



Kufotokoza Momwe Ziliri Mbewu Zokonzedwanso Munjira Yasayansi Zomwe Zikugulitsidwa Padziko Lonse
Wolemba: Clive James, Yemwe anayambitsa ndikukhalapo wapampando wa bungwe la ISAAA

Yalembedwa popeleka ulemu kwa malemu Norman Borlaug, yemwe analandira ulemu wawukulu wa Nobel Peace, Yemwenso ndi m'odzi mwa anthu omwe anayambitsa ndikutsogolera bungwe la ISAAA, pamene tikukumbukira kutha kwa zaka 100 kuchokera pa tsiku lomwe anababwa pa 25 March 2014

MFUNDO KHUMI ZIKULUZIKULU ZOKHUDZA MBEWU ZOKONZEDWANSO MWAMAKONO MUNJIRA YASAYANSI MUCHAKA CHA 2013

MFUNDO # 1. Chaka cha 2013 chinali chaka chopambana cha nambala 18 kugulitsa mbewu zokonzedwanso munjira zasayansi. Mbewu zamtunduwu zinagulitsidwa koyamba mchaka cha 1996. Kukula kwa malo amene mbewu zokonzedwanso munjira zasayansi zinalimidwa kumawonjezeleka chaka chilichonse mzaka za pakati pa 1996 mpaka 2013, ndipo kwa zaka zokwana 12 kuchuluka kwa mbewuzi kumawonjezeleka koposa 10pelesenti. Zimenezi zimasonyeza chikhulupiliro cha alimi mazanamazana padziko lonse, m'mayiko otukuka ndi mayiko omwe akukwera kumene. Chopambana kwambiri ndichakuti kuyambira pomwe mbewuzi zinayamba kudzalidwa mchaka cha 1996, mbewuzi zinadalidwa mopindula pandime zaminda zoposa mahekitala 1.5 billion. Kukula kwa ndimezi kukuposa ndime yanthaka yonse ya dziko la China kapena United States of America ndi 50%.

MFUNDO # 2. Kukula kwa ndime yomwe mbewu zokonzedwanso munjira yasayansi zinalimidwa kunawonjezeleka kwambiri kuchoka mahekitala 1.7miliyoni mchaka cha 1996 ndikupyolera mahekitala 175miliyoni mchaka cha 2013. Izi zikutanthawuza kuti mbewuzi zokonzedwanso munjira yasayansi zinakhala mbewu zomwe zinathamangilidwa kwambiri ndi alimi mzaka zaposachedwapa atasiya kugwilitsa ntchito mitundu ya mbewu zina. Zimenezi zinachitika kamba kaphindu lomwe amalipeza kumbewuzi. Mchaka chha 2013, ndime zomwe mbewu zokonzedwanso munjira yasayansi zimalimidwa zinawonjezeleka ndi mahekitala 5miliyoni, zomwe zikutanthawuza kuti ndimezi zimawonjezeleka ndi 3% chaka chilichonse. Ndikofunika kuzindikira kuti pali chiyembekezo chakuti muzaka zocheza zikubwerazi, phindu lapachaka lidzakhala lokwera komanso malo ambiri okwera adzalimidwa. Izi zidzachitika kamba kakwera kwachiwerengero cha alimi omwe asiya kulima mbewu zina ndikuyamba kulima mbewu zokonzedwanso munjira zasayansi, chomwe pakalipano ndichokwera kale.

MFUNDO # 3. Chiwerengero cha mayiko omwe akulima mbewu zokonzedwanso munjira zasayansi Number of countries growing biotech crops and stacked traits. Of the 27 countries which planted biotech crops in 2013, 19 were developing and 8 were industrial countries. Stacked traits occupied 47.1 million hectares, or 27%.

MFUNDO # 4. Monga momwe zinalili mchaka cha 2012, mchaka chotsatira cha 2013 mayiko omwe akungokwera kumene analima ndime zamahekitaala ochuluka zambewu zokonzedwanso munjira zasayansi kuposa mayiko otukuka. Kunadziwika kuti mayiko omwe akungokwera kumene analima mahekitala 94miliyoni ambewu zokonzedwanso munjira zasayansi, yomwe imayimira 54% yamahikitala onse, kuposa mayika otukuka omwe analima mbewuzi pamahekitala okwana 81miliyoni, omwe amayimira 46% yamahekitala onse omwe analimidwa.

Mayiko ambiri kuphatikizapo Brazil, Bangladesh ndi Indonesia anakhazikitsa maubale a magulu ndi mabungwe aboma komanso omwe sanali aboma omwe anali opindula kwambiri.

MFUNDO # 5. Chiwerengero cha alimi omwe akulima mbewu zokonzedwanso munjira yasayansi. Mchaka cha 2013 alimi okwana 18miliyoni ndi omwe analima mbewu zokonzedwanso munjira zasayansi, kuwonjezeleka modabwitsa kuchoka pa alimi 700,000 omwe analima mbewu zamyunduwa mchaka cha 2012. Chonyaditsa kwambiri chinali chakuti mwa alimiwa, alimi oposa 16.5miliyoni anali alimi ang'onoang'ono osawuka am'mayiko ommwe akungokwera kumene. Alimi amakhala akatswiri popewa zowopsa zobwera kutsogolo ndi ndikupititsa patsogolo zokolola zawo kupyolera mu ulimi owilikiza (kuchita ulimi pandime zosapyola mahekitala 1.5biliyoni zolimapo mbewu, ndipo potero amateteza nkhalango ndikulimbikitsa ulimi wambewu zosiyanasiyana). Mchaka cha 2013, alimi ang'onoang'ono okwana 7.5 million m'dziko la China ndi enanso okwana 7.3miliyoni am'dziko la India, anasankha kudzala mbewu yokonzedwanso munjira yasayansi pamahekitala okwana 15miliyoni chifukwa chaphindu lomwe mbewu yamtunduyi imatulutsa. Mchaka cha 2013, alimi ang'onoang'ono okwana pafupifupi 400,000 m'dziko la Philippines anapindula ndi mbewu yachimanga yokonzedwanso munjira yasayansi.

MFUNDO # 6. Mayiko asanu omwe ali pamwamba podzala mbewu zokonzedwanso munjira zasayansi – kugawa mbewu yoyamba yachimanga chopilira kuchilala ndi tchana wodzala mm'ilu. Dziko la USA linapitilira kukhala patsogolo pamayiko ena ndipo limalima mahekitala okwana 70.1 miliyoni komanso alimi okwana 90% anayamba kulima mbewu zokonzedwanso munjira zasayansi. Chofunikiranso kwambiri ndichoti mbewu yoyambilira yokonzedwanso munjira yasayansi yachimanga chopilira kuchilala inadzalidwa ndi alimi okwana 2,000 am'dziko la America pandime yokwanaa mahekitala 50,000. Dziko la Brazil linali lotsatira ndipo kwazaka zisanu zotsatana, linali ngati maziko enieni achitukuko padziko lonse lapansi, powonjezera ndime zomwe limalima mbewu zokonzedwanso munjira zasayansi koposa dziko lina lililonse. Dzikoli linawonjezera ndime zolima mbewuzi mwapamwamba kwambiri kuchoka pa ma hekitala 3.7miliyoni mchaka 2012 kufika pa 40.3miliyoni, kukwera ndi 10%. Dzikoli linadalanso mbewu yoyambilira ya tchana yam'milu koyambilira pamahekitala okwana 2.2miliyoni, komanso mbewu yanyemba yokonzedwanso munjira zasayansi yomwe ziwonongedwa nditizilombo yomwe imapangidwa mdzikoli yakonzeka kugulitsidwa posachedwapa. Dziko la Argentina lidakali pachitatu ndipo limalima mbewuzi pamahekitala okwana 24.4 miliyoni.

Dziko la India lomwe linachotsa dziko la Canada pachinayi likulima mbewu ya thonje yokonzedwanso munjira zasayansi pandime yokwana mahekitala 11miliyoni, komanso alimi okwana 95% adzikolo anayamba kulima mbewu zamtunduwa. Dziko la Canada linali pachisanu ndipo limalima mahekitala okwana 10.8 miliyoni, koma chiwerengero cha mbewu za *canola* chimachepa, komabe chiwerengero cha alimi omwe anasiya kulima mbewu zaakale ndikuyamba kulima mbewu zokonzedwanso munjira zasayansi chinakhazikika pa 96%. Mchaka cha 2013, lililonse mwa mayiko asanu apamwambawa anadzala mbewuzi pandime zosachepela mahekitala 10miliyoni, zomwe zinayala maziko othandiza kuti mbewuzi zipite patsogolo mzaka zamtsogolo.

MFUNDO # 7. Momwe ulili ulimi wa mbewu zokonzedwanso munjira zasayansi mu Africa Dziko la Africa lakhala likupitabe patsogolo, ndipo dziko la South Africa lakhala likupindula kuchokera kumbewu zokonzedwanso munjira zasayansi kwazaka zoposa khumi. Mchaka cha 2013, mayiko a Burkina Faso ndi Sudan anawonjezera kwambiri ndime zomwe amalima mbewu ya thonje wokonzedwanso munjira zasayansi. Dziko la Burkina Faso linawonjezera ndi 50% pamene dziko la Sudan linawonjezera ndi 300%. Mayiko asanu ndi awiri omwe ndi Cameroon, Egypt, Ghana, Kenya, Malawi, Nigeria ndi Uganda anadzala mbewuzi mongoyesera, lomwe ndi khwelero lofunika kwambiri chivomelezo chogulitsa mbewuzi chisanapelekedwe. Chofunikira kwambiri ndichakuti

pulojekiti ya WEMA ikuyembekezeka kupeleka ku mayiko aku Africa mbewu yoyambilira yachimanga chopilira kuchilala mchaka cha 2017. Kusowa kwa ndondomeko zoyenera zotsamira kusayansi, zzosatenga nthawi komanso zosatenga ndalama zambiri kukupitilira kukhala chiletso kwa alimi kuti ayambe kugwilitsa ntchito mbewu zamtunduwu. Ndondomeko zabwino ndi zoyenera zikuyenera kukhazikitsidwa makamaka m'mayiko omwe ndi aan'gono komanso osawuka, omwe akukwera kumene.

MFUNDO # 8. Momwe ulili ulimi wa mbewu zokonzedwanso munjira zasayansi m'mayiko a EU. Mayiko asanu a m'bungwe la EU omwe ndi Spain, Portugal, Czech Republic, Slovakia ndi Romania anadzala mbewu ya chimanga yokonzedwanso munjira yasayansi pandime ya mahekitala okwana 148,013, omwe anawonjezeleka ndi 15% poyelekeza ndi chaka chha 2012. Dziko la Spain ndi lomwe linali patsogolo pa mayiko ena am'bunwe la EU, pomwe anadzala mbewu yachimanga chokonzedwanso bwino pandime yamahekitala okwana 136,962, omwe anawonjezeleka ndi 18% poyelekeza ndi m'chaka cha 2012. Ndipo alimi 31% ndi omwe anayamba kuggwilitsa ntchito mbewu yamtunduwu mchaka cha 2013.

MFUNDO # 9. Phindu lochokera ku mbewu zokonzedwanso munjira yasayansi. Kuchokera mchaka cha 1996 kufika chaka cha 2012, mbewu zokonzedwanso munjira yasayansi zathandiza kwambiri pothetsa kusowa kwachakudya, kuteteza zachilengedwe ndi kusintha kwa nyengo munjira zotsatirazi: kuwonjezera kholola kufika pamitengo ya US\$116.9 biliyoni; kusamala zachilengedwe pochepetsa kwambiri kugwilitsa ntchito mankhwala ophera tizirimbo towononga mbewu (mankhwala ochulukira 497miliyoni grams sanagwilitsidwe ntchito); mchaka cha 2012 chokha zinachepetsa mpweya wotuluka wotchedwa Carbon Dioxide ndi makilogram 26.7 biliyoni, zomwe ndichimodzimodzi kuchotsa galimoto zokwana 11.8miliyoni pamsewu kwa chaka chimodzi; kulimbikitsa ulimi wambewu zosiyanasiyana poteteza ndime zodzalapo mbewu zokwana mahekitala 123 miliyoni kuchokera mchaka cha 1996 kufika mchaka cha 2012; komanso zathandiza kuchepetsa umphawi kwa alimi ang'onoang'ono oposa 16.5miliyoni ndi mabanja awo, omwe ndi anthu oposa 65 miliyoni, omwe ndi anthu osawukisitsa padziko lonse. Mbewu zokonzedwanso munjira zasayansi ndizofunika kwambiri koma siyankho kuzonse, kotero, kutsatira ndondomeko zofunika paulimi monga ulimi wakasinthasintho ndi kuteteza mbewu, ndikofunika kwambiri pa ulimi wa mbewu zokonzedwanso munjira zasayansi monga momwe zimakhallira ndi ulimi wambewu zina zonse.

MFUNDO # 10. Tsogolo la mbewuzi. Pali chiyembekezo kuti phindu lapachaka likula powona kuti alimi ochulukira akuyamba kulima mbewu zokonzedwanso munjira zasayansi makamaka pambewu zikuluzikulu pamisika yokhazikika m'mayiko otukuka ndi omwe akukwera kumene. Mayiko a Bangladesh, Indonesia ndi Panama anavomeleza alimi awo kudzala mbewu zokonzedwanso munjira zasayansi ndipo alinso ndi mapulani oyamba kugulitsa mbewuzi m'chaka cha 2014.

ISAAA ndi bungwe lomwe siligwira ntchito zake pofuna kupeza phindu, ndipo limalandira thandizo lake kuchokera kumabungwe aboma ndi omwe siaboma. Ndondomeko zonse zofotokoza kukula kwa ndime zomwe padzalidwa mbewu zokonzedwanso mwanjira zasayansi zomwe zimalembedwa m'zolembedwa zonse za bungwe la ISAA zimawelengeredwa kamodzi, posayang'anira kuti mumbewuzo mwawonjezedwa zinthu zingati. Mauthenga otambasulidwa bwino alembedwa mu ISAAA Brief 46 "**Kufotokoza Momwe Ziliri Mbewu Zokonzedwanso Munjira Yasayansi Zomwe Zikugulitsidwa Padziko Lonse Chaka Cha 2013**", lomwe linalembedwa ndi Clive James. Ngati mungafune kudziwa zambiri onani pa adilesi iyi <http://www.isaaa.org> kapena funsani ku ISAAA SEAsiaCenter at +63 49 536 7216, ISAAA AfriCenter at +254 20 422 3618 kapena lembani email ku africenter@isaaa.org.