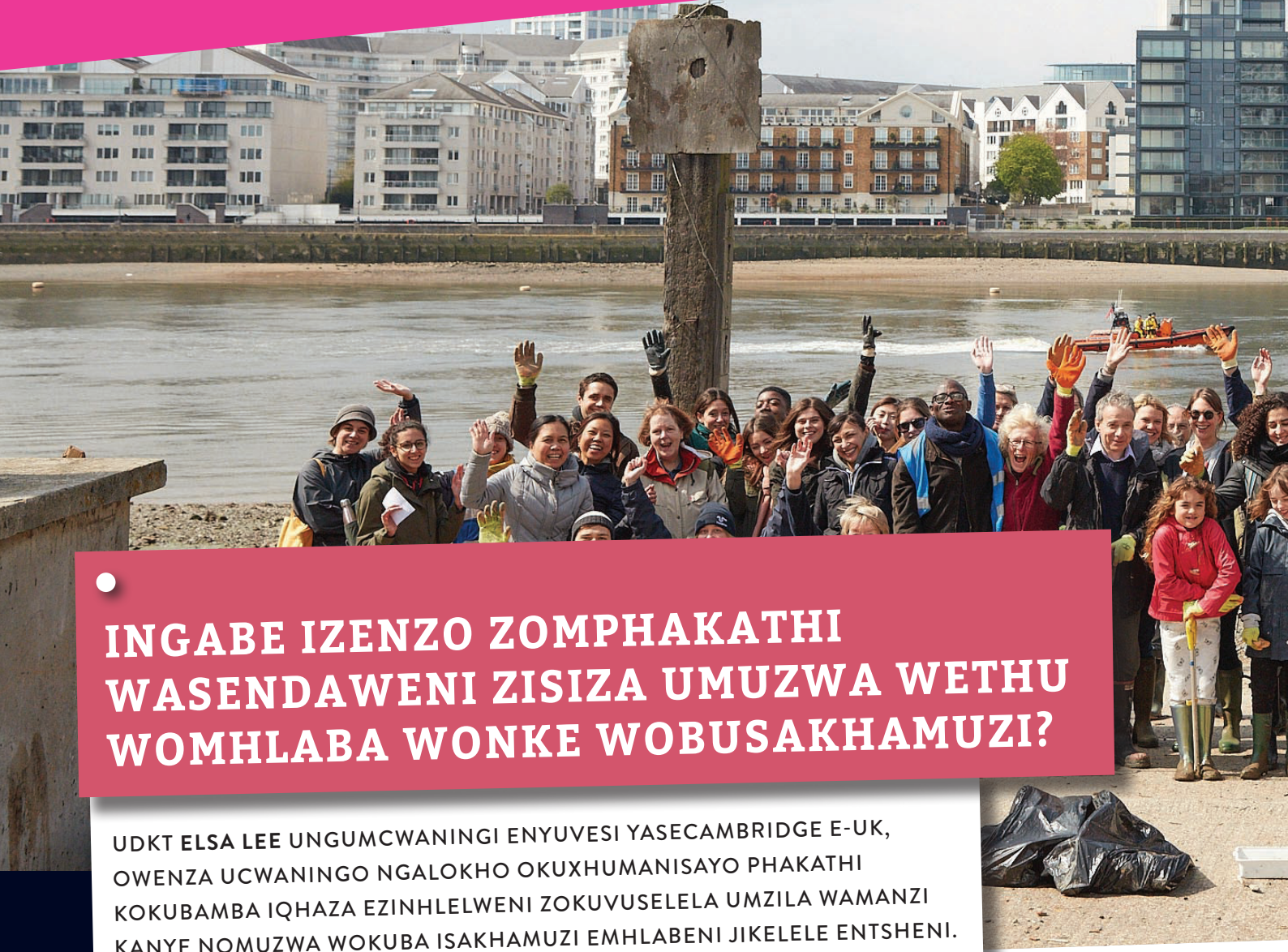

INGABE IZENZO ZOMPHAKATHI WASENDAWENI ZISIZA UMUZWA WETHU WOMHLABA WONKE WOBUSAKHAMUZI?

UDKT **ELSA LEE** UNGUMCWANINGI ENYUVESI YASECAMBRIDGE E-UK, OWENZA UCWANINGO NGALOKHO OKUXHUMANISAYO PHAKATHI KOKUBAMBA IQHAZA EZINHLELWENI ZOKUVUSELELA UMZILA WAMANZI KANYE NOMUZWA WOKUBA ISAKHAMUZI EMHLABENI JIKELELE ENTSHENI.

UHLU LWEZINHLOKO

UKULINGANA - ukusatshalaliswa okufanele kwezisetshenziswa ngokusekelwe ezidingweni zabamukeli.

I-GLOBAL CITIZEN - umuntu owazi umhlaba obanzi futhi oqondayo indawo yakhe ngaphakathi kwayo.

UBUNTU - inkolelo yaseNingizimu Afrika yokuthi sakhiwa ubuhlobo bethu nabanye

UKUVUSELELWA KWEMIGUDU YAMANZI - ukubuyisela imifula, izindawo ezingamaxhaphozi kanye nezindawo ezinamanzi.

"Ngokubheka indlela izenzo zethu ezingabathinta ngayo abantu abahlala kwamanye amazwe, singakwazi ukweseka impilo kanye nenhlalakahle yabantu emhlabeni wonke," kusho uDkt Elsa Lee, umcwaningi wemfundo yokusimamisa kwemvelo eNyuvesi yaseCambridge. U-Elsa ukhona ukuphenya ngamaphrojekthi ahlukene asebenzisana nentsha ukuthuthukisa indawo amanzi e-England naseNingizimu Afrika. Unentshisekelo yokuqonda ukuthi uma kanjani ukubamba iqhaza kule miklamo yomphakathi kungasiza abantu abasha ukuthi bazizwe njengezakhamuzi zomhlaba.

BUYINI UBUSAKHAMUZI SOMHLABA WONKE/GLOBAL CITIZEN?

Ukuba yisakhamuzi somhlaba wonke kuwumbono ukuthi sonke siyingxenye yomhlaba okanye yeplanethi eyodwa, ngakho indlela esiphila ngayo ezweni lethu imiphakathi kanye namazwe kufanele futhi asebenzise indlela esiphila ngayo njengamalungu omhlaba omphakathi. Sonke sinamalungelo nezibopho (ezifana nesibopho sokunakekela abanye, kanye nelungelo lokunakekelwa lapho sigula), kanye nomgomo wokusebenzisana noHulumeni izinhlangano ezifana neZizwe Ezihlangene (UN) ukuthi wonke umuntu kufanele afinyelele amalungelo afanayo futhi babelane ngezibopho ezifanayo. Umqondo wokuba yisakhamuzi somhlaba ugqanyiswe ngu I-UNESCO kuZinjongo zabo Zentuthuko Eqhubekayo, kanye namanye amagama anezincazelo ezifanayo zihlanganisa ukuqwashisa umhlaba wonke, ukuzwa umhlaba kanye no Ubuntu.

Umbono wukuthi uma sizibheka njengezakhamizi zomhlaba wonke, singaqala ukusebenzela ukulingana kubo bonke. Kufanele sicabangele ukuthi izenzo zethu zendawo zingabathinta kanjani abantu abahlala kwenye indawo. Ngokwesibonelo, uma sigcina amanzi emifuleni yethu engenakho ukungcola, okuzokwenzeka kuzosiza abantu abahlala ezansi nomfula, ngisho nalabo abakolunye uhlangothi lwezwe, hleze lawo manzi ahlanzekile agcina efikile kubo.

"Nokho, kunzima kakhulu ukuphila ngale ndlela," kuchaza u-Elsa. "Kuyinto enkulu kakhulu ukuyicela abantu ukuthi bagcine izidingo zawo wonke umuntu emhlabeni engqondweni yabo lapho benza izinqumo mayelana nendlela yokuphila izimpilo zabo. " Kufanele futhi sibheke ukuthi abantu emhlabeni wonke benza kanjani emazingeni ehlukene okuthola amanzi, ukudla nezinye izinsiza, ngakho lezi zinqumo ziningi okunzima ukwenzela abanye kunabanye. Futhi kudingeka sicabange ukuthi amazwe ahlukene kanjani, izinqubomgomo ezibusayo zithonya amandla ezakhamizi ngazinye zokuba izakhamizi zomhlaba.

Kodwa, uma sigxila ekwenzeni izinto ezincane, ezinhle emiphakathini yethu, singakwazi ekugcineni ukwenza izinguquko ngezinga elikhulu kakhulu. Nakuba singenakho ukufinyelela okufanayo ezintweni ezibonakalayo izinsiza, sesivele sinezimfanelo ezingokwengqondo, ezingokomzwelo nezingokomoya ezidingekayo

DKT ELSA LEE

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INKAKHA YOCWANINGO:

Imfundo Yokusimamiswa Kwezemvelo

IPROJEKTHI YOCWANINGO:

Iphenya ukuthi ubamba iqhaza kanjani emgwaqeni wamanzi wendawo amaphrojekthi okuvuselela anomthelela umuzwa wokuba yisakhamuzi somhlaba kwabantu abasha: Ukuxhuma Amanzi Esakhamuzini Somhlaba Ngemfundo Ukuthuthuka okungashabalali

UMXHASI:

UMkhandlu Wocwaningo Lwezomnotho Nezenhlalakahle (ESRC), UK: Grant inombolo ES/S000151/1

ukuze siphile njengalokhu, sidinga nje ukukholelwa ukuthi izenzo zethu ezincane, zokucabangelana zenza umehluko, futhi sazi ukuthi sihlala siyingxenye encane yengqikithi enkulu. “Uma sisebenzisana futhi sinakekelane ngokwethu kanye nalabo abaseduze nathi, singafinyelela eqophelweni lapho sithatha khona izinqumo emphakathini ngaphandle kokucabanga ngakho ngokunzulu,” kusho u-Elsa. “Futhi-ke bonke labo izinqumo ezithinta umphakathi ziyahlangana ukuze zibe nomthelela omuhle ezingeni lomhlaba.”

IZINDLELA ZOKUCWANINGO ZIKA-DKT LEE

Ucwaningo luka-Elsa lusebenzisa izindlela ze-ethnographic, okusho ukuthi uchitha isikhathi ngokukhethekile namavolontiya nabaqeqeshwayo abenza imisebenzi yokuvuselela umzila wamanzi. “Ngaphambi kobhubhane, savakashela le miklamo futhi sahamba eduze kwemifula nemithombo yamanzi lapho izinhlangano zethu ezibambe iqhaza zisebenza khona, kodwa uthaqa wokuvalwa kwezwe uvimbele ukuya ezindaweni zenkundla,” kuchaza u-Elsa. Manje, u-Elsa kanye nomcwaningi wakhe wephrojekthi, uDkt Mary Murphy, bakhuluma namalungu ezinhlangano mayelana nomsebenzi abawenzayo, benza izingxoxo ku-inthanethi.

Ngemva kokuguqula lezi zingxoxo zibe umbhalo, u-Elsa noMary babheka izingqikithi ezikhona ezivamile nezindikimba ezihlukile kumasethi ahlukene wezingxoxo. Lolu hlelo lokusebenza okwaziwa njengokuhlaziya okuqukethwe kwetimu futhi kuyindlela evamile yokuhlaziya idatha eqoqwayo ocwaningweni lwesayensi yezenhlalo. Ivumela abacwaningi ukuthi babone ukuthi abantu abahlukene bavumelana kanjani noma ningavumelani ngezihloko ezahlukene. U-Elsa noMary babe sebecabangela izici ezifana nezomnotho, izimo zenhlalo, ezombusazwe kanye nezemvelo lapho ababambiqhaza behlala futhi basebenze. “Ukwazi izimo zasemuva kungenza umehluko omkhulu endleleni ohumusha ngayo lokho oxoxa nabo bayakutshela,” kusho u-Elsa. “Kubalulekile futhi ukuthi ubuyele kwabakakho abahlanganyeli ubabuze ukuthi bazizwa kanjani ngezincazelo zakho zalokho abakushoyo.”

U-Elsa uhlose ukuqonda ukuthi kungani abantu abehlukene abenza izinto ezifanayo (ukuvuselelwa kwemizila yamanzi) kodwa ezindaweni ezahlukene (eNgilandi naseNingizimu Afrika) beza okufanayo noma kuveza iziphetho ezahlukene ngomthelela womsebenzi wabo. “Lesi yisigaba esijabulisa kakhulu amaphrojekthi ocwaningo lwezemfundo, futhi ingaqhubeka iminyaka! ” uyenaba.

UKUXHUMANA KOKUKUVUSELELWA KWEMIZILA YAMANZI NOBUSAKHAMUZI BOMHLABA WONKE/GLOBAL CITIZENSHIP

Idatha ka-Elsa iphakamisa ukuthi ukubamba iqhaza kumaphrojekthi wokuvuselela umzila wamanzi asekelwe emphakathini ithonya ubuzwe bendawo kubantu abasha makuza kwezemvelo. “Ukuvolontiya kumaphrojekthi afana nalawa lokhu kunikeza intsha ithuba lokusabela ezinkingeni ezigqanyisiwa nsuku zonke kwabezindaba,” kusho u-Elsa. Intsha iyazi ngokukhula komhlaba, izinkinga ezifana nokushintsha kwesimo sezulu kanye nokucekelwa phansi kwemvelo, kodwa ibuye ingabi nesiqiniseko ngendlela yokuzixazulula. Izinyathelo ezifana nezinhlelo zokuvuselela umzila wamanzi zihlinzeka ngethuba lokuthi abantu abasha bathathe isinyathelo futhi baxazulule izinkinga emphakathini wabo wendawo yezemvelo.

“Yize lokhu kunezinzuzo ezisobala emvelweni, kodwa kunenzuzo nakwabasha abantu ngokwabo,” kusho u-Elsa. Umuzwa wokuba neqhaza esixazululweni unomthelela omuhle inhlalakahle, ukusiza ukunqoba ukukhathazeka ngezemvelo, kuyilapho ukuzithandela futhi kunikeza amakhono angakwazi ukwenza ngcono amathuba okuqashwa kanye nokuhlala kahle kwezomnotho esikhathini esizayo. Le mithelela efanayo phakathi kwebikwe yintsha eNgilandi naseNingizimu Afrika.

Nokho, u-Elsa uthole ukuthi abantu abasha abahileleke emphakathini amaphrojekthi okuvuselela umzila wamanzi awabenzi bezizwe njengezakhamuzi zomhlaba wonke, futhi ngokuvamile bazizwa bengahlalisekile ngombono. Abanye babenomuzwa wokuthi nesibopho sokuba izakhamuzi zomhlaba wonke kunesisindo, abanye babenomuzwa wokuthi kakuphumeleleki futhi abanye babenomuzwa wokuthi kuphumeleleka ngokungalingani. “Uma uphila ezimeni lapho izinselelo zokuhlangabezana nowakho umthwalo wokondla umndeni wakho ungaphezu kwamandla akho okucabangela umthelela wakho ezindleleni zamanzi zasendaweni, ingasaphathwa ezindabeni zomhlaba wonke, bese kuba nombono wokuba isakhamuzi somhlaba wonke kwandisa umuzwa wokungalingani,” kuchaza u-Elsa. Ngakho-ke kubaluleke kakhulu ukuqaphela indaba yokuthi imibono efana nale ingaba nomthelela okanjani emaqenjini ahlukene abantu.

Ngenkathi ukuba yisakhamuzi somhlaba wonke kuphakamise izingqinamba ezibalulekile kubantu abasha u-Elsa asebenza nabo, amathuba ahlinzekwa yimiklamo yokuvuselela umzila wamanzi abavumele ukuthi babe izakhamuzi zendawo ezikhuthele. Ukube wonke umuntu emhlabeni ubenomqondo womphakathi (nganoma yiluphi uhlobo olufanele izimo zabo) futhi bathathe izinyathelo ngendawo ukuvikela imvelo yabo, lapho-ke umhlaba ubuzoba olungile futhi ube ngcono nendawo esimeme. “Lena yinto izishoshovu zezemvelo nabacwaningi asebeyaze isikhathi eside,” kusho u-Elsa, “futhi kujabulisa kakhulu ukubona indlela esebenza ngayo emdlalweni imiphakathi esiyifundile.”

ABAHLANGANYELI KWI-PHROJEKTHI

FRIENDS OF THE LIESBEEK
www.fol.org.za

Umfula i-Liesbeek eNingizimu Afrika ugeleza usuka emthonjeni wawo oseTable Mountain unqamule eKapa Idolobha, elihlinzeka ngomthombo wamanzi obalulekile wedolobha futhi lisebenza njengendawo yokusebenzela yemvelo ngokusebenzisa imvelo yasemadolobheni. “Umfula uyindawo ebalulekile yezinhlobonhlobo zezinto eziphilayo,” kusho Sabelo. “Zingaphezu kuka-580 izinhlobo zezilwane eziye zaqoshwa e-Liesbeek, eziningi zazo ezikhona isabalele esifundeni.” Nokho, lo mfula uhlushwa izinkinga zokungcola kanye nodoti olahlwayo. Imisele yasemadolobheni iholela ngqo emfuleni ngakho konke okusemigwaqweni kugelezela eLiesbeek uma lina, futhi izakhamuzi zivame ukulahla imfucuza yazo emfuleni.

Abangane be-Liesbeek basebenzela ukulondoloza kanye nokuvuselela umfula kanye nendawo ezungezile. “Kwesinye isikhathi kumele sihlele ukukhuculula umfula kabili ngesonto ngenxa yokugcwala kwawo imfucuza enqwabelanayo,” kusho uPhil. “Singakwazi ukususa udoti wezikhwama zemigqomo engu-500 njalo isikhathi.” Baphinde basuse izinhlobo ezihlaselayo, batshale izitshalo zendabuko futhi basebenzela buyisela izindawo ezingamaxhaphozi ngokususa izindonga ezingxenyeni zomfula ezinemisele ukuvumela izikhukhula zemvelo.

“Abantu banqanyuliwe ukuxhumana kwabo nomfula,” kusho uSabelo. Izakhiwo eziningi ziyifulathele i-Liesbeek, ngakho-ke izakhamizi azizibandakanyi nendawo yazo yemvelo. Abangane be-Liesbeek basiza ukukhuthaza ukongiwa kwedolobha okusimeme ngokuhlelela umphakathi imisebenzi evumela abantu ukuthi baxhumane nemvelo ngokuzibandakanya ne-Liesbeek.

THAMES21 **www.thames21.org.uk**

UMfula iThames ogelezaudabule idolobha iLondon, ungumfula wesibili ngobude e-UK. “ILondon iyidolobha lemifula,” kusho uChris. “I-London ubuyona baziwa ngemifula. Kodwa namuhla, i-Thames ithathwa njengomfula ongcolile futhi oyingozi, futhi sifuna ukushintsha lesi simo sengqondo kubantu.”

IThames21 isebenzela ukulwa nokungcoliswa komfula ngokuhlela ukukhuculula njalo, ukuhlinzeka ngazo zonke izinto ezidingekayo ukuze amavolontiya asuse udoti (angaphezu kwe-nkulungwane (1000) amapheya emithonjeni etholakalayo!). Baphinde bakhuthaze izakhamizi ukuthi zibambe iqhaza kumaphrojekthi esayensi yezakhamizi, njengokwenza ucwaningo lwemfucuza. Enye yalezi zinhlelo ithole ukuthi u-45% wepulasitiki amabhodlela atholakala eThames angamabhodlela amanzi asetshenziswa kanye. Le miphumela yasetshenziswa ukwesekela umkhankaso we-#Oneless wokufaka imithombo eminingi yamanzi yomphakathi e-London.

I-Thames21 iphinde ihlele imisebenzi yokufunda yangaphandle, isebenzisa umfula njengensiza kufundisa. Le misebenzi ayiyona eyezikole kuphela, kodwa futhi neyamalungu omphakathi, nge imicimbi efana nokuhambela imvelo kanye nezinkundla zokucobelelana ngolwazi zomculo noma zokuthatha izithombe ezibanjelwe ngasemfuleni. Lemisebenzi ikhuthaza izakhamuzi ukuthi zihlanganyele noMfula iThames futhi ziwuhloniphe umfula njengoba uyimvelo.

“Kubalulekile ukuxhumanisa intsha nezindaba zokuphathwa kwamanzi,” kusho uChris. “Intsha abathathi zinqumo bakusasa. Bazoba abasebenzisi bamanzi bakusasa, abamoshi kanye nabasunguli bokunakekelwa kwemvelo. Uma beqonda izinkinga ezizungeze imigudu yamanzi manje, ngemva kwalokho bazokwenza izinqumo ezingcono esikhathini esizayo.”

DUZI-UMNGENI CONSERVATION TRUST (DUCT) **www.duct.org.za**

Umfula uMsunduzi kanye noMngeni eNingizimu Afrika wonakaliswe kanzima futhi ungcolile. Njengengxenye yomgomo wayo wokusungula uhlelo lomfula onempilo engokwemvelo, i-DUCT isebenza nentsha abantu abangasebenzi abafuna ukuvikela imvelo, ukuhlinzeka ngokuqeqeshwa namathuba omsebenzi kanye nokubuyiselwa kwe-ecosystem.

“Ngangingasebenzi ngesikhathi ngiqeda isikole, ngakho, kimina, ukujoyina iphrojekthi kwaba ithuba lokuqala lomsebenzi, hhayi ngoba nganginentshisekelo kakhulu ngezemvelo,” kusho uPortia. “Kepha lokhu kwashintsha ngokushesha lapho ngiqala ukuqeqeshwa.”

Lokhu kuqeqeshwa kwakufaka ukuhlonzwa kwezinhlobo zezitshalo zendabuko nezangaphandle ngesikhathi sokuhlasela ukususwa kwazo, ukuhlolwa kwezindawo zokulawula udoti nokusebenzisa i-Google Earth ukuze kudwebeke izindawo zokuhlala ezahlukene. “Siphinde sithole ukuqeqeshwa komuntu ngamunye ukuze kusisize ngeyethu indlela yokufundela umsebenzi, futhi ngakhetha ukuzibandakanya nokuphathwa kwemfucuza kanye nokugaywa kwayo kabusha,” kuquba yena.

Ngosizo lwe-DUCT, u-Portia wasungula inkampani yakhe yokugaywa kabusha lapho eqoqa khona imfucuza ezikoleni zendawo, bese ehlukanisa izinto ezigaywa kabusha azidayisayo ukuze enze imali.

Ezindaweni eziningi zokuhlala akukho nkonzo kamasipala yokuqoqa imfucuza, ngakho abantu bayayilahla ukulahlwa kwayo okungokuyilahla emfuleni noma ezindaweni ezingamaxhaphozi. Amalungu e-DUCT ayawykhuculula lodoti, futhi ngemva kokuthola ukuqeqeshwa kwe-permaculture, bebelokhu betshalela umphakathi izingadi ezindaweni ezazisetshenziswa njengendawo yokulahla udoti. “Lezi zenzo ezincane ziyayikhuthaza imiphakathi ukuthi ibe ngabagadi bendawo ehlala kuyo,” kusho uPandora. “Ngokusebenza endaweni encane lapho umthelela ongokoqobo ungabonwa, abantu bakholelwa ukuthi bangakwazi ukulungisa izinkinga nokwenza umehluko.”

Funda ngamanye amaphrojekthi okuvuselela umzila wamanzi u-Elsa asebenza nawo:

- LIBERTY NPO **www.libertynpo.co.za**
- NATURE CONNECT (eyayikade iyi-Cape Town Environmental Education Trust) **www.natureconnect.earth**
- THE SEVERN RIVERS TRUST **www.severnriverstrust.com** and **www.unlockingthesevern.co.uk**

MAYELANA NEMFUNDO YOKUGCINA KWEMVELO

Njengengxenye ye-UNESCO's Sustainable Development Goals, bonke abafundi kufanele banikezwe amandla ngolwazi, amakhono namagugu adingekayo ukuze kubunjwe ikusasa eliqhakazile. Abacwaningi ukufunda imfundo yokusimamiswa kwemvelo bafuna ukuqonda ukuthi lokhu kungaba kanjani okuzuzwe ngokubeka ukusimama enhiziyweni yokufunda.

Imfundo yokusimama kwemvelo ilinganisa izinsika ezintathu zentuthuko esimeme (okungukuthi umnotho, imvelo nomphakathi, noma inzuzo, umhlaba wonke nabantu). "Thina bagcizeleli bemvelo, sithi indawo ezungezile iyisisekelo, futhi bese sicabanga ukuthi kusho ukuthini ukugcizelela ukusimama kwemvelo kwezemfundo," kuchaza u-Elsa.

Ucwaningo luka-Elsa lubeka ukulinganisa izidingo zabantu nezidingo zezinto zoMhlaba eziphilayo kanye nengxenye yalezi ezingaphili. "Kimina, amandla okuphendula ngendlela encane ukuqonda izinselelo zokucekelwa phansi kwemvelo ngabantu kubalulekile, futhi kuyisisekelo endleleni yami yokuphila," usho kanje. "Angikwazi ukukhetha ukuphila ngenye indlela."

HLOLA IMISEBENZI EPHATHELENE NEMFUNDO YOKONGIWA KWEMVELO

"Indlela engcono kakhulu yokuqala kulo msebenzi ukuthola inhlangano yendawo bese uqala ngokuzi-volontiyela," kugcizelela u-Elsa. Lokhu kungaba ngephrojekthi yendawo yokuvuselela umzila wamanzi, i-trust yezasendle noma iqembu lendawo elisebenza ngokongiwa kwemvelo. "Ukusebenza nomphakathi wangakini kuzokuqalisa ohambweni lwakho lwemfundo yezemvelo, futhi ungakhetha ukuthi uzoya kuphi ukusuka lapho."

U-Elsa futhi uphakamisa amaphrojekthi esayensi yezakhamizi njengethuba lokubhekana nezinga elikhulu nezindaba zokuzibandakanya komphakathi. Lezi zinhlangano ezilandelayo zinamaphrojekthi amaningi atholakalayo:

- The Natural History Museum **www.nhm.ac.uk/take-part/citizen-science.html**
- EU Citizen Science **www.eu-citizen.science**
- National Geographic **www.nationalgeographic.org/idea/citizen-science-projects**
- The Nature Conservancy **www.nature.org/en-us**

INDLELA YOKUSUKA ESIKOLENI EYA EMFUNDENI YOKONGIWA KWEZEMVELO

U-Elsa uphakamisa ukuthi igeography, ubuciko, ezomnotho, i-ecology kanye nebhizinisi kubalulekile njengezifundo okufanele zifundwe. Kodwa njengodaba lwemixhantela yemikhakha, zonke izifundo ziyoba usizo ekukhucululeni izinselelo emkhakheni wezemfundo yokusimamiswa kwemvelo. Empeleni kumayelana nokuthi imikhakha eyahlukene yokufunda ingaletha ukusekela ukucwaningwa kwezixazululo.