

Mazingira Bora



English Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Members of Tharu Clusters in a group photo with visitors from among others, Taylors of Harrogate.

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TIST Receives Visitors from Taylors of Harrogate, Carbon Neutral Company, KTDA and Ethical Tea Partnership.

On January 12-15, 2015, TIST was privileged to host important visitors from 4 world-renowned companies:

Taylors of Harrogate, a major tea and coffee buyer, which included their delegation members Simon Hotchkin, Samantha Gibson, and Sam Ward.

Carbon Neutral Company is a world-leading provider of solutions to businesses reducing their environmental impacts. Tom Popple and Zubair Zakir represented them on the visit.

The Ethical Tea Partnership (ETP) is a not for profit membership organization that works to improve tea sustainability, the lives of tea workers, and the environment in which tea is produced. Jane Nyambura represented ETP.

Kenya Tea Development Agency Ltd. is the Leading Management agency for the small-scale tea farmers in Kenya. Chege Karoba and Ms. Asinatu represented KTDA.

The purpose of this visit was to see some of the work that TIST Small Groups have accomplished over the years, the results achieved with an objective of forging a partnership between TIST and Taylors of Harrogate to expand TIST in tea growing areas.



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.

The delegation visited various TIST groups in different locations. In Kirinyaga County, Njukiini



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

Cluster, they visited Kerere Women A, TIST Small Group 2008KE1191, where Elizabeth, a Cluster Servant and TIST farmer has a great TIST Grove with grown trees for fodders and firewood. They also visited Kerere Women B, TIST Small Group 2008KE1109 where John's TIST Grove has more than 25 bee hives producing over 500kg of honey for domestic use and for sale.

In Tharaka, Nithi County, Muthambi Cluster, our guests visited Ushinde Biashara (2010KE99) where Mr. and Mrs. Nyaga have put up a very successful Riparian Grove and great Conservation Farming (CF) plot. In the same county, but in Kianjagi Cluster, they visited Kajiongo Tree Planting Group 2007KE449. Mr. Kiruja Nkambu TIST Grove has trees planted along the tea farm boundary with gazetted forest. Trees keep away elephants from getting to the farm.

In Meru County, Mwanga Cluster, they visited Umoja A TIST 2005KE934. Jeniffer Kithure has a successful mango grove there. Also in Meru, they visited Wilson's grove in Kithuri Cluster where he has a very beautiful avocado grove and tea garden.



Our visitors also got an opportunity to attend the Thara Cluster meeting. They also visited some schools in both Meru and Tharaka-Nithi counties. The delegation also included visits to selected Tea factories. Among the factories visited included Makomboki, Imenti and Kionyo Tea Factories.

Ben Henneke, Jeniffer Kithure and Martin Weru were Lead Team members from TIST on this visit while other TIST servants were involved as well. In TIST, we are grateful for this visit and we are looking forward to a great working relationship with all stakeholders involved.



Mrs. Nyaga , Ushinde Biashara , 2010KE99
(in a black T-shirt) shows the visitors her Riparian grove.

TIST Regrets Temporarily Suspension of some of Small Group Payments.

TIST Kenya profoundly regrets suspension of some of Small Group Payments. This is a result of discovery of errors in generation of some vouchers.

TIST Technical Team and Leadership Council and Cluster Servants are working hard to review all the vouchers that have been issued. Vouchers

that will be found correct will be paid as rapidly as possible. Those that have errors will be cancelled and correct one will be issued.

We highly regret any inconvenience caused to our members. We will keep you informed of our next steps. We ask for your patience as we resolve this issue.

TIST: Waste Management.

Waste is any material that is a by product of human activity and that may not have immediate value, which includes:

- Human excreta/waste.
- Domestic rubbish like left over food.
- Waste paper.
- Scrap metals and old batteries (dry cells)
- Polythene bags.
- Sewage sludge, etc.

What Causes Rubbish Problems in your Community?

Waste is inevitable but is made more problematic by:

- Wasteful/inefficient use of resources.
- Lack of methods for reusing waste.
- Lack of waste disposal sites (Rubbish pits, latrines)
- Lack of knowledge about the dangers of waste management.

Problems caused by poor waste management:

- Litter of fields and compounds.

- Loss of beauty of the area.
- Pollution of water, air and soil, disease outbreak
- Blockage of drainage channels.
- Toxic poisoning and fumes from old batteries.
- Children and animals may be poisoned or injured if they pickup and play with old batteries or other rubbish.

What Can Your Small Group Do Help Solve The Problem?

- Reduce or minimize the generation of waste
- Consider using solar powered products instead of those that use disposal batteries when possible.
- Reusing-use materials again where possible. (i.e. plastic bags)
- Composting as a natural fertilizer for use in gardening (save organic waste from left over food and fodder)
- Dig a rubbish pit in your compound.
- Remember to only burn paper and cards.
- Do not burn batteries as they can explode, instead put them in the pit latrine.



Conservation Farming Field Preparation.

After the harvest, do not burn the crop residues. Instead, leave them on the ground. The more residues left on the ground the better because they enrich the soil, making it more fertile. A layer of crop residue around the bottom of trees and seedlings will help increase the amount of moisture in the soil which prevents trees from getting too dry. Remember that crop remainders can also be used for compost manure.

- Try to stop animals from grazing on the area. If they graze there will be less crop remainders left covering the ground.
- Conservation farming holes have to be dug before the rains come. It is therefore vital to start digging them early.
- Mark out where you are going to dig your holes. Get a long piece of rope or string and squeeze bottle tops on to it 70cm apart. Stretch the rope across the width of your field. Each bottle top marks the centre of a hole and it makes sure that the holes are correctly spaced out. Mark out the rows of holes using a hoe. Each row should be 90cm apart. Just mark out the rows and holes you think can be completed that day.
- On the same day as you mark a block of holes, dig the holes. The holes need to be oblong. They should be between 15cm wide, 35cm long and 15cm deep.
- When you are ready to plant the grain it is important to put some very fertile soil into the holes to help the crop to be stronger. Take some manure and good topsoil and mix it together, or use compost manure. Fill the hole with the mixture up to 5cm from the surface. That space will help capture more rain.
- If you are planting maize, soak the seeds

in some water for 6-7 hours before planting them. This speeds up germination and ensures that more will survive. When you plant the seeds, plant 4 seeds in the soil across the hole. Cover them with 2.5cm of the rich soil and manure mixture. After this, the soil in the hole should be about 2.5cm below the surface of the field. It should never be more than this. Clods (big lumps of soil) should always be broken up so that the soil makes good contact with the seed.

- 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.
- The space at the top of the hole enables water to get to the plants when the rains come. Without this space the rain will just run off the land, taking a lot of the soil nutrients with it.
- Weed around the holes regularly and each year you will find there will be fewer and fewer weeds.
- Don't be discouraged! Digging the holes now will mean they are ready for this year and you will not have to dig them next year.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



How to Make Compost Manure.

Compost manure is a natural fertilizer, which will help your crops to grow. It is better than chemical fertilizer because it is natural and has no damaging effects for the crops or the environment. There are lots of different methods, of which the following is just one that has been useful in some areas:

Preparation of compost

1. Choose an area 4m by 4m for your compost pit.
2. Clean the area.
3. Dig a hole of diameter 3 - 4m and 1.5m deep.
4. Collect all the remains of the crops you have (e.g. the leaves and stalks of maize, millet, beans) and cut these remains into small pieces.
5. Put these crop remains into the hole up to a depth of 0.5m.
6. Then add 5 liters of ash.
7. Next add about 30cm (or as much as available) of animal dung (e.g. dung from pig, cow, goat or chicken)
8. Now add another layer of crop leaves and stalks (0.5m)
9. Add another 5 liters of ash
10. Add the leaves and stalks again until the hole is almost filled.
11. Finally, add a layer of soil until the hole is filled.
12. While filling the hole with soil, put a long stick in the middle of the hole so it reaches the bottom.
13. Leave the compost pit for 90 days (3 months)
14. During this period, use your dirty water to water the compost pit. For example, after cleaning your house or clothes, empty the used water over the compost pit unless it has dangerous chemicals in the water. If you have animals you can also pour animal urine over the pit.
15. Try to water the compost pit in this way every day, or whenever water is available.
16. After the 90 days, the manure will be ready. Use the stick as a thermometer – when the compost is ready it should be hot and you may even see steam coming from the stick after you have removed it.

Use of compost

When you have dug your holes for planting maize, millet or other crops, add one handful of compost to each hole.



Small Group Best Practices: Action Steps and Action Planning.

TIST groups do a lot of practical activities: Planting trees and improving agricultural techniques. When there is a lot of work to be done, it is good to create **action steps**. Each group member should tell the group what they are going to achieve that week. We are going to teach you and your Small Group how to do action planning. Please share this with other members of your Small Group during your meeting.

An action step is something that is:

- Specific.
- Observable (a fly on the wall can see you do it!)
- Measurable.
- Has a beginning and an end.
- Make sure your action step is realistic and that you can achieve it!

For example, saying 'I will plant trees' is not an action step because it is too general. 'I will work on three mornings this week to transplant 75 seedlings into our new grove' is an action step because it is **specific** (transplant 75 seedlings), **observable** (people can see you do it), measurable (75 seedlings, 3 mornings) and **has a beginning and an end** (at the end of three days you can see the results).

When your group meets again, allow ten minutes near the end of the small group meeting for each person to report on his or her action step. Each person quickly:

- (1) **Tells the group what their action step was for the past week.**
- (2) **States what they actually did.**
- (3) **States what action step they will take for the following week.**

If the person succeeded in his or her action step, the group celebrates the success.

If, as often happens to start with, the group member met only part of his goal, the group encourages him / her and does not criticize or blame. When people are able to freely share their successes and failures they will be encouraged to

do better each week. Encourage your Small Group members to think of possible action steps. Make sure each is specific, measurable and realistic! Share and celebrate the action steps that your Small Group has accomplished.

Action Steps for Action Planning.

A similar method can be used when planning. Here an example is given in brackets. When your group is planning what to do, make sure your plans are:

Specific (Our TIST Small Group will plant 1000 trees at the local hospital by November 30)

Measurable (How many? - 1000 trees will be planted)

Achievable/Realistic (Our TIST Small Group can plant 1000 trees in 5wks – 100 trees per Tuesday and Thursday, 10 trees per person/per day)

Time-bound (Has a beginning and an end - we will plant the trees between October 15 to November 30)

Observable (A fly on the wall can see us planting) SMARTO!

This is the guide and test of your action steps for your plan and helps you be specific:

- 1) **What** – (Planting 1000 trees)
- 2) **Who** – (TIST Small Group members by name)
- 3) **When** – (October 15 – November 30)
- 4) **Where** – (At the hospital)
- 5) **How** – (We meet every Tuesday and Thursday afternoon after the heat of the day and dig holes, then plant the trees)
- 6) **Why** – (To improve the area around the hospital, have more shade for patients and visitors, people can sit under trees and the shade will make the hospital cooler)

Now, try to practice action planning in your next Small Group meeting.

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Kimeru Version

An Environmental, Sustainable
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Program.



Amemba ba cluster ya tharu bari kiri mbicha ya gikundi na ageni kuuma kiri Taylors of Harrogate na antu bangi.

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TIST nionete ageni kuuma kambuni ya Taylors of Harrogate, kambuni ya Carbon Neutral Company, kambuni ya KTDA na ingi igwitwa Ethical Tea partnerships.

Kuuma ijiri Tariki ikumi na gwita ikumi na ithano cia mweri jwa mbele jwa mwaka juju, TIST niyatitue mono kuriungirwa ni ageni ba bata kuuma kiri kambuni inya ikumenyekana ndene ya nthiguru yonthe:

Taylors of Harrogate, muguri umunene wa majani na kauwa, iria yatumite Simon Hotchkin, Samantha Gibson, na Sam Ward.

Carbon Neutral Company ni kambuni imwe ya iria itongeretie nthigurune kiri kuejana njira cia kuthiria thina ndene ya biashara gukurukira kuniyia uthuuku bwacio kiri naria gutithiurukite. Tom Popple na Zubair Zakir nibo barungamirite antu a kambuni iji kiri ndiunga iu..

The Ethical Tea Partnership (ETP) ni gikundi gititi gia kwona baita kiria kiritaga ngugi kwongera kuumbika gwa urimi bwa majani igita riraja, miturire ya arimi ba majani na aria kuthiurukite au majani jakurimwa. Jane Nyambura niwe wario antu a ETP.

Kenya Tea Development Agency Ltd. ni kama kiria gitongeretie gia kurungamira arimi babanini ndene ya Kenya. Chege Karoba na Ms. Asunta nibo bario antune a kambuni ya KTDA.

Gitumi kia ndiunga iu kiari kwona ngugi imwe iria ikundi bibinini ciumbite kuthithia ndene ya miaka iria ikuukite, na jaria bombite gukinyira bara kioneki gia kwambiria kuritaniria ngugi gatigati ga TIST na Taylors of Harrogate nikenda batambia TIST ndene ya ntuura iria cianditwe majani.

Gikundi giki nikiariungire ikundi bibingi bia TIST ndene ya ntuura inyingi. Ndene ya county ya



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

Kirinyaga, cluster ya Njukiini, nibariungire Kerere Women A, gikundi gia TIST namba 2008KE1191, naria Elizabeth, nthumba ndene ya cluster na murimi wa TIST arina munda jumithongi jurina miti iandi niuntu bwa iria na nkuu. Nibariungire kinya Kerere Women B, gikundi gia TIST namba 2008KE1109 naria munda jwa John jwa kuanda miti ya TIST jwari na maugu mirogo iiri na jatano jaaria jaritaga nkuruki ya kilo magana jatano ja naicu iria itumagirwa nja na ingi ikendua.

Ndene ya Tharaka, county ya Nithi, cluster ya Muthambi, ageni betu nibariungire Ushinde Biashara (2010KE99) naria Mukuru Nyaga na mwekuru wawe barina munda juthongi mono juria juri mubangone jwa uandi miti nterene cia nduuji na urimi bwa njira injega. Ndene ya county o iu, indi ndene ya cluster ya Kianjagi, nibariungire gikundi gigwitwa Kajiongo Tree Planting Group 2007KE449. Munda jwa TIST jwa mukuru Kiruja Nkambu jurina miti iandi mwankene jwa munda jwa majani aria jwankene na mwitu jwa thirikari. Miti niisingaga njogu itigatonye muundene.

Ndene ya county ya Meru, cluster ya Mworoga, nibariungire Umoja A TIST 2005KE934. Jennifer Kithure arina munda jwa miti imithongi mono ya miembe. Meru kairi nibariungiire munda jwa Wilson ndene ya cluster ya Kithurine naria arina munda



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.



jumuthongi mono jwa mibukandu na majani.

Ageni betu ibonere kinya kanya ga gwita mucemanione jwa cluster ya Thara. Nibariungire kinya macukuru ndene ya county cia Meru na Tharaka-Nithi.

Arungamiri baba nibariungire ibanda bia majani. Ibanda imwe bia biria bariungire biari bia Makomboki, Imenti na Kionyo.

Ben Henneke, Jeniffer Kithure na Martin Weru nibo bari amemba baria barungamirite TIST kiri ndiunga iu indi kinya nikwari na nthumba ingi cia TIST iria ciathithirie untu bumwe kana jairi.

Ndene ya TIST, turina nkatho niuntu bwa ndiunga iji na nitweterete mono kuumba kugia na ucore bukurita ngugi na bonthe.



Mrs. Nyaga , Ushinde Biashara , 2010KE99
(in a black T-shirt) shows the visitors her Riparian grove.

TIST nikwirira kuriwa gwa ikundi bibinini bimwe gutiumbika.

TIST ndene ya kenya nikwirira nainya mono niuntu bwa gutigithia kuriwa gwa ikundi bimwe. Bubu buumenie na kwoneka gwa makosa kiri uriti bwa vocha.

Gikundi gia gukabana na mantu jaja ndene ya TIST amwe na kiama gia atongeria na kiama gia atongeria na nthumba ndene ya cluster nibakurita ngugi nainya gutegeera vocha iria cionthe iria iriti.

Vocha iria ikethirwa itina makosa igatumirwa kuria na mpwi uria kuumbika.. iria cirina makosa igatigithua na injega ciritwe.

Nitukwirira mono niuntu bwa thina iria amemba betu bagetera niuntu bwa untu bubu. Tukabumenyithia matagaria jaria tukajukia. Itukuuria kuumiria kwenu tugikabana na thina iji

TIST: Kurungamira ruuko.

Ruko ni gintu kionthe kiria kiuamanagia na maththio ja muntu na kiria gitona utumiri bwa oriu, na ni amwe na:

- Kioro kia muntu
- Matigari ndene ya nja ta irio.
- Maratasi jatina ngugi
- Miuko ya mubira
- Cuuma, maiga jatumiri
- Ruuko rwa sewage na jangi jamaingi

- Kuthukua gwa ruuji, ruugo na muthetu
- Kuumbuka kwa mirimo
- Kuingana gwa paipu cia kurita ruuji
- Sumu na ruugo ruruthuku kuumania na maiga jamakuru

Nimbi iretaga thina ya ruuko ndene ya ntuura yaku?

Ruuko rutiebereka indi nirwingiagua rukaa thina na njira ya:

- utumiri bubuthuku bwa biria turina bio
- Kwaaga njira cia kurutumira kairi
- Kwaaga antu a kuruta (ja bioro bia oome)
- Kuaga umenyo bwa mogwati jaria joomba kuumania na urungamiri bubuthuku bwa ruuko

Aana na ndithia no ciajithue kana ikagitarua riria ciajukia na guchetha na maiga jamakuru kana ruuko rungi.

Nimbi gikundi giaku kithithia kuthiria thina iji

Jaria jaumanagia na urungamiri bubuthuku bwa ruuko

- Kujura kwa ruuko bienine, kwaga uthongi bwa antu au

- Nyiyia mantu jaria jatumaga ruuko rwija.
- Thugania gutumira into biria bitumagira mwanki jwa riuwa antu a biria bitejagwa riria uumbikia.
- Tuumira kairi – tumira into kairi riria uumbikia (ja maratasi ja mubira)
- Kuthithia mboleo- iika ruuko ruria rumba kwoora (irio biria bitigarite na bia ndithia) ja mboleo ya gutumira muundene
- linja kirinya kia ruuko nja yaku.
- Ririkana kuithia aki maratasi na kadi. Ukaithia maiga niuntu noja lipuke. Ikira kiorone.



Kuthuranira munda jwa kurima na njira ya urimi bubwega.

Riria ukuthuranira marinya ja Kilimo Hai warikia guketha utibati kuithia matigari ja imera indi ubati kujatiga nthi. Wajatiga jamaingi nthi nibwega nkuruki niuntu jakanoria muthetu nikenda jugia maciara nkuruki. Matigari jaja jetagwa 'mulch'. Matigari ja imera nojatumirwe kuthithia kinya mboleo.

- Geria kumenyeera nyomoo itareta kuriao niuntu ciarea ni imera bibikai bigatigwa nthiguru.
- Marinya ja CF nijabati kwinjwa mbele ya kuura na kurina bata kwambiria kujeenza kurio. Kwinja riria kuumi ni ngugi indito indi niku kwega! Niuntu guku ni kuuga uandi bukathithua riria kubati kwambiria kuura orio.
- Maka aria ukeenza marinya jaku, riu ucue murigi na uoge nkuniki cia cuba citarenie na centimita mirongo mugwanja. Kucia murigi kugitania munda jwaku nikenda o nkuniki ithirwa iri gati gati ga kirinya na ikamenyeera ati marinya jaku nijatarenie uria jabati.
- Tumira gicembe kumaka milaini ya marinya nikenda o milaini ithira itarenie na centimeta mirongo kenda. Maka milaini na marinya jaria ukomba kuthiria ntuku iu. O ntuku iu ukamaka marinya, jeenje jarina nteere inya intamburuku. Nijabati kwithirwa jarina warie bwa centimita ikumi na ithano, uraja bwa centimita mirongo ithatu na ithano na kwinama centimita ikumi na ithano. Marinya jamaraja kwinama nijaunaga muthetu jumuumu na nijatethagia ruuji rugatonya bwega nkuruki na miiri igakura bwega.
- Riria waa tayarikuanda mbeu, burina bata gwikira muthetu jumunoru nkuruki ndene ya marinya nikenda jutethia gwikira imera biaku inya. Uungania na mboleo inkai na muthetu jwa iguru jumuthongi, kethira urina lime kana fertilizer, ikira ndene kirinyene na ujurie o kirinya na muunganio juju mwaka gutigare centimita ithano. Kethira urianda mpempe, riinda mbeu ruujine mathaa jatantatu kana mugwanja mbele

ya kuanda. Bubu nibutumaga ikauma ntuti na inyingi cikomba gutura. Riria ukuanda mbeu, anda mpindi inya ndene ya muthetu kugitania kirinya na wikunikire na centimita ijiri na nusu cia muthetu jumunoru juungenu na mboleo. Muthetu ndene ya kiriinya jubati kwithirwa jutigeria centimita ijiri na nusu kirinya kiujura. Ithumbwa bibiumu bia muthetu nibibati kuunangwa rionthe nikenda muthetu jukinyira mbeu bwega.

- Kethira ni mwere ukuanda, anda mpindi ithano kana ithanthatu kiri o muthia jwa kirinya gia kuanda kwarikia kuura bwega na ukunike mpindi na centimita ijiri na nusu cia muthetu jumunoru juungenu na mboleo. Kanya kau kari iguru kirinyene nijatethagia ruuji gukinyira imera riria kwaura. Gutina kanya kau, ruuji rwa ngai rugakamatwa iguru ria muthetu na rukamate unoru bubwingi bwa muthetu.
- Rimira kuthiuruka kirinya o igita. O mwaka gukethirwa kurina maria jamakai na jamakai nkuruki.
- Ukagituka moyo! Kwinja marinya nandi nikuuga jakethirwa jari tayari gutumirwa mwaka juju na utitia kwinja kairi mwaka jou jungi. Kethira antu ni baberu kiri njira iji, bekire moyo kugeria urimi bubwega antu anini mwaka juju riu bateganirie na maciara ja urimi bubega na jaria jaumenie na urimi bwa kawaida nikenda boona kethira kurina mwanya.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



Kuthuranira mboleo ya imera - Fertilizer ya gintwire.

Mboleo ya imera ni fertilizer ya gintwire iria itethagia imera biaku gukura. Ni injega nkuruki ya fertilizer cia kuthithua na ndawa niuntu ni ya gintwire, itina uguri, na itithukia imera biaku na naria gututhiurukite ja uria fertilizer imwe cia kugura ithithagia. Kurina njira inyingi cia kuthithia mboleo iji, indi njira iji nitetherie mono ndene ya ntuura imwe. Uria aturi baku ndene ya cluster yaku njira iria ibuite kiribo.

Kuthuranira mboleo ya imera

1. Taara antu a kwija kirinya gia gwikira irina kithimi kia warie na uraja bwa mita inya
2. Theria antu au
3. Inja kirinya gia kithiururri kiri na warie bwa mita ithatu gwita inya na kwinama mita imwe na nusu.
4. Oja matigari ja imera jaria uri najo (ta mathangu na mabua ja mpempe, ugimbi, mung'ao) na ugitange tunini tunini.
5. Ikira imera kirinyene kwaka gitigare nusu mita
6. Ongera Lita ithano cia muju
7. Riu wongere centimita mirongo ithatu (kana iria irio) cia ntaka ya ndithia (ta mai ja ngurue, ng'ombe, mburi kana nguku).
8. Ongera mathangu ja imera na mabua kairi (nusu mita).
9. Ongera lita ingi ithano cia muju.
10. Cokera kwongera mathangu na mabua mwaka kirinya kiende kujura.
11. Muthiene ongera muthetu mwanka kirinya kiujure.
12. Ukiiongagira muthetu kirinyene, ikira muturo jumuraja gati gati ga kirinya nikenda jukinya nthiguru buru.
13. Tigana na kirinya ntuku mirongo kenda (mieri ithatu)
14. Igitene riri tumira ruuji rwaku rwa ruuko kugera kirinyene. Ta, warikia kutheria nyomba yaku kzana nguo, ituura ruuji ruria watumira kirinyene. Kethira urina ndithia, no uture maumago jacio kirinyene.
15. Bubu nibwongagira nitrojeni mboleone.
16. Geria gwikira kirinya giki ruuji ntuku cionthe, kana riria ruuji rukuoneka. Ntuku mirongo kenda ciathira, mboleo ikethirwa iri tayari.

Tumira muturo kuthima mwanki.– riria mboleo yabua nibati kwitherwa irina mwanki na nowone muturo jugitoaga wajurita.

Utumiri bwa mboleo iji

Wenja marinya jaku ja kuanda mpempe, ugimbi kana imera bingi, ongera nkundi imwe ya mboleo kiri o kirinya. Tegera maciara!



Mitire iria miega buru ya ikundi bibinini: Matagaria na kubangira matagaria.

Ikundi bia TIST nibiritaga ngugi inyingi iria cionekaza: kuanda miti na kuthongomia njira cia kurima. Riria kurina ngugi inyingi cia kugita, nibwega kubangira matagaria. O mumemba wa gikundi nabati kwira gikundi nimbi bakomba gukinyira kiumia kiu. Tukaburitana na kuritana gikundi giaku uria matagaria jabangagirwa. Itu gaana bubu na amemba bangi ba gikundi giaku igitene ria mucemanio jwenu.

Itagaria ni gintu kiri:

- Gikwirungamira kiongwa
- Gikwonekana (ngi iri ruthingone yomba gukwona ukithithia!)
- Gikuthimika
- Kirina mwambirio na muthia
- Menyeera ati itagaria riaku rikombika na rikathithika!

Mung'uanano, kuuga 'Nkaanda miti' ti itagaria niuntu giki ni gintu gikiarie. 'Nkarita ngugi mithenya ithatu kiumia giki kuthamiria miti ya kuanda mirongo mugwanja na itano muundene jwetu jumweru' ni itagaria niuntu ni gintu gikwirungamira (kuthamia miti mirongo mugwanja na itano), gikwoneka(antu bagakwona ukithithia uju), gikuthimika(miti mirongo mugwanja na itano, mithenya ithatu) na kirina mwambirio na muthia (nyuma ya ntuku ithatu ukoona maciara).

Riria gikundi giaku gigatirimana kairi, ejana dagika ikumi muthiene jwa mucemanio jwa gikundi gikinini nikenda o muntu wonthe aejana ripoti ya itagaria riawe. O muntu wonthe nampwi:

- (1) **Eere gikundi itagaria riawe ria kiumia kiu kithiri.**
- (2) **Akauga nimbi yongwa athithirie.**
- (3) **Akauga itagaria riawe ria kiumia kiu kithingatite.**

Kethira muntu uju noombanire kiri itagaria riawe, gikundi nikigwiranagirua amwe.

Kethira, ja uria jaria maingi kwithagirwa gukari, mumemba wa gikundi nombire kuthithia gicunci kia uria eendaga, gikundi nikimwikagira inya na gitimuthumbagia. Riria antu boomba kugaana batigukirana kuumbana na kugwa kwao, bagekirwa inyo kuthithia bwega nkuruki o kiumia. Ikira inya amemba ba gikundi giaku kuthuganiria matagaria jaria boomba kujukia. Menyeera ati o itagaria nirikwirungamira, ni rikuthimika na rikoombika!

Gaana na bugwirirue matagaria jaria gikundi kienu gikinini kijukitie.

Matagaria riria bukubangira mantu jaria bukathithia

Njira ikwenda gukara uju no itumirwe kubangira. Aja mung'uanano nijuejani. Riria gikundi giaku gikubangira jaria gikathithia, menyeera ati mibango yenu iri:

Specific- Yakuirungamira yongwa (Gikundi gikinini gietu gia TIST gikaanda miti ngiri cibitari iria iri akui igikinya mweri jwa ikumi na jumwe tariki mirongo ithatu)

Measurable- Ikuthimika (Ing'ana? – Miti ngiri ikaandwa)

Achievable/Realistic- Igakinyirika (Gikundi gikinini gietu gia TIST kiomba kuanda miti ngiri ndene ya biumia bitano- miti igana o Jumanne na Alhamisi, miti ikumi o muntu o ntuku)

Time-bound- Ithimirri mathaa (Burina mwambirio na muthia – tukaanda miti gati gati ka Mweri jwa ikumi tariki ikumi na ithano na mweri jwa ikumi na jumwe tariki mirongo ithatu)

Observable-Ikooneka (Ngi iri ruthingone igatwona tukianda) SMARTO!

Jaja nijo ubati kuthingata kiri kuthithia matagaria ja mubango jwenu nijagutethagia kuuga jaria jongwa bukwenda jairungamirite:

- 1) **Nimbi** – (Kuanda miti ngiri imwe)
- 2) **Nuu** – (Amemba ba gikundi gikinini gija TIST)
- 3) **Rii** – (October 15 – November 30)
- 4) **Naa** – (Cibitari)
- 5) **Atia** – (Tugatirimana o jumanne na jumatano ugoro mwanki jwa ntuku jwathira na kwinja marinya, riu tuande miti)
- 6) **Niki** – (Kuthongomia aria kuthiurukite cibitari, kugia irundu bia aajii na ageni bibingi nkuruki, antu no bakare rungu rwa miti na kirundo gigatuma cibitari igie gapio)

Nandi, gerieni bubangire matagaria jenu ndene ya mucemanio jou jungi jwa gikundi gikinini.

Mazingira Bora



Kikuyu Version

An Environmental, Sustainable
Development and Community Forestry
Program.



A member a Tharu Cluster mbica-ini mari na ageni hamwe na Taylors kuma Harrogate.

Thiini:

TIST kwamukira ageni kuma Tylors of Harrogate, Carbon Neutral Company na KTDA na Ethical Tea Partnership. Page 2

TIST kuiga marihi ma ikundi imwe keheriini. Page 3

TIST: Kuhurana na giko. Page 3

Kuhariria mugunda wa Kilimo Hai. Page 4

Uria ungithondeka thumu wa mahuti. Page 5

Mitaratara miega ya ikundi nini: Makinya ma ciiko na makinya ma mibango. Page 6



TIST kwamukira ageni kuma Tylors of Harrogate, Carbon Neutral Company na KTDA na Ethical Tea Partnership.

Kuri January 12-15 2015 nitwagiiri kamweke kugia na ageni kuma cambuni inya cirri ngumo thi yothe.

Tylors of Harrogate, imwe ya aguri aria anene a majani na kahuwa aria marehete andu mari igweta ta Simon Hotchkin, Samantha Gibson na Sam Ward. Carbon neutral Company ni imwe ya cambuni iria citongoretie hari guteithiriria hari kwagiria riera. Tom Popple na Zabair Zakir nio mamarugamiriire hari iceera riri.

Ethical Tea Partnership (ETP) ndikoragwo iri ruhonge rwa guthondeka faida iria iteithagiriria kugacirthia urimi wa majani na miturire ya arimi a majani na maria marigiciirie kuria majani makuragio. Jane Nyambura niwe warugamiriire ETP.

Kenya Tea Development Agency Ltd. Niruo ruhonge rwa arimi anini a majani ruria rutongoretie. Chege Karoba na Ms. Asinatu nio marugamiriire KTDA.

Gitumi kia iceera kiari kwona wira uria urarutwo ni arimi a TIST na maundu maria mahotete gukinyaniria kwa miaka iria makoretwo kuo, maciaro maria monekire niguo guthondeka ngwataniro gatagati ka TIST na Tylors of Harrogate niguo gutheremia TIST kuria gukuragio majani.

Anduaya nimaceereire ikundi ngurani cia TIST



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.

kundu ngurani. Kirinyaga County, Njukiini Cluster, na ningi magiceerera Kerere Women A, TIST small



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

group 2008KE1191, kuria Elizabeth, uria ni ndungata ya Cluster na murimi wa TIST ari na mugunda wa miti ya irio cia mahiu na ngu. Ningi nimaceereire Kerere Women B TIST small group 2008KE1109 kuria mugunda wa John uri na makiria ma miatu ya njuki 25 na arathondeka uuki makiria ma 500kgs wa kuhuthira mucii na wa kwendia.

Thiini wa Tharaka Nithi County, Muthambi Cluster ageni aitu nimaceereire Ushinde Biashara (2010KE99) kuria Mr. and Mrs Nyaga mari na maugunda wa miti na makahuthira urimi wa Kilimo Hai. O thiini wa County iyo, no thiini wa cluster ya Kianjagi, nimaceereire gikundi kia uhandi wa miti ki Kajiongo 2007KE449. Mr. Kiruja Nkambu mugundai gwake kuria ahandite miti majaniini muhakaini. Miti niigiragiriria njogu kuingira mutituini. Thiini wa Meru County, cluster ya Mworoga , nimaceereire Umoja A TIST 2005KE934. Jennifer Kithure ari na mugunda mwega wa maembe. Ningi o Meru, nimaceereire mugunda wa cluster ya Kithurine kuria mari na mugunda wa miti ya makorobia.

Ageni aitu ningi naimagiire na kahinda ha guthii



mucemanio wa cluster ya Thara. Ningi nimaceereore cukuru thiini wa Meru na Tharaka Nithi.

Ageniaya ningi nimaceereire factory cia majani na imwe cia iria ciaceereirwo ni Makomboki, Imenti na Kiunyu.

Ben Henneke, Jennifer Kithure na Martin Weru nio matongoretie timu ya TIST thiini wa iceera riri na ningi ndungata ingi ciari o kuo.

Thiini wa TIST, nitukene ni iceera riri na niturerigirira kugia na ngwataniro ithuothe tukinyita itemi.



Mrs. Nyaga , Ushinde Biashara , 2010KE99
(in a black T-shirt) shows the visitors her Riparian grove.

TIST kuiga marihi ma ikundi imwe keheriini.

TIST Kenya niiracakaya guthengio kwa marihi ma ikundi imwe na uyu niundu wa mahitia hari kurutwo kwa voucher imwe.

TIST Technical Team, Leadership Council na Cluster Servant nimirageria wothe uria mangihota guthondeka thina uyu. Vouchers iria igokorwo itari

na thina ni cikurihwo naihenya. Iria ci na thina ni cigukanjwo na ciathondekwo cirihwo.

Nituracakaya maundu macio na tukoria arimi matukiriririe. Nitukumumenyithia riria tukuheana voucher ingi na cirumirirwo ni marihi. Nituroria o ringi mutukiriririe.

TIST: Kuhurana na giko.

Giko ni kindu kiumanaga na andu kuruta wira na niindo ta,
ai ma mundu.

- Matigari ma irio.
- Maratathi mahuthiku.
- Cuma nguru na betiri huthiku.

- Guthukio kwa riera, maai na tiir ohamwe na gututhuka kwa mirimu.
- Gethingana kwa njira cia maai.
- Guthukio kwa riera ria kuhuhia.
- Guthukio gwa ciana riria cirathaka.

Nikii kirehaga giki matuuraini?

Giko gitigiithemwo no nikiinghagio ni:

- Njira njuru cia uhuthir wa indo.
- Kwaga njira cia kuhuthira indo ringi.
- Kwaga njira cia gute giko.
- Kwaga umenyo wa mogwati ma giko.

Niatia gikundi kianyu kingika niguo kunyihia thina uyu wa giko?

- Kunyihia njiracia kurehe giko.
- Kuhuthira njira cia riua handu ha betiri.
- Kuhuthira ringi indi.
- Gutua giko thumu wa kuhuthira mugundai.
- Kwenja irima ria kiara.
- Gucina maratathi.

Mathina maria marehagwo ni giko.

- Maratathi ma kihaaro na miciiini.
- Kwaga uthaka miciiini.

Ndugacine betiri tondu nocituthuke, cikie kioro kia irima.



Kuhariria mugunda wa Kilimo Hai.

Thutha wa magetha, ndugacine matigari ma mugunda na noumatige kuu mugundai. O uria kuri na matigari ma magetha maingi noguo mugunda na tiiri cunoraga. Muigana wa matigari ma irio gitinaini kia muti na mimera niuteithagia hari kuiga tiiri uri mugunu na ukagiria muti kana mumera ndukome. Ririkana ati matigari mamagetha ma mugunda nomahuthirwo na guthondeka thumu.

- Geria kwaga kuriithia mahiu mugundai. Riria mahiu mariithio mugundai nikuga gutukorwo na matigari maingi mugundai.
- Marima ma Kilimo Hai magiriirwo nikwenjwo mbere yam bura yurite niwega kwambiriria kumenja o kuri tene.
- Cora kuria ukwenja marima. Korwo na rurigi ruraihu na uikie nyota 70cm. gucia rurigi mugundai. O nyota yagiriirwo nigukorwo haria irima riagiriirwo nigukorwo. Tigirira marima macio mari na utaganu muiganu. Enja marima.
- O muthenya o ucio, enja marima mari na utaganu wa 15cm na uraihu wa 35cm na uriku wa 15cm.
- Riria wehariria kuhanda mimera niwega gwikira tiiri munoru thiini wa irima niguo mimera ikorwo na hinya muiganu. Oya thumu na tiiri mwega na utukanie, nouhuthire ona thumu wa mahuti. Ihuria irima na mutukanio muigana wa 5cm kuma thi. Handu hau nihaguteithia kuiga maai ma mbura.
- Angikorwo ni mbembe urahanda, cirinde maaipi gwa kahinda ka mathaa 6-7 mbere ya

kuhanda. Gwika uu niguteithagia kumera na gutigirira ati mimera miangi niyakura. Riria wahanda mbegu, handa mbegu inya o konaini ya irima na uhumbire na tiiri 2.5cm tiiri munoru na thumu na utukanie. Thutha wa uu, tiiri thiini wa irima wagiriirwo 2.5cm nathi wa mugunda. Ndwegiriirwo nigukorwo ukirite hau. Mahiga ma tiiri magiriirwo nikuragwo niguo mbegu na tiiri ciguane.

- Angikorwo urahanda muhia, handa mbegu 5-6 o irima thutha wa mbura kuura. Humbira mbegu na 2.5cm cia tiiri na mutukanio wa thumu.
- Urima riria riatigara kuma tiiriini niriteithagiriria kuiga maai ma mbura tondu ngiaga gutigia uguo maai mangiterera mugundai nginya mathii ruui.
- Rimira irimaini maita maingi na o mwaka niukwona riia riguthii rithirite.
- Ndukanyihie witikio,! Kwenja marima ihinda ta riri nikuuga mbura ikura igakora marima mari ho na ndukamenja mwaka uyu ungi.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



Uria ungithondea thumu wa mahuti.

Thumu wa mahuti ni fertilizer ya kiimerera, iria ikuhotithia mimera yaku gukura. Ninjega gukira fertilizer ya guthondekwo na chemical tondu ndithukagia mimera kana maria maturigiciirie. Kuri njira nyingi cia cia guthindeka thumu na ino ni imwe ya njira icio.

Uthondeki wa thumu

1. Hariria handu ha 4m X 4m niguo wenje irima.
2. Theria handu hau.
3. Enja irima ri warii wa 3 - 4m na uriku wa 1.5m.
4. Ungania matigari mothe uri namo (mahuti na mabebe ma mbembe, muhia na mboco) na umatinangie.
5. Mekire irimaini na utigie handu ha 0.5m.
6. Ikira 5l cia muhu.
7. Ikira mai ma ngombe ta 30cm.
8. Ikira mahuti mangi 0.5m.
9. Ikira muhu ungi 5l.

10. Ikira mahuti mangi nginya irima riihure.
11. Ikira tiiri na uihurie irima biu.
12. Riria uraihuria tiiri, ikira muti muraihu gatagati nginya ukinye thi.
13. Tiga irima riu gwa kahinda ka 90days (3months).
14. Gwa kahinda gaka, huthira maai mari na giko guitiriria irimaini. Kwa muhiano thutha wa guthambia indo kana kuhura nguo, ikira maaai macio irimaini riu angikorwo maai matiri na chemical cingithukia. Angikorwo uri na mahiu nouhuthire mathugumo mamo.
15. Geria guitiriria irima riu maai na njira ino o muthenya angikorwo maai mari kuo.
16. Thutha wa thiku 90, thumu niugukorwo uri muhiu. Huthira muti uria wekirire gatagatita thermometer ya guthima urugari. Riria thumu uri muhiu wagiriirwo nigukorwo uri muhiu na nowone ndogo ikiuma mutiini ucio thutha wa kuuruta.

Mahuthiro ma thumu.

Riria wenja marima ma kuhanda mbembe, muhia na mimera ingi, ikira ngundi ya thumu irimaini.



Mitaratara miega ya ikundi nini: Makinya ma ciiko na makinya ma mibango.

kundi cia TIST niciikaga maundu maingi makwoneka:kuhanda miti na kwagirithia urimi. Riria kuri na wira muingi wa kurutwo, niwega guthondeka makinya ma ciiko. O memba wa gikundi niagiriirwo nikwira aria angi uria magiriirwo ni gwika kiumia kiu. Nituguguthomithia ohamwe na gikundi kianyu uria muguthondeka mubango wa ciiko. Menyithia amemba aria angi uhoro uyu mucemanio-ini.

Mubango uyu ni kindu ta giki:

- Maundu ma bata.
- Maundu maria maroneka
- Maundu maria mangithimika.
- Maundu maria mari na kiambiriria na muthia.
- Tigirira makinya maku nomahoteke.

Kwa muhiano, kuga niukuhanda muti ti giiko. Kuga (giroko ithatu niguhanda miti 75 mugundaini) ni giiko tondu undu ucio uri na bata na niurauga kaundu(kuhanda miti 75), niuroneka (andu nimakuona) nouthimike (miti 75, irooko 3) na uri na kiambiriria na muthia (thutha wa matuku 3 niukuona maciaro).

Gikundi giaku giacemania ringi, itikiria ndagika 10 mucemanio ugithira niguo o mundu aheane mubango wake wa ciiko. Omundu naihehnya:

- (1) **Ira gikundi mubango wao wa kiumia kihituku.**
- (2) **Hutia maundu maria mekite.**
- (3) **Uga mibango iria igukorwo kuo kiumia giukite.**

Murimi angihota gukinyaniria mubango wa ciiko aria angi nimagiriirwo ni kumukenerera.

Na angikorwo, ta uria maita maingi gukoagwo andu makiambiriria ati mukinyaniirie ciiko imwe, gikundi nikiagiriirwo gwikira murimi hinya na matikamurute mahitia. Riria andu mari na kamweke ga kwiyaria na kuga maria mahotete na

maria matanahota nimahotaga kugia na hinya wa guthii na mbere a kiumia. Hinyiriria arimi a gikundi giaku makorwo na mubango wa ciiko unghoteteka. Tigirira ati mubango ucio niuraririria kindu! Araniriria na muonanie ciiko iria muhotete.

Makinya ma mbango wa ciiko.

Njira ihanaine no ihuthirwo riria urehariria. Haha hari na cionereria.

Kwaririria kindu (gikundi gitu kia TIST nigikuanda miti 1000 thibitari-ini tugikinyiria November 30)
mangithimika (Miti iigana? Miti 1000 niyo ikuhandwo)

Ingihoteteka (Gikundi gitu gia TIST nokihande miti 1000 hari ciumia 5 – miti 100 o wakeri na wakana, miti 10 o mundu o muthenya.)

Mahinda (turi na kiambiriria na muthianitukuhanda miti gatagati ka October 15 – November 30)

Ingioneka (nginya ngi niirakwona ukihanda miti) Smarto.

Giki nikigeranio giakuonania kana niurarumirira mubango waku:

1. **Kii?** (Kuhanda miti 1000)
2. **Uu?** (Riitwa ria memba wa TIST)
3. **O ri?** (October 15 – November 30)
4. **O ku?** (Thibiari-ini)
5. **Atia** (tucemanagia o wa-keri na wa-kana miaraho thutha wa kuruta wira na tukenja marima na tukahanda miti)
6. **Niki?** (niguo kwagirithia thibitari niguo kuhe arwaru handu ha kiiruru)

Niwega kugeria maundu macio mucemanio-ini wa ikundi cianyu.

Mazingira Bora



Kiswahili Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Wanachama wa Tharu Clusters wakiwa kwa picha ya kikundi pamoja na wao ni Taylors wa Harrogate.

Ndani ya gazetti:

TIST yapata wageni kutoka Taylors of Harrogate, Carbon Neutral Company, KTDA na Ethical Tea Partnership. Uk. 2

TIST yahuzunika kuachisha malipo ya baadhi ya vikundi vidogo kwa muda mfupi. Uk. 3

Usimamizi wa taka. Uk. 3

Kutayarisha mashamba ya Kilimo Hai. Uk. 4

Kutengeneza mbolea ya mabaki ya mimea- Mbolea ya kiasili. Uk. 5

Mienendo bora zaidi ya vikundi vidogo ya kufanya mambo tofauti: Hatua za kuchukua na kupangia hatua. Uk. 6



TIST yapata wageni kutoka Taylors of Harrogate, Carbon Neutral Company, KTDA na Ethical Tea Partnership.

Januari mwaka 2015 kati ya tarehe kumi na mbili kufika kumi na tano, TIST ilibahatika kupata wageni kutoka kampuni nne zinazojulikana ulimwengu mzima:

Taylors of Harrogate, mnunuzi mkubwa wa chai na kahawa, iliyowakilishwa na memba wao Simon Hotchkin, Samantha Gibson, na Sam Ward.

Carbon Neutral Company ni kampuni inayozipa biashara suluhisho kwa kupunguza athari kwa mazingira. Waliwakilishwa na Tom Popple na Zubair Zakir katika matembezi haya.

The Ethical Tea Partnership (ETP) ni shirika lisilo la faida linalofanya kazi kuongeza uzalishaji wa majani chai kwa muda mrefu, kuboresha maisha ya wanaofanya kazi ya majani chai na mazingira ya maeneo yanayopandwa majani chai. Jane Nyambura aliwakilisha shirika hili.

Kenya Tea Development Agency Ltd. ni kampuni ya kuwasimamia wakulima wadogo wa majani chai inayoongoza katika nchi ya Kenya. Chege Karoba na Ms. Asinatu waliwakilisha kampuni hii.

Lengo la matembezi haya lilikuwa kuona kazi iliyofanyika na vikundi vidogo vya TIST kwa miaka michache iliyopita na mafanikio yao wakiwa na lengo la kuanzisha ushirika kati ya TIST na Taylors of Harrogate ili kupanua mradi wa TIST katika maeneo yanayokuza majani chai.

Kundi hili lilitembelea vikundi vya TIST kadha katika lokesheni mbalimbali. Katika jimbo la Kirinyaga cluster ya Njukiini, walitembelea Kerere



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.

Women A, Kikundi kidogo cha TIST nambari 2008KE1191, ambapo Elizabeth, mtumishi katika cluster na mkulima katika TIST ana shamba la miti



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

iliyopandwa ya mifugo na kuni. Pia walitembelea Kerere Women B, Kikundi kidogo cha TIST nambari 2008KE1109 ambapo katika shamba la miti ya TIST la John, kuna zaidi ya mizinga ishirini na tano inayozalisha zaidi ya kilo mia tano za asali inayotumika nyumbani na pia kuuzwa.

Katika eneo la Tharaka, jimbo la Nithi, cluster ya Muthambi, wageni wetu walitembelea kikundi kidogo cha Ushinde Biashara (2010KE99) ambapo Bwana na Bibi Nyaga wameanzisha shamba la kulinda maeneo yanayopakana na mito na pia la kilimo hai. Katika jimbo hilo hilo, lakini katika cluster ya Kianjagi, walitembelea Kikundi cha Kajiongo Tree Planting Group 2007KE449. Shamba la miti Bwana Kiruja Nkambu lina miti iliyopandwa ikifuata mpaka wa shamba lake la majani chai na msitu wa serikali. Miti hufukuza ndovu na kuwafanya wasiingiekatiika shamba hilo.

Katika jimbo la meru, cluster ya Mworoga, walitembelea Umoja A TIST 2005KE934. Jeniffer Kithure ana shamba la miembe linalofanikiwa sana. Pia katika jimbo hilo la Meru, walitembelea shamba la miti la Wilson katika cluster ya Kithurine ambapo ana shamba nzuri sana la avocado na la majani chai. Wageni wetu pia walipata fursa ya kuhudhuria mukutano wa cluster ya Thara. Pia walitembelea



baadhi ya shule katika majimbo ya Meru na Tharaka-Nithi.

Kundi hilo pia lilitembelea viwanda vya majani chao. Viwanda walivyotembelea ni kama Makombozi, Imenti na Kionyo.

Ben Henneke, Jeniffer Kithure na Martin Weru ndio waliokuwa wawakilishi wa TIST katika matembezi haya huku watumishi wengine wa TIST wakihusika pia.

Katika TIST, tuna shukrani sana kwa matembezi haya na tunangoja sana kujenga urafiki wa kikazi na wote wanaohusika.



Mrs. Nyaga , Ushinde Biashara , 2010KE99
(in a black T-shirt) shows the visitors her Riparian grove.

TIST yahuzunika kuachisha malipo ya baadhi ya vikundi vidogo kwa muda mfupi.

TIST katika Kenya inahuzunika kuachisha malipo ya baadhi ya vikundi vidogo. Jambo hili ni kutokana na kuonekana kwa makosa katika utengenezaji wa vocha.

Timu ya kutengeneza vyombo vya teknolojia, chama cha uongozi na watumishi katika cluster wanafanya kazi kwa bidii ili kuangalia vocha zote zilizotolewa. Vocha zitakazopatikana kuwa

sahihi zitatumika kulipa haraka iwezekanavyo. Zile zitakazokuwa na makosa zitaachishwa na zingine kutengenezwa.

Tunahuzunishwa sana na shida zozote zilizosababishwa na haya kwa memba. Tutawajulisha tutakapokuwa tayari kupeana vocha na kufanya malipo. Tunawaauliza kuwa wavumilivu tunapotatua shida hii.

Usimamizi wa taka.

Taka ni kitu chochote kinachotokana na mazi za binadamu na yaweza kukosa utumizi wa mara moja, na ni pamoja na:

- Choo cha binadamu
- Uchafu wa nyumba kama mabaki ya chakula.
- Makaratas yasiyotumika
- Mifuko ya mpira
- Chuma, betri zimeisha (seli kavu)
- Maji taka sludge nk

Ni nini husababisha shida za taka katika eneo lako?

Taka haiwezi kuepukika lakini yafanya kuwa shida zaidi na:

- Matumizi mabaya ya rasilimali
- Ukosefu wa njia za kutumia tena
- Ukosefu wa mahali pa kutupa taka (mashimo ya taka, vyoo vya kuchimba)
- Ukosefu wa ujuzi wa hatari za usimamizi mbaya wa taka

Usimamizi mbaya wa taka husababisha

- Uchafuzi wa mashamba na viwanja, kupoteza urembo wa eneo hilo

- Uchafuzi wa maji, hewa na udongo
- Kuenea kwa magonjwa
- Kufungana kwa paipu za kuondoa maji taka
- Sumu na moshi mbaya kutokana na betri nzee

Watoto na wanyama waweza kupata sumu au kuumizwa wakiokota na kucheza na mawe mazee na taka nyinginezo.

Kikundi kidogo chako chawenza kufanya nini kutatua shida hii?

- Kupunguza kutengeneza kwa taka.
- Fikiria kutumia vifaa vinavyotumia nishati kutokana na jua badala ya nishati inayotokana na betri inapowezekana.
- Kutumia tena – tumia vitu tena inapowezekana (mfano, mifuko ya mpira)
- Kutengeneza mbolea – weka uchafu unaooza (mabaki ya chakula cha binadamu na cha mifugo) kama mbolea ya kutumia katika kulima.
- Chimba shimo la taka kiwanjani mwako.
- Kumbuka kuchoma makaratas na kadi pekee. Usichome betri kwani yaweza kulipuka. Yaweke katika vyoo vya shimo.



Kutayarisha mashamba ya Kilimo Hai.

Unapotayarisha mashimo ya kilimo hai baada ya kuvuna usiyachome mabaki ya mimea, yaache chini. Unapoache mabaki zaidi chini ndivyo unavyorutubisha udongo na kuhufanya kuwa wenyе rutuba. Mabaki haya hitwa ‘matandazo’. Mabaki ya mimea yanaweza pia kutengeneza mbolea.

- Jaribu kuweka mifugo mbali kwani mifugo ikila itaacha mabaki machache yakifunika udongo.
- Mashimo ya kilimo hai yafaa kuchimbwa kabla ya mvua kuja na ni muhimu kuanza kuyachimba mapema. Kuchimba wakati wa kiangazi ni ngumu lakini kuna thamani yake! Inamaanisha unaweza kupanda mapema mara moja mvua unapokuja.
- Tia alama utakapochimba mashimo yako, halafu utafute kamba ndefu na ufungie vifuniko vya chupa vikitengana na centimita sabini. Nyoosha kamba kuvuka shamba lako ili kila kifuniko kiwe kati kati ya shimo ili kuhakikisha kuwa mashimo yana nafasi inayofaa kati yao.
- Tumia jembe kutia alama ya kuonyesha mistari ya mashimo ili kila mstari uwe centimita tisini kutoka kwa huo mwингine. Siku hiyo hiyo unapotia alama, chimba mashimo yaliyo na umbo la mviringo. Yafaa kuwa na upana wa centimita kumi na tano, urefu wa centimita thelathini na tano na centimita kumi na tano kwenda chini. Mashimo marefu huvunja udongo mgumu uliopo chini katika udongo mwингi, na hivyo kuruhusu maji kuingia vizuri zaidi na mizizi kukua vizuri.
- Unapokuwa tayari kupanda mbegu, ni muhimu kuweka udongo wenyе rutuba shimonii ili kusaidia kutia mimea nguvu. Changanya mbolea na udongo mzuri wa juu, au utumie mbolea ya mimea. Ikiwa una saruji na mbolea ya viwanda, iweke shimonii na ujaze kila shimo na mchanganyiko huo hadi centimita tano chini ya ardhi ya kawaida. Ikiwa unapanda mahindi, lowesha mbegu kwa maji masaa sita kufika saba

kabla ya kupanda. Jambo hili hufanya mbegu kuota haraka na kuweza kuishi. Unapopanda mbegu, panda mbegu nne udongoni kuvuka shimo na ufunike na mchanganyiko wa udongo mnono na mbolea sentimita mbili na nusu. Udongo katika shimo utakuwa sentimita mbili na nusu chini ya ardhi ya kawaida. Mavimbe makubwa magumu ya udongo yanafaa kuvunjwa ili udongo ufikie mbegu vizuri.

- Iwapo unapanda mtama, panda mbegu tano au sita katika kila mwisho wa shimo baada ya mvua nzuri halafu ufunikie mbegu na centimita mbili na nusu za udongo wenyе rutuba uliochanganyika mbolea. Nafasi inayoachwa juu husaidia maji kuingia kwa mimea wakati mvua inapofika. Bila nafasi hii maji ya mvua yatabebwa juu ya ardhi na kubeba virutubisho vingi.
- Chimba karibu na mashimo kila baada ya muda. Kila mwaka kutakuwa na magugu machache na machache zaidi.
- Usife moyo! Kuchimba mashimo sasa kutamaanisha yatakuwa tayari mwaka huu na hutachimba tena mwaka ujao. Kama watu ni wapya kwa mbinu hii, watie moyo kujaribu eneo ndogo la kilimo hai mwaka ujao halafu walinganishe na mapato kutokana na walipotumia ukulima wa kawaida ili kuona kama kuna tofauti.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



Kutengeneza mbolea ya mabaki ya mimea- Mbolea ya kiasili.

Mbolea ya mimea ni mbolea ya kiasili inayosaidia mimea yako kukua. Ni bora kuliko mbolea ya viwanda kwa sababu ni ya kiasili, haina malipo na haitaharibu mimea na mazingira kama mbolea zingine za viwanda zinavyofanya. Kuna njia nyingi za kutengeneza mbolea ya mimea lakini njia ifuatayo imesaidia sana katika maeneo mengine. Uliza majirani wako katika cluster yako njia iliyofanya kazi vizuri kwao.

Kutengeza mbolea ya mimea

1. Chagua eneo la kuweka shimo lako la taka urefu na upana wa mita nne.
2. Fagia eneo hilo.
3. Chimba shimo la mduara lenye upana wa mita tatu au nne na mita moja unusu kushuka.
4. Kusanya mabaki yote ya mimea uliyonayo (kwa mfano majani na mashina ya mahindi, mtama na maharagwe) na ukate vipande vidogo.
5. Weka mabaki haya shimoni hadi kina cha mita nusu.
6. Ongeza lita tano za majivu
7. Weka centimita thelathini (ama iliyopo) ya kinyesi (kwa mfano kinyesi cha nguruwe, ng'ombe, mbuzi au kuku).
8. Weka safu nyingine ya mabaki ya mimea na mashina (nusu mita).
9. Ongeza lita tano za kijivu.
10. Rudia kuongeza majani na mashina hadi shimo likaribie kujaa.
11. Hatimaye ongeza safu ya udongo hadi shimo lijae.
12. Ukiwa unajaza shimo na udongo, weka kijiti kirefu kati kati ya shimo hadi kifike chini.
13. Wacha shimo likae hivyo siku tisini (miezi tatu)
14. Katika kipindi hiki tumia maji yako machafu kuweka shimoni hili la taka. Kwa mfano. ukishaosha nyumba au nguo, yamwage maji uliyotumia shimoni. Kama una mifugo, waweza pia kuongeza mkojo wa wanyama shimoni. Mkojo huongeza naitorjeni katika mbolea.
15. Jaribu kuweka maji shimoni kwa njia hii kila siku au kila unapopata maji.
16. Baada ya siku tisini mbolea itakuwa tayari. Tumia kijiti kama kipima joto - mbolea ikiwa tayari lazima iwe na joto jingi na waweza ata kuona moshi wa joto ukitoka kijitini baada ya kutoa.

Matumizi ya mbolea

Ukishachimba mashimo ya kupanda mahindi, mtama au mmea mwingineo, ongeza mbolea ikiwa imejaa kwa mkono wako kwa kila shimo. Ngoja kuona matokeo!



Mienendo bora zaidi ya vikundi vidogo ya kufanya mambo tofauti: Hatua za kuchukua na kupangia hatua.

Vikundi vingi vya TIST hufanya kazi nyingi zinazoonekana: kupanda miti na kuboresha mbinu za ukulima. Wakati kuna kazi nyingi inayohitaji kufanyika, ni vizuri kufanya mpango wa hatua zitakazochukuliwa. Kila mwanakikundi afaa kuambia kikundi ni kitu gani wataweza kufanya katika wiki hiyo. Tutawafunza nyinyi na kikundi chenu jinsi ya kufanya mpango wa hatua zitakachochukulia kufanya kazi hiyo. Tafadhalii gawana haya na wanakikundi wengine wakati wa mkutano.

Hatua ya Utekelezaji ni iliyo:

- Maalum.
- Inayoonekana (Nzi iliyo ukutani yaweza kukuona ukifanya!)
- Inayopimika.
- Iliyo na mwanzo na mwisho.
- Hakikisha hatua yako ya utekelezaji ni itakayowezekana na unayoweza kufikia!

Kwa mfano, kusema ‘Nitapanda miti’ si hatua ya Utekelezaji kwa sababu ni taarifa ya ujumla. ‘Nitafanya kazi asubuhi tatu wiki hii kupandikiza miche sabini na tano shambani letu jipya’ ni hatua ya utekelezaji kwa sababu ni **iliyo maalum** (kupandikiza miche sabini na tano), **inayoonekana** (watu waweza kukuona ukifanya), **inayopimika** (miche sabini na tano, asubuhi tatu) na **ina mwanzo na mwisho** (mwishoni mwa siku tatu utaona matokeo).

Kikundi chako kitakapokutana tena, ruhusu dakika tano mwishoni mwa mkutano ili kila mtu aripoti kuhusu hatua yake mwenyewe ya utkelezaji. Kila mtu haraka:

- (1) **Aambie kikundi hatua yake ya utekelezaji ya wiki iliyopita.**
- (2) **Aseme ni nini chenyewe alichofanya.**
- (3) **Aseme hatua yake ya utekelezaji ya wiki inayofuata.**

Kama huyo mtu alifanikiwa katika hatua yake ya utekelezaji, kikundi kinashereheke fanikio hilo. Ikiwa, kama mara mengi inavyotokea, mwanakikundi ameweza kufanikiwa kufikia kiwango fulani cha lengo lake, kikundi kimtie nguvu na kisimkosoe au kumtia lawama. Watu wanapoweza kugawana bila hofu kuhusu mafanikio na kutofaulu kwao, watahimizwa kufanya vyema zaidi wiki inayofutilia. Himiza wana kikundi chako kufikiria hatua za utekelezaji zinazowezekana. Hakikisha kila mojawapo ni maalum, inapimika na inawezekana! Gawana na

msherehekee hatua za utekelezaji kikundi chako kilichotimiza.

Hatua za utekelezaji unapofanya hatua za mipango

Njia sawa yaweza kutumiwa unapopangia kitu. Hapa ni mfano katika mabano. Wakati kikundi chako kinapopanga kitakavyofanya, hakikisha mipango yenu ni:

Specific- Maalum (Kikundi chetu cha TIST kitapanda miti elfu moja katika hospitali mtaani kabla ya tarehe thelathini, Novembra)

Measurable- Inapimika (Ngapi? - Miti elfu moja itapandwa)

Achievable/Realistic – Inayoweza kufikiwa (Kikundi chetu cha TIST chaweza kupanda miti elfu moja katika muda wa wiki tano- miti mia moja kila jumanne na alhamisi, miti kumi kwa kila mmoja kila kila siku)

Time-bound- Inapimiwa muda (Ina mwanzo na mwisho- tutapanda miti kati ya tarehe kumi na tano, Octoba hadi tarehe thelathini Novembra)

Observable- Inaonekana (Nzi ukutani yaweza kukuona tukipanda miti.)

SMARTO!

Huu ni mwongozo na kipimo cha hatua zako za utekelezaji na unakusaidia kuwa maalum:

- 1) **Nini** – (Kupanda miti elfu moja)
- 2) **Nani** – (Wana Kikundi kidogo cha TIST kwa jina)
- 3) **Lini** – (Octoba 15 – Novembra 30)
- 4) **Wapi** – (Hospitalini)
- 5) **Aje** – (Tutakutana kila Jumanne na Alhamisi alasiri baada ya joto la siku na kuchimba mashimo, halafu tupande miti)
- 6) **Kwa nini** – (Kuboresha eneo linalozunguka hospitali, tuwe na kivuli zaidi kwa wagonjwa na wageni, watu waweza kukaa chini ya miti na kivuli kitafanya hospitali iwe baridi zaidi.)

Sasa, jaribu kujizoesha kufanya hatua za mipango katika mkutano wako wa kikundi kidogo ujao.

Mazingira Bora



Kikamba Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Ene ma Ngwatanio ya Tharu, visani uu nimakuniwe mena aeni ma TIST mevo, Taylors of Harrogate.

Thiini:

TIST Kukwata aeni kuma Taylors of Harrogate, Carbon Neutral Company, KTDA na Ethica Tea Partnership. Page 2

TIST kwamba kuungamia kwa kavinda ndivi imwe sya tukundi tunini. Page 3

TIST: Kusuvia Kiko. Page 3

Nima ya kusuvia na undu wa kuseuvya miunda yitu. Page 4

Undu wa kuseuvya vuu wa yiima. Page 5

Mawiko maseo ma tukundi tunini, matambya maosa na walany'o wa meko/wiko. Page 6



TIST Kukwata aeni kuma Taylors of Harrogate, Carbon Neutral Company, KTDA na Ethica Tea Partnership.

Kwi mwai wa mbee matuku 12-15, 2015 TIST niyee thiiwe na ivuso ya kukwata aeni ma ndaia kuma kambunini 4 sya vata ila ni:- Taylors of Harrogate, ila nikambuni ya kuua mainani na kaawa vala matumite Simon Hotchkin, Samantha Gibson na Sam Ward.

Kambuni ya Carbon Neutrol Company ila itongoetye nthi yonthe kwa kunengane usungio iulu wa undu wa kuola uthokoany'a wa mawithyululuko ni ya tumite aa:- Tom Popple na Zubair Zakir.

Nayo kambuni ya Ethica Tea Partnership (ETP) ila nikambuni itaseuvasya vaita ila ithukumaa yi muamba na aimi ma maiani kuikiithya nimee thiwa matonya kwiyikalya na kwailya mathayu moo na kusuvia mawithyululuko matumite Jane Nyambura. Nayo Kenya Tea Development Agency Ltd. Ila nikambuni iungamie uthoosya wa maiani kenya kwaaimi anini ni matumike Chege Kabora na Ms. Asinatu kuma KTDA.

Kitumi kya aeni aa ki kwona mawia ma tukundi wa TIST na undu twithiitwe tuyika myaka mithelu na mivango ila mavikiite nikana mekie muvango wa umakwatania na Taylor of Harrogate nikana methiwe matonya uthathasya tist kwa isio ila ivandawa maiani.

Thini wa Kirinyaga County, Ngwatanion ya



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.

Njukiini ni mathokie thini wa kakundi ketawa Kerere Women A, TIST GROUP 2008KE1191, vala Elizabeth umwe wa athukumi ma TIST wina kamutitu ka miti



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

ya liu wa indo na ngu. Ingi nimatembei kakundini ka Kerere Women B, TIST Group 2008KE1109 vala kamutitu ka muti ka John vala wina myatu ya nzuki mbee wa 25 ila yumasya uki wa suki kilo mbee wa 500 kwoondu wa utumiii wa musyi na kuta.

Nthini wa Tharaka, Nithi County, Ngwatanio ya Muthambi niyo yathokeiwe ni aeni aa na mavika nthini wa kikundi kya Ushinde Biashara (2010KE99) kwa Mr na Mrs. Nyaga vala meethiie mavandite miti ya kiene na makeka nima ya kusuvia(CF) kasioni kamwe. Ingi nthini wa county isu nimanavikie ngwatanioni ya Kianagi vala mathokeie Kajiongo Tree Planting Group 2007KE449. Mr. Kiruja Nkambu ula wina miti ya TIST ila uvandite ta muvaka utee wa muunda wake wa mainani muvakani wake na Mutitu mutangase vala miti ino imuteetheesye klui nzou.

Nthini wa Meru County, Ngwatanio ya Mworoga nimavikie Umoja A Tist 2005KE934 kwa Jeniffer Kithure vala wina kamutitu ka miembe. Ingi okuu Meru nimavikie kwa Wilson vala wina kamutitu ka ivakato na maiani ula ni umwe wa ene ma ngwatanio ya Kithurine.



Aeni maitu nimakwatie ivuso ya kutembea nthini wa umbano wa ngwatanio ya Thara. Ingi nimeethiiwe matonya utembea masukuluni me Meru na Tharaka-Nithi Counties. Ingi nimatembeie ithiini yuve sya maiani. imwe kati wa ila sya kwatia aeni aa nita Makomboki, Imenti na Kionyo Tea Factories.

Ben Henneke, Jeniffer Kithure na Martin Weru nimo manyuvitwe ni tist kutongoesya aeni aa vala athukumi ala angi ma tist onamo nimatetheesye. Nthini wa Tist twina muvea kwa ueni uu na tiikwatya withiwa na uusiano wa kiuthukumi na kila umwe waivo.



Mrs. Nyaga , Ushinde Biashara , 2010KE99 (in a black T-shirt) shows the visitors her Riparian grove.

TIST kwamba kuungamia kwa kavinda ndivi imwe sya tukundi tunini.

TIST Kenya nikwilila na kwitya uekeo nundu wa kwamba kuungamia kwa kavinda ndivi sya tukundi tumwe. Kii nikumana na kwithiwa mathangu ma ndivi amwe manoonekie maseuvitwe mena mavityo.

Kikundi kya timu ya TIST, Utongoi wa kanzu ya TIST na athukumi ma ngwatanio sya TIST kwa

vamwe nimaendee kuthukuma kuikiithya nimasisya mathangu othe ma ndivi ala manengane.

Na mathangu (Voucher) ila syubna makosa iseuvya ingi nesa na mituki undu vatonyeka. Mathangu ala mekwithiwa na makosa ni mekwikw'a itheka na angi ala matena makosa kunenganwe na mituki undu vatonyeka.

TIST: Kusuvia Kiko.

Kiko ni kindu kyothe kithiawa kitena vaita kyumanaa na utumii wa syindu wa mundu ila ni ta:-

- Mai ma mundu/ Maumao
- Matiolyo ma liu, kiko kuma miioni
- Mathangu matenawia
- Syuma ila nguu na mavia ma tosi
- Mathangu ma nailoni
- Kiko kuma kambunini

kuungamiwa undu vaile

- Kiko na mavuti kila vandu
- Kukosa wanake wa vandu
- Kuthokoania kiw'u, muthanga na kuete ma uwau
- Vinga nzia sya kiw'u
- Kumya miuke yi sumu ta mavia ma tosi makua
- Syana na indu ni ilikwa ni sumu uyu ta syana iithauka na mavia ma tosi makuu na kiko kingi

Ni Kyau kietae thina wa mavuti kisioni kyenyu?

Kiko na mavuti no muvaka indi utwikaa nthina ethiwa

- Ethiwa syindu iiutumiwa nesa
- Kukosa nzia sya usyoka utumia kiko/takataka usu
- Kukosa kundu kwa kwikya kiko ta Syoo namaima ma kiko
- Kukosa umanyi iulu wa muisyo wa kiko

Thina ula uetawe ni kuko kyalea

Nata tutonya kwika ta kakundi kanini kutetheesya nthina uyu?

- Kuola nzia ila ietae kiko
- No tutumie vinya wa sua vandu va mavia ma tosi
- Kutumia ingi kila kitumiika ta mathangu ma nailoni ma ukua syindu
- Kuseuvya vuu wa yiima wa kutumika mundani.
- Inza yiima musyi kwaku ya kiko
- Lilkana kuvivya mathangu ala mate ma niloni.
- Ndukavivye mavia ma tosi maikavulike na kuuvivya indi ikia kyooni.



Nima ya kusuvia na undu wa kuseuvya miunda yitu.

tina wa kuketha, ndukavivye matialyo kana makusa ala matiala muundani indi ekana namo vau. Oundu makusa matitwe maingi now'o useo nundu now'o manoasya muunda na kuuvwika. Ukavwika muti ungu na makusa kana matialyo ma kila uuketha ni kutetheesya kwikalya kimeu na uthithu ungu wa muti usu na uyithia ndwi uma. Lilikana matialyo aya na makusa nimatumikaa kuseuvya vuu wa yiima.

- Tata kuela kuothya kisioni kiu nundu waithya indo niuya matilyo asu na kutia muthanga utemuvwike.
- Nima ya kusuvia maima menzawa mbée wa mbua kwambii. Kwoou ni useo kwambii kumesa tene.
- Ikkia uvano kula ukwisa maima. osa ikanda iasa na uyoveea tuvululu twina utaaniu wa 70cm. tambuukya ikanda yaku kisioni kila ukwenda kwisa maima na utaanisya maima maku utaaniu wa tuvululu tuu kii kitetheeasya kuikiithya kana vena utaaniu mwianiu. Ingi ikiithya kila laini wa maima kuthi ula ungi vena utaaniu wa 90cm. Thima maima ala muona utonya kwisa makathela muthenya usu.
- Muthenya ula weekia uvano wa vala ukwisa maima inza muthenya usu maima mena uthathau wa 15cm, uliku wa 15cm na uasa wa 35cm.
- Weethiwa wi tayali kuvanda ni useo wngeli vuu maimani aya kutetheesya mimea kwithiwa yina vinya. Osa vuu uvulany'e na muthanga wa yiulu na uyikia yila yiimani ususye kilio kya 5cm. mwanya ula watiala witetheesya ukwatya kiw'u kya mbua.

- Ethiwa wi vanda mbemba inda mbeu kiw'uni kwa masaa 6-7 mbee wa kuvanda. Kii kitetheeasya mbeu kumea mituki. Yila uuvanda mbanda ngii 4 yiimani yimwe iatianie. Vwika na muthaka wa 2.5cm ula muthanga uvulanitye na vuu. Itina wa uu vaile ithiwa vatiele 2.5cm kya yiima yite kindu. Muthanga ndwaile usua kuvituka vaa. Ethiwa muthanga wina mavali niwaile ithiwa umatuangite nikana muthanga uvikie mbeu na kumivwika nesa.

- Ethiwa wivanda mvya vanda ngii 5-6 kila yiimani na uvwika na muthanga wina vuu utie 2.5cm uasa wa yiima utemuvwike.
- Uasa uu wa 2.5cm watiala utetheeeasya kiw'u kutuumana vandu va usemba kiendete na kwoou mumea ula vivo ukwata kiw'u nesa na yisiia kukuwa kwa muthanga ula munou.
- Ima uthyululukite yiima yii kila ivinda withie kila mwaka vakeethiawa yiia inini ya kuima.
- Ndukatule ngoo! inza maima yu nikana mwaka uyu withiwe namo na ndukasyoka kwisa ingi mwaka wukite.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



Undu wa kuseuvya vuu wa yiima.

Vuu wa yiima nivuu ute sumu nundu niwa kuma mimeani na nutetheeasya mimea kwika nesa na nwanangaa mawithyululuko. Ve nzia mbingi sya kuu seuvya indi vaa twi unenga nzia imwe ila yithiitwe itumika na twonete itumika isioni imwe:-

Undu wa kuuseuvya.

- 1) Kusakua kisio kya matambya 4×4 m na kwisa yiima
 - 2) Enga kisio
 - 3) Inza yiima uthathau wa 3-4m na l. 5uliku
 - 4) Kolany'a matialyo ma mavemba, muvya, mavoso na utilanga tulungu tuniini
 - 5) Ikia yiimani itumie uliku wa 0.5m
 - 6) Ikia muu wa lita itano
 - 7) Ongela kyaa kya indo ethiwa kivo kya uliku wa 30cm
 - 8) Ongela matu na makusa uliku ungi wa 0.5m
 - 9) Ikia muu ungi wa lita itano
 - 10) Ongela matu na makusa withie yiima notayausua
 - 11) Ususya yiima na muthanga
 - 12) Uyususya yiima ikia muti muasa kati withie utinite yiimani ungu.
 - 13) Eka yiima yiu yiyiue vandu va myai itatu kana mithenya miongo kenda
 - 14) Ivindani yii yonthe osaa kiw'u kila kina kiko uketa vo ngelekany'o kila wavua nakyo kana kuthambya miio. Ethiwa wina maumao ma indo no wite vo.
 - 15) Tata navinya ungithye yima yii kila muthenya kwa nzia ila utonya.
 - 16) Itina wa mithenya miongo keenda vuu wiithiwa wi tayali. Tumia muti uyu wikati ta kithimi kya uvuyvu. Vuu wasuva ukeethiwa wimuvyu na nowone muti uuyu waumya uitoa.
- Utumii wa vuu wa yiima
Whamina kwisa maima ma kuvanda mbemba kana muvya kana okilawithiwa uivanda ikia ngundi imwe ya vuu yiimani yiu.



Mawiko maseo ma tukundi tunini, matambya maosa na walany'o wa meko/wiko.

Ngwanio na ikundi sya TIST nisyikaa maundu maangi ta kuvanda miti na kwongela utuika wa nima. Yila kwina wia mwangi ni useo kwosa matambya na kutavya kila umwe kila wailwe nikwithiwa avikiite kyumwa kiithela. Nituu mumanyisya undu wa kuvanga na matambya maosa. kwandaia neenanisyai kana utavye anga ma kakundi kenyu yila mwakomana mbumbanoni.

Itambya ya meko ni kindu:-

- Kiamuitwe nikiva.
- Kitonya kwoneka.
- Kitonya uthimwa.
- Kina mwambiiro na muthya.
- Ikiithya itambya na wiko yila woosa noyivikike na yina kitumi.

Kwa ngelekany'o 'Ni nguvanda miti" usu nuneeni ti wiko ."Kyumwa kii nthukuma mithenya itatu kumya miti 75 kivuoni na kumivanda vala yaile" yii ni itambya ya meko nundu niwinengete nginya ivinda ya kukuna wia uu. No yoneke nundu nukwoneka uivanda, ve kwambiia na kumina nundu itina wa ila mithenya itatu nitukwona undu wikite.

Yila kakundi kenyu koombana mwiikithya nimwoosa ndatika ta 20 kila umwe kuweta itambya ya meko yila wosete okwa mituki.

Kila umwe akaweta:- Itambya yila wosete kyumwani kiu kithelu Mawete kila mekite Na maiweta ni itambya na wia ungi mwau mekwika kyumwa kiatiee.

Kethiwa umwe ni wa vitukiwa ni itambya yake kikundi kyothe kikatana nundu wa kwithiwa niwikite nesa.

Na ethiwa mundu akivikia yusu ya walany'o wake kikundi kikamuthuthya kumina indi ti kumutula muti na kumatalila makosa. Nundu yila andu meyelene na ukethia useo kwa umwe kana uvaluku nomawetanie na kuthuthania kwindu wa kwika nesa mbee. Thuthania tukundi tunini na kutaana iulu wa

matambya na mawalany'o ala mutonya kwika kwona kila umwe akitana na kuvikia mawendi ma TIST kwa vamwe.

Itambya ya wiko na walany'o wa itambya

Nzia ino no itumike kwia walany'o ta wa mbee kwa ngelekany'o yila kakundi kenyu ke kwia walany'o ikiithya.

Amuai undu mukwika (Kakundi kaitu ka TIST nakeuvanda miti 1,000 tuivika November 30th)

Kithimo (Yiana? - 1000 miti nikuvandwa)

Niuvikiika (kakundi kaitu no kavande miti 1000 kwa ivinda ya sumwa itano - 100miti kila wakeli na waka, miti ikumi kwa kila umwe kwa muthenya mithenyanu isu)

Ivinda (vena kwambiia na kumina - ta twivanda miti kuma October 15 kinya November 30)

Kwoneka (wia uyu no woneke ona ni kaki ke ukutani)

UI! Kii ni kithimi kya matambya na mawiko na ni kitetheeasya kwithiwa na kuamua

1. **Ata** - Kuvanda miti 1000.
2. **Nuu** - Kakundi kanini ka TIST - ene kwa masyitwa.
3. **Indii** - Oct 15 - Nov 30.
4. **Va** - kiwanzani kya sivitali.
5. **Kwa nzia yiva** - Kukomana kila wakeli na wakana iya mawiyoo na kwisa maima naindi kuvanda miti.
6. **Niki** - Kwailya mawithyululuko ma sivitali , kwithiwa vena muunyi awau na ala mavika vau sivitali matonya kwikala na kuikiithya ona sivitali niyeethiwa na uthithu kumana na nzeve ila ikuma mitini.

Yu tatai kwosa itambya ya kwika itambya ya wiko yila muukomana ingi wumbanoni.

Mazingira Bora



Kipsigis Version

An Environmental, Sustainable
Development and Community Forestry
Program.



Members of Tharu Clusters in a group photo with visitors from among others, Taylors of Harrogate.

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Toek chekorutechi TIST koyob Taylors of Harrogate, Carbon Neutral Company, KTDA ak Ethical Tea Partnership.

En kanametab kenyini 12-15-15 Ko kinyor TIST toek koyob kebeberwek agwan en kwony chebo kombunisiek.

Taylors of Harrogate, icheget ko olikab machanik ak kawek kimiten ak kiprutooinik alak Simmon Hotchkin, Samantha Gibson ak Sam Ward. Carbon Neutral Company icheget ko cheindoe en mungaretab bosetab koristo en kwony anan ribetab itondab emet. Tom Popple ak Zubair Zakir kogigabwa negata kombuninito.

Ethical Tea Partnership (ETP) en korurugutioni ko missing kotononchin korib machanik ak ole kiminchin koribok koboto kiboitnik che bute machanik. Jane Nyambura ne kitononchin yoton (ETP).

Kenya Tea Development Agency, ichek ko che tononchin chaikab temik chemengechen en Kenya. Kigonyo Chege Karoba na Ms. Asinatu koyob KTDA. En rutoitanywan ko kimoche koger bosisietab TIST en kenyisiek chegigobata asi komuch kotestai ak TIST en komoswek che kole chaik.



Jeniffer Kithure, a member of Umoja A TIST 2005KE934 explaining to our visitors how she manages her farm.

Kirutechi kiprutoinichuton komoswek cheterchin en ole testai korurugutik chemengechen



Mzee. Kiruja Nkambu of Kajiongo Tree Planting Group 2007KE449 explains how planting trees with TIST helped him keep elephants from getting to his farm.

chebo TIST. En Kirinyaga County, Njukiini Cluster, Kerere Women A, Group 2008KE1191 ole miten Elizabeth, ole kigomin temik ketik chebo tuga ak chebo kwenik. Kirutechi kora Kerere B, Group 2008KE1109 nebo John, Tinye Moingonikab segemeik 25 ole nyorunan 500kg chebo kumik cheboisien en kaa ak melekto.

En Tharaka Nithi County, Muthambi Cluster korutechi Ushinde Biashara (2010KE99) ole miten Mr Nyaga ne kimin ketik en ng'egutab beek ak koletab imbaret ne magibat (CF). Kitestai Kiprutoinik korutechi Kianjagi Cluster, Kajiongo Group 2007KE449 ole kimin ketik Mr. Kiruja Nkambu tabanbab chaik.

En County nebo Meru korutechi Umoja 2005KE934, nebo Jeniffer Kithure, ole kigol maemb. Kinyor kora imbaret ne kigimin avocado en cluster nebo Kithurine nebo Mr Wilson.

Kirutechi kebeberwek chechang missing kou



tuiyet negibo Tharu cluster. Ak Sugulisiek en Meru ak Tharaka Nithi Counties.

Kimuch kora koba agoi koit factorisiek, kou makomboki, Imenti ak Kionyo.]

Ben Henneke, Jeniffer Kithure ak Martin Weru ko kicheget totonik chebo kondoik chebo kondoik chebo TIST ak komiten kora kiboitnikab TIST koboto ichek. Kitinye anyanun boiboindo neo missing ak ketinye keret nebo kayumetab gei ak tonondoik chebo kebeberuek alak keboisien tugul.



Mrs. Nyaga , Ushinde Biashara , 2010KE99
(in a black T-shirt) shows the visitors her Riparian grove.

Kiimengei TIST teretab melekwekab kurubisiek chemengech.

En TIST Kenya ko kobit kewelnatet nebo melekwekab kurubisiek noton kogosibgei ak konemunetab vochaisiek. Tesetai anyun en inguni kondoik chebo Leadership Council ak

kiboitnikab cluster koisto kewelnataniton kobit. Kisome anyun mutaet en membaek tugul. Ye chobok onyoru wolutiet ak kotestai kou atgai tugul.

TIST Ngetunonik che chang.

Ngetunonik chuton ko kitagetugul ne mogitinya komonut missing; kou:-

- Omitwogik che mongunen chito.
- Ngetunonik chebo omitwogik
- Kartasisiek.
- Ole kiunchin beek che yachen en town.

Kewelnatet ne bitu yon mogirib.

- Ngetunonik en kaa
- Monyoru keret ne kararan kaa.
- Nyabiretab beek, koristo, ngungunyek ak bitu myonwek.
- Timoksei ortinwekab beek.
- Beterisiek kogonu sumu.
- Bitu ngemisiet en logok ak tieng'ik.

Ne anyun negonu yoitioni en ole kimenye?

- Wegetat tuguk chekitinye
- Mogitinya ortinwek che kimuchi keboisien kora.
- Mogitinya ole kimuchi kirurugen (korik chemengechen)
- Mogitinya kabwuatet agobo ngoyondit neimuch kobit.

Kogi kurubit ketoretitoi ano?

- Kebal korik chegiboisien ak keringoik chegimetechn.
- Keboisien solaisiek ak kemete baterisiek.
- Kegetingei keboisien cheimugosei (kou plastic).
- Keboisien koik keturek en cheimugosei.

Mat kebel beterisiek, torchin keringet.



Tounetab imbaret ne mogiboti.

Yeibata kesisiet komat ibat ngetunonik chebo minutik. Ingotebi en imbar asi kogochi imbaret konyor okwoindo. Ak gonyor imbaret koititindo amun teben beek. En ngetunonichu kimuchi kewal koik keturek.

- Matichomchi tuga kwageten imbar amun komegonyoru ngungunyek koititindo.
- Baletab keringonik kesib kebole komorobon kokararan inginam Mutai.
- Ye kaitaban ole ibolchini keringonik icheng usit ne kararan ago ne gim ak iroti kiratek kokwoutik 70cm. Boisien mogombet. Ituch kasarta nebo 90cm en kwenutab lainisiek.
- En betunoton imuchi ibal keringoik. En keringonik komiten kouni; 15cm tebesinto, 35cm kointo ak 15 cm oritab keringet.
- Ye imoche anyun igole keswek icheng keturek ak iburuchen ak ngungunyek chebusbus, ingobit boroindo nebo 5cm en keringo noton sikoyayai koyum beek.
- Angot igole bandek en kasarta ne koroboni;
- inde keswek kotebi beek saisiek 6-7 kotomo igol. Niton kogochin keswek tugul korut. En keringet agenge inde keswek 4, ak itesi ngungunyek kot konget boroindo nebo 2.5cm.
- Angot igole mosonik, kemine keswek 5-6 en keringet.
- Kebebertha ne konget en keringet ko ne ribe beek asi maruai.
- En semberet kenemu timdo nemiten keringet orit ko en kwenutab lainiti keswoche mogisemberi.
- Keringonik keboisien en kenyit agetugul ketesin anyun keturek.



A very successful Conservation Farming Plot for Mr and Mrs. Nyaga, Ushinde Biashara, 2010KE99



Ole kimuchi ketoundo keturek.

Bogomonut nito amun igochin imbaret konyor okwoindo missing ago tebye koik keny en ngungunyek kosir che kyole. Ago mongemei itondab emet. Miten anyun oritnwek chechang chegechoben, agenge ko ni:

1. Lewen ole tanye boroindo nebo 4x4 M.
2. Swach ko kararanit.
3. Bal keringet nebo 3-4M ak 1.5 M orit.
4. Tonaton ngetunanik chebo rurutik.
5. Torchin keringet kot koit 0.5m
6. Tesin 5ltrs chebo orek.
7. Tesin anyun sorowekab kiagik, kou; tuga ak ngechirek.
8. Tesin kora ngetunonikan rurutik (0.5).
9. Tesin 5Ltrs chebo orek.
10. Tesin kora ngetunonikab rurutik kot koit katitab keringet.
11. Tesin ngungunyek kot konyi.
12. Ye tesetai bosioni inde ketit neu kirokto koteben kwenutab keringet.
13. Ingo tar betusiek, 90.
14. En kasarito iyom itumchi beek chon kageboisien en kaa, agot sogororekab tuga ngot itinye.
15. Ngot komugak inde beechu kila betut.
16. Ye kagobata betusiek 90, ko kagochobok keturek. Iborun kirogto ye inemu, komungu burgeiyet neo en oritab keringet.

Boisietaab Keturek:

Ye kagobata keringonik iromchi rubeito agenge nebo keturek en kila keringet. Kitinye komongunet en temik tugul chemiten TIST ak chetomo koboisien oranito amun inyorunen kelchin neo missing. Yomten en imbarengung ibal agot keringonik konom.



Practice che koron en Groupishek che meng'ech: Steps chebo boishonik ak panganet.

Groupishek en TIST koyoe kasishek che hchang che practical:minet'ab ketik ak ripetnywai,ak koimproven temishet.Yon miten kasit newo ne keyoe , ko kararan kechob **action steps**. Membayat ake tugul komwoi ki neyochin groupit wiki noton .Kipendi kinetok ak groupishek kwok o;e kichopto action planing. Kaikai omdechin membaek alak chebo groupishek chemeng'echen yon omi tuyet.

Action step ko kit ne:

- Mwoe direct.
- Tokunot.
- Pimonoshek.
- Tinye kanamet ak mwisho.
- Yoche ko itchinoshek panganet!

Yon kotuyo kora gropitngung', ichomchi minutishek tamain ko aror chitugul agobo action plan nenyinet. Chi ake tugul en harak:

- (1) **Kit ne kiu action plan nenywan .**
- (2) **komwa tuguk che kiyai.**
- (3) **Komwa action plan che tinye en wikit ne isupu.**

Ango ko kibor chito en action plan nenyinet koboiboiyenchin groupit.

Angot koimuch kotimisan membayat action plan nenyinet, kokochin muguleldo groupit inendet. Yon kakomuch pik kopchei kabutoshechwaik ak siroshekchwai koibu ki bageng'e en groupit.lgil membaek chebo groupishek che meng'echen koker ole tot kochopto action steps chechwaget. Yoche ko pimonoksek, itchinoshek alak tugul en action steps ichuton. Yon kokotar chi tugul, obchei chuton akityo oboiboiyenchu chuton.

Action Steps chebo Action Planning

Kimuche kora keboishen oret noton yon kiyo planning. Ne isubu ko koborunet.yon yoe groupit neng'ung pang'anet iker ile pangonuti choton kou ni:

Che tetoyotin (Groupishek che meng'ech en TIST ko mine ketik 1000 en sipitalishek chebo karibu kotomo koit November 30)

Pimanoksei (Ata? – Ketik 1000, che kemine)

Itchinoksei, (Groupishek che meng'ech komuche komin ketik 1000 en 5wks – 100 ketik en Tuesday ak Thursday, ketik 10, chito age tugul kila petut)

Tinye kanamet ak mwisho (October 15 agoi November 30)

Togu. SMARTO!

Inoni ko kit ne iborun ako testen action plan ne karo chob:

- 1) **Ne-** (Minet 'ab ketik 1000)
- 2) **Ng'o-** (TIST membaek 'ab groupishek che meng'echen)
- 3) **ou'**– (Oct 15 – Nov 30)
- 4) **Ano** – (En sipitali)
- 5) **namna gani**– (kituitosi kil Tuesday ak Thursday jioni yon kokobata asita nepele ketik , akityo kemin ketik)
- 6) **Amune** – (Kikararanit compound nepo sipitali ak kechopchi uronok pik che mionidos ak pik chenyokokotisie)

Ingunon jaribunanan oyai action planning en tuyet ne isubu nebo groupit.