



MFUNDO ZIKULUZIKULU

Momwe Mbewu Zamakono (Zomwe Chikhalidwe Chake Chinasinthidwa Pogwiritsa Ntchito Maluso a Sayansi/Mbewu Zomwe Tinthu Tomwe Timawonetsa Chikhalidwe Chake Tinasinthidwa Polowetsa Tinthu Tomwe Timawonetsa Chikhalidwe Cha Mbewu Zina Mkati Mwake) Zomwe Ziri Pa Msika Zikuchitira Pa Dziko Lonse La Pansi: 2011

Chaperekedwa ndi mlembi kwa anthu 1 biliyoni osawuka ndi anjala komanso chipulumutso chawo

Pamene chiwerengero cha anthu pa dziko lonse la pansi chafika 7 biliyoni, Mahekala omwe pamadzalidwa Mbewu Zamakono, Zomwe Chikhalidwe Chake Chinasinthidwa Pogwiritsa Ntchito Maluso a Sayansi, akuchulukirabe ulimi wa mbewuzi utapitirirabe kupita pa tsogolo mu zaka 15 zapitazo.

Chifukwa cha phindu lochuluka, ulimi wa mbewuzi unapitirirabe kupita pa tsogolo mu chaka cha 2011 ndipo mahekala omwe mbewuzi zinalimidwapo anafika pa 12 miliyoni, anapita patsogolo ndi 8% ndipo anakwana mahekala 160 miliyoni, anachuluka kuposa mahekala 148 miliyoni omwe analimidwa mu chaka cha 2010.

Kuchuluka uku kotayimuza ndi 94 kuchoka pa mahekala 1.7 miliyoni mu chaka cha 1996 kufika pa mahekala 160 miliyoni mu chaka cha 2011 kukupangitsa mbewu zamakono zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi kukhala mbewu zovomeredzedwa komanso kulandiridwa mwa changu kwambiri kuposa mbewu zonse zamakono mu mbiri ya mbewuzi.

Umboni wopasa kaso kwambiri wa mbewu zamakonozi ndiwoti kuyambira mu chaka cha 1996 kufika 2011 alimi mamiliyoni ochokera mu mayiko 29 pa dziko lonse la pansi anapanga zigamulo zopitirira mamiliyoni 100 za paiwo wokha kuti adzala komanso kupitiriza kudzala mbewu zimenezi pa mahekala omwe akhala akuchulukirabe okwana 1.25 biliyoni. Chifukwa chachikulu chomwe chikupangitsa alimi kuti akhale ndi chikhulupiriro komanso chidaliro pa mbewuzi ndi choti mbewuzi zimapereka phindu lochuluka la chuma komanso malo ozungulira amakhala abwino.

Mwamayiko 29 omwe anadzala mbewu zamakonozi mu chaka cha 2011, 19 anali mayiko omwe akutukuka kumene ndipo 10 anali mayiko olemera. Mayiko 10 omwe ali patsogolo pa ulimiwu anadzala mahekala opitirira wani miliyoni dziko liri lonse ndipo iwo amapereka madziko ochuluka oti ulimi wambewuzi upite patsogolo kwambiri kutsogoloku.

Mu chaka cha 2011 alimi okwana 16.7 miliyoni, omwe anali ochuluka ndi 1.3 miliyoni kapena kuti 8% kuposa a mu chaka cha 2010, anadzala mbewu zamakonozi. Mwa alimiwa, alimi opitirira 90% kapena kuti 15 miliyoni anali alimi osawuka omwe alibe zipangizo zokwanira omwe ali mumayiko omwe akutukuka kumene. Alimi amadananzo kwambiri zoti awononge chuma chawo pachabe koma mu chaka cha 2011 alimi ang'onoang'no okwana 7 miliyoni amudziko la China komanso 7 miliyoni amudziko la India anasankha kulima mahekala okwana 14.5 miliyoni a thonje la Bt.

Mayiko omwe akutukuka kumene anadzala pafupifupi theka la mbewu zamakono, zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, zomwe zinadzalidwa pa dziko lonse la pansi komanso akuyembekedzeka kudzala mahekala ochuluka kuposa omwe amadzalidwa ndi mayiko olemera mu chaka cha 2012. Mu chaka cha 2011 ulimi wa mbewuzi unapita pa tsogolo mwachangu kutayimuza kawiri komanso malo odzalapo anakula kutayimuza kawiri mu mayiko omwe akutukuka kumene, ulimiwu unapita patsogolo ndi 11% kapena mahekala 8.2 miliyoni kufananitsa ndi 5% kapena mahekala 3.8 miliyoni mu mayiko olemera.

Kukhala ndi chikhalidwe cha mbewu zina ndi chizindikiro chofunikira kwambiri- mu chaka cha 2011, mayiko 12 anadzala mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito ma luso a sayansi zomwe zinali ndi chikhalidwe cha mbewu ziwiri kapena kuchulukirapo. Cholimbikitsa ndi choti mayiko 9 mwa mayiko 12 awa anali mayiko omwe akutukuka kumene. Mu chaka cha 2011 mahekala mamiliyoni 42.2 kapena opitirira gawo limodzi la magawo anayi a mahekala mamiliyoni 160 panadzalidwa mbewu zomwe zinali ndi chikhalidwe cha mbewu zingapo. Mahekalawa anachuluka kuposa mahekala 32.3 miliyoni kapena 22% ya mahekala mamiliyoni 148 omwe anadzalidwa mu chaka cha 2010.

Mayiko asanu omwe akutukuka kumene omwe akutsogolera pa ulimi wa mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi ndi India ndi China ku Asia, Brazil ndi Argentina ku Latin America ndi South Africa mu Africa, omwe onse pamodzi akuyimira 40% ya chiwerengero chonse cha dziko la pansi chomwe chikhodza kufika pa 10.1 biliyoni chikamafika chaka cha 2100.

Dziko la Brazil kwa zaka zitatu zondondoza, linali kum'phika kopititsa patsogolo ulimiwu ndipo limawonjedzera mahekala odzalapo mbewuzi kuposa dziko lina liri lonse ndipo linadzala mahekala 4.9 miliyoni kupita patsogolo ndi 20% kuwonjedzera pa mahekala omwe linadzala muchaka cha 2010. Ndongomeko ya kachitidwe kachangu inavomeredza mbewu zina zatsopano zokwana zisanu ndi imodzi mu chaka cha 2011 kuphatikizaponso nyemba zolimba kumatenda zomwe zimadzalidwa ku Brazil zomwe zinapangidwa ndi bungwe la boma la dzikolo la EMBRAPA (Brazilian Agricultural Research Cooperation).

Dziko la US linapitirirabe kukhala dziko lomwe limadzala mbewu zamakono zochuluka kwambiri pa dziko lonse la pansi lomwe linalima mahekala 69.0 miliyoni komanso mu dziko limemeli mbewu zonse zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi zinavomeredzedwa ndi kulandilidwa ndi pafupifupi 90%. Linayambanso kudzala nandolo wotchedwa RR@alfalfa ndipo mahekala 200,000 anadzalidwa, kuwonjedzeranso apo mahekala 475,000 a mbatata yotchedwa RR@sugarbeet

anadzalidwa. Papaya wolimba ku kachilombo kotchedwa vayilasi yemwe amachokera ku US anavomeredzedwa kukhala chipatso chodyedwa ku Japan kuyambira mu Disembala 2011.

Dziko la India linali ndi chisangalalo chokumbukira kuti patha zaka khumi chiyambireni kudzala thonje la Bt ndipo kwa nthawi yoyamba linadzala mbewu pa mahekala opitirira mamiliyoni 10 zomwe zinapangitsa kuti mahekala afike pa 10.6 miliyoni ndipo malo awa anali 88% ya mahekala 12.1 miliyoni omwe panadzalidwa mbewu ya thonje. Amene anapindula kwambiri anali alimi ang'onoang'ono okwana 7 miliyoni omwe anadzala thonje pa mahekala 1.5 miliyoni. Dziko la India linawonjedzera chuma chochokera ku ulimi wa thonje la Bt ndi US\$9.4 biliyoni kuchokera mu chaka cha 2002 kufika 2010 koma mu chaka cha 2011 chokha inapeza US\$2.5 biliyoni.

Mu dziko la China alimi ang'onoang'ono 7 miliyoni (omwe aliense anadzala mahekala 0.5) anadzala thonje la Bt pa mahekala okwana 3.9 miliyoni zomwe zikuwonetsa kuti mbewuyi inavomeredzedwa ndi kulandilidwa ndi 71.1%. Kuvomeredzedwa kwa mpunga wa Golden , kuti ukhale pa msika, komwe kukuyembekedzeka kuchitika mu chaka cha 2013/14 mu dziko la Philippines kuzapindulira kwambiri dziko la China.

Dziko la Mexico linadzala mahekala 161,500 a thonje lomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi zomwe zikuwonetsa kuvomeredzedwa ndi kulandiridwa kwa mbewuyi ndi 87%, kupita pa tsogolo ndi 178% kuchoka pa mahekala 58,000 mu chaka cha 2010. Cholinga ndichoti likhale lodzidalira lokha pa thonje komanso kudzalidwa kwa chimanga chomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi mu mayiko achakumpoto kuti awonjedzere chimanga ndi matani 10 miliyoni pa chimanga chomwe chimafunika mochuluka komanso kugulidwa modula.

Africa anapitsanso patsogolo pa ulimiwu potsatira malamulo omwe anakhadzikitsa. Mayiko a South Africa, Burkina Faso ndi Egypt onse pamodzi anadzala mahekala okwana 2.5 miliyoni; mayiko atatu Kenya, Nigeria ndi Uganda analima minda yoyetserera yochuluka.

Mayiko asanu ndi limodzi a mu EU anadzala mahekala 114,490 a chimanga cha Bt, chomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, ndipo mahekala anachuluka ndi 26% kuposa mahekala omwe anadzalidwa mu chaka cha 2010. Mayiko ena awiri owonjedzera anadzala mbatata, zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, zotchedwa 'Amflora'.

Kuchokera mu chaka cha 1996 kufika 2010, mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi zinathandiza kuti Kukhale Chakudya Chokwanira, Kudzidalira komanso Kusintha kwa Nyengo: popangitsa kuti kukhale zokolola zambiri zokwana US\$78.4 biliyoni; kupereka malo abwino otizungulira pochepetsa makhwala ophera mbozi ndi makilogalamu 443 miliyoni; muchaka cha 2010 chokha zinathandiza kuchepetsa mpweya wa CO2 wokwana makilogalamu 19 biliyoni zomwe zikufanana ndi kuchotsa pa msewu magalimoto okwana pafupifupi 9 miliyoni; kusamala chilengedwe posalima pa malo okwana mahekala 91 miliyoni komanso zinathandiza kuchepetsa umphawi pothandiza alimi ang'onoang'ono okwana 15.0 miliyoni omwe ndi ena mwa anthu osawuka kwambiri pa dziko lonse la pansi. Mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi ndi zofunikira koma sizikutanthawuza kuti izi sizifuma madongosolo abwino a ulimi monga kudzala kwa kasinthesintha komanso chisamaliro kuti zisazolowere makhwala. Madongosolo a bwino a ulimi ndi wofunikira ku mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi monga momwe aliri ofunikira ku mbewu zinazi.

Pakufunikira, mwachangu, njira zoyenera, zogwiritsa ntchito maluso a sayansi komanso zosafuna ndalama zambiri kapena nthawi yochuluka zomwe ndi zodalirika, zopindulitsa komanso zosabweretsa mavuto mu mayiko ang'onoang'ono komanso osawuka omwe akutukuka kumene komanso mayiko amu EU.

Mtengo wa mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi pa dziko lonse la pansi wunali pa US\$13 biliyoni mu chaka cha 2011 ndipo mtengo wa zinthu zopangidwa kuchokera ku mbewu zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, unali pafupifupi US\$160 biliyoni pa chaka.

Tsogolo la mbewuzi kufika mu chaka cha 2015 komanso kudutsa pamenepo likuwoneka lolimbikitsa: mayiko pafupifupi 10 oti ayambe ulimiwu; pali dongosolo loti mbewu yoyamba ya chimanga cholimba ku dzuwa la likulu , chomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, izakhale pa msika ku North America mu chaka cha 2013 ndipo mu Africa mu chaka cha pafupifupi 2017; mpunga wa Golden ku Philippines muchaka cha 2013/14; chimanga chomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi chomwe chikuyembekedzeka kudzalidwa pa mahekala pafupifupi 30 miliyoni mu dziko la China kenako mpunga wa Bt. Mbewu zamakono, zomwe chikhalidwe chake chinasinthidwa pogwiritsa ntchito maluso a sayansi, zingathandize kwambiri pokwaniritsa cholinga cha chitukuko cha dziko lonse la pansi cha 2015 pochepetsa umphawi ndi theka popangitsa kuti kukhale zokolola zambiri, zomwense zingalimbikitsidwe ndi mabungwe omwe si aboma, mwachitsanzo chimanga cholimba kudzuwa lalikulu ku Africa chintha kulimbikitsidwa ndi mabungwe olimbikitsa za umunthu monga Bill and Melinda Gates Foundation.

Chidwi cha ISAAA pa magawo atatu a kugawana mzeru, kubweretsa kusintha ndi kupereka maganizo atsopano komanso mgwirizano pochita zinthu zatsopano chikugwirizana ndi ganizo lomwe a Gates Foundation anapereka ku G20 mu Novembala chaka cha 2011.

Tsatanetsatane wa izi ali mu Brief 43 'Global Status of Commercialized Biotech/GM Crops: 2011' cholembedwa ndi a Clive James. Mukafuna kudziwa zambiri yang'anani ku <http://www.isaaa.org> kapena yimbani ku ISAAA AfriCenter pa nambala iyi +245 20 4223618 kapena lembani kalata yoyenda pa magesi ku africenter@isaaa.org kapena ku info@isaaa.org.