

# Mazingira Bora

NOT FOR SALE



August 2010 Newsletter

ENGLISH VERSION

[www.tist.org](http://www.tist.org)

## The International Small Group and Tree Planting Program (TIST)

An Environmental, Sustainable Development and Community Forestry Program.



Muguna Disabled TIST Small Group members in an interview and photo session with Lynn of Hotpoint

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**Remember to attend your month of August Cluster Meeting**



# Time to prepare our shambas: A reminder on Conservation Farming best practices.

Many farmers called us to share their successful harvest last season in their kilimo hai maize plots. Others shared their joy with other farmers at their monthly cluster meetings. Some others invited their neighbours and other TIST Small Group members to their plots to witness good crops in their kilimo hai.

A few farmers, despite trying to practice CF did not get as good a harvest as others. Reason? They didn't follow the right practices while preparing their pieces of land for Conservation Farming.

This article will help you understand better how to practice kilimo hai. Making sure you follow these rules is the first step towards adhering to CF best practices.

## Preparing the land.

Prepare your land at least 1 month before the rains.

- Clear your plot of weeds and bushes. Do not plough.
- Prepare your holes oblong (rectangle) shape. They should each be 15 cm wide, 35 cm long and 15 cm deep. Space holes at least 75 cm apart.
- Take some manure and good topsoil and mix it together, or use compost manure. Fill the hole with the mixture up to 5 cm below the surface.

## Planting.

- When you plant the maize seeds (1 -2 days before rains start), plant 4 seeds in the soil across the hole.

## TIST: The Best Practice in Conducting Weekly Meetings.

It is important too, for your Small Group to be having regular meetings. For instance, once a week or once after two weeks. This will give all members in your Small Group an opportunity to strengthen your group and also share and learn new ideas.

## Meeting Schedule.

In managing our time better, a small group should have well-organized meeting schedule. This is

- If you are planting sorghum, plant 5-6 seeds at each end of the planting hole after a good shower of rain.
- Cover the seeds with 2.5 cm of the rich soil and manure mixture. After this the soil in the hole should be about 2.5 cm below the surface of the field.
- The space at the top of the hole enables water to get to the plants when the rains come.

You do not need to use chemical fertilizer on the Conservation Farming plot. Your crops will still do better without chemical fertilizer, if you put enough manure.

## Weeding.

- Weed around the holes regularly
- Do not weed the entire plot completely. Just weed around the holes. Use a panga to clear weeds between the lines or spaces from one hole to the other. Make sure your plot is free from weeds all the time.
- Leave the weed residue in the plot to rot. This will help add soil fertility.

## Post -harvest practices.

- Do not burn off the remains on the plot. Leave the residue on the ground so that they make the soil more fertile. Crop remainders can also be used for compost manure.
- Do not graze cattle in the plot.

Please remember, we will be glad to celebrate your successful harvest through this newsletter as well during your cluster meeting. Start working now!

important because it will help your small group keep focus of your agendas and other activities. Since we are farmers, time is important to us, and we need to make sure we hold efficient meetings that do not take up most of the day light hours.

During your meeting, it is necessary to focus on important issues. To be able to accomplish this, other TIST small groups have practiced the below steps when conducting their meetings:

**Step I.**

**Greetings and introductions for any new members (5 - 15 minutes):** Make sure everyone feels welcomed. Make it brief but let each of you introduce himself or herself.

The time spent should be agreed so that the co-leader can help keep the meeting on time.

**Step II.**

**Opening prayer (2 minutes):** It is important to begin your meeting with a word of prayer. Keep it short.

**Step III.**

**Songs (5 minutes):** These could be songs written by your group, or songs that encourage people such as religious songs. A song sung by all will relax us and put us in a better mood.

**Step IV.**

**Agreement on task and time (5 minutes):** The leader explains what will be done in the meeting and the group members agree to do the task.

**Step V.****Group work on tasks (1 hour):**

Ideally the tasks should have been discussed at the end of the last meeting. Tasks might include sharing what each person has done to help TIST activities, sharing best practices, training and any other important issue that will help your small group to prosper.

**Step VI.****Kujengana (5 minutes):**

Each group member makes one positive, specific statement to that week's leader about his or her observable leadership of the meeting. In addition, anyone may identify a gift seen in the leader.

**Step VII.****Closing prayer (2 minutes):**

End your meeting with a word of pray.

## Mara Small Groups hand in their applications and many are being baselined.

By Kimani.

Over the last seven months, great effort has been put in by Small Groups and the TIST Social Entrepreneur (TSE) team in Mara to get more groups to join the TIST family. They are working in Bomet and Narok south districts, which fall in the Mara river basin. Following the new registration approach, 56 groups have handed in their applications, and many more are getting their paper work in order so as not to be left out. Currently, we are doing baselines and the team is creating local capacity for quantifiers and trainers. Excited farmers are really working hard to get Small Groups to have tree nurseries and use best practices in their meetings (e.g., song before starting the meeting, prayers, getting leader

and co-leader, kunjengana etc.). It exciting to the TSE team to see how things are getting in shape so fast.

Mara is one of the biggest tourism destinations in Kenya. It falls in the Mara river basin (drainage area) in Kenya where the Mara river begins, stretching 495 kilometers until it drains into Lake Victoria. It is a shared asset of Kenya, Uganda and Tanzania where TIST is working. The biodiversity is a great asset that needs to be conserved by tree planting, which is the heart of environmental conservation.

We are watching closely on how Mara farmers make this happen.



# Nursery care and protection

## A. Pest control

Organisms like fungi, bacteria, viruses, nematodes and insects (e.g. ants, termites, aphids) can damage seedlings.

A common nursery disease is called *damping off* and is caused by fungi. It causes seeds to rot before germination, roots to decay before the shoot appears and the shoot to become thin and collapse. The typical symptoms are

- The thinning and death of the stem at ground level.
- The subsequent wilting and falling over of the seedling.
- The leaves turn yellow.
- The seedling eventually dies.

### Control damping off by:

- Changing seedbed soil every 1-2 years. Loosening the soil also helps.
- Immediately removing affected seedlings and burning them.
- Avoiding excessive watering.
- Ensuring good drainage.
- Providing better aeration.
- Weeding effectively and on time.
- The soil should not be overly fertile. The proper ratios of the soil should be followed. Reduce nitrogen content by applying less manure.
- There should be enough spacing between seedlings to avoid overcrowding.
- Make sure that the nursery is clean at all times.

Diseases can also be managed by the proper use of chemicals and insecticides. It is best to use natural insecticides as chemical ones can be expensive and may damage the environment. For instance.

- Application of ash.
- Ensure the seedbed is clean to avoid encouraging pests.

## B. Root pruning

Move the seedlings around once a week so that the taproots do not sink into the ground and need to be cut. A healthy taproot helps the trees get water after transplanting.

When the seedlings are growing in the pots after

3-4 months (depending on species and climate) their roots start to grow out of the bottom of the pots. These roots should be cut every 1-2 months with knives. Note that care must be taken when lifting the pots so as not to damage the young roots.

Alternatively, try the raised nursery beds which reduce the need for root pruning as the roots drop off naturally.

## C. Watering, weeding and shading

- Sprinklers should be attached to the watering cans so as not to cause soil erosion.
- Avoid too much or too little watering.
- Water every morning and evening when possible.
- Avoid watering during mid day because more water will evaporate because of the heat.
- Be careful not to damage roots when weeding.
- Do not leave the weeding too late. Weeding is necessary as the weeds increase competition for light, soil water and nutrients.
- Some seeds require shading – make sure simple shades are constructed.
- During the rainy season, cover the seedlings using dry grasses or hay. Seedlings should be moved away from under trees so water does not drip onto the seedlings and cause damage.
- Fence off the nursery to protect from cattle and playing children.
- Let the seedlings grow to about 30 cm before transplanting. This may take from 1 month to 6 months. See transplanting notes.



Members of Kiambogo Small Group tending their nursery.



# Helped to Help: Spreading beneficial practices to more members

By Dorothy Muriuki

The Helped to Help program, as we learned from last month's Mazingira Bora, is a newly introduced program. It has two components that have strong benefits for our TIST members. We have energy saving stoves that are of benefit to both human health and the environment. We also have Conservation Farming that will similarly give direct benefit to the individual farmer and to the environment on the other hand. The Helped to Help program is expected to efficiently develop the spirit of sharing the little one has with many neighbors.

## Energy saving stoves.

Energy saving stoves has a couple of benefits:

- When using energy saving stove, one will experience improved health since the stove releases less smoke. All improved stoves make less smoke emissions, and some even have chimneys to carry the remaining smoke away from the kitchen.
- The energy saving stoves will help reduce usage of fuel, resulting in savings for all households:
  - It saves those who collect wood fuel time and energy
  - It saves those who buy fuel money, which would otherwise have been used to buy wood fuel.
  - Those who collect wood fuel on their land may be able to sell surplus wood because they use less in their own homes.

- Energy saving stoves reduce the need to cut trees, which will increase forest cover.
- Improved stoves help fight climate change by reducing the emission of carbon dioxide and black carbon to the atmosphere.

## Conservation Farming.

Conservation Farming also has many benefits:

- We will have low expenditure yet high yields
- By using the zero tillage method,
  - we will conserve our soil by reducing soil erosion and maintaining soil fertility
  - carbon gases that are stored in the soil will stay in the ground instead of being released into the air

The pioneers of the program will keep accurate data on the amount extra crop yield and of fuel saved. This will help all of us to understand the true benefits of the CF and improved stoves. Currently, the program is not able to offer carbon incentives for stoves, but with very accurate testing and record keeping, these pioneers will help open the door for the future possibility of getting carbon credits from reduced fuel use that results from using improved stoves.



# I am saying, many trees are good for clean air; help improve life.

By Susan

1. long time ago, during the time of our forefathers  
it was difficult to walk through forests  
it was dense of trees, a lot of monkeys and buffalo  
I am saying, many trees are good for clean air; help improve life
2. people invaded forest and cut down the trees  
Many animals fled and we started experiencing lack of rains  
We faced drought and famine  
I am saying, many trees are good for clean air; help improve life.
3. I am saying all of us to come together, we plant many trees  
in our forests and in our own lands  
because, together we can  
I am saying, many trees are good for clean air; help improve life

4. Trainers should join us  
Thank you for your good work  
You have taught us a lot  
How to plant trees in our own lands  
You taught us conservation farming, we got food  
I am saying, many trees are good for clean air; help improve life
5. We now understand carbon credits business  
We appreciate the incentives we get  
We fight hunger through conservation farming  
We have got double yields in small pieces of land  
Indigenous trees have helped improve soil fertility  
I am saying, many trees are good for clean air; help improve life

Thank You.



A Small Group member planting a tree

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**KIKUYU VERSION**

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Amembba a Muguna Disabled Group makihuru mbica ni Lynn kuuma Hotpink

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gutheria riera, teithiriria kwagiria muturire.

**Ririkana guthii mucemanio wa Cluster yanyu mweri wa August.**



## Kahinda ga kuhariria migunda iitu: kuririkania Kilimo Hai

Arimi aiingi nimatwitire tuone kugacira kwa magetha kimera kihituku angi magishare gikeno kiao na arimi aria angi micemanio-ini ya cluster. Angi magita aria marigainie na amemba a ikundi cia TIST plot-ini ciao nigetha mekire uira hari Kilimo Hai.

Arimi anini onamageretie kurima Kilimo Hai matinagia na magetha maangi ta aria angi, Gitumi? Matiarumiriire mitaratara yagiriire makihariria migunda yao.

Mandiko maya nimaguguteithiriria kumenya uria ukurima na Kilimo Hai. Ukihuthira mawatho hari ikinya ria mbere .

### Kuhariria mugunda.

Hariria mugunda waku mweri umwe mbere ya mbura.

- Tuguta riia na githaka(ndukarime)
- Hariria marima(rectangle) mari na warie wa 15cm, uraihu wa 35cm na uriku wa 15cm na marima makorwo na utiganu wa 75cm.
- Oya thumu na tiiri wa iguru utukanie kana uhuthire thumu wa mahuti. Ihuria irima na mutukanio ucio nginyagia 5cm.

### kuhanda.

- Riria urahanda mbembe(matuku 1-2 mbere ya mbura), handa mbembe inya tiiri-ini

- Ukihanda muhia handa mbegu 5-6 a kona ya irima thutha wa mbura.

- Humbira mbegu na 2.5cm na tiiri na mutukanio wa thumu. Thutha wa uu tiiri wagiriirwo nigukinya 2.5cm

- Hau hangi nihakuhotithia kuiga maai.

Ndurabatara kuhuthira fertilizer ya duka hari Kilimo Hai. Wahuthira thumu muingi no ukugia na magetha mege na maangi.

### Kurimira.

- Rimira irimaini kahinda gwa kahinda.
- Ndukarime mugunda wothe. Huthira banga gutheria riia gatagatiini ka marima.
- Tiga mahuti macio kuu mugunda.

### Thutha wa magetha.

- Ndugacine mahuti, matige mugunda niguo mongerere unoru. Matigari ma irio nomahuthike kuthondeka thumu.
- Ndukariithie ngombe mugunda-ini.

Ririkana, nitugakena tugikunguira magetha mega kumana na uhoro uyu na micemanio-ini ya cluster. Ambiriria kuruta wira riu.

## TIST: Mibango miega ya michemanio ya o wiki.

Kwina bata munene inyui ikundi nini gukoragwo na micemanio kaingi. Ta ngerekano, rimwe hari wiki kana rimwe thutha wa wiki igiri. Uu nigukuhe mweke mundu wothe wa gikundi kianyu gukuria gikundi orohamwe na kumenya maundu meru.

### Mibango ya michemanio.

Hari kubanga mathaa maitu wega, gikundi

kinini kiagiri-ire gukorwo na michemanio ibangitwo wega. Kwina bata munene muno tondu nigugutuma muikare mukimenyaga maria mukaririria na maundu mangi.

Thi-ini ya michemanio, niwega guthingata maundu maria mabata. Nigetha muhote kurikia uu, ikundi ingi nini cia TIST ciekaga maundu maya riria cikoragwo namicemanio.



### NJIRA YA I.

Kugeithania na kumenyithania amemba eru. (ndagika 5 – 15): Ona ati mundu wothe niaiganira. woe kahinda kanini no wone ati mundu wothe niemenyekithania.

### NJIRA YA II.

Mahoya ma kuhingura (ndagika 2):  
Niwega kwambiriria mucemanio waku na mahoya. Reke makorwo mari makuhi.

### NJIRA YA III.

Nyimbo (ndagika 5):  
Ici nocikorwo ari nyimbo ciandikitwo ni ikundi cianyu kana ikorwo ari nyimbo cia kugocha.

### NJIRA YA IV.

Gwitikaniria wira na mathaa. (ndagika 5):  
Atongoria mataragiria uria gugwikwo

mucemanio-ini na andu a gikundi magetikira gwika uguo. Mathaa metikanirio nigetha mutabariri ahote kuiga mathaa.

### NJIRA YA V.

Ikundi irute wira uria ihetwo. (Itha Rimwe):  
Wira uyu wagiriire gukorwo wabangitwo muchemanio-ini muhituku. wira uyu no ukorwo ari guitariria uria mundu ekite guteithia TIST, kurutana oronakana maundu mangi ma bata maria maguteithiriria ikundi cianyu nini ikure.

### NJIRA YA VI.

Kujengana (ndagika 5):  
Oro mumemba oige kaundu kamwe ka mwanya angikorwo onete muchemanioini oro na kana kiheo onete hari mutongoria.

### NJIRA YA VII.

Mahoya ma kuhinga (ndagika 2):

## Ikundi nini kuuma mara kwandikithio na ingi gwikirwo baseline

Mwandiki: Kimani

Gwa kahinda ka mieri mugwanja, nigwikwitwo ugaruruku munene thiini wa ikundi nini na TIST Social Entrepreneur (TSE) team nigetha tugie na ikundi nyingi iria ikuungira family ya TIST. Mararuta wira Bomet na Narok ya muhuro, iria iri thiini wa Mara River Basin.

Njira ino njeru ya kwiyandikithia, ikundi 56 nicicoketie marua ma kwiyandikithia na ingi nyingi nicirahariria maratathi macio nigo citikahingiririo. Gwa kahinda gaka, niturathondeka baseline natimu nicirathondeka local capacity kuri quantifiers na athomithania.

Arimi aria makenete ni mekirite kio nigetha ikundi nini cigie na nathari na kuhuthira

mitaratara miega micemanioini yao( nyimbo, mbere ya kwambiriria micemanio, mahoya, guagura atongoria na anini ao, gukurania na mangi maangi) ni gikeno kuri timu ya TSE kuona uria maundu marathii wega na ihenya.

Mara nikio gicigo kiria kinene kia Tourism Kenya, gikoragwo thiini wa mara River Basin hari ruui rwa Mara rwambiriirie, gutamburuka Km 495 nginya rwiitirire Lake Victoria. Ni kindu kia bata Kenya, Uganda na Tanzania kuria TIST iri. Biodiversity nikindu kia bata kiria kirabatara kumenyererwo na kuanda miti kuria ni ngoro ya kumenyerera maria maturigiciirie.

Niturarora uria arimi a Mara marathii na mbere.



# Umenyereri na utungata wa tuta.

## A. Kugiriria Tutambi

Tutambi twamithemba mi-ingi (ta Muthua na) hamwe na viruses no cithukie mimera yaku muno.

Umwe wa murimu uthukangagia tuta yaku witagwo “damping off” na urehagwo ni “fungi”. Murimu uyu utumaga mbegu cibuthe mbere ya cimerete, miri niyoraga mbere ya mumera umerete na ukaga hinya na muthia ukagwa. Ndariri cia murimu uyu ni; -

- ❖ Mumera ugachekeha na ukoma uri omunini.
- ❖ Mumera ukahoha na muthia ukagwa.
- ❖ Mathangu makagia na rangi wa ngoikoni.
- ❖ Mumera ukoma.

No ugiri-rie murimu uyu na njira ici:

- ❖ Ugachenjia tiri wa tuta yaku thutha wa mwaka umwe nginya miaka iri.
- ❖ Irute mimera iria irinamurimu uyu na umichine.
- ❖ Ndugekagire mai maingi makiria.
- ❖ Ona ati tuta yaku ndiraraha mai.
- ❖ Wone ati tiri waku niuraingiria riera wega.
- ❖ Urimagire mumera waku kahinda karia kagiri-ire.
- ❖ Ona ati tiri waku tumunoru makiria ma uria kwagiri-ire. Ona ati tiri waku niuhingitie mabataro mothe. Ndugekire thumu muungi muno
- ❖ Ona ati hari hari na utigani muiganu mimeraini yaku nigetha ndigatumane muno.
- ❖ Ona ati tuta yaku nitheru mahinda mothe.

Murimu uyu no uninwo na njira ya kuhuthira ndawa. Niwega kuhuthira ndawa ya gwithondekera itari na goro muno na iria itangithukia mariamatuthiururki-irie. Kwa ngerekano.

- ❖ No uitiririe muhu.
- ❖ Ona na kinyi ati tuya yaku nitheru nigetha kugiri-ria tutambi.

## B. Gucheha Miri.

Thamagia mumera waku rita rimwe hari oro wiki nigetha muri waitimu ndugatonye tirini. Muri mwega wa itimu niutumaga mumera waku uhote

kunyua mai wega thutha wa kuuhanda mugundaini.

Miri ya kamumera gaku niyambagia kuma nya ya karatathi karia uhandi-ire thutha ya mieri 3-4 kuringana na riera ria kuria uhandite muti ucio. Miri ino yagiri-ire kurengwo thutha wa mieri iri. Ririkana kunyita mumera waku na umenyereri munene muno nigetha ndugathukie tumiri turia tunini.

Geria muno kuhuthira tuta iria yoetwo iguru nigetha ndugatindage ugitinia miri yaku tondu miri iri-itinagia oyo miene.

## C. Guitirirua mai, Kurimira hamwe na Guikira Kiruru

- ❖ Ikira gichungi hari ndoo ya mai nigetha ndugathukie tiri wa tuta yakuugiitiriria mai.
- ❖ Ndugaitagiririe mai maingi muno.
- ❖ Itagiriria mai rucini na hwaini kungihotekeka
- ❖ Menyerera guthukia miri riria urarimira.
- ❖ Ndukarimagire uchereirwo muno tondu ria niri gayanaga utheri, mai hamwe na unoru wa tiri
- ❖ Mimera ingi niyendaga kiruru. Ona ati niwa gitira mimera yaku kumana na riua inene.
- ❖ Kahinda ka mbura nene, niwega kugitira mimera yaku ukihuthira nyeki. Angikorwo tuta yaku iri rungu rwa muti niwega umieherie nigetha mimera yaku ndigathukio ni matata ma muti.
- ❖ Gitira tuta yaku kumana na mahiu na ciana.
- ❖ Rekemumera waku ukure uraya wa 30cm mbere ya kuuthamia na no woe kahinda ka mweri umwe nginya itandatu. (Ona uria mundu athamagia muti wake.)



Amembra a gakundi ka Kiambogo makirimira nathari yao ya miti



# Teithio witeithie: gutherema

Mutaratara wa Helped to Help ta uria twathomire ngathitiini ya mweri muthiru, ni mutaratara mweru. Ukoragwo na icunji igiri iria nicia umithio kuri a meba a TIST. Turi na Energy saving stove iria iri ya bata kuri ugima wa mwiri na maria maturigiciirie. Turi na Kilimo Hai kiria gikurehe umithio kuri arimi na maria maturigiciirie. Mutaratara uyu niwirigiriirwo gukuria kugia na ngoro ya kuheana kiria kinini turi nakio.

## Energy saving stove

Rikoragwo na mawega Mario

- Ukihuthira riiko riri, niukugia na ugima wa mwiri mwega todu rirutaga ndogo nini. Mariko maya mothe marutaga ndogo nini na mangi nimakoragwo na chimney.
- Nirinyihagia uhuthiri wa maguta
  - Niriteithagia aria monganagia ngu mahinda na hinya.
  - Niriteithagia aria maguraga maguta na kumahonokeria mbeca.
  - Aria mahuthagira ngu kuma migunda-ini yao nomahote kwendia ngu nyingi tondu ndarahuthira ciothe.

- Ndurabatara gutema miti miangi na kwoguo kwongerera gicunji kia mutitu.
- Niriteithagia hari kugia na riera riega tondu ritirutaga Carbon dioxide nyingi.

Kilimo Hai

Kilimo Hai nigikoragwo na mawega makio.

- Tukuhuthira mbeca nini na tugie na magetha maingi
- Tukihuthira njira ya zero tillage,
  - Nitukumenyerera tiiri na kunyihia gukuuo gwa tiri ni main a kugia na unoru wa tiri
  - Carbon gases iria cikoragwo tiiri-ini ciguikara okuo.

Ambiriria a mutaratara uyu nimakuiga uhoro mukinyaniru hari magetha na maguta maria mahonoketio. Uu niugutuhotithia kumenya mawega ma Kilimo Hai na riiko. Gwa kahinda gaka, mutaratara uyu uyu ndungihota kuheana incentives kuri riiko no hari accurate testing na kuiga mohoro wega, ambiriria aya nimaguteithiriria kuhingura milango hari kugia na carbon credits kumana na kunyihia kuhuthira maguta kumana na kuhuthira riiko riri.



# Ndirauga miti miingi ni miega hari gutheria riera, teithiriria kwagiria muturire.

Mwandiki: Susan

1. Tene muno, hendi ya maithe maitu  
Kwari hinya kuhitukira thiini wa Mutitu  
Kwari miti mitumanu na nugu na ifaru  
Ndirauga miti miingi ni miega hari  
gutheria riera, teithiriria kwagiria  
muturire.
  2. Andu nimaingirire mititu na magitema  
miti  
Nyamu nyangi ikiura na tukiaga mbura  
Gukigia na ngaragu  
Ndirauga miti miingi ni miega hari  
gutheria riera, teithiriria kwagiria  
muturire.
  3. Ndirauga ithuothe tuke tuhande miti  
miingi  
Mitituini na migundaini iitu  
Tondu turi hamwe notuhote  
Ndirauga miti miingi ni miega hari  
gutheria riera, teithiriria kwagiria  
muturire.
  4. Athomithania manyitane naithui  
Ni ngatho niundu wa wira mwega  
Nimututhomithitie maundu maingi  
Uria tukuhanda miti migundaiini iitu  
Mugituthomithia Kilimo Hai na tukigia na  
magetha.  
Ndirauga miti miingi ni miega hari  
gutheria riera, teithiriria kwagiria  
muturire.
  5. Riu nituramenya biashara ya Carbon  
credit  
Niturakena ni maundu maya mega mureka  
Urarua na ng'aragu na Kilimo Hai  
Miti ya ki-nduire niyongereiore unoru  
migundaiini  
Ndirauga miti miingi ni miega hari  
gutheria riera, teithiriria kwagiria  
muturire.
- Niwega.



Mumemba wa TIST  
akihanda muti

# Mazingira Bora

NOT FOR SALE

August 2010 Newsletter



www.tist.org

KIMERU VERSION

## The International Small Group and Tree Planting Program (TIST)

An Environmental, Sustainable Development and Community Forestry Program.



Gikundi gikinini kia müguna Disabled bakiuragua biuria na kuringwe mbicho ni Lynn kuuma HotPink

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**Rikana gwita mucemanione jwenu jwa Cluster jwa mweri jwa  
August.**



# Igita ria kuthuranira miunda yetu; Kuburikania mitire iria miega ya urimi bubwega ( kilimo hai)

Arimi babingi nibatwitite kugwiranirua amwe nabo niuntu bwa iketha ririthongi iketha rithiru kiri miunda yao ya mpempe ya urimi bubwega. Bangi nibagaanire na arimi bang indene ya micemanio yao ya cluster ya urimi bubwega bangi beetire aturi na arimi ba ikundi bia TIST miundene yao gukujira itha ririnene kiri miunda yao ya kilimo hao.

Arimi babakai kinya bakugeria gutumira urimi bubwega batonere iketha ririnene ta bangi. Gitumi? Batathingatirie mitire iria ibati riria bathuranagira miunda yao ya kilimo hai.

Haja ukamenya bwega gutumira kilimo hai> Kimenyeera ati ukuthingata jaja nirio ikinya ria mbele kiri kumenyera ati ukithingata jaja nirio ikinya ria mbele kuiri kumemenyera ati nukuthingata mitire iria miega buru ya TIST.

## Kuthuranira muunda

Thuranira munda jwaku igita ritikunyia nkuruki ya mweri jumwe mbele ya mbura.

- Kuura maria na mathaka. Ukarima.
- Inja marinya ja kona. Jethire jari na warie bwa 15cm uraja bwa 35cm na 15cm kwinama nthi. Marinya jataranie na 75cm.
- Jukia mbolea na muthetu jwa iguru uthukanie, kana utumire mbolea ya kirinya. Ujuria kirinya na muthukanio jou mwanka gutigare 5cm.

## Kuanda

- Waanda mpempe (ntuku imwe kana ijiri mbele ya mbura) anda mpindi inya

muthetune kirinyene.

- Kethira ni myua, anda mpindi ithano kana ithanthatu kiri omuthia junthe jwa kirinya kwarikia kuura bwega .
- Kunikira mbeu na muthukanio jwa muthetu jumunoru na mbolea 2.5cm.Nyuma ya bubu, muthetu jwa kirinya jwiithirwa juri 2.5cm nthiguru ja muthetu jwa munda.
- Kaanya kau kari iguru ria kirinya nigagutethagia ruuji gutonya kiri imera riria gukambiria kuura

## Gukuura iria

- Kura maria akui na marinya o-igita.
- Ukarima muunda junthe. Rimira akui na kirinya aki. Tumira kibanga gukura maria gatigati ka laini kana gatigati kamarinya. Menyeera ati munda jwaku jutina iria magita jonthe.
- Tiga maria muundene nikenda jora. Bubu bukongera unoru bwa munda.

## Jaria ubati kuthithia warikiaguketha

- Ukaithiria matigari jaria jari muundene. Jatige nthiguru nikenda jakanoria muunda. Matigari ja imera nojatumirwe kuthithia mbolea ya kirinya.
- Ukarithia ndithia muundene jou.

Itu rikana, tukagwirua kugwiririrua iketha riaku ririthongi gukurukira mazingira bora na kinya mucemanione jwaku jwa cluster. Ambiria gwita ngugi nandi!



## TIST: Njira injega ya kuthithagia micemaio yetu ya o kiumia.

Ni uritu bubwega Gikundi kieru kwithirwa gigicemanagia o kiumia kana nyuma ya biumia biiri. Uu gugagiteithia gwikira Gikundi kieru inya kenda buumbakuthoma thaantu jameeru.

### Mutaratara jwa mucemano:

Kenda tuumba gutumira mathaa yetu bwega thabwiri twira mibango jwa mathaa yetu. Kenda twimba kuthithia mantu yetu jarithe Gikundi gietu kibwiri kuthingata mantu joja micemanoine yetu.

#### Nkeethi na kumenyithania amemba babeeru kethirwa kuri bo (Dagika 5-15)

Tigiira aguciimenyinyania wegwa na agatwa ugeni.

#### Iromba ria mbere (dagika 2)

Ni untu bubwega kwambiria mucemano na iromba.

#### Dwimbo (Dagika 5)

Dwimbo iji no cithirwe iri iria citungi ni amemba kana cia gwikira amembe inya.

Gwitikaniria kiri utumiri bwa mathaa (Dagika 5). Mutongerya okeera amembe ngugi iria ikanitwa ni amemba nabo beetikaniirie. Mathaa muteetheria omba gwika mathaa.

#### Kurita Ngugi (Dagika 60)

Mantu jaja jabwirite kwithirwa jaaririthe mutemano muthiru. Ngugi iji ita; mathithio ja o muntu kuri TIST, urita kana mantu jangi jaria Gikundi kieru kiendekia. Gwakana (Dagika 5)

O mumemba akarita untu bubwega bwa mutongeria wa kiumia kiu na aritu bungwa kana untu buria wona kiri mutongeria uu.

#### Iromba ria kuthiria (Dagika 2)

Niuntu bubwega kuthiria muceemanio na iromba

## IKUNDI BIBINGI BIA MARA NIBICOKETIE FOMU CIA KUROMBA KUA AMEMBA BA TIST NA MIUNDA YAO NIKUTHITHIRUA BASELINE

Ni Kimani

Ndene ya mieri mugwanja iu ithiri, ngugi inyingi nirititwe ni ikundi bibinini bia TIST na atongeria ba TSE ya Mara kiri gutonyithithia ikundi bingi ndene ya nja ya TIST. Nibakurita ngugi ndene ya Bomet na Narok south, iria ciri muurone jwa Mara. Kuthingata mwitire jumweru jwa kuandikithia ikundi bibinini kiri TIST juria jwakurukirue, ikundimirongo itano na bitantatu nibicoketie fomu cia kuria gutonyithua kiri TIST na bingi bibingi nibikujuriria fomu ciao nikenda bitatigwe ome.

Nandi nitukujukia baseline baseline na gwikira inya Atari miti na aritani kumania na ntuura iji. Arimi baria bari na wiru nibakurita ngugi mono kiri gwikira inya ikundi bithithia minanda ya miti na bitumira mitire iria miega buru micemanione yao. (mitire iji ni ja kwina rwimbo mbele ya kwambiria mucemano,

marimba, gutaara mutongeria na mutetheria wa mutongeria, gwakana na jangi). Ni wiru bwa atongeria ba TSE iji kwona mantu jagiita bwega na ndene ya igita ririkai.

Mara ni kumwe kwa ntuura iria ageni kuuma nthiguru ingi bendaga kuriunga ndene ya Kenya. Iri muurone jwa ruuji rwa Mara ndene ya Kenya aria rwambagiria na rukenama 295 kilometers mwanka rugatonya ndene ya iria ria Victoria.

Ruuji ruru ni rwa Kenya, Uganda na Tanzania naria kunthe TIST ikurita ngugi. Wingi bwa imera na nyomoo ni gintu kia gitumi mono kiria gikwenda kumenyerwa gukurukira kuanda miti, kuria kuri gintu kiria kinene buru kiri umenyeri bwa naria gututhiurukite. Nitutegerete mono uria arimi ba Mara bagatuma untu bubu buumbika



## KUMENYEERA NA KURIGIIRIA NURSERY.

### A: Kurigiiria murimo.

Bacteria na tunyamu (muthwa na tunyamu tungi) nituthukagia mbeu cia miti.

Murimo juria jwithagirwa jario jwitagwa "damping off" na juretagwa ni fungi. Nijutumaga mpindi cia miti ciora mbere ya kuuma, miri yoora mbere ya jwambiria kuuma orio kana jwauma kamuti gakethirwa gati na inya mwanka muthiene gakagwa. Uria umba kumenya murimo juju nita uju:-

- ❖ Mbeu ya muti igacekea na ikomira nthi.
- ❖ Kamuti gakagwa.
- ❖ Mabuura jakagaruka jakaa yellow.
- ❖ Muthiene jugakua

### URIA UMBA KURIGIIRIA DAMPING OFF

- ❖ Guchanjia muthetu jwa nursery nyuma ya mwaka 1kana 2. kinya kwinyia muthetu buu ibutethagia.
- ❖ Ukarita mbeu iria igwati ni murimo oorio na ukaciithia.
- ❖ Ugatiga gwikiira ruuji rurwingi.
- ❖ Ukamenyeera ruuji rutikethirwe rutikurungama amwe.
- ❖ Ruugo rukethirwa rugitonyaga bwega.
- ❖ Kurimagira igiita ririo.
- ❖ Muthetu jukethirwa junori nkuruki. Kithimi kia muthetu kiongwa kithingatwe (beere kithimi kia muthetu kethira batikumenya.)
- ❖ No mwanka mbeu ya muti yumwithue itaraniirritie itikaimbane.
- ❖ Nursery ithagirwe iri intheru igiita rionthe. Mirimo no imenyerwe na kuugiira ndagwa. Ibibuugi gutumira ndagwa cia kienyeji tontu iti goru na itithukagia aria gututhiurukiite. Kwa mung'uanano ta:-

1. kuminyiria mujuu.
2. menyeera kiumithirio kithagirwe kitheri igiita rionthe. Njira iji nirigagiiria tunginyo.

### B. Gucaa miri.

Itaitithagia mbeu ciaku oo rimwe kiumia kenda urigiiria muri jwa itumo jutigatoye nthi jwenda gucawa. Muri jwa itumo jukethirwa juri na inya ijutethagiria mbeu yaku yumba gucwaaga ruuji

wamianda. Wona mbeu yakurira mibukone nyuma ya mieri 3-4 (kuringana na muthemba jwa muti na climate ya au). Miiri niyambagiria kuumira oome bwa nthi. Miiri nibwirite kwithirwa ikigitwa nyuma ya mweri jumwe kana iiri na gaciu. Menyeera miri mono riria ugukiiria mibuko yaaku utikathukie tumiri turia tuniini.

Kana ugerie nursery iria ithagirwa yukiritue kenda umba kuniyyia gucaa miri tontu igujaga yongwa.

### C. Gwikira ruuji, kurimira na gukunikira.

- ❖ Gintu kiria ugukundia nakio ruuji kithirwe giturangi tukutho tuniini kenda muthetu jutigakondorue.
- ❖ Ugekagiira ruuji rurwingi mono kana tuniini mono.
- ❖ Riria ukumba ikagira ruuji rukiiri na ugoro.
- ❖ Tiga gwakira ruuji muthanya gatigati tontu ruuji rugeta na riuu niuntu bwa murutira.
- ❖ Menyera miiri mono riria ukurimira
- ❖ Ukarimagira ucereri. Kurimira kuri bata tontu iiria iriongagiira gucindanira weru, muthetu na mboreo.
- ❖ Mbeu imwe iciendaga kwimbirwa – menyera gwakira karutara ga kwimbira.
- ❖ Igita ria ngai kunkira mbeu yaku na nyaki injumu. Mbeu yaku ikaumithirua ruungu rwa miti kenda matanta ja ruuji jatikathukangie mbeu ciaku.
- ❖ Irigira nursery kenda umba kurigiria nyomoo kana twana tutikeje gutindaniria o.
- ❖ Reka mbeu ikinye centimeter 30 ukimianda. Iji ikajukia mweri jumwe mwanka mieri itantantu. Teega notes ciaku.



Amemba a gakundi ka Kiambogo makirimira nathari yao ya miti



# Tethua utethie: Kugaana mitire iria miega na amemba bangi.

Mubango jwa tethua utethie, o uria twathomere kiri gazeti ya mweri muthiru, ni mubango jumweru. Juri na mantu jairi jaria jena baita inene kiri amemba ba TIST. Turina mariko jagutumira nkuu inkai jaria jari na baita kiri thiria ya mwiri na kiri naria gututhiurukite. Turina kinya kilimo hai, mubango juria kinya juu juri na baita kiri mumemba wengua na kiri naria gututhiurukite. Mubango jwa H2H jugatethia kuneneyia wendo bwa kugaana kinini kiria turi nakio kiri aturi babaingi

## Mariko ja gutumira nkuu inkai

Mariko jaja jari na baita kithumba:

- Riria muntu agutumira riiko ria nkuu inkai, akethirwa akithongomagia thiria yawe ya mwiri nontu riiko riri rikarita toi inkai. Mariko jonthe ja nkuu inkai nijaritaga togi inkai na jangi jarina kinya chimney ya kuumaria togi kuuma riikone.
- Mariiko jaja ja nkuu inkai jagatethia kuniyiyia utumiri bwa nkuu, kwou mbeca iria iringi gutumirwa kugura nkuu cikomba gwikwa ni nja cionthe.
  - Jakanyiyia mathaa na inya iria itumagirwa gucwa nkuu.
  - Jagatethia gwika mbeca iria iringi gutumirwa kugura nkuu.
  - Baria bojanagia nkuu miundene yao bakoomba kwendia iria

ciatigara nontu bagatumira inkai ndene ya njaa ciao.

- Mariko jaja jakanyiyia ugiti bwa miti na kwou miitu ingie.
- Mariko jaja jagatethia kurua na kugaruka kwa rera gukurukira kuniyiyia ruugo ruruthuku na carbon iria irekagua riria ukuithia nkuu

## Urimi bubwega burina baita inyingi:

- Tugatumira mbeca inkai twone maketha jamanene
- Twarega kurima buru:
  - Tukamenyera muthetu gukurukira kuniyiyia ukamati bwa muthetu na kumenyeera unoru bwa muthetu.
  - Ruugo ruria ruri na carbon ruria ruingiritwe muthetune rugakara ku antu a kurekerua rutonya kiri ruugo rungi.

Baria bakambiria mubango juju bageka rekondi cia mma cia iciara riria riongekerete na nkuu iria cititumiri. Babu bugatutethia twinthe kumenya baita ciongwa cia urimi bubuega na mariko ja nkuu inkai. Igitene riri, muradi jutiumba kuria niuntu bwa mariko indi na rekondi cia mma, baba bakwambiria bagatethia kurugurira mwari kuriwa mbeca niuntu bwa kuniyiyia utumiri bwa nkuu niuntu bwa gutumira mariiko ja nkuu inkai.



# Ninkuuga, miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire

## Ni Susan

1. Igit a ririnene rithiri, igit a ria biujuju bietu  
Nikwari inya mono gwitira miitune  
Miti niyaingei, ncoro na mbogo inyingi  
Ninkuuga miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire
2. Antu baratonya miitune bagiita miti  
Nyomoo inyingi ciamatuka na twambiria kwaga mbura  
Nthiguru yooma na mpara yeja  
Ninkuuga miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire
3. Ninkuuga twinthe tugwatane, tuande miti imingi  
Ndene ya miitu yetu na miundene yetu twingwa  
Nontu amwe , twinthe tukoomba  
Ninkuuga miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire
4. Aritani nibabati gututethia,  
Nibwega niuntu bwa ngugi yenu injega,  
Nibuturitanite jamaingi  
Uria tukaanda miti miundene yetu twingwa  
Nibuturitene urimi bubwega, twona irio  
Ninkuuga miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire
5. Nandi nitumenyete kwegia thoko ya ruugo  
Nitugwiraniritue ni mbeca iria tukwona Nituruite na mpara gukurukira urimi bubwega  
Turi na maketha maita jairi kumania na tumiunda tutunini  
Miti ya gintwire nitethetie kwongeera unoru bwa muunda  
Ninkuuga miti ni imiega kiri ruugo rurwega: nitethagia kuthongomia miturire



Mumemba wa gikundi gia  
TIST akiandaga muti