

# Imfuduko ukusuka kumbona owenzwe ngezakhi zofuzo (GM) ukuya kumbona olinywe ngendlela ezinobudlelwane nendalo onesondlo eMzantsi Afrika.

Imfuduko ukusuka kumbona owenzwe ngezakhi zofuzo (GM) ukuya kumbona olinywe ngendlela ezinobudlelwane nendalo onesondlo eMzantsi Afrika.

Indlela zangoku zokulima zifa namthanyana, kwaye zinobuzaza kwindalo zikwakhupha isivuno esingena sondlo kwaye esinobungozi kubalimi. Zenzelwe ukuba zilungele le ndlela intsha yokulima (Green Revolution) ejolisele ekongezeni imveliso ngokusebenzisa izichumisi ezingezizo kwakunye nezitshabalalisi khula ziphinde zivelise uluhlu lwentlobo ezahlukeneyo zesivuno. Imibutho emininzi equka iqumrhu loongcaphephe bezizwe i-International Panel of Experts on Sustainable Food Systems ngelasemzini okanye (IPES-Food) ngamafutshane, i-IAASTD, kwakunye noMbutho Wezizwe Ezimanyeneyo, enze ikhwelo lokuguqula iindlela zokulima nokuvelisa izidlo ezinobudlelwane nendalo kwaye ezingenankohlakalo kwintlalontle yabantu ngokubanzi.

UMzantsi Afrika uthembele kakhulu kwimbewu yombona eyenzwe ngezakhi mfuzo (GM), ukubonelela izigidi zabantu ngokutya okusisigxina kwanokutya kwezilwanyana neentlobo ntlobo zeentaka ezahlukeneyo eziquka iinkukhu. Kuthi ke ngexesha lembalela kwakunye nothelekiswano mali oluphantsi lwenze ulimo lokutya kwethu okusisigxina kube buthathaka kakhulu. Le nto yenza umhlaba wethu uphatshe kwaye nesivuno singabi nasondlo

- Lento yenza umhlaba ophatshileyo

ovelisa ukutya okungenasondlo

- Le nto ikwahambelana namaxabiso aphezulu ezifakwa kwezolimo (imbewu, amafutha, izichumisi, nezitshabalalisi khula)
- Umbona sisityalo esidinga amanzi amaninzi ingakumbi kwilizwe elithembele kwimvula ukondla izityalo (kukholelwa ekubeni umlinagiselo oyi 10 lwepesenti lwezityalo luxhomekeke kunceceshelo)
- Le nto ikhuthaza inkqubo nendlela eyongeza ukungalingani, intlupheko, kwakunye nentswelo msebenzi zinto ezo eziphinde zongeze ekulambeni nokungondleki kwabantu.
- Lento iphinde ifake abantu kumngcipheko wezifo kwanowokubulawa kwendalo.

Singenza njani ukuphuhlisa kwanokuxhasa iindlela zolimo ezakha ubudlelwane nendalo obusemgangathweni, uqoqosho nentlalo eziqhelisana nesimo sezulu esiguqukayo: singenza njani ukususa ukungalingani kokutya nokufikelela igunya lokutya elizinzileyo? Ezi ngqiqo zilandelayo kubalulekile ukuba siziqonde:

**Ulimo olunobudlelwane nendalo:** indlela yokuelisa isidlo ekhokelwa ziindlela zendalo ezikwafunxa kwiimfundiso zenzululwazi nakulwazi lwemveli. Yakha uhlobo lwemveliso lokutya olulungele indawo, olunophuhliso nesivuno esinesondlo, kwaye luyilungele imvelo likwanobulungisa kwintlalontle nenkcubeko yabantu. Ulimo olunobudlelwane nendalo lucingelwa

ukuba lungayindlela evakalayo yokulwa indlela yoqoqosho ebeka ingeniso phambi kwempilo.

**Ulimo oluphangaleleyo:** luquka iindlela ezahlukeneyo kulimo nemveliso ezizalwe ngumkhethe wendalo ubuqu, kwanazo zonke izinto eziqanjwe zaphuhliswa kwesisigidi sidlulileyo seminyaka ezibangelwe yinguqu ngokuhlala nangenkcubeko yabantu.

**Ulilimo lolondolozo:** le ingqiqo ikwathatha kulamcabango wolimo olunobudlelwane nendalo apho kukhuthazwa umkhombandlela wemvelo okanye wendalo- apha ukhuselo lomgangatho womhlaba nolondolozo lwamanzi lufikelelwa ngokugquma umhlaba nokuqinisekisa ukuba umhlaba awuhlakulwa xa kulinywa. Ushishino lolimo seluyamkele nalo le ndlela ukunqanda ukonakaliswa komhlaba, kodwa ukuze sikwazi ukulima isityalo esinye ixesha elide kumhlaba omnye kusabalulekile ukuba sisebenzise izitshabalalisi ukuze silawule ikhula nezinambuzane ezibulala isivuno. Asikwazi ke ukuthi le ndlela lulimo lo londolozo.

**Ukhuselo lokutya:** ukufikeleleka kokutya okunesondlo okulinganayo ngamaxabiso afikelelekayo.

**Igunya lokutya:** ilungelo labantu lokuba nokutya okunempilo okuhambisana namasiko nenkcubeko yabo kuveliswe ngendlela ezizinzileyo kwaye ezinenqubela, kwa nelungelo labo lokuzikhethelela ukutya amabakutye neendlela zokulima.

**Inguquko kwezolimo:** ukwandiswa kwemveliso okanye isivuno ngokusebenzisa izichumisi ezingezizo, izitshabalalisi khula kwaye zikwaveza iintlobo nintlobo zezityalo ezitsha.

## Imveliso yokutya okusisigxina eMzantsi Afrika

### Umbona

Kukho imfuneko yombona omhlophe ephakamileyo edalwa sisidingo sokondla abantu baseMzantsi Afrika nabakwingingqi yaseMazantsi aseAfrika (ngapha kwe 80% wombona oveliswa eMzantsi Afrika ngowembewu eguqulwe izakhi zofuzo), GM, uthi ke wona umbona otyheli usetyenziswe ukondla izilwanyana. Ngonyaka ka 2016 uMzantsi Afrika uye wanyanzeleka ukuba uthenge inani elikhulu lombona omhlophe notyheli kwamanye amazwe ukumelana nemfuno yabantu. Imbalela ende ibe negalelo elikhulu ekungakufumanekini nokungafikeleleki kokutya; isivuno sombona omhlophe sehle nge 14.2 amawaka etoni ngonyaka ka 2014 ukuyokutsho ku 7.16 amawaka ku 2016. Kuqikelelwa ukuba uMzantsi Afrika uzakuthenga kumazwe angaphandle i-5 yamawaka etoni ombona phakathi kwenyanga kaMay 2016-neye April 2017.

Utshintsho lwemo yezulu yenza ukuba kubekho inguqu kwi bio climatic zones kwaye kuzakuthi ekuhambeni kwexesha imveliso yombona izakwehla, ingakumbi eHighveld. Noxa nje imveliso yombona inganda eMpuma Koloni lonto ingaphazamisa uphangalalo lwendalo neendawo ezikhuselweyo.

### Ukonyuka kwamaxabiso okutya

Abathengi base Mzantsi Afrika bayaluva ulwamvila lokonyuka kwamaxabiso okutya. Phakathi kweyo Mdumba (Janywari) 2015 neyo Mdumba (Janywari) 2016, i5kg yombona yonyuke nge 43.7% ngexabiso (NAMC, 2016). Okukonyuka kwamaxabiso kunefuthe elibi kumaxabiso okufuya kungoko amaxabiso enyama ephakame kangaka.

Kuqikelelwa ukuba loxa abathengi abapokotho zinzulu besebenzisa kangange 2% yemirholo yabo ekutyeni, amahlwempu asebenzisa kangange 33%. Ngoku, kuqikelelwa ukuba kangange 50% yamakhaya eMzantsi Afrika athwaxwa luphango, eli nani lizakonyuka ngenxa

yokunyuka kwamaxabiso.

### **Umbona olungselelwe ukuthwala imfuzo oyamezela imbalela**

Ukukhawulelana nembalela kwakunye nesivuno esihlayo sombona, amashishini embewu aqambe umxube wembewu uguqulwe ufuzo (GM) okwazi ukumelana nembalela. Kodwa eMelika apho iMonsanto GM “Droughtgard” (MON87460) seyiqalwe khona ukusetyenziswa, kuqikelelwa ukuba izakonyusa isivuno nge 1%- okuphatse kufane nesivuno sesiqhelo kwimbalela (Gurian-Sherman, 2012).

Ngalomnyinyiva umncinci kangako ukonyusa isivuno, asivakali ncam isigqibo seziphathi mandla sokuvumela ukulima nge MON87460. Isikhalazo esikhulu malunga nesikhalo ekusetyenzisweni uguqulolwezakhi fuzo kwakunye nalemixube yeembewu siquka iindleko eziphezulu zokuthenga imbewu nyaka nonyaka, ukusetyenziswa kwamachiza kwezolimo, ukunqandwa kokulondolozwa kwembewu ukuze kutyale ngayo kwixa elizayo, kwakunye nezinye iindleko ezizalwa kokusetyenziswa kolu guqulelo lwezakhi zofuzo nezimbewu zingumxube, kubalimi abasakhasayo. Nangona lomkhwa uphikiswa ngabantu abangapha kwe 25000 yamawaka, uvavanyo lombona uguqulwe izakhi zofuzo nemixube yembewu ekwazi ukunyamezela imbalela kulindeleke ukuba luqhubeke eMzantsi Afrika kungekudala.

Abalimi bamelana njani nembalela. Iindlela zolimo zihlulwe kubini eMzantsi Afrika: kukho ingqokelela yabalimi boshishino olungaphantsi nje ku 40,000 ilawula umlinganiselo we 82 wezigidi zehekhthare zomhlaba, apethe 199% yorhwebo lwezolimo; kubekho abalimi abakhasayo apethe ngamakhaya angapha nje ku 2.5 ezigidi, apethe umlinganiselo we 14 ezigidi zehekhthare omhlaba, abanye babo baswele izibonelelo zamanzi.

Kubalimi boshishino, imbalela nesivuno esincinci – esihambelana nothelekiso lwezimali eliphakamileyo nengxaki

yokuba uMzantsi Afrika ingumthengi weizifakwa kwezolimo- izalela ekuntuyumpantuyumpeni ematyaleni kwabalimi. Abanye abalimi babhenela kumvumvuzelo ovulekileyo (OPV) ukuthoba indleko nokonyusa ingeniso. IiOPVS ziyafikeleleka ngamaxabiso ukodlula uguqulelo lwezakhi zofuzo nemixube yazo kwaye azifuni zifakwa zininzi. Umbona uguqulwe izakhi zofuzo uxabisa ngokuphindaphindwe kabini kunombona oqhelekileyo uxabise kahlanu kunomvumvuzelo ovulekileyo (OPVS), ithi imbewu yombona uguqulwe izakhi zofuzo ibephezulu ngama 42% kunombona osimo sinye (Fischer *et al*, 2015).

Abalimi abasakhasayo bafumaneka kakhulu emakhaya, bayafuya baphinde balime, ingakumbi umbona. Ngenxa yembalela ka 2015/2016 amakhaya amaninzi abenokuzilimela umbona ukuzondla, anyanzeleke ukuba athenge umbona ngamaxabiso aphezulu, nto leyo ixhalabisayo ingakumbi kumakhaya ahluphekileyo, ukhuseleko lokutya noqoqosho lasekuhlaleni. Iintlelo zokuphuhlisa abalimi zona zikhona kodwa zijoliselwe ushishino nenzuzo nto leyo eyenza ukuba zixhamlwe ngabalimi boshishino abazinzileyo iqhubekelelise ukungalingani ihluleke ukuxhasa abo badinga uncedo kakhulu.

## **Ukusebenzela inguqu**

Umhlaba jikelele wamkele ukuba ushishino lolimo, noxa lukwazi ukuvelisa ukutya okuninzi luhlulakele ukunqanda intswela yokutya kwanokuqinisekisa ukutya okunesondlo. Ushishino lolimo luphethwe kukungalingani kwanendlela yorhwebo etshabalalisa imvelo. Ngenxa yokuthembela kakhulu kumachiza olimo umhlaba waseMzantsi Afrika ulahlekelwe ngama 50-70ekhabhon kwaye uwohlokile.

Kwangelixesha ulahlekelwa bubutyebi bomhlaba, uMzantsi Afrika unegxaki ezimbini eziza ngamandla, ukungondleki nokutyeba kwabantu ngenxa yokongezeka kokutya okwenziwa



ngokukhawuleza nokungenasondlo. Kumele sikhawuleze sikhuthaze iindlela ezahlukeneyo zokutya okusempilweni ukuze sikwazi ukondla isizwe esikhulayo. Imveliso yolimo ejonge inzuzo iye ijolise ekuthengiseni ukuze ifumane ingeniso njengokuba besenza ngalembewu ye GM enamachiza banake ilungelo lokutya okunesondlo.

Ulimo olunobudlelwane nendalo lungajongana nemozulu eguqakayo, nokutya okunesondlo neengxaki kwintlalontle ezibangwa yilendlela yangoku yokuelisa ukutya. Ngokuya kwembumba yezizwe ezimanyeneyo indlela zokulima ezinobudlelwane nendalo zingayiphinda kabini imveliso yokutya kwiminyaka elishumi kwaye idale imisebenzi emininzi ukodlula le ndlela yangoku yokulima, ngoba imali izakujoliswa kubantu abalima ngezinongo zendalo (Rodale Institute, 2011) Ukutya kwesintu okufana namazimba kungadlala indima ebonakalayo kwinguqu uba kungatyalwa imali kwaye zikhuthazwe ngokufaneleyo, kuxhotyiswe abantu ukuba bathathe izigqibo ezingcono ngokubhekiselene nokutya nempilo. Uba kungakhuthazwa indlela yokulima

## Isiphelo

Singenza kanjani ukuphuhlisa nokuxhasa indlela zokulima ezinobudlelwane nendalo, noqoqosho kwakunye netlalo entle? Kufuneka sisuke kwisivuno

esinemveliso ephezulu kunye nekhali eziphezulu siziyamanise neendidi ezahlukeneyo zokutya ezifikelela lula, zingaxabisi kakhule kwaye zihambelana namasiko abantu. Ukutya okunesondlo okuveliswe ngendlela zokulima ezinobudlelwane nendalo kubalulekile. Oku kudinga:

- Sahlukane nokulima isityalo esinye, siquka nezityalo ze GM nombona we GM nakunye nokusebenzisa amachiza ukulima.
- Umbuso utyale imali yokweza uphando nophuhliso.
- Umgaqo nkqubo ongajolisanga kwisivuno esiphakamileyo kuphela (ingakumbi eMzantsi Afrika apho songanyelwe sisivuno esinye se GM) sijolise imibombo kwizityalo neembewu ezahlukeneyo ingakumbi imbewu zomthonyama zohlobo;
- Ulimo olunesisekelo esilungileyo kwakunye nomgaqo nkqubo wembewu oxhaswa ngumthetho.
- Uxhaso mali oluphuma kurhulumente oluxhasa ulimo olunobudlelwane nendalo; kwakunye
- Nokutobisa iimalike sesivuno esahlukeneyo ukwenzela ukuba abalimi abakhasayo nabo bangathatha inxaxheba kuveliso lokutya.

Ekugqibeleni kufuneka sisebenzele ekubani negunya lwemveliso yokutya; ilungelo labantu ekutyeni okunempilo okuhambelana namasiko nezithethe zabo, okuveliswe ngendlela ezinxamnye nendalo, kwakunye nelungelo lokuzikhethela ukutya amabakutye neendlela omakuveliswe ngayo.

## Izithenjwa

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