

# Mazingira Bora

Newsletter November 2025

**tist** Growing Trees  
Growing Leaders

1. We are Honest
2. We are Accurate
3. We are Transparent
4. We are Servant to each other
5. We are Mutually Accountable to each other

www.tist.org

English Version

*TIST is an innovative, time - tested,  
afforestation program led by the  
participants.*



**Kagongo TIST Cluster meeting held on 2/10/2025.  
Next meeting will be held on 6/11/2025.**

- Inside:**
- ✓ **TIST: Understanding How to Join TIST, Create Carbon Tonnes, and Earn Profit. Page 2**
  - ✓ **TIST: Kujengana - Don't miss the blessing for your Small Group and Cluster. Page 4**
  - ✓ **Preparing Compost Manure - a natural fertilizer. Page 5**
  - ✓ **Nursery Care. Page 6**



# TIST: Understanding How to Join TIST, Create Carbon Tonnes, and Earn Profit.

**M**any TIST Farmers, especially those who are joining TIST today, have requested more understanding about the TIST program. They want to understand how they can join TIST and what they need to work on together with other members in their Small Groups, in order to get benefits and profits.

This newsletter heeds their request. We will discuss the process from the time a new farmer wants to join TIST, key activities, and benefits expected while working together in TIST.

It is important to note that joining TIST is voluntary. Before joining TIST, farmers are encouraged to learn more about TIST, so that they can make a free and informed decision. TIST works directly with farmers. Farmers work hard on their farms and take care of the things they do in order to earn benefits.

## **A Farmer wanting to join TIST.**

TIST expands through Farmer to Farmer. Many TIST members learnt about TIST through other farmers. When a potential farmer is interested in joining TIST, they are welcomed to a nearby Cluster meeting where they are taught more about TIST. At the Cluster meeting, they are

taught on how to establish a strong TIST Small Group. More and deeper trainings are offered at the Cluster meeting.

## **Participation in TIST.**

When a Small Group decides to join TIST, they are taken through the application process. This process helps them have a clear understanding of the TIST major trainings areas – sustainable development, improved farming, and carbon credit business. If they decide to participate in the carbon business, they are taught about requirements necessary in order to participate effectively.

## **Before Starting Planting Trees with TIST - Baseline for New Small Group.**

In order to begin planting trees with TIST, the carbon market requires that you identify an area where you intend to plant trees for carbon business. After you identify that area in your shamba, a Cluster Servant will visit your farm and carry out Baseline Quantification.

## **Planting Trees with TIST.**

At the Cluster meetings, you will be taught Best Practices in tree planting, as well as in raising tree nursery beds. For the Small Group to be profitable, they are advised to plant high value



trees and keep those trees alive for long-term. Further, attending Cluster meetings offers a platform of exchanging best ideas amongst the farmers.

### **Quantification.**

Quantification is a process whereby we measure results of your farm. These include tree growth and tree count. The healthier the trees, the more carbon is sequestered. A Cluster Servant will visit your farm and carry out quantification. The data obtained will help us know the amount of carbon stored by your trees.

### **External Audit – Verification.**

In order to assure carbon credit buyers that they are getting full value for their money, external auditors (verifiers) come to check on TIST work. Verification is an important exercise because it checks whether we are following carbon market rules, as well as keeping our word to the buyers that trees will be kept alive for long-term.

### **How TIST get permission to sell Carbon Credits.**

Verifiers will come and visit some randomly selected Small Groups. They choose Small Groups they want to visit by their own. If they find those Small Groups are following TIST Values and adhering to rules set by carbon

business regulators, they write a report to Verra. VERRA is the body regulating carbon projects and trading under voluntary market. We get certification or authority to sell our carbon tonnes from Verra.

### **Selling TIST Carbon Tonnes and Sharing Profits.**

CAAC does all of the work to manufacture and market the TIST tonnes. When we have high quality results, it becomes easier for CAAC to market TIST tonnes. Additionally, when other activities like CF, stove jikos, bee hives, fruits, nuts, fodder etc. (including participation of youth and women in TIST leadership), are being practiced by TIST Farmers, the value of TIST tonnes increases in the market, hence the price. If we do a poor job and have poor data and wrong information, verifiers will not approve the tonnes, and buyers will lose confidence with TIST. They begin looking for tonnes elsewhere. We lose the market and cannot participate in carbon market any longer. Let's avoid this!

It is therefore important for everyone involved in TIST to strictly adhere to **TIST Values – We are Honest; We are Accurate; We are Transparent; We are Mutually Accountable; We are Servant to each other; We use low budget to get High Results.**





## TIST: Kujengana - Don't miss the blessing for your Small Group and Cluster.

**K**ujengana is a very important part of your Cluster monthly meeting and Small Group weekly meeting.

It says in Ephesians 4:15, 16 that we are to build each other up into the fullness of Christ. Each person in your TIST Small Group brings his or her own special talents and gifts to the entire group. One of the wonderful things that happen in the Small Group is recognizing, sharing and using those God-given talents. Kujengana is a way to let those talents be seen and utilized. There are two parts to Kujengana:

- Before the closing prayer, every person in the group says one specific, positive thing that the leader did at that meeting. For example: they smiled, kept to time, made good plans, encouraged all group members to speak, greeted me and made me feel welcome, pointed out something that was going very well at the meeting or in the work the group was doing, etc. Each member needs to say something different. This is not optional. Everyone gives Kujengana to the Servant Leader. Some groups also give Kujengana to the co-leader.
- In addition, if someone sees a gift shown by the leader, a group member can also say that. With Rotating

Leadership, each week a new leader will receive Kujengana. Through Kujengana, we encourage each other on the good things that week's leader did in the meeting and the talents the person showcased. Kujengana is also the way we learn to look for positive things about people and then say them. We all need to train our tongues to say the positive. In addition, the whole group learns what it is that the group thinks is important in a Servant Leader. The next leaders will benefit from what they have heard in Kujengana about previous leaders and know what the groups think is important in a Servant Leader.

In response to Kujengana, that week's Servant Leader says, "Thank you" after each group member's specific, positive statement. There is no discussion about how it could have been done better, or differently. Often, the person is happy when he or she is told the good things they did during the meeting. Sometimes we learn things about ourselves we didn't know! Kujengana helps the leader on that day to recognize his or her talents. Kujengana also helps the Small Group because the members improve their servant leadership as they learn. Kujengana is a double blessing!



## Preparing Compost Manure - a natural fertilizer.

**C**ompost manure is a natural fertilizer that helps your crops grow. It is better than chemical fertilizer because it is natural, free, and will not damage crops and the environment as some chemical fertilizers can. There are many ways to make compost manure, but the following method has been useful in some areas. Ask your neighbors in your Cluster what has worked well for them.

### Preparation of compost:

1. Choose an area for your compost pit measuring 4m by 4m.
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. 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. Add five 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. Put another layer of crop leaves and stalks (0.5m).
9. Add another five liters of ash.

10. Repeat adding 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 (three 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. If you have animals, you can also pour animal urine over the pit. This adds extra nitrogen to the compost.
15. Try to water the compost pit in this way every day, or whenever water is available.
16. After 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. Then stir all of the compost together so it is mixed well.

### Use of compost:

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



## Nursery Care.

### 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 e.g.

- 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 (see Unit 4) 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.
- You can also use a pierced tin.
- Avoid too much or too little watering, roughly 20 litres for 1000 seedlings. Too much water can weaken the seedlings and attract pests and fungus. One sign of over-watering is a thin film of algae or green moss on the soil surface.
- Water every morning and evening when possible.
- Sandy soils will need more watering than clay soils.
- Direct the water to the soil, not to the leaves.
- Water slowly to ensure it penetrates the soil.
- 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. Also remove the shade during this time.



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**Kagongo TIST Cluster wakiwa kwa mkutano wao tarehe 2/10/2025.  
Mkutano ujao utakuwa tarehe 6/11/2025.**

- Inside:**
- ✓ **TIST:** Kumenya uria uumba kuthungira kiri TIST, kuthondeka tani cia Kaboni, na kugwata Baita. *Page 2*
  - ✓ **Gwakana:** Bukaaga kitharimo kia gikundi kienu. *Page 4*
  - ✓ **Kuthithia mboleo yaku gwengwa – fertilizer itiongeri into bia kuthithua ni muntu.** *Page 5*
  - ✓ **Kumenyeera minanda.** *Page 6*



## **TIST: Kumenya uria uumba kuthungira kiri TIST, kuthondeka tani cia Kaboni, na kugwata Baita.**

**A**rimi baingi ba TIST, Muno baria bakuthungira kiri TIST kagitene gaka, bari na iromba ria kumenyithua mantu jegie muradi jwa TIST. Nibakwenda kumenya uria bathongira ndene ya TIST na ngugi iria bagaita amwe na amemba bangi kiri gakundi, boomba kugwata baita. Ngathiti iji ni igocokia iromba riao. Nitukubumenyithia mutaratara kuuma gakundi gatonya kiri TIST, ngugi cia TIST, na baita iria ukoona ukirita ngugi na TIST.

Nibwega kumenya gutonya kiri TIST ni kwiendera. Mbere utonya ndeene ya TIST, arimi ni bweega bamenye mantu jegie TIST, nikenda boomba kuthithia uamuzi ju mwega. TIST iritaga ngugi na arimi. Arimi baritaga ngugi na inya ndeene ya miunda yao na bakamenyeera mantu jaria bathithagia nikenda bona baita.

### **Murimi ukwenda gutonya ndeene ya TIST.**

TIST iitaga mbere kuuma kiri murimi gwita kiri murimi ungi. Amemba baingi ba TIST bamenyaga mantu jegie TIST kuuma kiri arimi bangi. Riria murimi eena uumbani akwenda gutonya ndeene ya TIST, nibagwatagwa ugeni kiri mucemano jwa clasta juria jubakuhiritie na bakathoma nkuruki mantu jegie TIST. Ndeene ya micemano ya clasta, nibathomaga uria boomba kuthithia gikundi kiri na inya gia TIST. Ithomo ingi inyingi ni ithomithanagwa kiri micemano.

### **Kurita ngugi ndeene ya TIST.**

Riria gakundi kabanga gutonya ndeene ya TIST, nibetithagua ndeene ya mubango jwa kwiandikithia. Mubango juju nijubatethagiiria kumenya bweega mantu jaria TIST ithomithagia ja - Mantu ja gwitithia muturire mbere, urimi bubwega, na biashara ya kaboni. Amemba bakenda kuthithia biashara ya kaboni, nibathomithagua mantu jaria jendekaga.

### **Mbere wambiriakuanda miti na TIST - Rugano rua miunda ya gikundi.**

Nikenda wambiriria kuanda miti na TIST, thoko ya kaboni yendaga wonanie aria ubangite kuanda miti ya biashara iji. Wambaga aria ukaanda miti ndeene ya muunda jwaku, clasta servant akeja ndeene ya muunda jwaku nikenda ojuria rugano rwegie muunda jwaku mbere ya wambiria kuanda miti.

### **Kuanda miti na TIST.**

Ndeene ya micemano ya clasta, ukathoma njira injega jiegie uandi wa miti, na nkinya uria uumba kuthithia nasari ya miti. Nikenda gakundi koomba kuthithia baita, nitubamenyithagia ati ni weega baande miti iri na baita ingi na beeke miti iji gwa kagita karaja. Nkuruki, gwita ndeene ya micemano ya clasta nikuejaga arimi kaanya ga kathongi ga kugaana mathuganio gatigati kao eene.



**Utari wa Miti.**

Utari wa miti niyo njira ya kuthima ngugi iria ukurita ndeene ya muunda jwaku. Iji ni ngugi ya gutega uria miti igukura na ni miti igana. O uria miti igukuura bweega nou ikuumba kugwata kaboni inyingi. Clasta servant akeja muunda jwaku kurita ngugi iji. Data iria clasta servant akajukia kuuma kiri muunda jwaku igatetheeria kumenya ni kaboni igana miti igiite.

**Utegi ngugi ni ategi kuuma oome - (Verification)**

Nikenda tuumba kwonia aguri ba kaboni ati nibakugwata kiria kibataranitie kuringana na mbeca ciao,ategi ngugi kuuma oome jabo verifiers nibejaga gutega ngugi ya TIST. Utegi bubu ni bwa gitumi niuntu niboATEGAGIIRA kwona nitugukinyaniria mawatho jonthe jegie biashara iji ya kaboni,amwe na nkinya kuingia wirane bwetu na aguri ati miti iji igekwa gwa kagita ga karaja.

**Uria TIST igwata ruutha rwa kwendia kaboni credit.**

Verifiers betaga kwona ikundi iria bathuura. Ikundi iji bathuura bo eene. Bakethira ikundi iji ni ikuthingatiira TIST values na mawatho jaria jeeki jegiebiashara ya kabon,nibaandikaga ripoti kiri Verra. VERRA niyo iejana mawatho jegie biashara ya kaboni kiri thoko iria voluntary.

Nitugwataga certibigeti kana ruutha rwa kwendia kaboni kuuma kiri Verra.

**Kwendia tani cia kaboni cia TIST na kugaa baita.**

CAAC niyo iritaga ngugi ya kuthondeka na kwendiatani cia TIST. Riria turi na mpumi injega, nikwithagirwa kuri na uuthu kiri CAAC kwendia tani cia TIST. Na ringi,Riria kuri na ngugi ingi ja urimi bubwega,mariko ja kumenyeera nku,miatu ya njuki, miti ya matunda, miti ya makandamia na nkinya ya iria ria ndithia amwe na kwithirwa turi na atongeeria ayuthi na ekuru kiri muradi, ni bagwita ngugi na arimi ba TIST, uguri wa tani cia kaboni cia TIST kiri thoko nika wongerekaga na maguri jakabua.

Tukeja kurita ngugi inthuku na utari wa miti ukethira utibuui, verifiers batiejanaga ripoti injega, na aguri nika bagaga gwitikia muradi ringi. Bakineeta gucua kungi kuria bakaguraga kaboni. Kuuma au nika twagaga thoko na tukinaremwa ni biashara iji. Nitumenyeere thina iji!

Ni untu bwa gitumi o muntu wonthe uri ndeene ya TIST kuthingatiira bweega **TIST values - Turi etikua,tuthingatagiira uuma bungwa, Turi ba utheri, Nituthingatagiira ngugi bweega,Turi atungataniri kiri muntu na ungi, Tutumagira amtumiri mamakai tukagwata mpumi inene.**



## Gwakana: Bukaaga kitharimo kia gikundi kienu.

**G**wakana ni gicunci kirina bata mono ndene ya mucemanio jwa gikundi kienu jwa o kiumia. lugaga ndene ya Aefeso 4:15,16 ati nitubati gwakana tugakinyira uujuru bunthe bwa Kristo. Muntu wonthe ndene ya gikundi gikinini gia TIST naretaga talanta na biewa bia mwanya kiri gikundi kionthe. Gintu kimwe kiria kiri gia kurigaria kiria gikarikaga ndene ya gikundi gikinini ni kwona, kugaana na gutumira talanta iu tuei ni Murungu.

Gwakana ni njira ya kureka talanta iu cionwa na citumirwa. Kurina icunci biiri ndene ya Gwakana:

- Mbele ya iromba ria muthia, o muntu ndene ya gikundi auge gintu kimwe gikieega gikwirungamira kiria mutongeria athithirie ndene ya mucemanio. Mung'uanano, nathekerie, nekire mathaa, nathithirie mibango imiega, neekire amemba bonthe inya, nanketherie na natumire ndaigua nkinyite, naugire akwona gintu gigita bwega mucemanione kana ngugine ya gikundi, na jangi jamaingi. O mumemba nagwitia kuuga gintu mwanya. Bubti bwa kwithurira. Muntu wonthe naakaga mutongeria wa uthumba. Ikundi bimwe ibakaga kinya mutetheria wa mutongeria.
- Kwongera, kethira muntu akwona kiewa ndene ya mutongeria, mumemba noauge.

Gukurukira utongeria bwa kithiuruko, o kiumia mutongeria umweru agakwa. Gukurukira Gwakana, nitwikanagira inya kiri into bibiega biria mutongeria wa kiumia athithitie mucemanione na talanta iria muntu ou onenie. Gwakana ni njira ya kinya kuthoma mantu jamega kwegie antu na riu kujauga. Twinthe nitugwitia gwitana nduume cietu kuuga mantu jamega. Kwongera, gikundi kionthe nikimenyaga jaria gikundi kithuganagia jarina bata kiri mutongeria wa uthumba. Atongeria bangi bakoona baitakuumania na jaria baigitue ndene ya Gwakana kwegie atongeria bangi na bakamenya jaria gikundi kithuganagia jarina bata kiri mutongeria wa uthumba

Arikia gwakwa, mutongeria wa kiumia kiu naugaga, 'lbwega' nyuma ya o mumemba wa gikundi auge gintu gikithongi na gikwirungamira. Gutikwariria uria aringi kuthithia bwega nkuruki kana na njira ya mwanya. Jaria maingi, muntu nethagirwa akeni erwa mantu jamega jaria athithirie mucemanione. Rimwe na rimwe nitumenyaga mantu kwegie twingwa jaria tutikwiji! Gwakana nigutethagia mutongeria wa ntuku iu kumenya talanta ciawe na gwita na mbele gwitumira. Gwakana kinya nigutethagia gikundi gikinini niuntu amemba bonthe nibamenyaga gutongeria bwega nkuruki o uria bakuthoma. Gwakana ni kitharimo nteere ijiri!



## Kuthithia mboleo yaku gwengwa – fertilizer itiongeri into bia kuthithua ni muntu.

**M**boleo ya kuthithia na imera ni fertilizer ya kuumania na into bitina ugwati ya gutethia imera biaku bikura bwega. Ni injega nkuruki ya fertilizer cia nduka niuntu icithithitie yongwa na itina ugwati kiri imera na kiri naria kuthiurukite. Kurina njira inyingi cia kuthithia mboleo, indi njira iji ithingatite nitethetie ndene ya guntu kumwe. Uria muturi waku ndene ya cluster yaku jaria jabatethetie nkuruki.

### Kuthithia mboleo:

- 1) Taara antu aria ukeenja kirinya giaku kia warie bwa mita inya na uraja bwa mita inya.
- 2) Theria antu au.
- 3) Inja kirinya kirina warie bwa mita ithatu gwita inya na mita imwe na nusu kwinama.
- 4) Uthurania matigari ja imera biaku jaria urinajo na ugitange tue tunini. (mung'uanano mathangu na mati ja mpempe, miere na ming'au).
- 5) Ikira matigari jaja kirinyene mwanka gitigare nusu mita.
- 6) Ongeera lita ithano cia muju.
- 7) Riu wongere centimita mirongo ithatu (kana o iria ikwoneka) cia mburi kana nguku).
- 8) Ongeru matigari ja imera nusu mita.
- 9) Ikira lita ingi ithano cia muju.

- 10) Ongeru matigari ja imera kairi mwanka kirinya kiende kuujura.
- 11) Muthia, ikira muthetu mwanka kirinya kiujure.
- 12) Ukiujuria kirinya na muthetu, tonyithia muti jumuraja gatigati ga kirinya mwanka jukinye nthiguru buru.
- 13) Tigana na kirinya giki ntuku mirongo kenda (mieri ithatu).
- 14) Igitene riri tumira ruuji rwaku rwa ruko gwikira bole. Mung'uanano, warikia kuthambia nyomba kana nguo ciaku, ituura ruuji ruru ugutumagira kirinyene. Kethira urina ndithia ituura maumago jacio iguru ria kirinya.
- 15) Untu bubu nibwongagira nitrogen kiri mboleo yaku.
- 16) Geria wikagire kirinya kiu ruuji na njira iji ntuku cionthe kana oriria ruuji rurio.
- 17) Ntuku mirongo kenda ciathira, mboleo ikethira iri tayari.

Tumira muti kuthima mwanki – mboleo yayia no mwanka ithirwe irina mwanki mwanka toi yoneke ikiumaga mutine wajurita ku.

### Utumiri bwa mboleo:

Warikia kwinja marinya jaku ja kuanda mpempe, muya na imera bingi, ongeru nkundi ya mboleo yaku kiri o kirinya. Etera wone uria gugakara!





## Kumenyeera minanda.

### A. Kuniyia tunyomoo.

Tunyomoo notuthukie miti iria ikuuma. Kurina murimo jumwe juria jwonekaga mono kiri minanda juria juretagwa ni fungi. Nijutumaga mbeu ikaumma mbele ya iuma, miri ikoora mbere ya kimera kiumira na ringi kimera kiu gikuuma gigaceng'a na gikagwa. Murimo juju jwonekaga aria:

- Kimera kiu gikuuma gigaceng'a na gigakua mbele ya kiumira iguru ria muthetu.
- Kimera kiu gikuuma kinyaraga na kugua.
- Mathangu nijagarukaga jakaa yellow.
- Muti nijukuuwaga nyuma ya kagita.

Murimo juju nojuthirwe na njira ya:

- Kugarura muthetu jwa munanda o mwaka kana o miaka iiri. Kuunanga muthetu kinyaku nigutethagia.
- Gwita kimera kiria kiajitue orio na ugakiithiria.
- Kwebera gwikira ruuji rurwingi nkuruki ya ruria rukwendeka.
- Kumenyeera ati ruuji rutikwigara.
- Kumenyeera ati kurina ruugo bwega.
- Gukurira iria bwega na kurio.
- Muthetu jukethira junori mono. Uungania muthetu na mboleo uria kubati. Nyiyya nitrogen iria ugwikira na njira ya kunyiyia mboleo.
- Nikubati kwithirwa kurina kanya gakeega gatigati ka miti nikenda itainyane.
- Menyeera ati munanda nijutheri magitene jonthe.

Mirimo no inyiwe na njira ya utumiri bubwega bwa dawa cia tunyomoo. Ni bwega nkuruki gutumira dawa iti cia nduka niuntu cia nduka ciri goro na nocithukie naria gututhiurukite. Mung'uanano;

- Utumiri bwa muju.
- Kumenyeera ati munanda nijutheri nikenda jutigakucie tunyomoo.

### B. Kuniyia miiri.

Garurira aria o muti juri rimwe o kiumia nikenda miri imiraja itigatonye muthetune mono iija gwitia kugitwa. Muri jumwega nijutethagia miti gucua ruuji jwarikia kuthamirua muundene.

Riria muti juandi mukebene jwakinya mieri ithatu gwita inna (kuringana na muthemba na rera) miiri yaju niambagiria kumira nthiguru ya mukebe. Miri iiji nibati kugitwa o mweri jumwe gwitaiiri na gaciu. Menyeera riria ugukiiria mukebe utikagitarie miri iu niuntu itikuri.

Antu a kuthithia ou, geria guukiria munanda untu buria bunyagia bata ya kugita miri niundu miri nigujaga iri yongwa.

### C. Gwikira ruuji, gukuura iria na kirundu.

- Tuminyi nitubati kwithirwa turina mukebe ya kuminya nikenda tutigatume muthetu jukamatwa.
- No utumire kinya mukebe jurina makutho
- Ebera gwikira ruuji rurukai kana rurwingi mono, ikira miti ngiri ruuji lita mirongo iiri. Ruuji rurwingi niruthiragia imera inya na rugakucia tunyomoo. Gintu kimwe kiria kionanagia ruuji rurwingi ni kuuma kwa imera bibinini bikari ja kimira muthetune.
- Ikira ruuji o ruukiri na ugoro kwombika.
- Muthetu jwa muthanga jukenda ruuji nkuruki ya muthetu jwa clay.
- Ikira ruuji muthetune ti mathangune.
- Ikira ruuji mpaari nikenda rutonya muthetune.
- Menyeera utikagitarie miiri riria ugukurira iria.
- Ugeteera mono mbele ya ukuurira iria. Gukurira iria kurina bata niuntu iria karicindanagira weru, ruuji na irio.
- Mbeu imwe niciendaga kirundu – menyeera ati irundu nibithithitue.
- Mburene, kunikira mbeu na nyaki injumu. miti iu ikuuma nibati kuthamua kuuma ruungu rwa miti nikenda ruuji rutikagwire mbeu rugitaria imera.
- Irigira munanda nikenda ujumenyeera kumania na ndithia na twana tuguchetha
- Reka miti iume mwanka uraja bwa centimita mirongo ithatu mbele ya kuthamiria muundene. Bubu no bujukie kuuma mweri jumwe gwita mieri itantatu. Thoma kwegie kuthamia. Rita kirundu riria ukwenda kuthamia.

# Mazingira Bora

Newsletter November 2025

**tist** Growing Trees  
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**Kikuyu Version**

*TIST is an innovative, time - tested,  
afforestation program led by the  
participants.*



**Kagongo TIST Cluster mari mucemano-ini wao mweri 2/10/2025.  
Mucemano ucio ungi ugakorwo 6/11/2025.**

- Thiini wa ngathiti:**
- ✓ **TIST: Kumenya uria tungiingira TIST, guthondeka Carbon Tonnes, na kugia na faida. Page 2**
  - ✓ **Gwakana: Ndukahitukwo ni irathimo thiini wa gikundi kianyu. Page 4**
  - ✓ **Kuhariria thumu wa mborera – bataraita ya kimerera. Page 5**
  - ✓ **Umenyereri wa Tuta. Page 6**



## **TIST: Kumenya uria tungiingira TIST, guthondeka Carbon Tonnes, na kugia na faida.**

**A**rimi aingi a TIST, na makiria aria maraingira TIST umuthi, ni moritie uria mangimenya makiria uhoro wa mubango wa TIST. Marenda kumenya uria mangiingira TIST na uria mangirutithania wira hamwe na ikundi nini niguo magie na umithio na faida.

Ngathiti ino iri na macokio. Ni tukukwaririria mahinda kwa mahinda uria murimi angiiingira TIST, maundu maria ma bata, na umithio uria tungiona tukirutithania wira na TIST.

Ni wega kumenya ati riria twangira TIST ni kwiendera. Utanaingira TIST, murimi ni arahinyiririo guthoma makiria uhoro wa TIST, niguo kugia na uigiririki. TIST irutithanagia wira hamwe na arimi. Arimi marutaga wira na hinya migunda-ini yao oro hamwe na kumenyerera indo iria ciri kuo niguo magie na faida.

### **Murimu uria urenda kuingira TIST.**

TIST ikuraga kugerera murimi hari uria ungi. Amemba aingi a TIST mathomanga uhoro wa TIST kugerera arimi aria angii. Riria murimi agia na wendo wa kuingira TIST, etagwo mucemano wa clasta kuria mathomithagio makiria uhoro wa TIST. Mucemano-ini wa TIST, ni

mathomithagio uria mangigia na ngurubu nini ya TIST iri na hinya. Githomi kirikiru githomithagio mucemano-ini wa clasta.

### **Kuruta wira na TIST.**

Riria ngurubu nini cieciria kuingira TIST, matwarithagio mutaratara wa kwiandikithia. Undu uyu uteithagia kumenya wega uria TIST ithomithagia – gukura, kugacirithia urimi na biacara ya carbon credit. Angikorwo ni makwenda kuingira biacara-ini ya carbon credit, magathomithio maundu maria mabataranagia niguo magacire.

### **Thutha wa kwambiriria kuhanda miti na TIST – Muthingi wa ngurubu nini njeru.**

Niguo kuwambiriria kuhanda miti na TIST, thoko ya carbon irabatara wambe wamure haria urenda kuhanda miti ya biacara ya carbon. Thutha wa kuamura ni ha mugunda-ini waku, muruti wira wa clasta agoka gwaku mugunda na kuona kana ni hagiriire.

### **Kuhanda miti na TIST.**

Mucemano-ini wa clasta, ni uguthomithio maundu maria mega niundu wa kuhanda miti, na uria ungithondeka tuta yaku. Niguo ngurubu nini igie na faida, niwega kuhanda miti iria miega





na ikuraga kwa ihinda inene. Kwa uguo, riria wathii mucemano wa clasta murimi ni agiaga na ihinda riega ria gucenjenia meciria na arimi aria angi.

### **Guthara.**

Gutara ni kumenya uria mugunda waku ungikuhe faida. Undu uyu ni hamwe na gukura kwa miti na gutara miti. Oro uria miti yaku iri mithaka, noguo carbon iri nyingi. Muruti wira wa clasta acera gwaku mugunda na gwika maundu maya. Mathabu maya ni magututeithia kumenya carbon iria iri miti-ini yaku.

### **Eki mathabu kuma thi cia nja – Gwikira kinyi.**

Niguo kuhe aguri a carbon credit ati ni maragura kiria kiagiriire na mbea ciao, eki mathabu kuma thi cia nja (verifiers) ni mokaga kumenya uria TIST iraruta wira. Gwikira kinyi guku ni kwegu niguo kumenya kana ni turarumirira mawatho ma thoko ya carbon credit, na kumenyithania kuri aguri ati ni tukumenyerara miti itu kwa ihinda iraihu.

### **Uria TIST ihetwo rutha kwendia Carbon Credits.**

Andu aya a gwikira kinyi mokaga magacera ngurubu nini mataguthutukania. Mathura ngurubu nini iria makwenda gucerera. Mangikora

ati ngurubu nini mi mararumirira maundu mega ma TIST na kurumirira mawatho maria mekiritwo ni aria maramataga thoko ya carbon, makandikira Verra riboti iyo. VERRA ni ruhonge ruria ruramataga thoko ya carbon. Tuheagwo rutha rwa kwendia carbon tonnes na Verra.

### **Kwendia TIST Carbon Tonnes na kugayana faida.**

CAAC irutaga wira wa guthondeka na kwendia TIST tonnes. Riria turi na umithio, gukoragwo kuri raithi hari CAAC kwendia TIST tonnes. Kwa uguo, riria maundu mangi ta CF, jiko cia stove, miatu ya njuki, matunda, nuts, nyeki etc. (oro hamwe na gutungata kwa mbeu nyinyi na atumia hari utongoria wa TIST), mekagwo ni arimi a TIST, value ya TIST tonnes ikongerereka thoko-ini, na kwa uguruo marihi.

Tungiruta wira muru na tugie na data njuru na uhoru utari mwega, atari aya matingitikira kuhitukia tonnes, na aguri makaga na uigiririki kuri TIST. Makambiriria gwetha tonnes kundu kungi. Tugate thoko na tutingicoka kuingirira thoko-ini ya carbon ringi. Rekei twimenyerere! Ni wega mundu oro wothe uria urutaga wira na TIST kumenya wega ati **TIST Values - turi ehokeku, turi na uma, turi na waragania, turi na uigiririki, turi murata na uria ungi, tuhuthagira bageti nini na tukagia na maciaro mega.**





## Gwakana: Ndukahitukwo ni irathimo thiini wa gikundi kianyu.

**G**wakana ni gicunji kia bata thiini wa TIST micemano-ini ya o wiki. Thiini wa Ephesians 4:15,16 ati twakane turi thiini wa Kristo. O mundu thiini wa gikundi kinini kia TIST arehage kiheo giake kia mwanya na akahe gikundi giothe. Maundu mamwe ma magegania mahanikaga thiini wa gikundi ni gukurana na kuhuthira iheo iria mahetwo ni Ngai.

Gwakana ni njira ya kuona na kurutithia iheo wira. Kuri na miena iiri thiini wa gwakana:

- Mbere ya mahoya ma kuhinga, o mundu thiini wa gikundi akauga kindu kime kirahutia kaundu ka uthii wa na-mbere karia mutongoria eka thiini wa mucemano. Kwa muhiano, atheka, aiga mathaa, akorwo na mubango mweka, ekira arimi hinya kwaria, angeithia na atuma njigue ndi mucii, auga kaundu thiini wa mucemano na gatuma mucemano uthii na-mbere wega. O mundu agiriirwo nikuga kaundu ngurani. Kaundu gaka ni ka muhaka. O mundu auge kaundu ga gwakana kuri atungata. Ikundi ingi nichiheanaga kujengana kuri munini wa mutongoria.
- Na makiria, angikorwo mundu nionete kiheo kuma kuri mutongoria, no age uguo.

Tukihuthira utongoria wa guthiururukana, o kiumia mutongoria mweru niakwamukira kujengana. Kuhitukira gwakana, niturahinyiriria arimi na mutongoria guthii na-mbere na maundu mega kiumia kiu.

Gwakana ni njira njega ya gukurana na kumenya kiria mundu arathimiirwo. Ithuothe twirute kwaragia maundu meega. Na makiria gikundi gikona maundu maria mega na mabata mekitwo ni atungati. Mutongoria uria uguka niagukorwo athomete kuma kuri atongoria aria angi.

Hari kujengana ututngati wa kiumia kiu agacokeria andu ngatho o thutha wa o mumemba kuheana uhoru wake. Mutikariririe uria kaundu kangiekirwo wega na njira ngurani. Muno, mundu niakenaga riria erwo maundu mega maria ekite thiini wa mucemano na makiria nituthomaga maundu maitu maria tutoi!

Gwakana niguteithagia mutongoria kumenya kiheo giake na guthii na-mbere na gugitumira. gwakana niguteithagia atongoria kwagirithia utongoria o magithomaga, gwakana ni kirathimo maita meeri.



## Kuhariria thumu wa mborera – bataraita ya kimerera.

**T**humu wa mborera ni bataraita ya kimerera iria iteithagia mimera gukura wega. Bataraita ino ni njega gukira ya nduka tondu I ya kimerera, ndiri thogora, ndithukagia mimera hamwe na maria maturigiciirie ta uria bataraita imwe cia nduka ciikaga. Kuri njira ngurani uria unghota gwithondekera thumu waku wa mborera. Hari njira imwe iria tuguthomithia iria ikoretwo igitumirwo ni andu aiangi. Niwega urie arimi aria angi muri mucemano wa cluster ni njira iria matumagira.

### Kuhariria guthondeka thumu:

1. Chagura handu haria ikwenja irima riaku ria mita inya kwa inya.
2. Theria handu hau.
3. Haririria kana uchimbe irima ria warie wa mita ithatu nginya inya na iriku wa mita imwe na nuthu.
4. Cokereria hamwe maragara maku moth eta mahuti, mabebe , maboco kana muhia na umatinangie tuchunji tunini.
5. Ikia maragara macio irima-ini riaku kwa uriku wa nuthu mita.
6. Ongerera lita ithano cia muhu.
7. Thutha ucio, ongerera thumu wa ng'ombe kana mburi kana nguku kana nguruwe kwa uriku ta fiti imwe.
8. Ongerera maragara mangi inguru ta nuthu mita.
9. Ongerera lita ithano cia muhu.
10. Ongerera maragara maku nginya irima riaku rikirie kuiyura.
11. Wa muthia, humbura na tiiri nginya iria riigure.
12. Hindi iria urahumbira na tiri, handa kamuti nginya kahutie irimariaku gitina.
13. Eterera gwa kahinda ka thiku 90 kana mieri itatu.
14. Gwa kahida gaaka korwo ugitiriria thumu waku maai maku ma giiko. Ungikorwo ni ukuhota ona mathugumo ma mahiu maku uitiririe.
15. Mathugumo ni mateithagia kuongera nitrogen.
16. Geria guitagiriria maai na muthugomo kwa mahinda makuhi.
17. Thutha wa thiku mirongo kenda, thumu waku ugakorwo uri muhiu.

Tumira kamuti karia uhandire ta githimi giaku. Hindi iria thumu waku wahia, wagiririrwo gukorwo wi muhiu na wacomora kamuti niwagirirwo ni kurata ndogo ya urugari.

### Uhuthiri wa thumu waku wa mborera:

Warikia kuhariria marima maku ma mbembe kana muhia kana o mimera iria ingi urahanda, ikira thumu muigana wa m oko maku o hari o irima. Eterera wone maciaro!



## Umenyereri wa Tuta.

### A. Kugitira tutambi.

Indo ta fungi, bacteria, viruses, nematodes na tutambi(muthua, thuthi na ingi) nocithukie mimera.

Murimu uria uikaine muno wa nathari ni damping off na urehagwo ni fungi. Utumaga mbegu cieme mbere ya kumera, miri ibuthe mbere ya kumera na mimera ikorwo iri miceke na ikoma.

Dalili ni;

- Gucekeha na gukua kwa mumera.
- Kuhoha na kugua kwa mumera.
- Mahuti gucunjia rangi.
- Mimera gukua.

Kugiririria murimu uyu.

- Gucunjia tiiri wa nathari thutha wa miaka 1-2. Kuhuthia tiiri noguteithie.
- Kwehutia mimera iria ihotetwo na kumicina.
- Ndukahe mimera maai maingi makiria.
- Tigirira maai nimarathertera.
- Gutigirira riera ni riingi.
- Kurimira maita maingi.
- Tiiri ndwagiriirwo gukorwo uri na unoru makiria. Uigananau wa tiiri na unoru niwagiriirwo ni kurumirirwo. Nyihia nitrogen na gwikira thumu.
- Tigirira utaganu ni muiganu mugundaini.
- Tigirira nathari ni theru hingo ciothe.

Mirimu noihotwo na kuhuthira dawa iria ciagiriire nadawa cia tutambi. Niwega kuhuthira dawa cia kiimereracia tutambi tondu cia duka cirri goro na nocithukie maria maturigiciirie.

### B. Guceeha miri.

Garura mimera rimwe hari wiki niguu muri wa itimu ndukaingire muno thin a niyagiriirwo ni gutinio. Muri mwega wa itimu uteithagia kugucia maai.

Riria mimera irakura thutha wa mieri 3-4 9kuringana na muthemba wa miti na riera) miri yayo yambagiriirwo gukura kuma nathi ya nathari.

Miri ino yagiriirwo nigutinio o thutha wa mieri 1-2 na kahiu. Ririkana umenyenereri niwa bata riria uroya mikebe ya miti niguu ndugathukie miri.

Njira ingi, oya nathari na igurunjira iria igiragiriirwo miri gutontya tiiriini na kumitina gugakorwo kuri kuhuthu.

### C. Kuhe maai, kurimira na kuhe kiiruru

- Tunyamu twa kuhe maai twagiriirwo ni kunyitithanio na ndoo ya kuhe maai niguu tiiri ndugakuu ni maai.
- Nouhuthire mukebe muture marima.
- Menyerera ndukahe maai maingi kana manini, makiria 20lts har mimera 1000. Ungihe maai maingi niukunina mimera hinya na uguciririe tutambi na fungus. Dalili imwe ya gukwonia ati niurahe maai maingi ni mareru.
- He maai o rucini na hwaiini kungihoteka.
- Tiiri uri na muthanga muingi wagiriirwo nigutiririo maai maingi.
- Ikira maai mumeraini na ti mahutiini.
- Itiriria maai kahora niguu maingire tiiriini wega.
- Menyerera ndugathukie miri riria urarimira.
- Ndukarimire riria mahinda mathire muno, kurimira k=ni kwa bata tondu riia niricidanagira maai na riua na mimera yaku.
- Mimera ingi niibataraga kiiruru – tigirira niwekira kiiruru na mahuti.
- Hingo ya mbura, humbira mimera na mahuti ma miti kana nyeki. Mimera niyagiriirwo kwehutio kuma rungu rwa miti niguu miti ya kuma mahutiini ma miti ndigathukie mimera yaku.
- Irigira nathari yaku niguu mimera ndigathukio ni mahiu kana ciana cigithaka.
- Reke mimera ikure nginya 30cm mbere ya guthamia. Njira ino noyoe kuma mieri 1-6. Thoma ugoro wa guthamia mimera. Na ningi wehutie kiiruru kahiondaine gaka.



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**Kiswahili Version**

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**Kagongo TIST Cluster wakiwa kwa mkutano wao tarehe 2/10/2025.  
Mkutano ujao utakuwa tarehe 6/11/2025.**

**Ndani  
ya  
Gazetti:**

**TIST: Kuelewa Jinsi ya Kujiunga na TIST, Kuunda Tani za Carbon, na Kupata Faida. Uku. 2**

**Kujengana: Msikose baraka ya kikundi chenu. Uku. 4**

**Kutengeneza mbolea kutokana na mimea – mbolea ya kiasili. Uku. 5**

**Utunzaji wa vitalu. Uku. 6**





## **TIST: Kuelewa Jinsi ya Kujiunga na TIST, Kuunda Tani za Carbon, na Kupata Faida.**

**W**akulima wengi wa TIST, hasa wale wanaojiunga na TIST leo, wameomba uelewa zaidi kuhusu mpango wa TIST. Wanataka kuelewa jinsi wanavyoweza kujiunga na TIST na kile wanachohitaji kufanyia kazi pamoja na washiriki wengine katika Vikundi vyao Vidogo, ili kupata manufaa na faida.

Jarida hili linatii ombi lao. Tutajadili mchakato kuanzia wakati mkulima mpya anataka kujiunga na TIST, shughuli muhimu na manufaa yanayotarajiwa wakati wa kufanya kazi pamoja katika TIST.

Ni muhimu kutambua kwamba kujiunga na TIST ni kwa hiari. Kabla ya kujiunga na TIST, wakulima wanahimizwa kujifunza zaidi kuhusu TIST, ili waweze kufanya uamuzi wa bure na wa kufahamu. TIST inafanya kazi moja kwa moja na wakulima. Wakulima hufanya kazi kwa bidii kwenye mashamba yao na kutunza mambo wanayofanya ili kupata faida.

### **Mkulima anayetaka kujiunga na TIST.**

TIST inapanuka kupitia Mkulima hadi Mkulima. Wanachama wengi wa TIST walijifunza kuhusu TIST kupitia wakulima wengine. Mkulima anayetarajiwa anapotaka kujiunga na TIST, anakaribishwa kwenye mkutano wa karibu wa

Nguzo ambapo wanafundishwa zaidi kuhusu TIST. Katika mkutano wa Nguzo, wanafundishwa jinsi ya kuanzisha Kikundi chenye nguvu cha TIST. Mafunzo zaidi na zaidi yanatolewa katika mkutano wa Nguzo.

### **Kushiriki katika TIST.**

Kikundi Kidogo kinapoamua kujiunga na TIST, huchukuliwa kupitia mchakato wa maombi. Utaratibu huu huwasaidia kuwa na uelewa wa wazi wa maeneo makuu ya mafunzo ya TIST - maendeleo endelevu, kilimo bora, na biashara ya mikopo ya kaboni. Ikiwa wataamua kushiriki katika biashara ya kaboni, wanafundishwa kuhusu mahitaji muhimu ili kushiriki kikamilifu. Kabla ya Kuanza Kupanda Miti kwa kutumia TIST - Msingi wa Kikundi Kidogo Kipya

Ili kuanza kupanda miti kwa kutumia TIST, soko la kaboni linahitaji utambue eneo ambalo unakusudia kupanda miti kwa biashara ya kaboni. Baada ya kutambua eneo hilo katika shamba lako, Mtumishi wa Nguzo atatembelea shamba lako na kufanya Uhesabuji wa Msingi.

### **Kupanda Miti kwa kutumia TIST.**

Katika mikutano ya Nguzo, utafundishwa Mbinu Bora za upandaji miti, na pia katika kuinua vitalu vya miti. Ili Kikundi Kidogo kiwe na faida, wanashauriwa kupanda miti yenye thamani kubwa na kuweka miti hiyo hai kwa muda mrefu.



Zaidi ya hayo, kuhudhuria mikutano ya Nguzo kunatoa jukwaa la kubadilishana mawazo bora miongoni mwa wakulima.

### **Ukadiriaji.**

Ukadiriaji ni mchakato ambapo tunapima matokeo ya shamba lako. Hizi ni pamoja na ukuaji wa miti na idadi ya miti. Kadiri miti inavyokuwa na afya, ndivyo kaboni inavyochuliwa zaidi. Mtumishi wa Nguzo atatembelea shamba lako na kufanya ukadiriaji. Data iliyopatikana itatusaidia kujua kiasi cha kaboni iliyohifadhiwa na miti yako.

### **Ukaguzi wa Nje – Uthibitishaji.**

Ili kuwahakikishia wanunuzi wa mikopo ya kaboni kuwa wanapata thamani kamili ya pesa zao, wakaguzi wa nje (wathibitishaji) wanakuja kuangalia kazi ya TIST. Uthibitishaji ni zoezi muhimu kwa sababu hukagua ikiwa tunafuata sheria za soko la kaboni, na vile vile kuweka ahadi zetu kwa wanunuzi kwamba miti itahifadhiwa hai kwa muda mrefu.

### **Jinsi TIST inapata kibali cha kuuza Carbon Credits.**

Wathibitishaji watakuja na kutembelea Vikundi Vidogo vilivyochaguliwa kwa nasibu. Walichagua Vikundi Vidogo ambavyo wangependa kutembelea wao wenyewe. Wakipata Vikundi hivyo Vidogo vinafuata Maadili ya TIST na kuzingatia sheria zilizowekwa na wadhibiti wa biashara ya kaboni, wanamwandikia Verra ripoti.

VERRA ni shirika linalodhibiti miradi ya kaboni na biashara chini ya soko la hiari. Tunapata cheti au mamlaka ya kuuza tani zetu za kaboni kutoka Verra.

### **Kuuza Tani za TIST za Carbon na Kugawana Faida.**

CAAC hufanya kazi zote kutengeneza na kuuza tani za TIST. Tunapokuwa na matokeo ya ubora wa juu, inakuwa rahisi kwa CAAC kuuza tani za TIST. Zaidi ya hayo, wakati shughuli nyinginezo kama vile CF, jiko za jiko, mizinga ya nyuki, matunda, karanga, malisho n.k. (ikiwa ni pamoja na ushiriki wa vijana na wanawake katika uongozi wa TIST), zinapofanywa na Wakulima wa TIST, thamani ya tani za TIST huongezeka sokoni, kwa hivyo bei.

Ikiwa tutafanya kazi mbaya na kuwa na data duni na taarifa zisizo sahihi, wathibitishaji hawataidhinisha tani hizo, na wanunuzi watapoteza imani na TIST. Wanaanza kutafuta tani mahali pengine. Tunapoteza soko na hatuwezi kushiriki katika soko la kaboni tena. Tuepuke hili!

Kwa hiyo ni muhimu kwa kila mtu anayehusika katika TIST kuzingatia kikamilifu **Maadili ya TIST - Sisi ni Waaminifu; Sisi ni Sahihi; Sisi ni Wazi; Tunawajibika kwa Pamoja; Sisi ni Watumishi sisi kwa sisi; Tunatumia bajeti ndogo kupata Matokeo ya Juu.**



## Kujengana: Msikose baraka ya kikundi chenu.

**K**ujengana ni sehemu muhimu sana ya mkutano wa kila wiki wa kikundi chako. Inasema katika Aefeso 4:15,16 kuwa tujengane hadi tuwe na utimilifu wa Kristu. Kila mtu katika Kikundi chako cha TIST huleta talanta na zawadi zake maalum kikundini. Moja ya vitu vya kuajabisha inayotokea katika kikundi kidogo ni kujua, kugawana na kutumia talanta hizo ulizopewa na Mungu.

Kujengana ni njia moja ya kufanya hizo talanta kuonekana na kutumika. Kuna sehemu mbili za Kujengana:

- Kabla ya ombi la kufunga, kila mtu katika kikundi aseme kitu kizuri maalum ambacho kiongozi amefanya katika mkutano huo. Kwa mfano, alitabasamu, aliweka masaa, alifanya mipango mizuri, aliwatia nguvu wanakikundi wote kuongea, alinisalimu na alinifanya nijisikie nimekaribishwa, alisema kitu kilichokuwa kinaendelea vizuri katika mkutano ama katika kazi iliyokuwa ikifanywa na kikundi, na kadhalika. Kila mwanakikundi anahitajika kusema kitu tofauti. Hili si la kujichagulia. Kila mtu ajenge kiongozi wa utumishi. Vikundi vingine hujenga hata msaidizi wa kiongozi.
- Kuongezea, ikiwa mtu ameona zawadi iliyoonyeshwa na kiongozi, mwanakikundi anaweza pia kusema ni zawadi ipi.

Kwa kupitia uongozi wa mzunguko, kila wiki kiongozi mpya hujengwa. Kupitia Kujengana, tunatiana nguvu kati yetu kuhusu vitu vizuri alivyofanya kiongozi wa wiki hiyo mkutanoni na talanta alizoonyesha mtu huyo.

Kujengana pia ni njia ya kujua kuangalia vitu vizuri kuwahusu watu halafu kuvisema. Sote twahitaji kufunza ndimi zetu kusema yaliyo mazuri. Kuongezea, kikundi chote hujua ni nini kikundi kinafikilia ni muhimu katika kiongozi mtumishi. Viongozi wanaofuata watafaidika kupitia waliyosikia katika Kujengana kuhusu viongozi waliopita na kujua ni nini muhimu katika kuwa kiongozi.

Kujibu wakati wa kujengana, kiongozi wa wiki hiyo atasema, “Asante.” baada ya kila mwanakikundi kusema taarifa nzuri iliyo maalum. Hakuna kujadiliana kuhusu vipi kungekuwa kuzuri zaidi ama tofauti. Mara nyingi, mtu huyo hufurahi anapoambiwa kuhusu mambo mazuri aliyofanya wakati wa mkutano. Wakati mwingine, huwa tunajua mambo kujihusu ambayo hatukuwa tunajua! Kujengana husaidia kiongozi wa siku hiyo kujua talanta zake na kuzidi kuzitumia. Kujengana pia husaidia kikundi kidogo kwa sababu wana kikundi wote huboresha uongozi wao wa utumishi wanapozidi kujifunza.

Kujengana ni baraka mara mbili!



## **Kutengeneza mbolea kutokana na mimea – mbolea ya kiasili.**

**M**boleo ya majani ni mbolea ya kiasilia ya kusaidia mimea yako kukua. Ni bora zaidi ya mbolea za viwanda kwani ni ya kiasili na haina athari za kuumiza mimea na mazingira. Kuna njia nyingi za kutengeneza mbolea, lakini njia ifuatayo imekuwa saidifu katika baadhi ya maeneo. Uliza majirani zako katika cluster yako ni gani imewaonekana.

### **Utayarishaji wa mbolea:**

- 1) Chagua eneo lenye upana wa mita nne na urefu wa mita nne la kuchimba shimo lako la taka.
- 2) Fagia sehemu hiyo.
- 3) Chimba shimo la mduara lenye upana wa mita tatu au nne na mita moja na nusu kina.
- 4) Kusanya masala yote ya mimea uliyo nayo na uyakate kuwa sehemu ndogo ndogo ( kwa mfano majani na mashina ya mahindi, mtama, maharagwe).
- 5) Weka masala haya ya mimea katika shimo ilo hadi kina cha nusu mita.
- 6) Halafu ongeza lita tano za jivu
- 7) Halafu uongeze centimita thelathini (ama kiwango kilichopo) za kinyesi cha mifugo (kwa mfano kinyesi cha nguruwe, ng'ombe, mbuzi au kuku).
- 8) Ongeza safu nyingine ya majani ya mimea na mashina (nusu mita).
- 9) Ongeza lita zingine tano za jivu.

- 10) Ongeza majani na mashina tena hadi shimo likaribie kujaa.
- 11) Hatimaye, ongeza safu ya udongo hadi shimo lijae.
- 12) Unapokuwa ukiweka udongo shimoni, ingiza fimbo ndefu katikati mwa shimo hadi ifike chini ya shimo.
- 13) Liache shimo la taka kwa miezi mitatu (siku tisini).
- 14) Katika kipindi hiki tumia maji yako machafu kuweka katika shimo hili. Kwa mfano, baada ya kuosha nguo au nyumba, yamwage maji uliyotumia juu ya shimo. Ikiwa una mifugo waweza pia kumwaga mikojo ya mifugo juu ya shimo.
- 15) Jambo hili litaongeza naitrojeni kwa mboleo yako.
- 16) Jaribu kuweka maji kila siku kwa njia hii, ama wakati maji yapo.
- 17) Baada ya siku tisini mbolea itakuwa tayari.

Tumia fimbo kama kipima joto – mbolea inapokuwa tayari lazima iwe na joto na waweza kuona mvuke ukitoka kwa fimbo hiyo baada ya kuitoa.

### **Matumizi ya mbolea hii:**

Ukishachimba mashimo yako ya kupanda mahindi, mtama au mimea mingine, ongeza mboleo kiwango kinachotoshea katika kiganja chako katika kila shimo. Angalia ili kujua matokeo!





## Utunzaji wa vitalu.

### A. Kudhibiti wadudu.

Viumbe hai kama fungi, bakteria, virusi, minyoo na wadudu (kwa mfano mchwa, vikugu) waweza kudhuru miche.

Ugonjwa aina moja unaopatikana sana katika vitalu huitwa 'damping off' na husababishwa na fungi. Ugonjwa huu husababisha mbegu kuoza kabla ya kuota, mizizi kuoza kabla ya mche kutokezea na mche kuwa mwembambe na kuvunjika.

Dalili za kawaida za ugonjwa huu ni:

- Shina hupunguza ukubwa wake na kufa linapofikia ardhi.
- Mche kunyauka nakuanguka.
- Majani yanageuka manjano.
- Mche unakufa mwishowe.

Dhibiti ugonjwa huu kwa:

- Kubadilisha udongo ulio kitaluni kila mwaka au miaka miwili. Kutenganisha udongo pia husaidi.
- Kutoa miche iliyoathirika na kuchoma mara moja.
- Kuepuka kumwagia maji zaidi ya yanayotakikana.
- Kuhakikisha maji hayafuriki.
- Kuhakikisha hewa inafikia miti vizuri.
- Kutoa magugu vizuri na kwa wakati mzuri.
- Udongo usiwe na rutuba nyingi sana. Fuatilia viwango vya kuchanganya vinavyofaa. Punguza kiwango cha naitorjeni kwa kupunguza mbolea.
- Kuna faa kuwa na nafasi tosha kati ya miche ili kuepuka mfinyano.
- Hakikisha kitalu kipo safi kila wakati.

Magonjwa yaweza kudhibitiwa kwa utumizi unaofaa wa kemikali na dawa za wadudu. Ni bora zaidi kutumia dawa zilizo za kiasili kwani za kemikali ni ghali na zaweza kudhuru mazingira kwa mfano;

- Matumizi ya jivu
- Kuhakikisha kitalu kipo safi ili kuzuia kuwahimiza wadudu kuja.

### B. Kupogoa mizizi.

Hamisha miche mara moja kila wiki ili mizizi mirefu isije ikaingia ardhini na kuhitaji kukatwa. Mizizi mirefu husaidia miti kutafuta maji baada ya kuihamishia shambani.

Miche inapoanza kumea katika mikebe baada ya miezi mitatu au mine (kulingana na aina na tabia nchi) mizizi huanza kukua na kutokea chini ya mikebe. Mizizi hii yafaa kukatwa kila miezi miwili au mmoja kwa kisu. Kumbuka kuwa mwangalifu unapoinua mikebe usije ukadhuru mizizi iliyo change.

Badala ya haya waweza kujaribu kitalu kilichoinuliwa ambacho hupunguza haja ya kupogoa mizizi kwani mizizi hujikata yenyewe.

### C. Kunyunyizia maji, kutoa magugu na kivuli.

- Kinyunyizi lazima kishikanishwa na mikebe ya kunyunyizia maji ili kisije kikasababisha mmomonyoko wa udongo.
- Waweza kutumia mkebe ulio na mashimo.
- Jiepushe na kunyunyizia maji mengi au kidogo, nyunyiza lita ishirini kwa miche elfu moja. Maji zaidi ya yanayohitajika hufanya miche kuwa nyoofo na kuvuta wadudu na fungi. Dalili moja ya maji zaidi ya yanayohitajika ni kuwepo kwa safu nyembamba ya mwani jua ya udongo.
- Nyunyizia kila asubuhi na jioni iwezekanapo.
- Udongo wenye mchanga utahitaji maji zaidi ya udongo unaoshikana.
- Mwaga maji udongoni, si kwa majani
- Nyunyizia pole pole ili maji yaingie udongoni.
- Kuwa mwangalifu usidhuru mizizi unapotoa magugu.
- Usiache magugu kwa muda mrefu. Kutoa magugu ni muhimu kwani magugu humea na kushindania mwangaza, maji na virutubisho.
- Baadhi ya mbegu huhitaji kivuli – hakikisha umetengeneza kivuli.
- Wakati wa mvua, funikia miche ukitumia nyasi kavu. Miche yafaa kutolewa chini ya miti ili maji yasiangukie miche na kuidhuru.
- Tengeneza ua ukizunguka kitalu ili kulinda kutokana na mifugo na watoto wanaocheza.
- Lache miche imee hadi centimita thelathini kabla ya kuihamisha shambani. Hili laweza kuchukua mwezi mmoja au ata hadi miezi sita. Angalia maelezo kuhusu kuhamisha miche. Pia toa kivuli wakati huu.

# Mazingira Bora

Newsletter November 2025

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**Kagongo TIST Cluster wakiwa kwa mkutano wao tarehe 2/10/2025.  
Mkutano ujao utakuwa tarehe 6/11/2025.**

## **Inside:**

- ✓ **TIST:** Kuelewa undu wa ulika nthini wa TIST ,kuseuvya tani sya nzeve itavisaa na kukwata vaita. *Page 2*
- ✓ **Kwakana:** Ndukavitukwe ni uathimo wa kakundi kaku kanini. *Page 4*
- ✓ **Kuseuvya vuu wa yiima -Vuu ute na kemikoo.** *Page 5*
- ✓ **Kusuvia Kivuio.** *Page 6*



## **TIST: Kuelewa undu wa ulika nthini wa TIST , kuseuvya tani sya nzeve itavisaa na kukwata vaita.**

**A**imi aingi ma TIST munamuno al meulika nthini wa wa TIST umunthi, nimakulitye maelew'e iulu wa walany'o wa TIST. Meenda kuelewa undu matonya ulika nthini wa TIST na nata matonya uthukuma na amemba ala angi tukundini tunini nikana matonye ukwata moseo na vaita.

Ithanguni yii nituneew'ie na nitueleetye nzia ya undu muimi utonya ulika e mweu nthini wa TIST, maundu mavata makwika na vaita ula weteetele wathukumana na TIST.

Ni undu wa vata kumanya kana kulika na TIST ni kwenda kwa mwene. Mbee wa kulika nthini wa TIST, aimi nimathuthaw'a mambe kuelewa muno iulu wa TIST nikana maaamue mesi nikyau kikwendeka kuma kwoo. TIST ithukumaa na muimi, muimi athukumaa na kithito muundani wake na kusuvia syindu syake nikana akwate vaita.

### **Muimi ula ukwenda kulika nthini wa TIST.**

TIST ithathaa kwisila muimi kuthi muimi ungi. Amemba aingi ma TIST mamanyie iulu wa TIST kwisila aimini angi. Yila muimi wina mea makulika nthini TIST, nuthokaw'a umbanoni wa ngwatanio ula wi vakuvi na kisio kyake na kumanyiw'a iulu wa walanio wa TIST. Wumbanoni usu wa ngwatanio nimamanyaw'a

undu wa kwaka kakundi kalumu ka TIST. Mauvundisyo mbeange na malikangu nimethiawa nthini wa mbumbano sya ngwatanio.

### **Kukonw'a nthini wa TIST.**

Yila kakundi kanini kaamua kukwatana na TIST, nimesilaw'a nziani ino ya kwiyaandikithya. Nzia ino nimatetheesya kuelewa vyu iulu wa TIST na movundisyo mayo iulu wa, kwiana kwikala, nima mbongele na utandithya wa nzeve itavisaa. Ethiwa nimaamua kulika viasalandi/utandithyani wa nzeve itavisaa, nimaaleaw'a iulu wa kila kyendekaa nikana makonw'e kwa wailu. Mbee wa kwambiia uvanda Miti ya TIST - Mwambiioni wa kakundi kanini ka TIST. Nikana kwambiia miti na TIST, soko wa nzeve itavisaa wendaa ukemanyithany'a vala ukuvanda miti ya viasala wa nzeve itavisaa. Itina wa kwonany'a niva ukavandaa miti ya TIST muthukumi kuma kwa TIST nutumawa kuka usisya miti ila yi kisioni kiu na kuthina miti la yivo kisioni kiu utw'ite kya uvanda miti.

### **Kuvanda Miti na TIST.**

Yila kwi mbumbano sya ngwatanio nimuumanyiw'a nzia nzeo sya uvanda miti na undu wa useuvya kivuio kya kitanda. Kwa tukundi tunini nikana tuseuvye vaita, nitutaawa to vande miti yina lato munene na kumikalya kwa ivinda iasa, ingi kuvika mbumbanoni sya





ngwatanio nikunenganae ivuso iseo ya kumanyiany'a iulu wa mawoni ma nima nzeo kwa aimi.

**Kuvitukithw'a.**

Kuvitukithwa ni nzia ya kuthima kila wikite muundani waku. Ila ni vamwe na kwina kwa muti, na utalo wa miti. Oundu miti yaku isasamukite now'o yina tani sya nzeve itavisaa ikutalika. Muthukumi wa ngwatanio nuvikaa muundani kwaku kuthiana na kuvitukithya. Uvoo ula waumya muundani waku kutumiawa kumya utalo wa nzeve itavisaa ila yiitwe mitini yaku.

**Utalokwikwa ni andu ma nza.**

Nikana kuikiithya aui ma nzeve itavisaa kana nimeukwata vaita wa mbesa syoo athiani nimokaa kuma nza wa TIST na kuthiana kila kivitukithye kana nikyaw'o. Kuvitukithya kuu niwkavata munonundu nikusiasya kana mio ya soko sya uta nzeve ino kana niyatiwe, nikana kwikalya au ma nzeve ino na kana miti ino nikwikala kwa ivinda iasa.

**Undu TIST ikwataa luusa wa uta nzeve ino itavisaa.**

Athiani na avitukithya yila mooka masakua tukundi tunini tumwe na matembea meoka kukunikila uw'o wa livoti ila inenganitwe kwoo kana nisyaw'o. Ethiwa nimavika kakundini kamwe ka TIST nameethia kaatii miao ila inenganitwe ni soko wa nzeve itavisaa nimaandikaa livoti kutunga kwa Verra. Verra

nikyo kikundi kila kiundamie utandithya uyu wa soko ino ya nzeve itavisaa kwa kwiyumya. Verra nimo matunengae ta TIST mwanya na utonyi wa uta tani sya nzeve itavisaa.

**Kutandithya tani sya nzeve itavisaa na kuaana vaita ta TIST.**

CAAC niyo yikaa wia wa utandithya na kuseuvya tani sya TIST. Yila tweeka nesa wiani witu ngetha yitu yi nzeve withiaa ni laisi kwa CAAC kuta tani sya TIST. Kwongeleela mawiko maitu angita nima ya kusuvia(CF) maiko ma usuvia mwaki, kuithya nzuki, matunda, mbindi, liu wa indo (vamwe na aka kutalika utongoini wa TIST) ila syikawa ni aimi ma tist nisyoneglaa lato wa tani sya TIST, kwoou thooa museo. Yila tweeka wia muthuku na livoti situ itenzeo kana kunengane livoti syovungu avitukithya mayiikiithya tani isu na kwoou athooi mayasya muiki naitu TIST. Nimambiia umatha tani kundu kungi. Nitwaasya soko noyithia tuitonya uta nzeve itavisaa sokoni uu ingi. Vatonyeka Twitenge na livoti itaikiika!

Kwoou ni useo kwa kila umwe wi nthini wa TIST kuatiia mawalanio maseo ma TIST ala nimo **Mwolooto wa TIST kana:- Twi aikiiku, Twikaa uw'o, Twikaa maundu kyenini, Nitutonya utalika kwa meko na mwikalo, Twi athukumi umwe kwa ula ungi, Nitutumiaa utumiku munini kwika maundu na kuete vaita munene.**





## Kwakana: Ndukavitukwe ni uathimo wa kakundi kaku kanini.

**K**wakana ni kwavata muno nthini wa kakundi kanini yila mwakomana kila kyumwa. Nthini wa Aveso 4:15 - 16 yiasya tuthuthanie ithyi kw aithyi kwindu wa uima wa Klisto. Kila umwe kakundini kenyu kanini nuetae kinengo kivathukany'o kwa kakundi kenyu. Kindu kimwe mwaile ni kwika ni kwona na kwakana na inengo ila Ngai umunengete.

Kwakana ni kueka inengo ila mwinasyo kwoneka kila kimwe kiithukuma. Ve nzia ili sya kwakana

- Mbee wa mboya sya mviso/kuinga wumbano kila umwe niwaile uweta undu wa kuthuthia ula mutongoi wikie nthini wa wumbano usu. Kwa ngelekany'o, kukeny'a, kusuvia masaa, walany'o museo wa mivango, uneeni wa uthuthia andu maneene, ngethi itumie mundu ew'a e muthokye wumbanoni, kumya mwolooto iulu wa undu uwetiwe na weekwa ni kakundi kaa na weethiwa wi museo mbee kwa kila umwe na angi maingi. Kila umwe nowaile uneena undu onakau ni kwenda kwa mwene.
- Ethiwa nimwoona kineng'o kinenganitwe ni mutongoi wenyu nimwaile ukiweta nikana onake amanye na kwiyyikia vinya.

Na utongoi wa kumanisya/kithyululu kila kyumwa mutongoi mweu akaakawa. Kwakanani kila umwe watongosya kyumwa kiiu akeethiawa akikite nundu kinengo kyake kila kiteni ungi akeethiawa atonya utavya na kuthuthw'a iulu wakyo ni amemba ala angi yila meuneenea kwakana.

Kwakana ni nzia ingi ya kuisya maundu ala maseo munduni na kumaweta, ithyoonthe nitwailwe uvundisya nimi situ kuneena mauseo ma umwe kuthi ula ungi. Nikana withie kila umwe niwoona na kusoma kuma utongoini wa uthukumi wa kila umwe wanyuvwa kutongosya. Mutongoi ula ungi mukanyuva akeethiwa emanyiity'e maundu meu kuma kwakanani kwenyu kula mwaaka mutongoi ula ei mbee wake. Ethiwa mukaneenany'a kwa kwakana ukeethia vaina mundu ukuthi anyungunyisya ayasya undu, unduu uu wialile kwikwa nundu kila umwe ena muyo na nimwianie nikwithiwa ethiwa motongoi ona akitie kwasya "nimuvea" kila umwe ena muyo na vai mundu ukwiw'a ataile na mundu atavya useo wake nutanaa na kumanya undu uteisi iulu wake mwene. Kwakana ni uathimo keli nundu ula uteisi kinengo kyake akimanya nuendeeaa na kukitumia na ungi akevundisya kuma kwake kwoondu wa utongoi ula wanengwa.



## Kuseuvya vuu wa yiima - Vuu ute na kemikoo.

**V**uu wa yiima ni vuu useuvitw'e vate ndawa na mimea kuma muundani na nutumaa mimea yiana nesa. Ni museo kwi vuu wa kuua ula wina kemikoo nundu niwakuma mniemani na niwamana ti wakuuu na nwanangaa liu kana mawithyululuko ta vuu / vatalisa wa kuua. Ve nzia mbingi sya useuvya vuu uyu, lakini ve nzia imwe nzeango kwi syothe isioni imwe. Kulya mutui waku wa ngwatanio yenyu kila kithukumite nesa kwoo.

### useuvya vuu wa yiima.

- 1) Kusakua kisio kya matambya 4 x 4m na kwisa yiima.
- 2) Enga kisio.
- 3) Inza yiima uthathau wa 3 - 4m na 1.5uliku.
- 4) Kolany'a matialyo ma mavemba, muvya, mavoso na uitilanga 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 ethiwa vaii oundu kiana (uyu ni vuu wa nguluwe, ng'ombe, mbui kana nguku).
- 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) Kii nikyongelaanzeve ya Nitrogen nthini wa vuu.

16) Tata navinya ungithye yima yii kila muthenya kwa nzia ila utonya.

17) Itina wa mithenya miongo keenda vuu wiithiwa wi tayali.

Tumia muti uyu wikati ta kithimi kya uvyuvu. Vuu wasuva ukeethiwa wimuvyu na nowone muti uuyu waumya uitoa.

### Utumii wa Vuu wa yiima.

wenza maima ma uvanda mbemba, muvya kana o mimea ingi ikia ngundi imwe ya vuu kila yiimani.

Syaiisya wone kila ukwata kuma vo!



## Kusuvia Kivuo.

### A. Kusuvia uwau na miimu.

Tusamu ta fungi, bacterial, virus, mithowe na tusamu ta (Nduti, Muthwa, syingolondo) nitonya kwananga tumime.

Mowau amwe makwataa mbeu yi kivuioni nita uthithu wina uundu ula uetae fungi. li nitumaa mimea yoa mbee wa itanamea kana mii ikoa mbee wa munguthe kumila na ethiwa mumea wii unambiia umea uimosa na ukw'a.

Mawonany'o amwe ma mowau aya nita:

- Kwosa kwa muthamba vaaya muthangani.
- Kuvova na kuvaluka kwa kamumea.
- Matu kutwika yelo.
- Kukwa kwa kamumea.

Undu utonya usiia uundu:-

- Kusesya muthanga wa kivuio kila itina wa mwaka kana miaka ili kila kietae kulekana kwa muthanga.
- Kuvetanga tumimea tula twakwatwa ni uwau uyu na kutuvivya.
- Kunginya na kithimo vate kuvitukya kiw'u uingithya.
- Ikiithya kiw'u nikiuthi kinatuumana.
- Eka muthanga withiwe ulekanitye nzeve ivite nesa.
- Ima nesa na ivindani yila yaile.
- Muthanga ndukethiwe wi munou kuvita kiasi. Kithimo kya muthanga kwavuu nikyaile uatiwa.
- Nivaile ithiwa na utaaniu waile katikati wa mimea.
- Ikiithya kivuio nikitheu ivinda yonthe.

Mowau ingi mnomasiwe kwa kutumi ndawa nesa. Ni useo kutumia nzia sya kikamba kwi kutumia ndawa ikwananga mawithyululuko ngelekany'o

- Tumia Muu.
- Ikiithya kivuio ni kiime kiina yiia nikana withie mututu ndina liu kwoou ndikuka kuete uwau.

### B. Kusea mii.

Sokya tumimea twaku kwa kyumwa imwe nikana mwii wa kuthi na nthi ndukangwate uendete na nthi na indi nikana usee mii ila yaasava muno . kii kitetheeasya miti kukwata kiw'u yathamwa kuma kivuioni na kutwawa muundani.

Yila tumimea tuu tuendee kumea itina wa myai 3-4 (kulingana na muvai) mii yatwo niyambiia kumea na kumila ungu mathanguni ala ivanditwe. Mii ino niyaile utilwa kila mwai kuvika myai ili na kavyu. Manya kana niwaile usuvia yila ukukiklya mathangu aya kana mikeve/mbisu ila uviite nthini ndukanange tumiti na mii. Ethiwa ti uu tata utumie kivuio kya kitanda (Sisya uniti 4) kila nikiolaa vata wa kusea mii nundu ikitaa uniina.

### C. Kungithya, Kuimia na Kwikia muunyi.

- Kikonyo kina mavuthi nikuyalie utumiwa mkungithyani nikana muthanga ndukakuwe.
- Ethiwa ti uu no utumie mukeve wina maima kungithya kivuio.
- Ndukendeew'e ni kungithya na kiw'u kingi kuvituka kana kungithya na kiw'u kinini muno, tumia ta lita 20 kungithya tumimea ta 1000. Kiw'u kingi nikietae undu ula uetae Fungus na kwongela tusamu tula twanangaa mimea. Wonany'o umwe wa kungithya kuvita kiasi ni kindiiu muthangani.
- Ngithya kila kwakya na mawioo vatonyeka.
- Muthanga wa thanganthi niwendaa kiw'u kingi kwi ilivi.
- Oneleelya kiw'u muthangani no ti matuni.
- Ngithya mbola nikana kiw'u kinywe muthangani.
- Sisya ndukanange mii yila ukuimia.
- Ndukeseumia yiia yikalite, imia oundu yongeleketete ute kuekeea yikambiie uania kiw'u kyeni, na unou wa muthanga.
- Mbeu imwe nisyendaa kwikiwa muunyi - kwoo ikia matambya makusyikiia muunyi ethwa ve vata
- Yila kwina munyao vrika muthanga wa kivuio na nyeki na ethiwa ni meu ikia kitaalu kuete muunyi. Ethiwa syi matanguni kana mbisuni/mikeve kua utwa ungu wa muti.
- lia kivuio mbee wa kukua kuthamya tumimea. nitonya ukua mwai kana myai ili kivuioni. wavikiia uthamya ingi vata muunyi ivindani yii.



# Mazingira Bora

Newsletter November 2025

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**Kagongo TIST Cluster wakiwa kwa mkutano wao tarehe 2/10/2025.  
Mkutano ujao utakuwa tarehe 6/11/2025.**

- Inside:**
- ✓ **TIST: Kikuyo ole kichutito TIST, Ketoo Tanisiekab Koristo, ak  
Kenyorchigee Melekweek. Page 2**
  - ✓ **TIST: Kujengana – Mat ibakach kaberuret en Katuiyeng’ung’ ne  
Ming’in ak Isasamet. Page 4**
  - ✓ **Ketoo keturrek chebo minutik. Page 5**
  - ✓ **Ribetab kabeti. Page 6**





# **TIST: Kikuyo ole kichutito TIST, Ketoo Tanisiekab Koristo, ak Kenyorchigee Melekweek.**

**T**emik che chang, missing ko chon kochute TIST raini, ko kikosom kokuyo missing akobo tetutietab TIST.

Moche kokuyo akobo ole kichutitoo TIST ak nee ne nyolu koyochi boisiet en kibagenge ak temik alak en Katuiyosiek Che Mengecheen asi komuch konyoror kelchinoik ak melekweek.

Baruani ko ityin makutikchuak. King'ololen kong'eteen ole chuteen temindet TIST, boisionik chebo komonuut, ak kelchinoik che kimuche kenyor olon kiboisie en kibagenge en TIST.

Bo komonuut kenai kele kechut TIST ko en tileng'ung' inyegen. Kotomo kechut TIST, kecheere temik konai chechang' akobo TIST, asi komuuch koityi tilet ne mie koichegen. Boisie TIST en kibagenge ak temik. boisie temik en kimnatet ak koriib komie tuguk che yoe asi komuch konyor kelchinoik.

## **Temindet ne moche kochut TIST.**

TIST ko tesokse koyoob temindet akoi temindet. Temik che chang konoe akobo TIST kobun temik alak. Olon mi temindet ne ititaat ne moche kochut TIST, ketoche en tuiyetab Isasamet ne negit en ole mii ole kinete che chang akobo TIST. En tuyetat Isasamet, kinete ole kitoundoo Katuiye ne Ming'in ne kiim. Kanetutik

che kimen ako chebo orit kinete missing en tuiyetab Isasamet.

## **Kebois tugul en TIST.**

Olon katil katuiyet ne ming'in kochut TIST, kimuti mutyo en ortinwek ch kichutitoo TIST. Ortinwechu ko toreti icheek konyoor kakuiyet ne tetaat akobo kanetutik che echeen chebo TIST – bandab taa ne teleloot, temisiet ne tesaat, ak mung'retab aldaetab koristo. Angot kotil kochut mung'aretab aldaetab koristo, kinete akobo mokutik asi komuuch kotestaa komie.

## **Kotomo kinaam kemin ketik ak TIST – Kiwotosiekab Katuiyosiek che Mengecheen.**

Asi kimuch kemin ketik en TIST, indonyo nebo koristo ko moche konai koreet ne imoche iminchi ketik chebo mung'aretab koristo. Yoon kaiboru komosto ne imoche en mbareng'ung', ko rutechin kiboityotab isasamet ak koyai koitosiek en kiwoteng'ung'.

## **Minsetab ketik ak TIST.**

En tuietab Isasamet, kinetin Ortinwek che Miachen chebo Boisiet en minsetab ketik, koboto ole kibititoo en betisiek. Asi komuch Katuiyet ne Ming'in konyoor melekweek, kechere komin ketik chebo komonut ak koriib



ketichoton kosobcho en kenysisiek che chang'.kora,ko ingeba tuiyosikab isasamet kenite kenyor ng'alek che chang akobo ortinwek che miach chebo boisiet chebunu temik alak.

**Koitosiek.**

Koitosiek ko oret ne kite walutik chebunu mbareng'ung'. Chu ko boto ole rutuntoo ketik, ak koitosiekab ketik. Olon miachen ketik kenyoru koristo neo ne kitobone kialda. Nyone kiboityotab isasamet ak koit ketikuuk. Walutikab koitosiechoton ko konech kenai koristo ne tindoo ketikuuk.

**Koitosiekab Sang' – Chigilikab.**

Asi kimuch kiborchi olikab sang chebo koristo kole nyoru kelchin en rabisiekuak, ko bwone chigilik chebo sang ak kochigil boisietab TIST. Chigilisiet ko boisiet ne bo komonut amun kere angot kisibi ng'atutikab ndonyo nebo koristo, ak koboto kiborchi oliik kelenchi kiribe ketik kosobcho en kenysisiek che chang'.

**Ole nyorundoo TIST chomchinet koalda koristo.**

Bwone chigilik ak korutechi Katuiyosiek che Mengechen che kamach inchegen. Leweni Katuiyosiek che Mengechen ichegen che moche korutechi. Angot konyor kole katuiyosiechoton kosibi ng'atutik chebo TIST, che kitet che ribe aldaetab koristo, kosire ng'al koityi Verra. VERRA ko katuiyet ne telechin tetutikab koristo ak

koyae mung'aret en ndonyo nebo magetab chi inegen. Kinyoru satifiket anan ko chomchinet kialden tanisiekab koristo koyob VERRA.

**Aldaetab Tanisiekab Koristab TIST Ak Pjeetab Melekweek.**

CAAC koyae boisiet tugul nebo taunet ak kamartaetab tanisieka TIST. Olon kokinyoru walutik chebo barak, ko nyumnyumitu en CAAC komarta tanisiekab TIST. Kora, olon mi boisionik alak cheu temisietab ribetab emet, koiwekab ma che ribe mat, moingonikab segemik, ndendereek, logoek ak amitwakikab kiyagik ak alak, (koboto boisionikab barnotik ak kwonyik en kandoinatetab TIST), ak keyoe choton tugul temikab TIST, kotesogse tanisieka TIST en ndonyo, ak kou noton ko boto oliet.

Angot keyai boisiet ne ya ak kiboru walutik che yachen ak logoiwekab lembech, ko moite koyan chigilik tanisiek ako ite kobeet kayanet olik en TIST akichek. Inome kocheng'e koristo en komoswek alak. Kibete ndonyo ako mokimuche ketestaa en ndonyo nebo koristo en kasarta age. Ongeistoengee niito!

Bo komonut kou noton en chi tugul ne tinye gee ak boisietab TIST kosib ng'atutik **chebo TIST – kibo iman, ki choton che nin, ki che tagunotin, ki che tindoo walutik, ki kiboitinikab iko, kiboisien rabisiek che tutigin kenyorun walutik che echeen.**



## TIST: Kujengana – Mat ibakach kaberuret en Katuiyeng’ung’ ne Ming’in ak Isasamet.

**K**ujengana (ketechgee) ko bo komonutiet missing en tuiyetab Isasameng’ung’ en arawet age tugul ak tuiyetab wikit age tugul nebo Katuiyet ne Ming’in. mwoe en Ephesoek 5:15, 16 kole kiiku che techegee akoi keit mitunet tugul nebo Kristo. Chi tugul en Katuiyeng’ung’ ne Ming’in koibu talentaisiekchik ak konunotoek koiti Katuiyet ne Ming’in. Agenge en tuguk che togu en Katuiyet ne Ming’in ko kegeer, kepjei ak keboisien talentaisiek che kigoneechg Kamuktoindet.

- Ketechgee (kujengana) ko oret ne kiboisien talentaisiechoton. Mi kebeberuwk oeng en kujengana: Kotomo kekerr en saet, ko mwoe chi tugul kiit agenge ne mie akobo kiy ne kayai kandoindet en tuiyet. En korogut, kinyimio, kirib saisiek, kiyai tetutik che kororoon, kicher membaekab katuiyet ne ming’in, kocher membaek tugul kong’alalso, kiigatan, kiibor kiit ne mie ne kiteset taa en tuiyet anan ko en tuiyet anan ko en boisiet. Nyolu komwa kiymembayat age tugul ne ter. Igochin age tugul kujengana kandoindet. katuiyosiek alak kogochin rubeiywot kujengana.
- Kora, angot kogeer membayat agenge konunotiot ne ko go kandoindet, komuche komwa kora. En kandoinatet ne kiwolchingee, ko wikit age tugul ko nyolu konyor kandindet age tugul

kujengana en wikit age tugul en kujengana, kecheregee en kit ne kayai kandoindet en wikinoton en tuiyet ak talenytaisiek che kaiboer chito. Kujengana kora ko oret ne kimuche kecheng’ tuguk che miachen akobo biik ak kemwa. Kimoche tugul kinet ng’eliepikiok kemwa tuguk che kororon. Kora, komuche konetgee katuiyet katugul konai kole nee ne kaibwat katuiyet katugul kobunchikamanut en kandoindet. Kandoik che isibu ko nyoru kelchinet en tuguk che kakimwa en kujengana akobo kandoik chebo taaak tuguk che bo kamanut che ibwote katuiyet akobo Kandoindet.

En walutiet koiti Kujengana, kandoindetab wikinoton ko kimwa kole, ‘Kongoi’ en chi tugul en tuguk che kamwa en katuiyet, ng’alek che miachen. Momi ole kimuche kemaw kele kotaimuche ko kakiakit kosir yoton. En abokora, ko bainbai chito ngemwochi tuguk che miachemn che kayai en tuiyet. En kasarta age kineteegee akobo tuguk che kimakingen akobo echeek! Kujengana ko toreti kandoindet en betunoton konai talentaisiekyik che kimakongen. Kora, kujengana ko toreti katuiyosiek che mengechen amun membaek komuche kotes kandoinatenyuan ak koneteegee. Kujenana ko koberuret ne nyilen oeng’!



## **Ketoo keturrek chebo minutik.**

**K**eturek ko toreti mising minutik kochok en ngungunyek. Ago kororonen amun motinye ngemet en rurutik ago nyumnyum kenyor ago motiye oliyet neo mising, motiye ngemet en agobo ltondab emet.

Miten anyun orinuwek chechang che kimuchi ketounen keturek en koborunet ne isibu ko kigoyomnda biik chechang temik. Otebenge en Kilasta ole kiboisioto biik alak.

### **Tounet ketoo kechob keturek.**

1. Lewen ole imuchi ichoben keturek (4m by 4m).
2. Itilil yoton.
3. Bal keringet netinye kokwoutik 3m - 4m - 1.5m kochut orit.
4. Iyum anyun ngetunanikab imbar tugul ak itonaton komengegitun ak itorchik keringet chon ko kou (sogegab ketik mobekkab bandek, ngendek) ak alakau.
5. Torchi keringt koit 0.5m.
6. Tesin beekab 5ls chebo orek.
7. Tesin sorowekab tuga, neng, lgogenik kot koit 30cm.

8. Tesin ngetunanaik kot koit 0.5m.
9. Tesin beek 5ls chebo orek.
10. Testai itesi ngetunanik got konyi keringet.
11. Tesin baragut ngungunyek.
12. Ye itestai icheng bitoiyot ne koi ak ilumchi kwenutab keringet kot kotiny kwony.
13. Igomuny keringet kotar betusiek 90(orowek somok).
14. En kasariton tugul itestai itumchi beek chon kiunen tuguk en kaa. Ingot itinye tuga imuchi iyum sogororek asi itesi keringet.
15. Niton kotesin nitrogen.
16. Yai kouniton en betusiek tugul.
17. Ye kagobata orowek 3 ko koruriyo keturek.

Togunen burgeyet ne mi keringet.

### **Boisiyetab keturek:**

Ye kagoit ichob imbaret inam ibal keringonik kosibgei ak minutik cheimoche igol. Keringet angenge koibe keturekab rubeito, rib anyun wolutik che bitunen imbarengu.





## **Ribetab kabeti.**

### **A. Teretab susurik.:**

Susurik kutik ak alak kou toik chepkimoik ak somunyik komuche kowech en kabeti

Miondo ne korom missing en kabeti ko koristo ikochin niiton nunet keswek. Kotomo korut

Tinye koborunet kouni:

- Sokite keswek ak koyam.
- Chorirendos sokek ak kobutyo.
- Tolelyokitu sokek.
- Nebo le komeyo.

Teret ne nyolu:

- Wal kabeti yeibata kenysisiek (1-2).
- Ketit ne kang'emak itutu.
- Mat inde beek che chang.
- Ker ile kosich ole mondoen beek.
- Ingonyor koristo.
- Sember en abogora.
- Mat konyor ng'ung'unyek anan okwoindo neo.
- Mat kochilge ketik en kabeti.
- Ingotililit betit en abogora.

Mionwek kimuchi keboisien kerichek , missing ko chebo kipkaa amun motinye kowech. Boisien kou orek Rib kabeti asi maimuch kobwa susurik.

### **B. Toretetab tigitik:**

Rib missing kabeti asi maimuch koba tigitik kokoegitun ketile asi konyor ketit itondo

Ne kararan. En kasarta nebo orowek (3-4) konam anyun tigitik komong'unen teret . Kimuchi ketil en kila en arowek (1-2) ak rotwet .

Kou noto itech betit ne kanaptaat asi komawechok tigitik. .

### **C. Tumchin beek, sember ak iur:**

- Boisien watering can asi mowech kabeti.
- Matinde beek che chang anan ko chetutikin , beek chechang koweche keswek.
- Tumchin en koron ak koskolen.
- Emet netinye ng'ainet komoche beek en abogora kosir menets.
- Matinkotiny beek sokek .
- Rib tigitik ye isemberi.
- Sember abogora amun timdo kokochin keik amoegekitun amub moche beek ak asista.
- Keswek alak komoche urwet.
- en kasartab robta ituch keswek ak suswek cheomotin asi moib beek.
- Rib en tuguk alak tugul kou tuga amun imuch kowech.
- Ingonyo ketit agoi 30 cm kotomo iwe imin imuchi kotar arawek (1-6) en kasari iiste urwet en kabeti asi kokochi ketik konyor asista ak kogimegitun.