JustTransitions

IKHASI LAMAQINISO 03

Ukungcola okunomthelela ekuguquguqukeni kwesimo sezulu okukhiqizwa yizimboni ezinhlelweni zokudla

Ziyini izinhlelo **zokudla zezimboni?**

Izinhlelo zokudla lwezimboni seziphenduke indlela "ejwayelekile" neyamukelwa emhlabeni wonke yokuhlela izinhlelo zokudla. Zisuka emqondweni wobunxiwankulu wokukhiqiza ngobuningi kusuka ngeminyaka yo-1800, lwasabalala emazweni amaningi aseningizimu ngeminyaka yawo-1950–1960 ngalokho okubizwa 'nge-Green Revolution'. Lokhu kwenza umkhiqizo waba nesivuno esiphezulu , kodwa kwenza ukuba kuzentshenziswe amanzi amaningi kanye nokufakwa kwezithako ezilekelela umkhiqizo omningi, nasekusebenziseni izimbewu ezihlanganisiwe ukuze kwandiswe ukukhiqizwa kwezitshalo ezimbalwa ezizohlinzeka izimakethe zomhlaba.

Loluhlobo lokulima luphuce ukudla ukubaluleka kwakho kwezenhlalakahle kanye nokuxhumana nokuhlobana ekuphilisaneni nemvelo kanye namasiko Esikhundleni salokho, ukudla sekufana nempahla edayisekayo ibe nenzuzo enkulu ngezindleko eziphansi. Lokhu okubizwa "ngochungechunge lwamanani" kuhlanganisa izindleko zokulima, ezokuthutha, ukuhlelwa, ukukhiqiza, ukudayisa kanye nokudliwa komkhiqizo. Imikhiqizo efanayo ikhiqizwa phakathi nesikhathi nendawo, ngesilinganiso esikhulu esidinga ukufana nokumiswa kulo lonke uchungechunge.

Ubunjalo bezindawo buyasuswa kulimale izinhlobonhlobo zezinto eziphilayo zendabuko ukuze kuvuleke indlela yokulima izitshalo ezifanayo nemfuyo efanayo ngenhloso yokudayisa. Ukuze kugcinwe izinhlelo ezinkulu ezifanayo, okungavumelani nesimo esinjalo semvelo kusetshenziswa kakhulu amakhemikhali afana nomanyolo nezibulala-zinambuzane kanye nemithi yokwelapha izifo zezilwane. Lokhu kuphambene nezinqubo zemvelo ezihlukahlukene nokusebenzisana kwazo. Ukudla kuhlelwa ngokusetshenziswa kwamakhemikhali ukuze kube nempilo ende lapho kuthuthwa nasemashalofini ezitolo. Lokhu kuhambisana nokusetshenziswa kwemishini ngezinga elikhulu kanye nokusetshenziswa kohlelo lobuchwepheshe ezimayini nasekukhiqizeni

ISITHOMBE: CTA ACP-EU/FLICKR

izinto ezisetshenziswayo, ukulima kwezimboni, ezokuthutha kanye nezokuthutha kulo lonke uchungechunge lokulekelela umkhiqizo, kanye nasekulungiseni ukudla. Ukusetshenziswa kwamandla (ugesi) kwenyukile kulzo lzonke izinhlelo lzokudla futhi nemfucuza ikhiqizwa kuzo zonke izigaba noma izinyathelo. Ingxenye eyodwa kwezintathu yokudla okukhiqizwa emhlabeni wonke igcina ilahliwe.

Lolu hlelo lube nomphumela oyimpi emvelweni, eyenze kwancipha ngokushesha kwezinhlobonhlobo zezinto ezimilayo eziphilayo, ukungcola, nokucekelwa phansi kwenhlabathi; izinhlobonhlobo zemithelela emibi yezempilo evela kumakhemikhali anobuthi emiphakathini yabalimi kanye nakubathengi; lokhu kudale nobumpofu kanye nokubukelwa phansi kwemiphakathi nabasebenzi abakhiqiza ukudla kwethu.

Loluhlelo lokudla lwasezimbonini lusebenzisana luphinde lunikeze amandla amakhulu onxiwankulu ukuthatha izinqumo ukuze bekwazi ukulawula ingxenye ngayinye ekukhiqizeni, konke lokhu kunyuka ngezinga elikhulu ekukhiqizeni nase kusabalaliseni ukudla ezweni nasemhlabeni jikelele.

Loluhlobo lwezinqumo ezithathwa onxiwankulu lushintshe indlela okubukwa ngayo izinhlelo zokudla, njengokuthi sidinga ukukhiqiza ukudla okuningi ukondla imiphakathi eyandayo futhi sidinga izindlela zesimanje ukuba sandise umkhiqizo wokudla ubemningi endaweni encane Empeleni ukudla okukhiqizwa emhlabeni jikelele kuningi ngokwanele ukwanelisa wonke umuntu. Kodwa kulesisimo sokufuna inzuzo eningi, sivimbela ukusatshalaliswa kokudla ngokufanele. Futhi, loluhlelo lokudla lwezimboni lwenze izinhlobo zokudla okumbalwa okunamandla kwabiza kancane ngokuhamba kwesikhathi, lokhu ukudla okungenawo umsoco, okubangela ubhubhane lokungondleki kwabantu emhlabeni jikelele, ukukhuluphala kanye nezifo ezingathathelani.

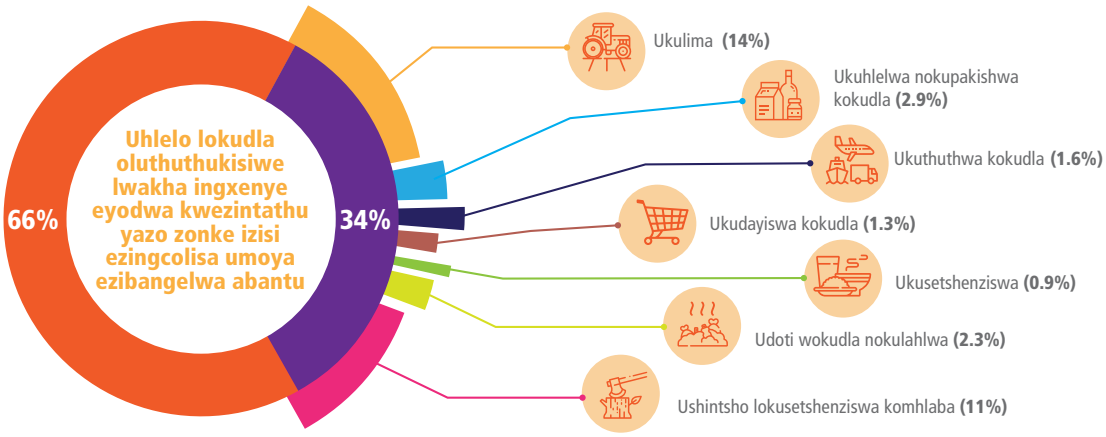
Izinhlelo zokudla **zinamuphi umthelela ekuguqugukeni kwesimo sezulu?**

Isivinini olukhula ngaso loluhlelo lwezezimboni zokudla okukhiqizwa nokusatshalaliswa ngayo emhlabeni wonke ayigcini nje ngokuhluleka ukuhlangabezana nezidingo zabantu, njengoba izinga lendlala nokungondleki likhuphuka, kodwa futhi ibangela izinkinga zemvelo nezenhlalo, okuhlanganisa nokuguqugukuka kwesimo sezulu. Izinhlelo zokudla emhlabeni wonke zinomthelela engxenyeni eyodwa kwezintathu (31–34%) zakho konke ukukhishwa kwesisi esingcolisa umkhathi okudalwa abantu (GHG).

Ukuze kuncishiswe umoya oshisayo futhi kwenziwe uguquko lokuba nomphakathi onobulungisa nekhaboni ephansi, kubalulekile ukubhekisisa izinohlelo zokudla zezimboni!

Izinhlobonhlobo zomoya oshisayo (gases) ezihamba phambili ezinhlelweni zokudla ilezi i-carbon dioxide, i-methane ne-nitrous oxide. Ukukhiqizwa kwezitshalo nemfuyo kundawonye kunomthelela ongaphezukuka-50% we-methane kanye no-75% we-nitrous oxide ekhishwa abantu., Umthelela lokhu kokubili okunawo ekufudumaleni unamandla kakhulu kune-carbon dioxide.

Isabelo sezinhlelo zokudla ekukhishweni kwesisi esibamba ukushisa emhlabeni



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Ezingeni lomhlaba wonke, isabelo esikhulu kunazo zonke esingu-25% sivela kwezolimo – lokhu kubandakanya:

- U-11% woshintsho lokusetshenziswa komhlaba (njengokugawulwa kwamahlathi ukuze kuvuleke izindawo zokutshala noma amadlelo emfuyo), futhi
- U-14% ovela ekukhiqizweni kwezinto ezisetshenziswayo, kanye nokukhishwa kwesisi emapulazini okuhlanganisa ukusetshenziswa komlilo nokudumayo , imfuyo, ukulima kanye nokufakwa kukamanyolo.

Ama-GHG (izinhlobonhlobo zomoya oqukethwe yisisi) avela ekulimeni kuphela acishe aphindeka kabili phakathi kuka-1961–2016, kanti iningi lalokhu kukhula livela ekusetshenzisweni komanyolo wokwenziwa, ukutshalwa kwerayisi kanye nokukhuliswa kwemfuyo.

Ukukhuliswa kwemfuyo kukodwa nje, futhi ikakhulukazi ukukhiqizwa kwenyama nobisi ngendlela yezimboni, kunomthelela ongu-14% wengqikithi yomhlaba wonke ekhishwa abantu futhi iwumthombo owodwa omkhulu kakhulu ovela ezinhlelweni zokudla. Lokhu kungenxa yalezi zizathu:

- Ukugawulwa kwamahlathi kanye nokugawulwa kwezimila zemvelo ukuze kwakhiwe amadlelo kanye nezindawo zokutshala ukuze kutholakale ukudla kwemfuyo;
- Ukutshala izitshalo zokudla;
- Ukuthuthwa kokudla okwenziwa emhlabeni; kanye
- Ne-(methane) ekhishwa ohlelweni lokugaya ukudla kwezilwane ezeluswayo njengezinkomo (okubizwa nge-enteric fermentation).

Umonakalo okhishwa yizinkampani ezinkulu ezinhlanu emhlabeni wonke zenyama nezobisi kulingana nezimbiwa ezinkulu zikaphethiloli ezifana-ExxonMobil.

Uma imboni yenyama neyobisi iqhubeka nokukhula njengoba kulindelekile izohlanganisa ngaphezu kuka-80% wesabelomali sekhabhoni futhi yenze kungenzeki ukukhawulela kokukhuphuka kwezinga lokushisa emhlabeni libe ku-1,5oC ngaphezu kwamazinga angaphambi kwenkathi yezimboni. Ingxenye yekhilogremu lenyama yenkomo idinga amalitha angu-6 800 amanzi ukuze ikhiqizwe, ngesikhathi sokuguquka kwesimo sezulu kuzocindezela lo mthombo.

Izinqubo zangaphambi nangemuva kokukhiqiza zifaka u-9% wesisi esikhishwayo, kanti ingxenye enkulu ithathwa wukuhlelwa nokupakishwa kokudla, kanye nokulahlwa kwezinsalela zokudla. Ukuhwebelana okukhulu kanye nezimboni ngale kwesango lepulazi kuyimithombo emkhulu yokwanda kokukhula kwe-GHG. Isibonelo, ukukhishwa okusuka kusiqandisi esidingekayo kuchungechunge lokudla kuphindeke kathathu kusukela ngo-1990 ukuya ku-5% wokukhishwayo kohlelo lokudla.

Umthelela **wesimo sezulu** ezinhlelweni **zokudla zaseNingizimu Afrika**

INingizimu Afrika inohlelo lokudla oluthuthuke kakhulu noluseqophelweni eliphezulu. Nakuba kunamapulazi onxiwankulu okuhweba aqoshiwe angaba ngu-40 000, ukudla kwethu okuningi kukhiqizwa cishe angu-15 000 kulawa. Lokhu kudla kube sekuhamba ngokusabalalisa, ukuhlelwa, ukukhiqizwa kanye nezizinda zokuthengiselana zilawulwa yizinkampani, futhi kunenzuzo enkulu etholwa kulokhu kulawulwa.

Lezi zinhlelo zokudla zezimboni zinomthelela ocishe ube ngu-18% wesisi esikhishwayo eNingizimu Afrika – cishe ingxenye eyodwa kwezinhlanu. Leli nani lingase libe phansi ngokwengxenye kunesilinganiso somhlaba wonke ngenxa yomthelela omkhulu ngendlela esikhiqiza ngayo ugesi ongcolil. Kulokhu:

- **Ukulima kunomthelela ongu-6%,**
- **Ushintsho lokusetshenziswa komhlaba kucishe kube ngu-1%, futhi**
- **Izinqubo zangaphambi nangemuva kokukhiqiza cishe zingu-10% wesamba esikhishwayo.**

Ukufuywa kwemfuyo kunomthelela ongu-70% wokukhishwa imikhiqizo yezolimo eNingizimu Afrika, kuyilapho ukukhiqizwa kwezitshalo zasemasimini kunomthelela ongu-11% (U-57% wokufakwa kukamanyolo wokwenziwa kanye no-30% wokufakwa komcako (lime)). Izitshalo ezitshalwa kakhulu ngobuningi eNingizimu Afrika – ummbila, ukolweni kanye nomoba – yizona zitshalo ezinomthelela omkhulu ekukhiqizweni kwe-(GHG), kanti ukukhiqizwa kwemifino ezimbonini kunezinga eliphezulu kakhulu lokukhishwa kwe-(GHG).

Ukuthuthwa kokudla, ezikhathini eziningi okwenziwa ngomgwaqo eNingizimu Afrika, kunomthelela ongu-1% lokukhishwa kwekhabhoni, kodwa ukudla okugayiwe kunesabelo esikhulu kunazo zonke ekuthuthweni kwezinto ezithunyelwa ngomgwaqo ezweni lonke. Lokhu kubonisa izinhlelo zokusabalalisa ezilawulwa endaweni eyinhloko zabakhiqizi bokudla abakhulu nezitolo ezinkulu, lapho izimpahla zithuthwa zisuka ezindaweni ezikude ziyiswe ezindaweni ezimbalwa zokukhiqiza nokusabalalisa, bese zisatshalaliswa futhi kubathengisi ezweni lonke.

ISITHOMBE: U.S. DEPARTMENT OF AGRICULTURE/RAWPIXEL

Izinhlelo zokudla zezimboni zaseNingizimu Afrika azigcini ngokuba nomthelela ziphinde zijulisea ubungozi bokuguquguquka kwesimo sezulu

Izinkampani zinomthelela omkhulu kunqubomgomo kahulumeni, imakethe, noase kudlenia kwethu. Zicija lokhu ukuze kuzuze zona, ngokwenza kanjalo kulimala ilungelo lokuthola ukudla, ukudla okunomsoco, impilo, abalimi abancane, izisebenzi, nabahwebi; kanye nemvelo. Lawa mandla ezinkampani kanye nokwenza inzuzo kuphambene nobunzima izigidi zabantu baseNingizimu Afrika ezibhekana nabo ekutholeni ukudla okukhiqizwa kulolu hlelo. Ngaphambi kobhubhane lwe-COVID-19, u-20% wabantu baseNingizimu Afrika wawungakwazi ukuthola ukudla okwanele noma okufanele. NgoMashi 2021, amakhaya angu-35% ayengakwazi ukuthenga ukudla okwanele kanti amakhaya angu-17% ahlaselwe yindlala eqhubekayo. Kepha izinkampani zokudla ziqhubekile zenza inzuzo enkulu, futhi ezolimo zakhula ngokomnotho ngo-13,4% ngo-2020 kanye no-8,3% ngo-2021.

ISITHOMBE: CLIMATE CHANGE, AGRICULTURE AND FOOD SECURITY/FLICKR

Ukusebenza kwezomnotho kohlelo lwamanje lokudla kunobudlelwano obuncane obuqondile nezidingo zenhlalo yezwe, kuyilapho kwenza igalelo elikhulu ezinkingeni ezihlanganayo, okuhlanganisa nokuguquguquka kwesimo sezulu. Ukuhlangana kokuguquguquka kwesimo sezulu kanye nokungalingani kuzojulisa ubungozi, indlala, imiphumela yezempilo futhi kungase kuqalise ukungezwani.

ISITHOMBE: LOTUS HEAD/WIKIMEDIA COMMONS

Imindeni empofu kakhulu, evele ichitha imali efinyelela ku-80% wemali eyitholayo ekuze ithenge ukudla, izophinde ihlukumezeke kakhulu njengoba ukuguquguquka kwesimo sezulu kuphehla ukwenyuka kwamanani okudla, okulindeleke ukuthi enyuke emhlabeni jikelele ngo-84% ngo-2050.

Yini engenziwa?

Okuhlosiwe kufanele kubekwe ukuze kuncishiswe isisi esingcolisa umkhathi i-GHG- ohlelweni lokudla, ngokuvumelana nokuzibophezela kweNingizimu Afrika kuzwelonke nasemhlabeni jikelele.

Okusemqoka kakhulu yilokhu:

- Umkhakha wemfuyo wonke
- Ezamandla nezokuthutha kuzo zonke izigaba zokukhiqiza ukudla
- Izindlela zokulima kanye nokusetshenziswa kukamanyolo wokwenziwa, ezigxile ekuguquleleni izinqubo ze-agroecological kuwo wonke amapulazi
- Uhlobo lokulima lonxiwankulu akufanele ludlulele ezindaweni zamahlathi emvelo kanye nezindawo ezinotshani bemvelo. Lezi zindawo eziyimvelo kufanele zivuselelwe futhi zivikelwe zombili zibe yizindawo yokupholisa umoya oshisayo (carbon) kanye nokuvikela izimila zemvelo ezinobudlelwano. . Ngokuphathwa ngendlela efanele, imfuyo ezidlela ngokukhululeka inamandla okuvuselela izindawo zamadlelo lapho kungasekho khona izinyamazane zasendle futhi ibe yingxenye yezinhlelo ezididiyelwe zokukhiqiza ukudla. Lokhu kudinga ukuthi izinkomo zidlale indima kwezemvelo nekwezomsoco, kunokumane kuphishekelwe ukwandisa ukukhiqizwa kwenyama ukuze kukhule umnotho.

Kucashunwe

Leli phepha lamaqiniso lithathelwe ephepheni lamaqiniso le-Biowatch: Ukuguquguquka Kwesimo Sezulu kanye nohlelo lokudla lwezimboni. Dawuniloda iphepha lamaqiniso, olunohlu oluphelele lezikhombo lapha:

https://biowatch.org.za/download/factsheet-climate-change-and-food/