yangasese, uwusebenzisa kangakanani ubhavu uma uwasha nokunye. Abantu abazimele kahle bavamise ukusebenzisa amanzi amaningi ngoba bawathola kalula kunabanye abantu. Ngokuvamisile abantu abahola ngokuhlukene basebenzisa amanzi kanje ngosuku:

Abahola kancane abangenampompi endlini noma eyadini labo	- 20-50 amalitha
Abahola kancane benompompi eyadini kuphela	- 50-100 amalitha
Abahola kancane benompompi endlini	- 80-120 amalitha
Abahola maphakathi benompompi ezindlini	- 80-160 amalitha
Abahola kakhulu benompompi ezindlini nasengadini	- 120-350 amalitha

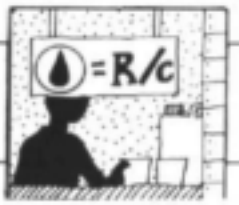
c. Mangakanani amanzi asetshenziswa ngumndeni?

Incwadi yesikweletu samanzi ethunyelwa emuzini ngamunye ikhombisa amalitha amanzi asetshenziswa ngabobonke abantu abahlala esitendeni esisodwa. Uma sicabangela ukuthi umndeni ngamunye unamalungu amahlanu atholakala esitendeni ngasinye, singakwazi ukulinganisela umthamo wamanzi esingawasebenzisa.

amakhilolitha ngenyanga

Abahola kancane abangenampompi endlini noma eyadini labo	- 3-7
Abahola kancane benompompi eyadini kuphela	- 7-15
Abahola kancane benompompi endlini	- 9-18
Abahola maphakathi benompompi endlini	- 12-24
Abahola kakhulu benompompi endlini nasengadini	- 18-53

10. Intengo yokulethwa kwamanzi nokuthuthwa kwendle



Ukusiza siqonde kahle ukubalwa kwezindleko zalokhu, kumele sibheke indlela ekuxhunywe ngayo amanzi nokuchithwa kwendle esizeni ngasinye nokuxhumana kwalokhu nazozonke iziza zendawo.

Ukuxhunywa esizeni ngasinye kubizwa ngengqalasizinda yangaphakathi (internal services). Loluhlelo lusebenzisa amapayipi adonsela amanzi emgwaqeni abe esedonselwa esizeni. Lendlela isebenzisa izindlu zangasese ezehlukene namapayipi athwala indle ukususa lomonakalo ezindlini.

Ukuxhunywa kwalezizinhlelo ezizeni zonke kubizwa nge-"bulk and connector service". Lendlela ifaka amadamu, izindawo zokuhluzwa kwamanzi, amadamu akhiweyo kanye namapayipi aletha amanzi ahluziwe emalokishini noma emadolibheni. Leligama libuye lifake namapayipi okuchitha indle, nezindawo zokuhluza amanzi angcolile endle kanye namapayipi athumela lamanzi emfuleni.

a. Izindleko ze-internal services.

Izindlela ezanele zokuthunyelwa kwamanzi nokuchithwa kwendle ziyabiza kunezindlela ezilingene. Kwezinye izindawo ukuthenga umhlaba kuyabiza impela kanti uma umhlaba unamatshe namawa lomhlaba ungabiza kakhulu. Ishadi elingezansi likhombisa inani lokuxhunywa kwalezizinhlelo esizeni ngasinye.

Ukulethwa kwamanzi	**shibhile**	**maphakathi**	**dule**
Umpompi osetshenziswa ngabantu abaningi emgwaqeni	R650	R750	R 900
Umpompi oxhunywe eyadini	R800	R1 100	R1 400
Umpompi oxhunywe endlini osebenzisa amanzi ngokwejwayelekile	R1 000	R1 500	R1 800
Umpompi oxhunywe endlini osebenzisa amanzi amaningi	R1 200	R2 000	R2 200
Ukuchithwa komonakalo wendle	**shibhile**	**maphakathi**	**dule**
Uphungalutho	R800	R1 600	R3 000
Indlu yangasese efulashwayo esebe-nzisa amanzi ama-ncane kakhulu	R1 000	R1 600	R3 900
Indlu yangasese efulashwayo esena-mapayipi esebe-nzisa amanzi amaningi	R1 800	R3 200	R5 600

b. Izindleko ze-bulk and connector services

Lezizindleko zikhokhelwa ngumphathi wasekhaya, abazikhokheli bona uqobo. Kodwa kubalulekile ukuthi sazi ukuthi umphathi wasekhaya uthola imali kubantu ngokuthi abakhokhise ngezinhlelo abazisebenzisayo. (bheka isigaba 11).

11. Ngubani okhokhela amanzi nohlelo lezokuhlanzeka

Ezahlukweni ezedlule sibonile ukuthi izinhlelo zokuletha amanzi nokuthuthwa kwendle ziyabiza kuye ngokunyuka kwezinga lazo. Umbuzo okumele ubuzwe manje ukuthi: Abathuthukisi nomphahti wasekhaya kungabe bayithathaphi imali yokuhlela, ukwakha kanye nokunakekela lezizinhlelo? Nxa uthenga indlu, ingxenye yemali iya kubathuthukisi abazokwakha lezizinhlelo eziyisidingo kumninindlu kanti uma ukhokhela ama-akhawunti amanzi nokuthuthwa kwendle, enye imali ikhokhela ukunakekelwa nokubhekwa kwalezizinhlelo.

a. Ukukhokhelwa kwezindleko zokwakha

Eningizimu Afrika izindleko zokuqala ukwakha zihambisana nemali yokuxhuma ingqalasizinda. Uma uthenga indlu ingxenye inikezwa umthuthukisi ukuze akhe lezizinhlelo. Umthuthukisi unikezwa ingxenye yokuxhuma lezizinhlelo. Yonke lemali ihlanganisa izindleko zokulungiswa kwemigwaqo ngamatshe, namalambu asemigwaqeni. Uma lezizinhlelo zingezezinga eliphezulu endaweni yakini, izindlu kuleyondawo zizobiza.

Kwesinye isikhathi uhulumeni angasiza ngokutshelekiswa kwezimali zokuthenga izindlu noma axhase abathuthukisi ukuba bakhokhele ukuxhunywa kwazozonke lezizinto ezilusizo olungaka emphakathini. Lena ibizwa ngokuba i-**subsidy**. Ngesikhathi esizayo lezizimali zikahulumeni zinokutholwa kuphela ngabantu abahlala emadolobheni kuphela. Lemali ikhokhela umhlaba, indlu uqobo, nakho konke okuxhunywayo emigwaqeni nasesakhiweni njengamanzi nezindlela zokuthuthwa kwendle.

b. Ukukhokhelwa kwezindleko zokunakekela lezizinhlelo

Izindleko zokusebenzisa nokugcinwa nokunakekelwa kwalezizinhlelo eziyizidingo kubantu, zikhokhelwa ngentela eya kumasipala kanye nama-akhawunti amanzi. Lentela yimali ekhishwa ngumninimuzi kumasipala njalo ngenyanga. Kanti uhlelo olubizwa ngama-tarrifs lubalwa ngendlela ehlukile umuzi ngomuzi. Uma sithatha isibonelo samanzi umuzi ngomuzi kudingeka ukhokhele amakhilolitha owasebenzisile ngenyanga.

Imininingwane ngokukhokhelwa kwezinhlelo zokuthuthwa kwamanzi nokuthuthwa kwendle inikiwe ngezansi:

* indlu yangasese engenamapayipi egaya indle eyadini intengo emisiwe ingango R5 ngenyanga.

* indlu yangasese efulashwayo enamapayipi endle ivame ukuthelelwa ngo R30 ngenyaga.Kodwa kusengakhokhwa imali ephakathi kuka R15 no R80 ngenyanga.

* ukulethwa kwamanzi ngompompi womphakathi kuvame ukuba ngu R7.50 ngenyanga. Kodwa kungakhokhwa phakathi kuka R2.50 no R15

* umpompi esizeni amanzi avame ukulinganiswa ngemishini ebizwa ngemitha yikhona abantu bezokhokhela amanzi abawasebenzisile kuphela. Ikhilolitha lingabiza iR1, ngesinye isikhathi ukusukela ku50c kuya kuR2 nangaphezulu. Umndeni onabantu abahlanu ungasebenzisa amakhilolitha angu 12 ngenyanga, lokhu kusho ukuthi umangabe ikilolitha libiza uR1, amanzi ayokubiza R12 ngenyanga.

* ukuxhunywa kwamanzi endlini umndeni onabantu abahlanu ungacatshangelwa ukuba ungasebenzisa amanzi angamakhilolitha angu 20 ngenyanga. Ngakho uma ikhilolitha lingu R1 ngenyanga,lomndeni kungamele ukhokhe uR20 ngenyanga.

12. Odinga ukukwazi uma uzoxoxisana ngomsebenzi wokulethwa kwamanzi nokuchithwa kwendle

Uma umphakathi usuzothola amanzi nezinhlelo zokuthuthwa kwendle kusuke kusafanele kuxoxiswane ngezinto ezithile. Ukuxoxisana kubaluleke kakhulu kuzozonke izigaba zalomsebenzi kusukela kusahlelwa, nanxa sekwakhiwa kuze kube yisikhathi abantu sebezisebenzisa futhi bezithelela lezizinhlelo.

a. Izingxoxo ngesikhathi sokuhlela

Isigaba sesikhombisa sikhomba amaqembu amane aqavile ezingxoxweni; umphakathi, umthuthukisi, uhulumeni wasekhaya noma umasipala kanye nosozimali. Imithetho nemigomo yokukhishwa nokusetshenziswa kwezimali uma isibekiwe ayishintshi. Ngakhoke amaqembu abasezingxoxweni nomphakathi ngumasipala nabathuthukisi. Amaphozu abalulekile okufanele bakhulumisane ngawo abekwe ngokufingqiwwe ngezansi.

Iliphi izinga lezinhlelo abantu abangakhona ukulikhokhela?

Abantu bayazithanda izinhlelo zezinga eliphezulu okuyizo ezibizayo. Umphakathi kumele wazi okumele ukuba ukhethe kukho nezindleko zako. Kubalulekile ukubalisisa kahle izindleko zezinhlelo ongakwazi ukuzikhokhela (ezinganyusa intengo yendlu yakho) nentela yokuzithelela nyangazonke. Umphakathi ontulayo uvamise ukwamukeliswa izinhlelo ezisezingeni eliphansi impela. Ngokwejwayelekile abantu imali abaxhaswe ngayo bayisebenzisa ekwakheni izindlu, kunokukhokhela izinhlelo ezibizayo zamanzi nokuthutha indle.

Kungabe lezizinhlelo zisezingeni lokukhokhelwa imali na?

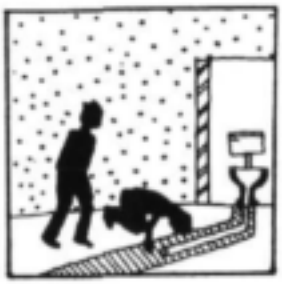
Ukuqiniseka ukuba abantu bayaneliswa iqophelo lezinhlelo abazitholayo kusemqoka ukuthola izeluleko ngezindleko zokuxhunywa kwalezizinhlelo kuleyondawo.

Zizoxhunywa kanjani-ke lezizinhlelo esizeni ngasinye?

Abantu kufanele bazi ukuthi ompompi nezindlu zangasese kuzokwakhiwa kuphi. Uma kungumpompi womphakathi kungusizo ukwenza amalungiselelo okuthi abantu bazowashela kuphi.

Yiziphi izinkinga ezingalindeleka ngalezizinhlelo?

Kuyisidingo ukuba abantu bazi ukuthi lezizinhlelo zisebenza kanjani kanye nezinkinga zazo. Isibonelo, uma ukugaywa kwendle kwenziwa eyadini abantu kudinga bazi ukuthi udaka lwendle kukhishwa kanjani emathangeni okugaya indle.



b. Ukuxoxisana ngesikhathi kusakhiwa lezizinhlelo

Emuva kokuhlelwa komfanekiso wesakhiwo uyadwetshwa bese kuyaqalwa nomsebenzi wokwakha.
Nanka amaphuzu asemqoka:

Ngubani ozoqashwa ukwenza lomsebenzi wokwakha?
Kungabe abantu bendawo bazoqashwa, baqashwe ngaziphi izizathu, wona amaholo abo akalwe kanjani?

Kungabe linjani iqophelo lesakhiwo?
Qikelela ukuba izinga neqophelo lwesakhiwo luyahlolisiswa kahle ngaphambi kokuba abantu bahlale ezindlini.

c. Ukuxoxisana emva kokuxhunywa kwalezizinhlelo

Umasipala nguye obe eseqiniseka ukuba lezizinhlelo zisebenza ngendlela, ukuze zisetshenziswe ngabantu abasandakuhlala ezizeni noma ezindlini zabo. Kulesisimo abantu kumele bazi lokhu okulandelayo:

Zingakanani izindleko zentela zalezizinhlelo?
Kumele uthole izindleko ngaleyondawo bese uxoxisana nomasipala uma abantu endaweni yakho bekhokha kakhulu.

Yimiphi imizamo yokunakekelwa nokubuyiselwa kwalezizinhlelo?
Abantu kumele bazi ukuba umasipala angenzani ukusiza nxa kuphukile noma kuvaleke amapayipi. Kusemqoka kakhulu nxa imigodi namathange kudinga ukuthululwa njalo. Qiniseka ukuba umasipala ukuhlelele ukwenza loku endaweni yakini.