

# Mazingira Bora



# TIST

The International Small Group & Tree Planting Program  
www.tist.org

English Version

An Environmental, Sustainable  
Development and Community Forestry  
Program.



Members of Karandi TIST Cluster after the Cluster meeting last month.

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# Kirubia Cluster: Teaching our Children about Climate Change. We have recruited Karurini Primary School into TIST Program.

By Festus Mutegi, Cluster Servant.

**W**e are Servants to each other, says Kirubia Cluster. Having realized the increasing effects of Climate Change, we agreed to focus our attention into educating our children on the importance of planting and caring for the trees.

We approached the management of Karurini Primary School and talked to them about TIST. They were excited and agreed to join TIST as an institution. Kirubia Cluster had organized to donate 522 trees, both indigenous and exotic to help the school start off.

Our goal is to make Kirubia Green, says Mr. Mbaka, a Cluster member. Today, Kirubia has more than 13,000 trees quantified in TIST. This season,

we are planning to plant more than 5,000 trees. Besides TIST activities, Kirubia Cluster has started table banking and so far, Ksh 15,000 has been raised.



Kirubia Cluster members together with Karurini Primary School pupils after planting 522 trees in their school grounds.

## TIST: Pest Management.

**E**very farmer knows how difficult it can be to keep crops and trees free from pests and diseases. There are many different types of pests that can damage your fields including rodents, insects, birds, fungi, bacteria and viruses. Weeds are unwanted plants that reduce productivity by competing with your trees and crops for nutrients, water, space and light.

This article is split into two parts - the first part gives some broad advice on general management strategies, which can reduce the risk of pests and diseases. These use best practices from conservation agriculture.

The second part collects some of the most useful advice from the internet on specific pests, diseases and strategies. It is not possible in this article to cover all the different crop types, pests and appropriate control strategies that TIST small groups need information on. It is important for trainers to research with their small groups what the most common problems are. Then trainers can access solutions through checking the resources provided in this article. Sometimes being a good trainer is not knowing all the answers at once, but knowing where to look for further information!

### Part A: General pest management strategies.

Through using the best practices from conservation agriculture you will also be helping to protect your fields from pests and diseases. The following are some key points to consider:

**Fertile soil:** having soil rich with nutrients gives your crops the best chance of growing well and stronger crops will be more resistant to diseases.

**Crop rotation:** certain pests depend on a specific food source. If you grow the same crop in a field year after year it increases the risk of pests being able to survive and thrive in that area. Changing the crop through rotation practices means that pest cycles can be disrupted and damage to your crops minimized.

**Intercropping:** increases the diversity of plant life in the plant, and can help prevent one type of pest dominating. Certain pests also get confused by intercropping and do not spread as quickly as in a field with just one crop. Try intercropping with plants, which repel some pests through their odor



(such as onion, leek, mint, garlic, sweet basil, oregano, marigold).

**Cover crops and mulching:** are not just good for increasing soil fertility and water content, but can also reduce weeds by increasing shade. Do not use plant material that has flowered and seeded as your mulch, however, as this may accidentally spread diseases.

**Use resistant crop varieties where possible:** remember that indigenous seeds may be the most resistant of all in some cases and it is not always necessary to buy imported strains. However, the context varies and you should get local knowledge from other small groups.

**Removal of diseased plants or plant parts:** diseased plants need to be properly disposed of so that they do not spread the infection to other healthy plants. Sometimes it is clear that the whole plant is not affected and can be controlled through pruning of specific branches.

**Plant seeds that are disease-free and appropriate:** to the local conditions to give your crops the best chance of survival.

If you are applying **nitrogenous fertilizer:** make sure you are using the correct amounts, as over-fertilizing a field may increase the risk of certain pests.

**Attract natural enemies/farmer's friends:** these include predators (those that eat the pests), parasitoids (they lay eggs in certain insects that are killed when the larvae hatch) and pathogens (infectious agents causing disease in pests). Examples include conserving ladybirds, spiders and hoverfly larvae, which feed on aphids, caterpillars and other pests. Hedges and mulch can provide good habitats for many natural enemies, as can certain flowering plants such as fennel and celery. However, it is important to be able to tell the differences between which are your farmer's friends and which are pests! Resources in the second part of this article will help you identify natural enemies at different stages of their life cycle, and which ones are most useful for the specific crops you are growing.

If you have tried the above suggestions and still have pest problems, you may need to **consider pesticides**. Some pesticides you can make yourself using natural ingredients and others you can buy from shops. Both types need to be used very carefully. The correct use of them can kill the pests and weeds, and increase crop yields. However, inappropriate use can kill beneficial organisms such as pollinators (e.g. bees) and natural predators which feed on pests. Pesticides can lead to resistance in pests, and can be harmful to human health if not applied in the right concentrations. If you do use pesticides, ensure you carefully follow the correct storage, usage and disposal guidelines. Get the right dilution, ensure you know whether to spray down on the plant or up from underneath (or both) to find the pests, choose pesticides which are specific to the pest you have a problem with, and choose ones with as low toxicity as possible. Using broad spectrum pesticides in high concentrations which kill everything may actually be worse for your crops and the ecosystem, so take the time to educate yourself on which products are most appropriate to the problem you are facing.

**Weeding:** although it is hard work, it is worth keeping your fields as clean as possible. Remember that some weeds can be beneficial – some types fix nitrogen, some can be used for fodder, some have medicinal properties and some produce flowers useful for producing nectar for bees.

## **Part B: Where to look for specific information**

The points given in part A will help your fields to be as healthy as possible and are Best Practices for reducing pests and increasing yields. However, sometimes Small Groups will still face pest problems that need specific treatment. Choosing the right natural predator, natural pesticide or chemical pesticide depends on clearly identifying which pest is causing which problem for which crop. The below links will help you find information you can pass on to the Small Groups:

**Useful websites, which have comprehensive directories on specific pests, management strategies and also common problems for different crops:**



<http://www.oisat.org/>  
<http://www.infonet-biovision.org/default/ovvimg/-/pests>

**Management tips specifically on nematodes:**  
<http://www.aglearn.net/resources/vegIPM/rkn.pdf>

**For more information on natural enemies of pests:**  
<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>  
<http://www.aglearn.net/resources/vegIPM/naturalEnemies.pdf>

**To learn more about insect life cycles:**  
<http://www.aglearn.net/resources/vegIPM/insectLC.pdf>

**Using natural pesticides and/or other natural methods of protection**  
**For information on a natural bacterial pesticide**  
<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**For home-made flour preparations:**  
<http://www.infonet-biovision.org/default/ct/236/recipes>

**For Organic Pesticides**  
<http://www.nzdl.org/gsdImod>

**For hot water treatment:**  
<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**For natural pesticide using garlic:**  
<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**For natural pesticide using neem:**  
<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**For natural pesticide using pyrethrum:**  
<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**For pesticides using soap:**  
<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**Using the power of the sun to kill pests (solarization):**  
<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**List of plants with crop-protecting properties:**  
<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**Using a push-pull approach using Napier grass and desmodium legume in maize fields:**  
<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**For a list of bio pesticides used in Kenya and distributors:**  
<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**For information on bio-fumigation:**  
<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**For information on copper pesticides:**  
<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**For information on sulphur pesticides:**  
<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**Using traps and bagging:**  
<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides6>

**For information on selective use of chemical pesticides as a last resort:**  
<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**For more information on pesticide toxicity:**  
<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>

Your Cluster Servant can use the palm to get this information from the internet and learn together at the Cluster meeting.





## Karandi Cluster: New TIST Cluster in Laikipia West.

*By David Thuku, Cluster Servant.*

We, Karandi Cluster are happy to join TIST. In 2014, Mr. Mwangi Kasabubu introduced TIST to our area and he learned about TIST while attending Tandare Cluster meeting. Mr. Mwangi talked to us and we were interested in joining TIST. So far, 26 Small Groups have been formed and formally registered in TIST. Many more groups are currently in the application process.

We have been impressed by TIST activities, and are happy to implement training we have been receiving. We have already completed elections and have our first leadership. Cluster leaders are Alice Wanjiru 0715247754 is Cluster Leader, Peter Kiarie 0716824874 is Co-Leader, and Samson Koech 0725466733 is the Accountability person.

Our leaders have volunteered to take our Cluster to high level of efforts that will bring us

bigger results. Our goal is to plant more than 250,000 trees in our Cluster. We have also been taught about TIST Values. We have committed to abide by TIST Values. In TIST, We are!



*Members of Karandi TIST Cluster after the Cluster meeting last month.*

## HIV & AIDS: Prevention of Mother - to - Child Transmission (PMTCT).

The HIV virus can be passed from the mother to the child during:

- Pregnancy
- Child birth
- Breastfeeding

This way of passing on the virus from the mother to the child is known as mother-to-child transmission or PMTCT for short. Without medication, the risk of transmission in this way can be 20-45%. However, there are ways in which this risk can be dramatically reduced. When PMTCT practices are followed properly, the risk of transmission of the HIV virus from the mother to the child can be less than 1 in 100 babies (less than 1%).

In July 2013, the World Health Organization released updated guidance on PMTCT. The guidance is written for the government's healthcare providers to follow. The main advice is:

- Give all HIV-positive women who are pregnant or breastfeeding antiretroviral drugs (ARVs). The ARVs should be started in pregnancy and be taken consistently not only during the birth and throughout breastfeeding, but then continuing for the rest of the mother's life.
- Continuing the ARVs for the rest of the mother's life will not only be beneficial for her, but it will continue to reduce the chance of her passing on the virus if she decides to have more children in the future.

- The type of ARV is advised to be a triple-drug regime. This is where three different classes of anti-HIV medication are combined together. However, the doctor should be the one choosing the specific treatment according to the country's national guidelines and what is currently available in the area.

In this article, we look in more detail at guidelines for how to prevent the spread of the virus from a mother to her child. At your Cluster meeting, ensure the follow key points are mentioned and understood:

Babies born to HIV-positive mothers should receive a course of antiretroviral drugs. The usual guidance for breast-fed babies is once-daily nevirapine (NVP) or twice-daily zidovudine (AZT) for 6 weeks. If the baby is not being breastfed for any reason, the doctor may advise the treatment for less than 6 weeks, but the decision not to breastfeed should be made in careful consultation with health professionals.

In low income countries such as Kenya and Uganda the advice is to continue breastfeeding babies. This is because unless there is access to clean water and sanitary conditions, contamination from preparing infant formula can increase the risk of infections for infants. The risk of serious illness and death from these infections is higher than the risk of passing on HIV, especially if ARV drugs are being taken.



Breast milk has all the nutrients required for the first six months of a baby’s life, and contains special proteins which protect the child against disease.

It is advised to breastfeed exclusively for 6 months. This means that only breast milk should be given to the baby – no water, no teas and no juices etc. The only thing other than breast milk that can be given is medication when advised by a health professional.

After exclusively breastfeeding for six months, gradually introduce foods into the diet. This is called introducing ‘complementary foods’ and includes semi-solid foods such as porridge and mashed foods. The advice of exclusively breastfeeding for 6 months and then gradually introducing complementary food thereafter is the same for HIV-negative and HIV-positive mothers.

Breastfeeding should continue alongside the introduction of foods for up to 12 months (one year). Therefore after one year of age the child will not be taking breast milk any more. This is slightly different than advice given to HIV-negative mothers, who are advised to continue breastfeeding up to 24 months (2 years).

The option above, where ARV’s are given to the mother for the rest of her life is known as ‘Option B+’. If a country does not have the resources for this, the government may follow Option B whereby ARVs are provided to the mother from pregnancy until one week after breastfeeding has stopped. The mother is then assessed to see if she requires continued ARVs or not. If her immune system is very weak she may qualify to continue using the ARV drugs, but if her immune system is stronger she may be advised to stop taking the drugs but continue regular check-ups to monitor the situation.

Whichever option is provided, it is very

important for the mother to take the ARV drugs at the right time and in the right dose to provide the greatest protection possible for her child.

If ARV drugs are not available for the period of pregnancy, delivery and breastfeeding the mother should get advice from the local healthcare providers. In most cases, especially where access to clean water is not guaranteed, breastfeeding will still be encouraged. Only in places where clean water is available consistently, and infant formula can be prepared without risk of contamination will formula be advised. This will not be the case for the majority of locations where TIST small groups are.

As of April 2014, Kenya has adopted Option B and Uganda has adopted option B+. For a video giving details of the B+ approach see: <https://www.youtube.com/watch?v=2TIX7-WreWo> (4:43) For the above guidance to be followed it is of course essential that the mother knows her HIV status.

Trainers, please encourage the group members if they are planning to have children, if they are already pregnant or breastfeeding, or they know of others in this situation, they should consider having an HIV test. This is the only way to know if there is a risk of passing on the virus to the child. The good news is with the appropriate use of ARVs for the mother and the child, the risk of transmission can be dramatically reduced.

References:

<http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>  
<http://www.emtct-iatt.org/countries/uganda/>  
<http://www.emtct-iatt.org/countries/kenya/>  
[http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)  
<http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>  
[http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

## Kinoro TIST Cluster: One step at a time.

*By Jemima Gatwiri, Cluster Servant.*

**W**ith 54 TIST Small Groups in our Kinoro Cluster, we are determined to do more in TIST for our own benefits. Today, we have established trees nurseries that are ready for transplanting this rainy season. We plan to increase our current 27,000 + trees to 35,000 trees this season alone. Our goal is to attain 200,000 trees.

We have embraced table banking in our Cluster. So far, we have saved over Ksh 10,000 which are loaned to participating members at a small interest. This is geared towards empowering ourselves financially too. We are planning to start rabbit and bee keeping early next year.



*Members of Kinoro TIST Cluster reading together Mazingira Bora articles during September 2014 Cluster meeting.*

# Mazingira Bora



# TIST

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**Kimereu Version**

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Members of Karandi TIST Cluster after the Cluster meeting last month.

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# Cluster ya Kirubia: Kuritana aana betu kwegie kugaruka kwa rera. Nitutonyithitie cukuru ya Karurini Primary ndene ya muradi jwa TIST.

*Ureteri ni Festus Mutegi, Ntumba ndene ya cluster.*

**T**uri atungataniri, niu cluster ya Kirubia ikuuga. Tukurikia kumenya mantu jaria jaumanagia na kugaruka kwa rera jaria jetite na mbele kwongereka, nitwetikaniririe kutegithia mathuganio jetu untune bwe kuthomithia aana betu kwegie bata ya uandi na umenyeeri bwa miti.

Itwonere atongerira ba cukuru ya twana ya Karurini na twabariria kwegie TIST. Nibagwirue na betikiria gutonya TIST ja cukuru. Cluster ya Kirubia niyangite kuejana miti Magana jatano na mirono iiri na iiri, miti migeni nay a gintwire gutetheria cukuru kwambiria.

Kioneki gietu ni kuthithia cluster ya Kirubia igie rangi ya imera, niu Mukuru Mbaka akuuga. Narua, Kirubia irina miti nkuruki ya ngiri ikumi na ithatu iria itari ni TIST. Mbura iji nitubangite kuanda

nkuruki ya miti ngiri ithano. Amwe na mantu ja TIST, cluster ya Kirubia niambiririe gwika mbeca na gukobithia amemba na gukinyira au, ngiri ikumi na ithano niciikitwe.



*Cluster ya Kirubia amwe na aritwa ba cukuru ya twana ya Karurini bakurikia kuanda miti Magana jatano na mirono iiri na iiri ndene ya cukuru.*

## TIST: Kunyiyia tunyomoo turia tuthukagia imera.

**O**murimi naji uria kuri inya gwika imera na miti itirumi ni tunyomoo na itigwati ni mirimo. Kurina tunyomoo twa mithemba mwanya turia tuumba kuthukia miunda yaku amwe na mbiti ta mbea, nyoni, na tunyomoo turia turetaga mirimo. Iria ni imera biria bitikwendeka biria binyagia uciari bwa imera gukurukira gushindana na miti na imera biaku niuntu bwa irio, ruuji, guntu gwa gukara na weru

Mantu jaja jariritue ndene ya icunci biiri – gicunci kia mbele kiriejana kirira gikiarie kwegie njira cia kumenyeera iria ciumba kunyiyia ugwati bwa tunyomoo na mirimo. Njira iji cia urungamiri itumagiira mitire iria miega buru ya urimi bubwega.

Gicunci kia biiri kiriuthurania mathuganio jamwe ja jaria mega buru kuuma kiri internet kwegie o kanyomoo, murimo na njira ya urungamiri. Tutumba kwariria mantu jonthe kwegie mithemba yonthe mwanya ya imera, tunyomoo na njira iria njega cia kunyiyia iria ikundi bibinini bia TIST bikwenda umenyo kwegie. Burina bata aritani kuuria na gucua umenyokwegie thina iria boonangaga barina ikundi biao. Riu aritani nobacue njira cia gukabana na mantu jaja gukurukira gucwaa guntu kuria baathiria bacue aja nthi. Magitene jwamwe kua muritani umwega ni kwithirwa utiji macokio o rimwe, indi ukamenya naria umba gucua umenyo nkuruki!

### Gicunci kia mbele: Njira cia urungamiri bwa tunyomoo

Gukurukira gutumira mitire ya urimi bubwega ukoomba kinya gutethia kumenyeera miunda yaku kumania na tunyoo na mirimo. Jaja jathingatite ni mantu jamwe ja bata mono ja kuthuganiria:

**Muthetu jumunoru:** Kwithira urina muthetu jumunoru na irio nikuejaga imera biaku kanya gakanene ga gukura bwega na imeraa birina inya nkuruki bikoomba gukabana na mirimo bwega

**Kugarurania imera:** Tunyomoo tumwe turijaga irio kuuma kimera muthemba munna aki. Ukaanda kimera kia muthemba jumwe muundene mwaka nyuma ya mwaka nwongagira kanya ka tunyomoo kuumba gutuura na gukura bwega antu au. Kugarura kimera na njira ya kuthiurukia ni kuuga guciarana kwa tunyomoo tutu gukagitarua na magitaria ja imera biaku jakanyia.

### Kuandaniria imera bia mithemba mwanya:

Nikwongagira wingi bwa imera biria bigukaraniria na nogutethe kuthiria kwathana kwa muthemba jumwe jwa tunyomoo. Tunyomoo tumwe kinya nitwangeratanagua ni uandi bwa imera mithemba mwanya na tutiumbaga gutamba na mpwi ja ndene ya munda jurina muthemba jumwe aki jwa kimera.





Geria kuandaniria mithemba ya imera iria ingaga tunyomoo gukurukira miruki yabio (ja matunguru, leek, mint, garlic, sweet basil, oregano, marigold).

**Cover crops and mulching Kuanda imera bia gukunikira muthetu na gukunikira muthetu na imera bigitwi:** Mantu jaja jatibui aki niutntu bwa kwongera unoru bwa muthetu na ruuji ndene ya muthetu, indi kinyanjanyagi iria gukurukira kwongera kirundu. Ugatumira imera biria birina maua kana birina mpindi gukunikira mutheti, nontu jaja nojatambie mirimo.

**Tumira mithemba ya imera iria itigwatangagwa ni tunyomoo na mirimo riria gukuumbika:** Rikana ati mpindi cia gintwire nicio ciumba kwithirwa ciumbaga gukabana na mantu jamaingi nkuruki ya ingi naamwe na rionthe ti mwanka ugure mpindi cia mithemba ya kuretwa. Indiri, bubu iburinganaga na nubati kwamba gucua umenyo kumania na ikundi bibinini bingi.

**Kurita kwa imera kana icunci bia imera biria birina mirimo:** Imera birina mirimo nibibati gutewa bwega nikenda bitigatambie mirimo iji kiri imera biria biri thiria. Rimwe nikwonekaga ati kimera kionthe gititongi ni murimo na murimo nojuthirue gukurukira kugita bingi bimwe.

**Anda mbeu iria itina mirimo na ikabua antu au:** kuringana na rera na uria antu au akari nikenya ua imera biaku kanya gakanene nkuruki ga gutuura.. Kethira nugwikira fertilizer ya nitrogen ya nduka: menyeera nugutumira ithimi biria ubati niuntu gwikira inyingi nkuruki muundene nikwongagira kumbikua kwa tunyomoo twa mithemba imwe kwongereka.

**Thithia mantu ja gukucia anthu ba tunyomoo/ acore ba arimi:** Anthu baba ni nyomoo iria cirijaga tunyomoo tutu, tunyomoo turia tuciaragira nkara kiri tunyomoo tutu tungi na gutuuraga nkara ciakomoka na tunyomoo turia turetaga mirimo ndene ya tunyomoo tutu ukwenda kwinga. Ming'uanano ni amwe na kumenyeera ladybird, mbwibwi natwana twa hoverfly turia turijaga mang'ingo na tunyomoo tungi. Ndwego na imera bia gukunikira muthetu ni antu aega a gukarwa ni antu baba ba tunyomoo tutu, na kinya imera bimwe biria biri maua ja fennel na celery. Indiri, burina bata kuumba kuathurana gatigati ka anthu ba tunyomoo baria bari acore ba murimi kumania na tunyomoo tutu tuthuku! Aja nthiguru ndene ya gicunci kia biiri nikuandiki mantu jaria jomba gugutethia kumenya anthu ba tunyomoo riria bari kiri igita mwanya ria ukuru, na ni mithemba iriku

igatethia nkuruki kiri imera biria ukuanda.

Kethira nugeretie mantu jaja na no urina thina cia tunyomoo, nubati kuthugania gutumira ndawa. Ndawa imwe womba kuthithia wengwa ugitumagira into bia gintwire na ingi nougure kuuma ndukene. Mithemba iu yoiiri nibati gutumirwa umenyere. Utumiri bubwega bwacio nobuurage tunyomoo na iria na bukoongera maciara kumania na imera. Indi, utumiri bubuthuku noburage nyomoo cia bata ja iria itethagiria kiri gutambia mbeu (ja njuki) na anthu baria barijaga tunyomoo. Ndawa nocitume tunyomoo tukagia njira cia gukabana nacio na nocigatarie thiria ya muntu ciarega gutumirwa na ithimi biria bibati. Watumira ndwa, menyeera ati nukuthingata antu aria wiri wike, utumiri na guta uria wiri ute, ongera ruuji ruria ubati, menyeera nwiji kethira ubati kuugira kimera na bwanthi kana na ntere cioijiri nikenda uugira aria kurina tunyomoo, taara ndawa iria cibati gutumirwa kiri tunyomoo tungwa turia wina thina natu na utumire iria iina sumu inkai uria kuumbika. Gutumira ndawa iria cithithitue ciri cia tunyomoo twa mithemba imingi na wingi iria iuraaga into bionthe nokwithirwe kuri gukuthuku nkuruki kiri imera biaku na kinya imera na nyomoo cionthe iria ciri antu au, kwou jukia kanya ucithomithie kwegie ndawa iria ciri injega buru kiri thina iria urinayo.

**Gukurira iria:** Kinya kethira ni ngugi injumu, kurina bata gwika munda jwaku jutheri uria kuumbikika. Rikana ati iria rimwe riri baita – mithemba imwe nitonyithagia ruugo rwa nitrogen muthetune, imwe no iriwe ni ndithia, imwe iri ndawa na imwe niraaga maua jaria jatumagirwa kuthithia naicu ni njuki.

**Gicunci kia biiri: Naria uumba gucua umenyo kwegie mantu jaria urina bata najo.**

Mantu jaria jaejani ndene ya gicunci kia mbele jagatethia miuanda yaku kugia thiria uria kuumbikika nan i mitire iria miega buru ya kunyiyia tunyomoo na kwongera iketha. Indiri, rimwe ikundi bibinini nobigakabana na thina cia tunyomoo ikwenda ndawa muthemba munna. Gutaara bwega munthu wa tunyomoo, ndawa ya gintwire kana ndawa ya nduka nikulinganaga na uria ukoomba kumenya ni tunyomoo turiku tuungwa tukureta thina kiri kimera kiriku. Ukathingata website iji ciri aja ukoona umenyo buria uumba kugaana na gikundi giaku:

**Website cia gutetheria iria cirina mantu jamaingi kwegie o muthemba jwa tunyomoo, njira cia kunyiyia o muthemba na kinya thina iria cionekaga na wingi kiri imera mwanya:**

<http://www.oisat.org/>

<http://www.infonet-biovision.org/default/ovvlmg/-1/pests>

**Kwegie urungamiri bwa nematodes:**

<http://www.aglearn.net/resources/vegIPM/rkn.pdf>

**Umenyo nkuruki kwegie anthu ba gintwire ba tunyomoo tutu:**

<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>

<http://www.aglearn.net/resources/vegIPM/naturalEnemies.pdf>

**Kumenya nkuruki kwegie utuuro bwa tunyomoo tutu:**

<http://www.aglearn.net/resources/vegIPM/insectLC.pdf>

**Utumiri bwa ndawa cia gintwire na njira ingi cia kumenyeera miunda kuumania na tunyomoo****Kwona umenyo bungi kwegie ndawa ya gintwire ya kuthiria tunyomoo**

<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**Kumeny kuthithia mitu nja:**

<http://www.infonet-biovision.org/default/ct/236/recipes>

**Kumenya kuthithia ndawa kuumania na imera na nyomoo**

<http://www.nzdl.org/gsdllmod>

**Kumenya kuthiria tunyomoo na njira ya gutumira ruuji rwa mwanki:**

<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**Umenyo kwegie kuthithia ndawa ugitumagira garlic:**

<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**Umenyo kwegie kuthithia ndawa ugitumagira muarubaini:**

<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**Umenyo kwegie kuthithia ndawa ugitumagira pyrethrum:**

<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**Umenyo kwegie kuthithia ndawa ugitumagira sabuni:**

<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**Umenyo kwegie gutumira mwanki kuuma kiri riuu kuthiria tunyomoo:**

<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**Imera biria biumbaga gukaria bingi kuumania na tunyomoo:**

<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**Gutumira njira ya gusukuma na gukucia ugitumagira thaara na desmodium ndebne ya miunda ya mpempe:**

<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**Mithemba ya ndawa ithithitue kuumania na nyomoo na imera iria itumagirwa Kenya nab aria bendagia:**

<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**Umenyo kwegie kuugira tunyomoo:**

<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**Umenyo kwegie ndawa cia tunyomoo ithithitue na copper:**

<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**Umenyo kwegie ndawa cia tunyomoo ithithitue na sulphur:**

<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**Gutumira mitego na mibuko:**

<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides>

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**Umenyo kwegie utaari bwa ndawa injega cia tunyomoo ja untu bwa muthia riria jonthe jarema:**

<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**Umenyo kwegie sumu kuumania na ndawa cia tunyomoo:**

<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>

Nthumba ya cluster yaku noitumire palm gucwa mantu jaja kiri internet na bukathoma bwinthe ja gikundi.



## Cluster ya Karandi: Cluster injeru ya TIST ndene ya Laikipia West.

*Ereteri ni David Thuku, Nthumba ndene ya cluster.*

**B**atwi, cluster ya Karandi nitugwiritue gutonya kiri TIST. Mwaka jwa 2014, Mukuru Mwangi Kasabubu naretere TIST ntuurene yetu na twathoma kwegie TIST turi kiri mucemano jwa cluster ya Tandare. Mukuru Mwangi natwaririe na twagia moyo jwa kwenda gutonya kiri TIST. Gukinyira au, ikundi mirongo iiri na bitantatu nibithithitue na biaandikithua uria bibati ndene ya TIST. Ikundi bingi bibingi biri harakatine iu cia kuandikithua thaa iji.

Niturigaritue ni mantu jaria TIST ithithagia na turina gikeno kuambiria guttumira moritani jaria twithiritwe tugikinyagirwa nijo. Niturikitie ithurano bietu bia mbele na turina atongeria betu ba mbele. Atongeria ba cluster ni Alice Wanjiru 0715247754 uria uri mutongeria wa cluster, Peter Kiarie 0716824874 ni mutetheria wa mutongeria, na Samson Koech 0725466733 ni mwiki mauku na mbeba cia cluster.

Atongeria bwetu nibairitirite gwikia cluster

yetu antu ari iguru nkuruki kingugi ya inya, mantu jaria jagaturetera maketha jamanene nkuruki. Kioneki gietu nikuanda nkuruki ya miti ngiri Magana jairi ja mirongo itano ndene ya cluster yetu. Kinya nituritani mantu jaria TIST ikiirite. Ndene ya TIST, turi!



*Members of Karandi TIST Cluster after the Cluster meeting last month.*

## HIV na AIDS: Kurigiria gutamba kwa murimo juju kuuma ng'ina gwita kiri kana (PMTCT).

**M**urimo jujunoutambue kuuma kiri ng'ina gwita kiri kana igita ria:

- Kumukamata
- Guciara
- Kumuonkia

Njira ya gutambia HIV kuuma kiri ng'ina gwita kiri mwana itagwa PMTCT na ukui. Gutina ndawa, kanya ga kugwatithania murimo na njira iji kari gatigati ka gicunci kia mirongo iri kiri igana gwita mirongo inna na ithano kiri igana. Indiri, kurina njira iria ciumba gutetheria kunyiyia untu bubu na njira inene mono. Riria mitire ya PMTCT yathingatwa uria ibati, kuumbika kwa gutambia murimo juju jwa HIV kuuma ng'ina gwita mwana no kwithirwe kuri nthiguru ya kana kamwe kiri twana igana rimwe. Mweri jwa mugwanja 2013, kiana kia WHO nikiaritire mantu jaria jabati gutonganiria kiri PMTCT. Mantu jaja jaandikiri madagitari na bangi cibitari bathingatira. Kirira kiria kinene buru ni:

- Aka bonthe baria bari na HIV nabaria barina iu kana bagwonkia nibaewe ndawa cia ARV. Ndawa iji ibati kwambirua riria mtu agia iu na nicibati kunyuwa rionthe ti aki igita ria guciara na igitene ria gwonkia aki, indi niibati kwendeleithua uturo bunthe bwa muka uju.

- Gwita na mbele kunyua ARV kwa ng'ina uturo bwawe bunthe butina baita aki kiriwe, indi bugeta na mbele kunyiyia kanya ga gutambia irusi bibi eja kwenda guciara aana bangi kairi.

- Ndawa ya ARV iria inekanagirwa jamaingi ni ndawa ithatu. Aja niaria mithemba ya kurigiria HIV ithatu iunganagua. Indi, daktari new ubati kuthura iria ibati kulingana na mantu jaria baandikiri nthigurune iu ja kubatongeria na kinya kulingana na iria irio ntuurene iu.

Aja, tugategeera na gutonya ndene kwona jaria jaandiki jari njira iria njega buru cia kurigiria gutambia irusi bibi kuuma kiri ng'ina gwita kiri mwana. Mucemaneone jwenu jwa cluster, menyeera ati mantu jaja jariaja nijainyiritue na bajelewa:

Jathingatagwa jaria maingi kiri aana bagwonkua ni nevirapine (NVP) rimwe ntuku kana zidovudine (AZT) jairi ntuku biomia biiri. Kethira mwana atigwonkua niuntu bwa gitumi kinya kiriku, daktari no aathane ndawa iji inyuwe nthiguru ya biomia biiri, indi igamba ria kurega gwonkia mwana nirigitwe warikia kuariria untu bubu bwega na daktari.

Ndene ya nthiguru cirina mbeba inkai ja Kenya na Uganda, antu baathagwa gwita na mbele gwonkia aana. Bubu niuntu tiga gukethirwa kurina antu aria ruuji rurutheru ruumaga na utheru, ruuko ruria rutonyaga riria ukuthithia iria ria mwana ria kugura nirwongagira kuumbika kwa mwana kugwatwa ni mirimo. Kuumbikika gwa kugwatwa ni mirimo imithuku na gukua kuumania na mirimo iji ni gukunene nkuruki ya kuumbikika gwa gutambia HIV, mono riria ndawa cia ARV ikunyuwa.

Iria ria nyoto riri irutubisho bionthe ndene ya mieri itantatu ya mbele ya mwana, na riri protein





imwe inthure iria irigagiria mwana kugwatwa ni mirimo.

Antu nibaathagwa gwonkia mieri itantatu mwana atikuria gintu kingi. Guku ni kuuga iria rionto ni rionka mwana abati kunyua – guti ruuji, guti chai, na guti ruuji rwa tunda. Gintu kiria aki giti iria rionto ng'ina kiria abati kuwera riria wathwa ni daktari ni ndawa.

Warikia gwonkia mwana mieri kenda atikuruma kingi, ambiria kumua irio mpari. Aja nuambagiria kumurumia irio bia gutetheria biria bitiumi buru ja ucuru na irio bia gukima. Untu bubu bwa gwonkia mieri itantatu riu kwambia irio nibwathagwa aciari batina HIV na kinya baria barinayo.

Gwonkia mwana nikubati gwita na mbele amwe na kwambirua kwa irio mwanka mieri ikumi na iiri(mwaka) ikathira. Mwaka jwarika, mwana ationka kairi. Aja nio aciari baria batina HIV baathagwa mwanya, nibaathagwa bête na mbele gwonkia mwana mwanka mieri itantatu (miaka iiri) ithire.

Untu bou bwathirwa au iguru aria ndawa cia ARV cinenkagirwa ng'ina wa mwana anyua uturo bwawe bunthe bwitagwa 'Option B+'. kethira nthiguru itina mbeba cia kuumba kuthithia uju, thirikari no ithingate 'Option B' aria ndawa cia ARV cinenkagirwa ng'ina wa mwana kuuma arina iu mwaka kiumia kimwe athiria gwonkia mwana. Ng'ina riu nategagwa nikenda kwoneka kethira nagwitia gwita na mbele kunyua ndawa iji na atigwitia. Kethira inya ya mwiri jwawe ya kurua na mirimo niinini, neetaga na mbele kunyua ndawa cia ARV, indi kethira inya ya mwiri jwawe ya kurua na mirimo ninyingi no aathwe atige gutumira ndawa iji indi ageta na mbele gutegagwa o igita nyuma ya igita nikenda mwiri jwawe jwonwa uria jugwita na mbele.

Njira iria igatumirwa, burina bata mono kiri mucuari uju kunyua ndawa cia ARV riria abati na ndawa iria abati nikenda oomba kumenyeera mwana wawe bwega uria kuumbikika.

Kethira ndawa cia ARV itio igitene ria gukamata, guciara na gwonkia ,mwana, ng'ina nabati gucia kiria kuumania na dagitari. Jaria maingi, mono naria ruuji rurutheru rutonekangaga, gwonkia igwikagirwa inya. Ni aki naria ruuji rurutheru rurio rionthe na iria riria rionto kugura riumba kuthithia gutina kanya ka ruuko gutonya, iria rionto kugura riikagirwa inya. Bubu butithira buri untu buria bukarikaga kiri gutu gukwingi naria ikundi bibinini bia TIST biri.

Kuuma mweri jwa inna 2014, Kenya nijukitia Option B na Uganda yathura Option B+. Wenda kwona video ikwonania mantu kwegie Option B+ iji tega <https://www.youtube.com/watch?v=2TIX7-WreWo> (4:43).Nikenda mantu jaja jathingatirwa, burina bata mono ng'ina kumenya kethira arina HIV kana atinayo.

Aritani, itu ikireni amemba ba ikundi inya kethira ibakubanga kugia aana, kethira nibakamatite kana bagwonkia, kana ibaiji bangi bari antune o jau, ati nibabati kuthuganiria gwita kuthimirwa HIV. Ii ni njira yonka ya kumenya kethira kurina kanya ga gutambia murimo kiri mwana. Nkuuma injega ni ati ng'ina na mwana bakanyua ndawa cia ARV uria babati, kuumbika gwa gutambia nikunyiaga nainya mono.

Website iria uumba gwita umenyo nkuruki:  
<http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>  
<http://www.emtct-iatt.org/countries/uganda/>  
<http://www.emtct-iatt.org/countries/kenya/>  
[http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)  
<http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>  
[http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

## Cluster ya TIST ya Kinoro: Ikinya rimwe o igita.

*Ureteri ni Jemima Gatwiri, nthumba ndene ya cluster.*

**T**urina ikundi bibinini mirongo itano na binna ndene ya cluster ya Kinoro, nitubangite kuthithia jamaingi nkuruki ndene ya TIST niuntu bwa baita yetu twingwa. Narua, nituambiritie minanda ya miti iria iritayari kuthamirua miundene mbura iji. Nitubangite kwongera miti yetu iria iri ngiri mirongo iiri na mugwanja ikinye ngiri mirongo ithatu na ithano mbura iji aki. Kioneki gietu ni gukinyia miti ngiri Magana jairi.

Nituambiritie gwika mbeba cia gukobithia amemba ndene ya cluster yetu. Gukinyira nandi, nitwikite nkuruki ya ngiri ikumi iria cikobithitua amemba betu iria cibati gucokua cirina gampongeri kanini. Bubu nibwerekerete guciikira inya twingwa kinya kimbeba. Nitubangite kwambiria wiki bwa

sungura na njuki mwambirio jwa mwaka juu twitwite.



*Members of Kinoru TIST Cluster reading together Mazingira Bora articles during September 2014 Cluster meeting.*

# Mazingira Bora



# TIST

The International Small Group & Tree Planting Program  
www.tist.org

**Kikuyu Version**

An Environmental, Sustainable  
Development and Community Forestry  
Program.



Amemba a cluster ya Karandi thutha wa mucemano wa mweri muhetuku.

## ***Thiini:***

**Cluster ya Kirubia: guthomithia ciana ciitu ugoro wigii ugaruruku wa riera. Nituthurite Karurini Primary School iri ya TIST . Page 2**

**TIST: Kurua na tutambi. Page 2**

**Cluster ya Karandi: Cluster njeru thiini wa Laikipia West. Page 5**

**HIV & AIDS: kugitira gutambia kuma kuri nyina ngiya mwana. Page 5**

**Cluster ya Kinoro: ikinya gwa ikinya. Page 6**



# Cluster ya Kirubia: guthomithia ciana ciitu uhoro wigii ugaruruku wa riera. Nituthuurite Karurini Primary School iri ya TIST .

*Mwandiki: Festus Mutegi, ndungata ya cluster*

**N**itutungatanagira, uguo niguu cluster ya Kirubia irauga. Thutha wa kuona maria ugaruruku wa riera wikite na utihiite nambere na gwika, nitwetikanirie tuthingate guthomithia ciana ciitu bata wa kuhanda miti na kumitungata.

Nitwaraniirie na arugamiriri a Karurini Primary School na tukimeera uhoro wigii mutaratara wa TIST. Nimakenirio na magitikira kuingira TIST mari ta thukuru. Cluster ya Kirubia nimehariirie kuheana miti 522 iria niya kinduire na nay a kiiriuu niguu mahote kwambiriria.

Kioneki giitu ni gutua Kirubia ya green, uguo niguu Mr. Mbaka, memba wa cluster augite. Umuthi, Kairubia iri na makiria ma miti 13,000 iria itaritwo ni TIST. Kimera giki, nitubangite kuhanda makiria

ma miti 5000. Makiria ma maundu ma TIST, Kirubia niyambiriirie gitati na nginyagia riu nimonganitie 15,000.



*Amemba a cluster ya Kirubia mari hamwe na arutwo a Karurini Primary School thutha wa kuhanda miti 522 thukuruini ucio.*

## TIST: Kurua na tutambi.

**M**urimi o wothe nioi mauritu maria makoragwo ho kuiga mimera itakurio ni tutambi na mirimu. Kuri na mithemba miingi ya tutambi turia tungithukangia mimera ta mbia, tutambi, nyoni, fungi, bacteria na virus. Riia ni mahuti mariamanyihagia magetha niundu wa gucindanira na miti na irio cia mugunda indo iria njega ta maai, unoru na utheri wa riuu.

Mandiko maya magayanitio maita meeri – gicunji kia mbere kiheanaga utaaro wa kugitira, uria unginyihia tutambi na mirimu. Maundu maya mahuthagira mitaratara miega kumana na urimi mwega.

Gicunji gia keeri kiroya utaaro uria mwega kuma internet kuringana na tutambi, mirimu na uria cingigitirwo. Gutingihoteteka thiini wa gicunji giki kuhutia mithemba yothe ya mimera, tutambi na maundu ma kugitira maria ikundi cia TIST irabatara uhoro kuma. Niwega aria marathomithania gwika utuiria mari hamwe na arimi mathina maria mahuanaine. Ningi athomithania nomahote kuona uhoro ucio kuhitukira mathomo. Maita maingi riria watuika murutani tigutuika ukoragwo uui maundu

mothe o rimwe, no nikumenya kuria ungiruta uhoro.

### **Gitunji kia Mbere: maundu ma kugitira tutambi.**

Kuhitukira kuhuthira mitaratara iria yagiriire hariurimi niugukorwo ugiteithia kugitira mugunda kumana na tutambi na mirimu. Maya nimo maundu mamwe maria ungirora.

**Tiiri munoru:** riria wagia na tiiri munoru niuheaga mumera mweke wa gukura wega na uri na hinya na ugilitiria mirimu.

**Urimi wa guthiururukania:** tutambi tungi tutegemeagiira muthemba umwe wa mimera. Riria wakuria muthemba umwe wa mumera mugunda-ini mwaka-ini umwe niwongagirira ugwati wa tutambi na ugatuhotithia guciarana. Riria wacenjia mimera kuhitukira guthiururukania nikuuga niwarenga muturire watuo.

**Kuhandaniria irio:** nikwongagirira gutherema kwa





miti na kukura kwayo na noguteithie kugitira kumana na muthemba umwe wa tutambi kugumira mugunda. Tutambi tungi nitutukanagirwo riria wahandaniria irio mugundaini. Geria kuhandaniria na mimera, iria itanyitagwo ni tutambi ta itunguru, leek, mint, garlic, sweet basil, Oregon, marigold na ingi.

Kuhumbira mimera na mahuti: njira ino nditeithagia o kunoria tiiri na kwongerera maai tiiri-ini no niinyihagia riia na kwongerera kiiruru. Ndukahuthire mithemba iria ikoragwo na mahua na mbegu hari kuhumbira tiiri, no, nitondu niitheremagia mirimu.

**Huthira mimera iregitira:** ririkana ati mbegu cia kinduire nocikorwo cirri cio ciregitira muno kwa mahinda maingi na timuhaka ujure mbegu cia kuma nja. No ningi, maundu maya nimaringanaga na urie wega.

**Kwehutia mimera iria irwarite :** mimera iria irwarite yagiriirwo nikwehutio na guteo. Mahinda maingi nikuuikaine ati mumera wothe timuhutie wothe na noucehwo na uhone.

**Kuhanda miti iria itanyitagwo ni mirimu:** kuri maundu ma kinduire niguo kuhe mimera kahinda keega ga kukura.

**Angikorwo niurekira fertilizer iri na nitrogen:** ririkana kuhuthira githimi kiria kiagiriire tondu wakiria niukuguciiiriria tutambi.

**Guciriria thu cia tutambi na mirimu:** ici ni indo ta predators, parasitoids (iria cirekagia matumbi kuri tutambi na tugakua riria matumbi maturika) na pathogens (indo iria cirehaga mirimu kuri tutambi). Muhiano ni nyoni, mbumbui na cihuruta imwe, rira ciriaga aphids, caterpillars na tutambi tungi. Mahuti na hefges nocikorwo na maundu mega ma kinduire ma kurehe thu cia tutambi ota indo ingi. No ona kuri o uguo niwega kuheana ngurani ya iria iri araata a arimi na ni tutambi! Maundu maria mari thiini wa gicunji gia keeri nimegukuonia uria maundu ngurani na maria mahuthikaga kuri kukura kwa irio. Angikorwo niugeretie maundu maya na nourathii nambere na kugumirwo ni mirimu na tutambi

niwagiriirwo ni kuhuthira dawa cia kunina tutambi. Dawa imwe nicikoragwo cirri cia kinduire na ingi noujure kuma dukaini. Mithemba yotrth yagiriirwo nikuhuthirwo na umenyereeri munene. Riria wahuthira muigan uria wagiriire niukuraga tutambi na riia na wongerere magetha. No, riria wahuthira githimi gitakinyaniire nourage nginya mimera yaku kana indo ta njuki iria citeithagiriria guciarithania. Dawa ici nicitumaga mimera iremwo ni kwigitirana nicikorwo cirri ugwati kuri andu riria ciahuthirwo uuru. Riria wahuthira dawa, tigrira niwarumirira maundu maria magiriire na uthambie indo icio wega. Tigrira niwahuhira wega handu hothe numeraini. Riria wahuthira dawa cirri na hinya muingi na waga gutukania wega nourage mimera yaku na uthukie maundu. Kwa uguo oya kahinda guthomithia indo iria iri njega na mathina maria uri namo.

**Kurimira:** ona kukorwo ni wira muingi, niwega kuiga mugunda waku uri mutheru. Ririkana ati riia rimwe nirikoragwo na kiguni – mithemba imwe niikiraga nitrogen, ingi niithuthikaga ta irio cia mahiu na ingi ta dawa cia kiimerera na ingi ikahuthika guthondeka uuki.

**Gicunji gia keeri: kuria ungiaria uhoro mukinyaniru**

Maundu maria maheanitwo gicunji-ini kia mbere nimaguguteithia mugundaini niguo ukorwo uri mwega na guguthomithia mitarataru miega iria ikunyahia tutambi na yongerere magetha. No ona kuri o uguo, mahinda mangi ikundi nicicemanagia na mathina ma tutambi. Riria wathuura njira iria njega na dawa iria ciagiriire kuringanaga na ni tutumbi turiku turehete murimu. Maundu maria mari haha nimaguguteithia kumenya uhoro makiria.

**Maundu kuma internet maguguthomithia**

<http://www.oisat.org/>

<http://www.infonet-biovision.org/default/ovvimg/-/pests>

**Njira cia gutabarira na makiria muno nematodes:**

<http://www.aglearn.net/resources/vegIPM/rkn.pdf>

**uhoro makiria wigii thu cia tutambi:**

<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>  
<http://www.aglearn.net/resources/vegIPM/naturalEnemies.pdf>

**githomo kia muturire wa tutambi:**

<http://www.aglearn.net/resources/vegIPM/insectLC.pdf>

**kuhuthira njira cia kiimerera kuhurana na tutambi****Uhoro makiria wa dawa cia kiimerera cia tutambi**

<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**mutu wa gwithondekera:**

<http://www.infonet-biovision.org/default/ct/236/recipes>

**dawa cia tutambi cia kiimerera**

<http://www.nzdl.org/gsdmod>

**guto: hondaka maai mararu**

<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**Dawa ya tutambi ukihuthira kitunguu saumu:**

<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**dawa cia tutambi ukihuthira neem:**

<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**Dawa ya tutambi ukihuthira pyrethrum:**

<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**Dawa ya tutambi ukihuthira soap:**

<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**kuhuthira hinya wa riuwa kuuraga tutambi:**

<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**mimera iria ihotaga kwigitira kumana na tutambi:**

<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**kuhuthira Napier thaara na desmodium legume mugundaini wa mbembe:**

<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**Dawa na athondeki acio:**

<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**uhoro makiria wa bio-fumigation:**

<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**Uhoro makiria wa copper pesticides:**

<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**Uhoro makiria wa sulphur pesticides:**

<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**kuhuthira traps and bagging:**

<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides>

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**Uhoro makiria wa kuhuthira dawa iri kindu kia muthia:**

<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**Uhoro makiria wa pesticide toxicity:**

<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>

cluster yaku noihuthire palm niguo gukinyirwo ni uhoro uyu kuma internet na mathome hamwe thiini wa micemanio ya cluster



## Cluster ya Karandi: Cluster njeru thiini wa Laikipia West.

*Mwandiki: David Thuku, ndungata ya cluster.*

Thui, cluster ya Karandi nitukenete nikuvingira TIST. Thiini wa mwaka wa 2014, Mr. mwangi Kasabubu niatuingiririe TIAT gwitu na amenyire uhoro wa TIST riria ari mucemano-ini wa cluster ya Tandare. Mr. Mwanginiatwariirie na tukigia na wendi wa kuingira TIST, nginya hau ikundi 26 nicithondeketwo na cikandikithio na ingi nyingi cirri mutarataraini wa kwandikithio. Nitukenetio ni TIST na tugakena ni githomo kiria tukoretwo tukiamukira. Niturikitie gwika ithurano na riu turi na atongoria na nio Alice Wanjiru 0715247754 is mutongoria, Peter Kiarie 0716824874 munini wa mutongoria, and Samson Koech 0725466733 muigi mathabu.

Ataongoria aitu nimerutiire gutwarithia cluster

iitu mbere niguu ikorwo iri nene. Kioneki giitu ni kuhanda miti 250, 000 thiini wa cluster. Nituthomithitio values cia TIST na tukauga nitugucirumirira. Thiini wa TIST, niitui!



*Amemba a cluster ya Karandi thutha wa mucemano wa mweri muhetuku.*

## HIV & AIDS: kugitira gutambia kuma kuri nyina ngiya mwana.

Virus cia HIV nocitambio kuma kuri mutumia nginya kuri mwana hingo ya;

- Riri mutumia omete nda
- Mutumia akiheo mwana
- Mutumia akiongithia

Njira ino ya gutambia virus kuma kuri mutumia nginya kuri mwana itagwo mother-to-child-transmission kana PMTCT kwa njira nguhi. Ungiaga kurigitwo, ugwati wa gutambia na njira ino ukoragwo uri gicunji kia 20-45%. Ningi, nikuri njira nyingi iria ingihuthirwo kunyihia ugwati uyu. Riria PMTCT yarorwo wega ugwati wa kugwatania niunyihaga na gichunji kia mwana umwe hari ciana 100.

Kuri July 2013, ruhonge rwa World Health Organisation nirwarekereirie utaaro w\ PMTCT. Na thiini waguo wandikiirwo aheani a urigitani a thirikari marumirire. Utaari munene wari wa -Kuhe atumia othe aria marongithia dawa cia ARV. ARV ciagiriirwo nikwambiririo riria mindu oha nda na cirumiriruo nginya riria aheo mwana na nginya akiongithia na ningi maishaini mothe ma mutun=mia ucio.

- Kurumirira unyui wa ARV kwa maisha ma mutumia gutikumuteithia owe no niguguthii nambere na kunyihia mweke wa gutheremia

virus angienda kugia na ciana ingi muturireini.

- Muthemba wa ARV wagiriire nigukorwo uri triple-drug regime. Uu niriria irathi ithatu cia urigiti wa HIV utukaniirwo, arigitani magiriirwo nigucagura urigitani uria mwega kuringana na mawatho maria maigitwo ni bururi wao

Thiini wa gicunji giki nitukurora maundu ma mitarataria iria iigitwo niguu kugitira gutherema kwa virus kuma kuri mutumia guthii kuri mwana. Thiini wa mucemano wanyu wa cluster, tigurira niwarumirira maundu maya nawataukwo wega.

Ciana iria ciaciarwo ni atumia mari na virus cia HIV niciheagwo dawa cia ARV. Watho uria uhuthikaga kuri ciana iria ciongithitio ni rita 1 ria nevirapine(NVP) kana maita 2 zidovudine(AZT) gwa kahinda ka mieri 6. Angikorwo mwana ndarongithio niundu wa itumi ngurani, dagitari noauge mwana aheo dawa ihinda rinyihiire mieri 6, no itua ria kwaga kuongithia riagiriirwo nikwoywo thutha wa kwaraniria na dagitari.

Mabururi-ini maria mathini ta Kenya na Uganda motaaro ni guthii nambere na kwongithia mwana. Uu nitondu tiga kungikorwo na maai matheru na indo theru, giko riria urahariria irio cia mwana





munini nokurehe mirimu ya ciana ona kana ikuu. Ugwati wa murimu nimunene gukira ugwati wa gutheremia HIV.

Ria ria nyondo nirikoragwo na hinya munene wa gukuria mwana gwa kahinda ka mieri 6 thiini wa muturire wa mwana na nirikoragwo na proteins cia mwanya iria cigitagira mwana kumana na mirimu.

Niwega kwongithia mwana mieri 6 utagutighithiria. Uu nikuuga ati no iria ria nyondo tu riagiriirwo ni kuheeo mwana – ndukamuhe irio, juice, kana kindu kingi o giothe. Kindu kiria kingi kingiheo mwana tiga iria ria nyondo ni dawa iria ciheanitwo ni dagitari.

Thutha wa kwongithia mwana gwa kahinda ka mieri 6, ambiriria kuhe mwana irio o kahora na irio ici ciitagwp “complementary food” na ni riot a ucuru kana irio thie. Utaari wa kwongithia mieri 6 utakuhe kindu kingi na kwambiriria kuhe irio nota uria ungika mwana uciaritwo ni mutumia HIV –ve.

Maundu maya, kuria ARV ciraheo mutumia muturireini wake wothe metagwo “Option B+”, angikorwo bururi nduri na indo ici, thirikari noihuthire option B kuria ARV ciheanagwo kuri nyina wa mwana kuma oha nda nginya wiki I thutha wa gutiga kwongithia. Mutumia niathuthuragio niguu oneke kana niarabatarara ARV ingi, angikorwo ugitiri wamirimu wa mwiri wake nimunyah noathii nambere na kuheo ARV, no angikorwo ni mwega noatige kunyua dawa na athii namere na urigitani mwega.

O njira iria unghithira niundu wa bata kuri nyina wa mwana kunyua ARV kahinda karia kagiriire na muigana uria wagiriire niguu kugitira mwana.

Angikorwo gutiri na dawa cia ARV citiri ho hingo ya kwoha nda, kuheo mwana ona kana kwongithia, mutumia agiriirwo kwaraniria na aheani urigitani. Maita maingi, na muno riria maai matheru mataroneka, kwongithia noguthii nambere. No kuria kuri na maai matheru na irio cia mwana munini icithondekeke hatari na ugwati o wothe, mwana noage kwongithio. No ndungika uu matuuraini maingi ma ikundi cia TIST.

Gukinyagia April 2014, Kenya niyoete option B na Uganda ikoya option B+. niundu wa thenema iria cingikwonia wega uria unghithira B+, roar <https://www.youtube.com/watch?v=2TIX7-WreWo> (4:43) niundu wa maundu maya na niguu marumirirwo, niwega mutumia amenye kana ari na virus cia HIV kana ndari.

Arutani, hinyiririai amemba a ikundu aria mabangite kugia na ciana, aria mohete nda kana aria marongithia mathimwo kana mari na virus cia murimu wa HIV. Ino noyo njira iria inginyihia ugwati. Uhoro mwega niati riria wahuthira ARV na njira njega hari atumia na ciana, ugwati wa gutambia niunyahaga biu

**References:**

- <http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>
- <http://www.emtct-iatt.org/countries/uganda/>
- <http://www.emtct-iatt.org/countries/kenya/>
- [http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)
- <http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>
- [http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

## Cluster ya Kinoro: ikinya gwa ikinya.

*Mwandiki: Jemima Gatwiri, ndungata ya cluster.*

**T**uri na ikundi 54 thiini wa cluster ya Kinoro, niturerutaniria kuruta wira na kio niguu tugie na maciaro maingi. Umuthi, nituambiriire nathari cia miti iria iri ho niundu wa kuhanda kimera giki. Nitubangite kwongerera miti kuma makiria ma 2700 nginya 35000 kimera giki na kionekigiitu ni gukinyia 200,000

Nitwambiriire gitati thiini wa cluster na tukaiga makiria ma 10,000 iria ciheanagwo iri ngombo na maciaro manini niguu twikirane hinya wa kimbeca. Niturabanga kwambiriria kuriithia thungura kuma mwaka uyu ungi.



*Amemba a cluster ya Kinoru magithoma Mazingira Bora hingo ya mucemanio wa September 2014.*

# Mazingira Bora



## TIST

The International Small Group & Tree Planting Program  
www.tist.org

**Kiswahili Version**

An Environmental, Sustainable  
Development and Community Forestry  
Program.



Wanachama wa cluster ya TIST ya Karandi baada ya mkutano wa cluster mwezi jana.

### ***Ndani ya gazeti:***

**Cluster ya Kirubia:** Kufunza watoto wetu kuhusu mabadiliko ya tabianchi. Tumeingiza shule ya Msingi ya Karurini katika mradi wa TIST. *Ukurasa 2*

**TIST:** Kudhibiti wadudu. *Ukurasa 2*

**Cluster ya Karandi:** Cluster mpya katika TIST iliyoko Laikipia Magharibi. *Ukurasa 5*

**HIV & AIDS:** Kuzuia usambazaji kutoka kwa mama kwenda kwa mtoto (PMTCT). *Ukurasa 5*

**Cluster ya TIST ya Kinoro:** Hatua moja kwa wakati. *Ukurasa 6*



# Cluster ya Kirubia: Kufunza watoto wetu kuhusu mabadiliko ya tabianchi. Tumeingiza shule ya Msingi ya Karurini katika mradi wa TIST.

*Umeletewa na Festus Mutegi, Mtumishi katika cluster.*

**S**isi tu watu wanaotumikiana, yasema cluster ya Kirubia. Baada ya kuzijua athira za mabadiliko ya tabianchi, tuliafikiana kuelekeza mawazo yetu kuelekea kuwasomesha watoto wetu kuhusu umuhimu wa kupanda na kuitunza miti.

Tuliwaona wasimamizi wa shule ya msingi ya Karurini na tukaongea nao kuhusu TIST. Walifurahia na kuitikia kuingia katika mradi wa TIST kama shule. Cluster ya Kirubia ilikuwa imepanga kuipa shule miti ya kuanzisha mia tano ishirini na miwili, ya kiasili pamoja na ya kigeni

Lengo letu ni kufanya Kirubia kuwa kijani, asema Mzee Mbaka, memba wa cluster. Leo, Kirubia ina zaidi ya miti elfu kumi na tatu iliyohesabiwa katika TIST. Msimu huu, tumepanga kupanda zaidi ya miti elfu tano. Pamoja na shughuli za kawaida za

TIST, cluster ya Kirubia imeanzisha kuweka pesa za kuwakopesha wanacluster na kufikia leo, shilingi elfu kumi na tano zimewekwa.



*Wanachama wa cluster ya Kirubia pamoja na wanafunzi wa shule ya msingi ya Karurini baada ya kupanda miti mia tano ishirini na miwili katika shamba la shule yao.*

## TIST: Kudhibiti wadudu.

**K**ila mkulima anajua jinsi inavyoweza kuwa vigumu kulinda mimea na miti yako dhidi ya wadudu na magonjwa. Kuna aina nyingi mbalimbali za wadudu ambazo zaweza kuharibu mashamba yako zikiwa ni pamoja na panya, wadudu, ndege, fungi, bakteria na virusi. Magugu ni mimea isiyotakikana inayopunguza uzalishaji kwa kushindana na miti na mimea yako ili kupata virutubisho, nafasi na mwanga.

Makala haya yameandikwa katika sehemu mbili- yakwanza inakupua ushauri mpana kuhusu mikakati kuhusu usimamizi kijumla, ambayo inaweza kupunguza uwezekano wa kuvamiwa na wadudu na magonjwa. Mikakati hii hutumia mbinu bora zaidi za kilimo hai.

Sehemu ya pili imekusanya baadhi ya mashauri muhimu zaidi kutoka kwa tovuti mbalimbali kuhusu wadudu, magonjwa na mikakati maalum. Haiwezekani katika makala haya kuleta aina zote mbalimbali za mimea, wadudu na mikakati ya kudhibiti inayofaa ambayo vikundi vidogo vinahitaji habari kuhusu. Ni muhimu kwa walimu kupeleleza shida wanazopata sana pamoja na vikundi vidogo vyao. Halafu walimu pia wanaweza kupata majibu kupitia kuangalia walipoelekezwa katika makala haya. Mara nyingine, kuwa mwalimu mzuri ni kutojua majibu yote mara moja, lakini kuwa na ujuzi wa pahali pa kutafuta habari zaidi!

### Sehemu ya A: Mikakati ya usimamizi wa wadudu ya kijumla

Kupitia kutumia mbinu bora zaidi kutokana na Kilimo hai, pia utaweza kusaidia kukinga ardhi yako dhidi ya wadudu na magonjwa. Zifuatazo ni pointi muhimu za kufikiria:

**Udongo wenye rutuba:** kuwa na udongo ulio tajirika kwa virutubisho huipa mimea yako nafasi kubwa ya kuweza kukua vizuri na mimea yenye nguvu itakuwa sugu zaidi dhidi ya magonjwa.

**Kuzungusha mimea:** wadudu wengine huwa na chanzo maalum ya chakula. Ukikuza mmea aina moja katika ardhi yako mwaka baada ya mwaka unaongeza hatari ya uwezekano wa wadudu kuweza kuishi na kuongezeka katika eneo hilo. Kubadilisha mmea kupitia mbinu za kuzungusha humaanisha msafara wa mdudu huyo utavurugwa na uharibifu wa mimea yako hutapungua.

### Kupanda mimea ya aina mbalimbali pamoja:

Huongeza wingi wa aina za mimea na husaidia kuzuia kutawala kwa mdudu wa aina moja. Wadudu wa aina zingine pia husawazishwa na kilimo cha mimea aina nyingi pamoja na haitambai kwa haraka kama katika shamba lililo na mmea wa aina moja. Jaribu kuchanganya mimea yako pamoja na





inayofukuza wadudu kupitia harufu ( kama vitunguu, tangawizi, sweet basil, oregano, marigold.

**Kupanda mimea ya kufunika udongo na kufunika udongo kwa mimea iliyokatwa:** Si nzuri tu katika kuongeza rutuba ya udongo na maji udongoni, bali pia kwaweza kupunguza magugu kwa kuongeza kivuli. Lakini, Usitumie mimea iliyo na maua au na mbegu kufunika ardhi yako kwani jambo hili laweza kutambaza magonjwa kwa bahati mbaya.

**Tumia aina zilizo sugu iwezekanavyo:** Kumbuka mbegu za kiasili zaweza kuwa sugu zaidi baadhi ya wakati na si lazima kila wakati kununua mbegu za kigeni. Hata hivyo, muktadha hutofautiana na unafaa kupata ujuzi kutokana na vikundi vidogo vingine.

**Kukata mimea au sehemu za mimea zilizo na ugonjwa:** Mimea iliyo na ugonjwa yafaa kutupwa inavyofaa ili isije ikatambaza maambukizi kwa mimea yenye afya nzuri. Mara nyingine inaonekana kuwa mmea wote hauna ugonjwa na ugonjwa waweza kudhibitiwa kwa kupuguza matawi maalum.

**Panda mbegu zisizo na magonjwa na zinazofaa** mazingira yalivyo ili kuioa mimea yako nafasi bora zaidi ya kuishi.

**Iwapo unaongeza mboleo ya naitrojeni:** Hakikisha unatumia kiwango kinachofaa, kwani kuweka mbolea hii nyingi kuliko ya inavyofaa kwaweza kuongeza uwezekano wa wadudu wengine.

**Vuta maadui kiasilia/marafiki wa mkulima:** Hawa ni pamoja na wawindaji (wanaokula wadudu), wanaoishi, wanaotaga mayai katika wadudu kadhaa wanaouliwa na vijidudu vinavyoambukiza baadhi ya wadudu magonjwa. Mifano ni kama kulinda viwavi,, buibui na wadudu wengineo wanaowala wadudu wanaoharibu mimea. Kupanda nyua na kufunikia udongo kwaweza kuwapa adui wa kiasili kikao na pia mimea ingine inayokuwa na maua kama fennel na celery. Hata hivyo, ni muhimu kuweza kujua tofauti kati ya marafiki wa mkulima na wadudu waharibifu! Maelekezo katika sehemu ya pili ya makala haya yatakusaidia kujua maadui kiasilia wakiwa katika hatua mbalimbali za maisha yao nan i wapi ni muhimu zaidi kwa mimea maalum unayokuza.

Ikiwa umeyajaribu mawazo yaliyo hapa juu nab ado una shida ya wadudu hawa waharibifu, unaweza hitaji kufikiria kutumia dawa za wadudu. Dawa zingine waweza kutengeneza mwenyewe ukitumia

vitu vya kiasilia na zingine waweza kununua kutoka madukani. Aina zote mbili wahitaji kuzitumia kwa uangalifu. Matumizi yanayofaa yaweza kukusaidia kuwau wadudu na magugu na kuongeza mazao yako. Hata hivyo, matumizi yasiyofaa yaweza kuwaua viumbe muhimu kama wanaosaidia kuzalisha (kama nyuki) na wawindaji kiasilia wanaowala wadudu. Dawa za wadudu zaweza kuwafanya wadudu kuwa sugu na zaweza kuwa haribifu kwa afya ya binadamu zisipotumika kwa viwango vinavyofaa. Unapotumia dawa, hakikisha umefuatilia kwa uangalifu mwongozo unaokupa unapofaa kuweka, unavyofaa kutumia na unavyofaa kutupa baada ya matumizi. Ongeza maji unayofaa, hakikisha unajua ikiwa wafaa kunyunyizia kutoka juu ya mimea au kutoka chini (au kutoka juu na chini) ili kupata wadudu, chagua dawa zilizo maalum kwa mdudu unaye shida naye, na uchague zilizo na sumu kidogo iwezekanavyo. Kutumia dawa zilizotengenezwa kufanya kazi mbalimbali kwa wingi ambazo uua kila kitu kwaweza kwa ukweli kuwa jambo mbaya zaidi kwa mimea na kwa wanyama na mimea wanaoishi hapo kwa jumla, kwa hivyo chukua wakati kujielimisha kuhusu ni bidhaa zipi zinazofaa zaidi kwa shida uliyonayo.

**Kutoa magugu:** Ingawa ni kazi ngumu, inalipa kuweka ardhi yako ikiwa safi iwezekanavyo. Kumbuka kuwa magugu mengine yaweza kuwa na faida – aina zingine huweka naitrojeni udongoni, zingine zaweza kutumika kama lishe ya mifugo, zingine zina dawa na zingine huwa na maua ambayo ni muhimu katika kutengeneza asali kwa nyuki.

### **Sehemu B : Unapoweza kutafuta ujuzi maalum.**

Mambo yaliyotajwa katika sehemu A yatasaidia ardhi yako kuwa yenye afya iwezekanavyo nan i mienendo borra zaidi ya kupunguza wadudu na kuongeza mazao. Hata hivyo, wakati mwingine vikundi vidogo bado watapata shida za wadudu ambazo zahitaji matibabu maalum. Kuchagua mwindaji kiasilia mwafaka, dawa ya kiasilia au dawa ya kiwandani hulingana na kuweza kujua ni mdudu yupi anayeleta shida kwa mimea upi. Tovuti zinazofuata zitakusaidia kupata ujuzi ambao unaweza kuwapa vikundi vidogo:

**Tovuti muhimu, zilizo na ujuzi mwingi kuhusu wadudu, njia za usimamizi na mikakati maalum na pia shida zinazopatikana sana kwa mimea mbalimbali:**

<http://www.oisat.org/>

<http://www.infonet-biovision.org/default/ovv1mg/-1/pests>





**Mawazo kuhusu usimamizi maalum kwa viwavi:**

<http://www.aglearn.net/resources/vegIPM/rkn.pdf>

**Kwa maelezo zaidi kuhusu maadui kiasilia wa wadudu waharibifu:**

<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>

<http://www.aglearn.net/resources/vegIPM/naturalEnemies.pdf>

**Kujua zaidi kuhusu duru za maisha ya wadudu:**

<http://www.aglearn.net/resources/vegIPM/insectLC.pdf>

**Matumizi ya dawa kiasilia na/au njia zingine kiasilia za kulinda dhidi ya wadudu**

**Kupata ujuzi kuhusu dawa ya kiasilia ya bakteria**

<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**Matayarisho ya unga nyumbani:**

<http://www.infonet-biovision.org/default/ct/236/recipes>

**Dawa kutokana na viumbe hai**

<http://www.nzdl.org/gsdmod>

**Matibabu ya kutumia maji moto:**

<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**Dawa kiasilia iliyongenezwa kwa vitunguu saumu:**

<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**Dawa ya kiasilia iliyongenezwa kwakutumia Muarubaini:**

<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**Dawa ya kiasilia iliyongenezwa kwakutumia pareto:**

<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**Dawa iliyongenezwa kwa kutumia sabuni:**

<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**Kutumia joto la jua kuwaua wadudu:**

<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**Orodha ya mimea iliyo na uwezo wa kulinda mimea mingine:**

<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**Kutumia njia ya kusukuma na kuvuta kwa kutumia nyasi na desmodium katika mashamba ya mahindi:**

<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**Kupata orodha ya dawa za kibiolojia zinazotumika Kenya na zinazouzwa :**

<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**Kupata habari kuhusu kunyunyiza kwa kibiolojia:**

<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**Kupata ujuzi kuhusu dawa za wadudu zilizotengenezwa kwa kutumia copper:**

<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**Kupata ujuzi kuhusu dawa za wadudu zilizotengenezwa kwa kutumia sulphur:**

<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**Kutumia mitego na begi:**

<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides> 6

**Kupata ujuzi uchaguzi wa dawa za wadudu zilizotengenezwawiwandani kama jambo la mwisho kabisa:**

<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**Kupata ujuzi kuhusu sumu iliyoko katika dawa za wadudu:**

<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>

Wewe mtumishi wa cluster waweza kutumia kifaa chako cha Palm kupata mambo haya kutoka kwa tovuti mbalimbali na kuelimika pamoja katika mkutano wa cluster.



## Cluster ya Karandi: Cluster mpya katika TIST iliyoko LaikipiaMagharibi.

*Umeletewa na David Thuku, Mtumishi katika cluster.*

**S**isi, cluster ya Karandi tuna furaha kujiunga na TIST. Mwaka wa elfu mbili kumi na nne, Bwana Mwangi Kasabubu alileta TIST katika eneo letu naye alikuwa amejua kuhusu TIST alipohudhuria mkutano wa cluster ya Tandare. Bwana Mwangi aliongea nasi na tukakuwa na moyo wa kujiunga na TIST. Kufikia sasa, vikundi vidogo ishirini na sita vimetengenezwa na kuandikishwa inavyofaa katika TIST. Vikundi vinginevingi vipo katika harakati za kuuliza kujiunga na TIST.

Tumeshangazwa na shughuli za TIST na tuna furaha kutumia mafunzo tuliyopata. Tushamaliza uchaguzi na tuna viongozi wetu wa kwanza. Viongozi katika cluster yetu ni Alice Wanjiru 0715247754 ambaye ni kiongozi, Peter Kiarie 0716824874 ni msaidizi wa kiongozi, na Samson Koech 0725466733 ini mweka pesa na vitabu vya cluster.

Viongozi wetu wamejitolea kupandisha cluster

yetu hadi ngazi ya juu kwa kufanya kazi itakayotupa mazao makubwa zaidi. Lengo letu ni kupanda miti elfu mia mbili na hamsini katika cluster yetu. Pia tumefunzwa kuhusu maadili ya TIST. Tumejitolea kufuatilia maadili haya ya TIST. Katika TIST, Tupo!



*Wanachama wa cluster ya TIST ya Karandi baada ya mkutano wa cluster mwezi jana.*

## HIV & AIDS: Kuzuia usambazaji kutoka kwa mama kwenda kwa mtoto (PMTCT).

**V**irusi vya HIV vyaweza kusambazwa kutoka kwa mama kwenda kwa motto wakati wa:

- Ujauzito
- Kuzaa
- Kunyonyesha

Njia hii ya kusambaza virusi hivi kutoka kwa mama kwenda kwa motto huitwa PMTCT kwa ufupi. Bila dawa, uwezekano wa kusambaza kwa njia hii waweza kuwa asilimia ishirini kufika arobaini na tano. Hata hivyo, kuna njia ambazo hatari hii yaweza kupunguzwa kwa kiwango kikubwa. Mbinu za PMTCT zinapofuatiliwa itakikanavyo, hatari ya kusambaza virusi vya HIV kutoka kwa mama kwenda kwa motto yaweza kuwa chini ya motto mmoja kwa watoto mia (asilimia moja).

Mwezi was aba mwaka elfu mbili kumi na tatu, shirika la WHO la afya ya ulimwengu lilipeana mwongozo uliorekebisha kuhusu PMTCT. Mwongozo huu umeandikiwa wahudumu wa afya katika serikali ili kuufuatilia. Mawaidha muhimu zaidi ni:

- Wape wamama wote wenye virusi na walio wajawazito au wanaonyonyesha madawa ya ARV. Dawa hii yafaa kuanzishwa wakati wa ujauzito na ainywe bila kuruka sio tu wakati wa kuzaa na pia wakati wa kunyonyesha bali pia kuendelea maisha yake yote.
- Kuendeleza dawa hii maisha yote ya huyu mama hakutakuwa tu na faida kwake bali pia kutaendelea kupunguza uwezekano wake kusambaza virusi hivi anapoamua kupata watoto wengine siku zijazo.

- Aina ya ARV inashauriwa kuwa dawa yenye sehemu tatu. Hapa ni ambapo aina tatu za kupambana dhidi ya HIV huchanganywa. Hata hivyo, daktari awe mwenye kuchagua matibabu mwafaka kulingana na mwongozo wan chi na dawa zilizo katika eneo hilo.

Katika makala haya, tunaangazia mwongozo wa jinsi ya kuzuia kutambazwa kwa virusi kutoka kwa mama kwenda kwa motto. Katika mkutano wa cluster yako, hakikisha mawazo haya muhimu yanaguziwa na kueleweka:

Watoto wanaozaliwa na mama walio na virusi vya HIV wanafaa kuanzishwa mfuatano wa dawa za ARV. Mwongozo wa kawaida kwa watoto wanaonyonyeshwa ni Nevirapine mara moja (NVP) au mara mbili kwa siku (AZT) kwa wiki sita. Ikiwa motto hanyonyeshwi kwa sababu zozote, daktari anaweza kumshauri matibabu ya chini ya wiki sita, lakini uamuzi wa kutomnyonyesha wafaa kufanywa baada ya ushauriano mwangalifu na mhudumu wa afya.

Katika nchi zenye pesa kidogo kama Kenya na Uganda ushauri ni kuendelea kuwanyonyesha watoto. Hii ni kwa sababu isipokuwa kama kuna uwepo wa maji safi na mazingira safi, uchafuzi kutokana na kutayarisha unga wa duka wa maziwa ya watoto waweza kuongeza hatari ya maambukizi kwa watoto. Uwezekano wa magonjwa makubwa na kifo kutokana na maambukizi haya ni juu zaidi ya hatari ya kuambukiza virusi vya HIV sanasana iwapo dawa za ARV zinatumiwa.

Maziwa ya mama huwa na virutubisho



vyotevinavyohitajika miezi sita ya kwanza ya maisha ya mtoto na huwa na proteni maalum ambazo hulinda mtoto kutokana na magonjwa.

Kila mtu hushauriwa kumnyonyesha mtoto miezi sita bila ya kumpa chakula kingine. Hili umaanisha kuwa ni maziwa ya mama tu yanafaa kupewa mtoto – hakuna maji, hakuna chai na hakuna maji ya matunda na kadhalika. Kitu kingine ambacho anaweza kupewa ni dawa ikiwa imeshauriwa na mhudumu wa afya.

Baada ya kumnyonyesha kwa miezi sita, muongeze chakula kimoja kimoja. Jambo hili huitwa kumpa 'vyakula vya kusaidia' na vyakula hivi huwa majimaji kama uji na chakula kilichopondwa. Ushauri wa kunyonyesha bila ya chakula chochote kwa miezi sita halafu kumwongeza chakula kimoja kimoja ni sawa kwa wamama wasio na wenye virusi vya HIV.

Kunyonyesha kunafaa kuendelezwa pamoja na vyakula hadi miezi kumi na miwili (mwaka mmoja). Hivyobasi baada ya mtoto kuwa mwaka mmoja hatakuwa anayonyona tena. Ushauri huu ni tofauti kidogo na unaopewa mama wasio na visuri, ambao hushauriwa kuendelea kunyonyesha hadi miezi ishirini nan ne (miaka miwili).

Chaguo lililo hapo juu, ambapo mama anapewa ARV maisha yake yote linaitwa "Option B+"; ikiwa nchi haina rasilmali ya kufanya jambo hili, serikali yaweza kutumia "Option B" ambapo dawa za ARV zinapewa mama kutoka ujauzito hadi wiki moja baada ya kuacha kunyonyesha. Ndipo mama anapimwa ili kuona ikiwa anahitaji kuendelea na ARV au la. Ikiwa uwezo wamwili yake kupigana na maambukizi umezorota anaweza kuhitimu kuendelea na ARV, lakini ikiwa mwili wake waweza kupigana na maambukizi, anaweza kushauriwa kuacha kuzinywa dawa hizi lakini aendeleo kuangaliwa na daktari kila baada ya muda ili kuangaliwa anavyoendelea.

Chaguo lolote lilapofuatwa, ni muhimu sana

kwa mtoto kunywa dawa za ARV wakati unaofaa na kiasi kinachofaa kumpa mtoto ulinzi mwingi iwezekanavyo.

Iwapo dawa za ARV hazipo wakati wa ujauzito, kuzaa na kunyonyesha, mama anafaa kutafuta ushauri kutoka kwa mhudumu aliye karibu. Mara nyingi, sanasana wambapo usafi wa maji hauwezi hakikishwa, kunyonyesha bado kutatiliwa mkazo. Ni tu mahali ambapo maji safi yapo kila wakati na maziwa ya mtoto ya duka yaweza kutengenezwa bila hatari ya uwezekano wa uchafuzi, maziwa haya hushauriwa. Hili halitakuwa katika mengi ya maeneo vikundi vya TIST vilipo.

Kutoka mwezi wa nne mwaka 2014, Kenya ilianza kutumia Option B na Uganda Option B+. Ili kupata video inayoonyesha kwa upana njia hii ya B+ fuata tovuti hii: <https://www.youtube.com/watch?v=2TIX7-WreWo> (4:43). Ili mwongozo ulio hapa juu kufuatiliwa ni muhimu kwa mama kujua hali yake ya HIV.

Walimu, tafadhali wahimize wanakikundi ikiwa wanapanga kuwa na watoto, ikiwa ni wajawazito au wananyonyesha, ama wanajua wengine walio katika hali hii, wanafaa kufikiria kupimwa HIV. Hii ni njia pekee ya kujua ikiwa kuna hatari ya kupitisha virusi kwa mtoto. Habari nzuri ni kwa matumizi yanayofaa ya ARV kwa mtoto na mama, hatari ya kupitisha virusi hivi hupungua kwa ukubwa.

### Marejeo:

<http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>

<http://www.emtct-iatt.org/countries/uganda/>

<http://www.emtct-iatt.org/countries/kenya/>

[http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)

<http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>

[http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

## Cluster ya TIST ya Kinoro: Hatua moja kwa wakati.

*Umeletwa na Jemima Gatwiri, Mtumishi katika cluster.*

**T**ukiwa na vikundi hamsini na nne katika cluster yetu ya TIST ya Kinoro, tumelenga kufanya mengi katika TIST kwa faida yetu wenyewe. Leo, tumeanzisha vitalu vya miti ambayo iko tayari kupelekwa shambani msimu huu wa mvua. Tumeamua kuongeza miti yetu elfu ishirini na saba iliyopo ifike miti elfu thelathini na tano msimu huu pekee. Lengo letu ni kufikia miti elfu mia mbili.

Tumeanza kuweka pesa za kukopesha wanacluster. Kufikia hapo, tuna elfu kumi ambazo tumewakopesha memba wetu kwariba kidogohili limelenga kujiwezesha kifedha. Tumepanga kuanzisha uwekaji wa sungura na nyuki mapema mwaka ujao.



Wanachama wa Clusterya TIST ya Kinoro wasoma makala ya Mazingira Bora pamoja katika mkutano wao wa mwezi wa tisa mwaka 2014.



# Mazingira Bora



# TIST

The International Small Group & Tree Planting Program  
www.tist.org

**Kikamba Version**

An Environmental, Sustainable  
Development and Community Forestry  
Program.



**Amemba ma Ngwatanio ya Karan`di itina wa wumbano wa mwai muthelu.**

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# Ngwatanio ya Kirubia: Kumanyisya syana situ iulu wa uvinduku wa nzeve. Nitumanyiite sukulu wa musingi wa Karurini na kumalikya nthini wa walany'o wa TIST.

*Na Festus Mutegi, Muthukumi wa ngwatanio.*

Ihtyi twi athukumi umwe kwa ungi nthini wa ngwatanio ya Kirubia. Nundu nitumanyite iulu wa uvinduku wa nzeve na kwona mauthuku mayo nituamuite muvundisya syana situ iulu wa vata wa kuvanda miti na kumisuvia undu wa wa kusuvia mawithyululuko na uvinduku wa nzeve.

Nitwaendie kwonana na utongoi wa sukulu wa musingi wa Karurini na twaneenanisya iulu wa TIST.

Nimeethiwe na utanu na meetikila kulika nthini wa TIST ta sukulu. Ngwatanio ya Kirubia ni yaumisye miti 522 ya kiene na yakuka kutetheesya sukulu uyu kwambiia.

Woni witu ni kutwikithya Kirubia ngilini niwo Mr. Mbaka waisye ula ni memba witu. Umunthi Kirubia yina mivi mivitukithye mbee wa 13,000. Mbua nino nituvaanda miti mbee wa 5,000. Na ingi

tyo kuvanda miti yoka indi nitwithiitwe tuyia mbesa kwa nzia ya kinandu kya mesani vala yu twina mbee wa silingi 15,000.00



Ngwatanio ya Kirubia vamwe na sukulu wa Karurini itina wa uvanda miti 522 kiwanzani kya sukulu uyu.

## TIST: Kusiia na kuungamya tusamu tula twanangaa.

**K**ila muimi ni wisi undu ve vinya kuiana liu na tusamu tula twanangaa. Tusamu tuu ni mithemba mingi twambiia na mbia, ngulu, kimbalutya, iinyu, nyunyi, fungi, bacteria na viruses. Yiia ni mimea itendekaa na isindanaa na mimie ya liu kutumia unou wa muthanga, mwanya na kyeni.

Vaa nituaanite kundu kwili undu wa kwisuviana na tusamu tuu twanangaa liu. Mbee ni undu tutonya kusiia uwau na tusamu tuu kwa kutumia nzia nzeo sya nima.

Kya keli ni kwosa mawoni kuma kwa internet iulu wa mauwau amwe na na tusamu na undu wa kwisiania nasyo. Tuitonya uandika iulu wa kila mumea nthini wa ithangu yii. TIST nikuandika iulu wa kwisuvianana na mitutu imwe na mowau amwe ma mimea ila kaingi ivandawa ni aimi tukundini tunini twa TIST. Ni useo kwa kila kakundu kwithiwa na ala meumavundisya mayika ukinikili kwianana na mathina ma uwau wa mimea kulingana na kakundi koo. Kwithiwa wi mumanisya museo ti kwithiwa wisi usungio wa kila nthina, indi kwithiwa wisi vala utonya ukwata usngio!.

**Kilungu kya A. Nzia sya Kusunga tusamu tula twanangaa mimea kwa vamwe.**

Kwa kutumia nzia nzeo sya nima ta Nima ya kusuvia ila ukethiawa ona usiia muunda waku kukwatwa ni mauwau na tusamu. Vaa ve syindu imwe waile umanya iulu wasyo:-

**Unou wa Muthanga:** Muthanga munou nutumaa mimea ila yamea yithiwa yina vinya na itonya kwisiia mauwau.

**Nima ya kusesany'a/kukuania:** Mithemba imwe na tusamu ni iisaa mithemba imwe ya mimea. Ethiwa niwavanda muthemba umwe wa liu mbua imwe kuthi ila ingi nikutumaa tusamu na uwau ula ukwataa muthemba usu wa mumea umesya mii na kwithiwa wi vinya kuthela. Kwoou yila wakuanya mimea niwatuma muthemba wa tusamu na uwau ula wiimumeani ula unavandite ukosa liu na kwoou kukw'a na kuoleka.

**Kuvandanisya:** Yila wavandanisya mithemba ya mimea nitumaa withia tusamu na uwau ula ukwataa muthemba umwe wa mumea ndiithiwa na vinya ta uvandite mumea usu wi w'oka na ingi uwau kana tusamu tuu tuiyaiikaa muno nundu kwi mimea imwe ilungasya tusamu na muuke wayo. Ta itunguu,



leek, kaluma, saumu, sweet basil, oregano na marigold).

Mimea ya uvwika na kwikia muunyi wa mavuti: ii ninzia imwe nzeo sya kwongela unou wa muthanga na kiw'u kwikala muthangani kwa kuola yia na kuvwika ungu wa mimea ila ingi nayo kana kuvanda mimea ila itambaa na kuvwika muthanga. Ndukatumie yia ilauku na isyau kuvwika muthanga nundu kii niutuma uwau na yia yii yongeleka.

Tumia mimea ila itonya kukitana na mauwau watonyeka: Lilkanana mithemba ya mbeu sya kiene imwe yithiawa itonya kukitana na mauwau na tusamu nesa kwi mimea ya kuka. Onakau niwaile umanya kivathukany'o kwisila ikundini syenyu mbee.

Kumya ilungu na liu ula utonya kwithiwa na uwau na kuuvetana na ula ungi: Yila waveta ni useo kuvivya kana kwisia vaasa nikana usiie kunyaiika kwa uwau uyu. Ingi nutonya kwina ni ngava na ti mumea w'o the muwau kwaau veta kaukava kala kawau kwa kusea.

Vanda mbeu theu itena uwau na ila yaile: Nikana withie mimea yaku no yike nesa na kwikana niwaile usisya mbeu ila yikaa nesa kisioni kyaku na iyithiwa itena uwau.

Ethiwa witumia vuu wa nitrogen ikiithya watumia kithimo kila kyaile nundu weekia vuu mwingi noutume tusamu sumwe twambiia kwongeleka.

Kunenga we amaitha / Nthu na anyanya ma muimi: li ni vamwe na tusamu tula tuisaa tungi ngelekany'o ta matumbi ma mbuambui, kang'athu, maki nimaisaa iinyu maalikw'a na tusamu tungi. kwikia uthui na muunyi nikuetae tusamu twingi muthangani tumwe twi nthu na tungi anyanya. Nthini wa ithangu ya mwai wukite tukakuelesya undu wa umanya amaitha na anyanya ma muimi na undu utonya usakua kwianana na utheyo ula mime yaku ikukwata kuma tusamuni tuu tukaa na kwendeewa kwithiwa muthangani muvwiike.

Ethiwa nutatite nzia ithi syivaa yiulu na wiona nthina wa tusamu niwaile kwisilya utumia ndawa sya kuaa tusamu tuu. Ndawa imwe no usevuye uitumia ndawa sya miti ya kiene kana ukaua kuma ndukani. Mithemba yothe ya ndawa niyendaa utumiwa nesa. Utumiaa ndawa ino nikana wuae tusamu na yia yila yanangaa mimea na uyithiwa utonya ukwata liu mwingi. Kutumia ndawa ithi undu vataile no itume wuaa tusamu twa vata ta nzuki na tungi twingi ta tula tutetheesya muthanga kwithiwa

na nzeve. Ingi utumii muthuku no utume tusamu tuu tumayia ukethia tuikwiw'a ndawa. Ingi ndawa ithi nisyithiawa ite nzeo kwa mungu na niutuma uima wake uthuka syatumiwa nai ta kwikiwa mbingi ukethia ona mumea waiwa ni mundu niwatwika sumu.

Ethiwa nuutumi ndawa sya kuaa mitutu ikiithya niwaia na nzia ila yaile wamina utumia. Ethiwa ve mthemba muna wa ndawa wisi niw'o utonya kuaa tusamu tula ukwenda tumia ndawa ila ite na sumu mwingi niwkoondu wa kusuvia mawithyululuko na nundu ndawa imwe syithiawa itonya kuaa kila kindu.

**Kuimia:** Onakau ni wia muto ni useo kwikalya miunda yaku yi mitheu. Lilikana yia yimbe niyithiawa ya vata muundani nundu niyongelkaa nitrogen, yingi ni liu wa indo na yia yimwe ni muiito na yingi yina malaa maseo kwa nzuki kusevya uki.

**Kilungu B. Vala utonya ukwata uvoa muna**  
Maundu aa manenganitwe kilunguni kya A makeethiwa ma utethyo lwa miunda ethiwa tukatumia nzia nzeo sya nima na kuola tusamu tulatwanangaa na kwithiwa na ngetha nzeo. Onakau tukundi tumwe nituukwatwa ni thina wa tusamu na kwitiwa mayenda uiiti umwe. Kusakua kwa ndawa kana kila kiuya kiingi nikyendaa usakuwa nesa na ethiwa ni ndawa niyaile umanyika nesa niyva na nthina ula wina mumea niwaile ithiwa wisikie. Vaa ve ikwatany'o imwe ila iukutetheesya kwosa uvoa ula waile na kuuvikya kakundini kenytu. Website ii syina nginya maualyulo/maelesyo ma mithemba ya tusamu, undu wa kwisiania nantw'o na manthina ala kaingi makwataa mimea kivathukany'o.

<http://www.oisat.org/>

<http://www.infonet-biovision.org/default/ovvimg/-/pests>

**Management tips specifically on nematodes:**  
<http://www.aglearn.net/resources/vegIPM/rkn.pdf>

**For more information on natural enemies of pests:**

<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>

<http://www.aglearn.net/resources/vegIPM/naturalEnemies.pdf>

**To learn more about insect life cycles:**

<http://www.aglearn.net/resources/vegIPM/insectLC.pdf>

**Using natural pesticides and/or other natural methods of protection****For information on a natural bacterial pesticide**

<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**For home-made flour preparations:**

<http://www.infonet-biovision.org/default/ct/236/recipes>

**For Organic Pesticides**

<http://www.nzdl.org/gsdImod>

**For hot water treatment:**

<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**For natural pesticide using garlic:**

<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**For natural pesticide using neem:**

<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**For natural pesticide using pyrethrum:**

<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**For pesticides using soap:**

<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**Using the power of the sun to kill pests (solarization):**

<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**List of plants with crop-protecting properties:**

<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**Using a push-pull approach using Napier grass and desmodium legume in maize fields:**

<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**For a list of bio pesticides used in Kenya and distributors:**

<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**For information on bio-fumigation:**

<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**For information on copper pesticides:**

<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**For information on sulphur pesticides:**

<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**Using traps and bagging:**

<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides6>

**For information on selective use of chemical pesticides as a last resort:**

<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**For more information on pesticide toxicity:**

<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>

Your Cluster Servant can use the palm to get this information from the internet and learn together at the Cluster meeting.

mwina umbano wa mwai wa ngwatanio.



## Ngwatanio ya Karandi: Ni imwe ya ngwatanio nzau sya TIST nthini wa Laikipia West.

(na David Thuku, Muthukumi wa ngwatanio)

Ithi ma ngwatanio ya Karandi twina utanu kulika nthini wa Tist. Kwi 2014 Mr. Mangi Kasabubu niwookie na uvoa wa TIST itina wa kumanyiw'a iuu wa TIST yila weethiwe na ivuso ya kuvika wumbanoni wa kila mwai wa ngwatanio ya Tandare. Mr Mwangi niwaneenie naitu na atukulya kana no twithiwe na wendi wa kilika nthini wa TIST. Kwa yu, tukundi 26 nitwaseuviw'e na tweeyiandikithya nthini wa Tist. Ikundi ingi mbingi no sieendee na walany'o wa kwiyiandikithya.

Nitutanithitw'e ni mawiko ma Tist na twina utanu kukwata umanyisyo na kuendee kuwika mekoni. Atongoi maitu ni Alice Wanjiru : 0715 247754 ni we mutongoi, Peter Kiarie 0716 824874 munini wa mutongoi na Samson Koech 0725 466733 niwe mundu wa masavu.

Atongoi maitu nimeyumitye kuendeesya kikundi kitu mbee na kwona nitwavikia maunene. Mwolooto witu ni kuvanda

miti mbee wa 250,000 nthini wa ngwatanio yitu. Ingi nitumanyitw'e iulu wa miao ya Tist na mawalany'o mayo.

Nitwiyumitye kumiatia na kwikala nayo. Nthini wa Tist twivo!.



Amemba ma Ngwatanio ya Karandi itina wa wumbano wa mwai muthelu.

## HIV & AIDS: Kusiia muthelo kukwatanw'a kuma iny'a kuthi kwi mwana.

Tulinyu tula tungwatanasya uwau uu wa muthelo no tume kwi iny'a wa mwana na kuthi mwanani ivindani yila

- Muito (wii vu)
- Asyaa
- Yila ukwongy'a

Kwa nzia ino tulinyu tuu nitumaa iny'ani wa mwana na kuthi kula kwi mwana ila kwa kisungu yitawa "mother-to-child transmission" kana "PMTCT" kwa ukuvi. Vate kutumia ndwa nzia ino ya uwau uu kanyaiika kuma asyaini kulika syanani iendaa kwa kilungu kya 20-45%. Ona vala ve nzia itonya usiia kukwatanw'a kwa uwau uu. Yila PMTCT yeekwa undu vaile tulinyu tuu nituolekaa ukwatanw'a kwa itheo wa kamwe kwa syana yiana (itheo wa 1%)

Kwi mwai wa muonza 213, World Health Organisation niyanenganie mwolooto mweu iulu wa PMTCT. Mwolooto uu niwaandikiwe nikana silikali iatiie masivitalini na kunengane utao kwa asyai ta uu:-

- Nenga iveti syoonthe ila syina muthelo ikwongya kana ngito ndawa sya kuola kyalya yaadi ARVs. Ndawa ithi sya ARVs syaile unengwe kivetu kikiito na inyiendee vate kutiia kunywa ndawa ithi thayu wake w'othe indi ti kwa ivinda yila muito kana ukwongya tu.

- Kueendee kunywa ndawa ithi kwa iveti ithi ndwii thiwa vaita kwasyo syoka indi wiithiwa na useo kwa kwithiwa niikuola ivuso yila utonya ukwatya mwana wake ona ethiwa akaamua kwongela syana.

- Muthemba wa ARV withiawa wathiiwe wi wa unywa katatu kaingi. Vaa nivo kaingi ndawa mithemba itatu ya uola kyala kila kietawe ni tulinyu tuu itumikaa kwa vamwe. Vaa ni ndakitali utumiaa utuika wake kunengane ndawa ithi kwianana na ndawa ila silikali yinasyo na ila iukwatikana nthini wa nthi isu.

Thini wa ilungu yii nituusisya muno undu tutonya usiia kunyaiika kwa tullinyu tuu kuma kwi iny'a kuthi kwi mwana. Yila mwi na umbano wa kila mwai ikiithya maundu aa mevaa nimawetwa na kueleeka:

Syana ila isyitwe ni asyai mena tulinyu tuu nimsyaile ukwata ARVs. Nzia ya syana ila ikwonga na syina uwau uu ni imwe kwa muthenya na iinengwa Nevirapine (NVP) kana keli kila muthenya innengwa Zidovudine (AZT) kwa sumwa thathatu (6), indi kuamua kulea kw'ongy'a nikwaile uamuwa vena uneenany'a na andu ma uima wa mwii.

Kwa nthi ila syina andu aingi ma ukwati wa nthi ta Kenya na Uganda niuseo kuendee kwongy'a. Kitumi ni undu kundu kwingi kui kiw'u kiseo kya





useuvisya ukenge liu, na kila kikw'o ve vinya kwithiwa kikiite na kitatonya ukwatya ukenge uwau. ivuso ya ukenga kuawa ni uwau ungi ona kwi ivuso ya kukwatwa ni muthelo ethiwa inya nukutumia ARVs. lia ya nondo yithiawa na mavinya ala maile kwa ukenge kuma muthenya umwe nginya myai thathatu na niyitetheeasya kusiia mwana na mauwau. kwoou ni useo kwongy'a mwana ona ethiwa ti kwa ivinda iasa lakini inyiva myai thathatu yambee. Kuu nikwasya mwana niwaile unengwa nondo yoka vate kiw'u, kyai na syindu ingi. Kila kingi mwana waile unengwa eka kwonga ni ndawa kwoondu wa uima wake.

Itina wa kwongy'a myai thathatu nowambiie kumunenga liu ta usuu, liu mukime indi ti liumumu ondu ona ala matena tulinyu tuu twa uwau wa muthelo mekaa. Kana nikaele kuendeeza onga nginya mwaka vala kwa ala mena uwau uyu maile kueka kwongy'a indi ala matenaw'o mathiwe kwongy'a nginya miaka ili.

Muvango uyu wivaa ilulu wa kiuendeeza kunenga iveti ithi ARVs maisha/thayu wasyo w'otho witawa "Option B".

Ethiwa nthi ila iveti ithi sii ndinenganae ndawa ithi kwa ivinda iasa ula wina mwana niwaile uendeeza na unengwa ARVs kwa Option B kuma e muto nginya kyumwa kya mbee kya aeka kwongya. Kiveti kii nikithimawa na kusiw'a kana nikyaile uendeeza na ARVs kana ni ata. Ethiwa nthakame ya kyo ndina vinya mwianu wa kukitana na mowau nikiendeeza na unengwa ARVs, indi ethiwa kinavinya wa kukitana na mauwau nutaawa undu wa kuendeeza na kuendaa kiliniki na kuthimwa na ni indii ukanengawe ndawa.

Ona ethiwa ni kwa ni utwio mwau waumwa, kya vata ni ula wina uwau uyu kuendeeza na ARVs kwa ivinda yila yaile na undu inenganitwe inyuwe

kusuvia mwana kukwatwa ni uwau uyu. Ethiwa ndawa iithi sya ARVs iivo ivindani yila mundu muto, akasyaa na kwongya ni useo kumantha ukuu kwa aithi kana sivitali ila yi vakuvi. Kaingi kundu kula kiw'u kitheu kitoneka kw'ongya withiiaa nokw'o kwaile. Ateo kula kiw'u kitheu kyoneka mundu nunengawe mwanya wa ukolokela mwana yiia na liu wa kuua. uu tiw'o kwa isio mbingi ila TIST yina tukundi na ikundi vamwe na ngwatanio.

Kuma mwai wa kana 2014, Kenya na Uganda niyoosie itambya ya utumia Option B. Kwa uvo mbeange no usisye kwa intenet :

[https://www.youtube.com/watch?v=2TIX7-WreWo\(4:43](https://www.youtube.com/watch?v=2TIX7-WreWo(4:43)) Kwa nzia ino twaelesya kuatiwa no ngnya ula ukumiatia ethiwe emuthime na kumanya kana ena tulinyu tuu twa muthelo.

Amanyisya kwa ndaia mwikulw'a muthuthye amemba ethiwa mena muvango wa kusyaa kana ni aito na kana ni mekwongya mamathe uima woo iulu wa tulinyu tuu twa muthelo. No kwa Nzia ino yoka tutonya usiia kukwatya syana na tuukenge tulinyu tuu twa muthelo. Useo ula wivo ni kana mundu amina kwimanya vena ARVs na nutonya utumia kusiia kukwatya mwana uwau uu kwa kilungu kinene.

Nutonya usisya nthini wa internet kwa address ithi:

**References:**

<http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>  
<http://www.emtct-iatt.org/countries/uganda/>  
<http://www.emtct-iatt.org/countries/kenya/>  
[http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)  
<http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>  
[http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

## Ngwatanio ya Kinoro: Itambya yimwe kwa ivinda.

(By Jemima Gatwiri, muthukumi wa ngwatanio)

**T**wina tukundi 54 nthini wa ngwatanio ya Kinoro nituamuite kwika nesa na muno mbeange na kwosa mauseo ma TIST kwitu. Umunthi twina ivuio tuvuiite kwoondu wa miti ya mbua yukite. Twianda kwongela miti yitu ila yu ni 27,000 ivike 35,000 mbua ino yoka. Woni witu ni kuvikya miti 200,000.

Nitwambiite kwia mbesa kinanundi kya mesani vala yu twiite ikavika Kshs. 10,00 ila tunenganae ithyi ka ithyi ta mikovo kwa vaita(interst) munini. Kii nikieleelo kwondu wa kuvikia kwithiwa twitonya kimbesa. Twina muvango wa kwambiia kuithyea mbuku na kutea myatu mwaka ukite.



Amemba ma ngwatanio ya Tist Kinoru maisoma vamwe Mazingira Bora mwaini wa kenda mwaka 2014 me umbanoni.

# Mazingira Bora



# TIST

The International Small Group & Tree Planting Program  
www.tist.org

**Kipsigis Version**

An Environmental, Sustainable  
Development and Community Forestry  
Program.



Members of Karandi TIST Cluster after the Cluster meeting last month.

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# Kirubia Kilasta: Kikinet Logokiyok agobo wale tab emet. Kigochut kirurini Primary school tesetab Tai en TIST.

By Festus Mutegi.

**K**iboisiechingie echeck en echeck, Muwoe kilasta nebo Kirubia. Yekigenai agobo waletabgei nebo Emet Kinam Konyor Logokokiok Konetisiet agobo niton Komonutietab Minetab ketik ak rebet negiribe ketichuton.

Nebo tai ko kiginyoru kondoikab Kirurini Primary ak Kengolochi Kobwa TIST. Kigotoret Karubia kitasta toretet nebo ketik 522, komiten cheboo kipkaa ak alak chebo Jumbeek che kiinomen. En toginenyon kemoche Sugul Konyor Walet ak Keret ne Kararan.

Inguni kotinye kirubia ketik chesire 13,000 ako

tinnye tetet kemin alak chesire 5,000. Maniton kitoo kitinye Table banking kigiyum Ksh 15000 chebo kurubit.



*Kirubia Cluster members together with Karurini Primary School pupils after planting 522 trees in their school grounds.*

## TIST: Tononet ne Kararan.

**T**iinye teminde age tugul Kewelatet en Tibetab Minutik ak Ketik ak susik ak Miyonuel cheimuchi kowech imbar cheu sususik, Toritik, Koristo ak Kutik. Timto en imbar Kogochin Rurutik ak Ketik Komonyor Boiboiyet amun Toren amitwogi, Bek, Boroindo ak Asista.

Miten anyun koyob oengu en Sirani. Nabotai kotinye Kabwatet neitwin chi tugul ineimuchi koter komonyor susurik ak miyonuwek. Oret ne karan Kegol imbareni ko magitem. Oret ab oeng ke nyeru eng temik Chechang chetinye Kotigonutik en chigitetab Susurik, miyonuwek. Mogiitini Koenyoru mising akobo niton amun minutik chechang kotinye Miyonuwek chechang Kosibgei ak Susurik cheter. inye boroindo kondoik tukul koyai ngalatet ak biik en kurubit.

**Kebertab A:** Kabwatet ne kararan.

Kitinye kabwatet kile intoimugosei Kegol Rurutik en imbareni che Magitem Kotoret Mising koter Susurik ak Miyobuwek. Che isibu ko tuguk imuchi kibowoti.

**Onguidab Nyungunyek:** Igochin nito Rurundi kochok ak kogimit amun konyo omitwogik che kororonen, komonyoru miyondo

**Minutik cheterechin enimbar;** milen anyun susurik chetiengi minutiet nekararan komat imin rurutiet Agenge en kila kenyit, wal igol rurutik alek asi mosich boroindo susurik

**Kole tab minutik cheter en imbaret Agenge;** Niton kogochin kobos susurik che mokingei Rurutiet Agenge mitenkora chengemin ak rurutik kotinye koristo ne imuchi koisto susurik en imbar, yomiten kou.



**Keurto minutik ak tuchi;** kararan niton amunteseni ngungunyek tondonito ak kogochin ngungunyek konyor bek en kasarta age tugul, nito amun kobose timdo en imbar. Matiboisien ketik che tinye tobtok ak keswek chuton koibu miyonuwek en rurutik.

**Boisien ngetunanikab Rurutik komukosei;** ibuwat iboisen kesuwekab kipkaa chemiten anan chetinyea amun motinye borotet chebo sang En kurubit omuchi Onyorunen ngomnot.

**Oratinuek chegiistoen miyonuwek ak kebebertab Rurutik;** minutiet age tugul netinye miyondo kinemu en imbar asi maimuch koisto. Imuch komanam ketik katugul, kinemu kebeberta netinye miyondo.

**Koi kesuwek che moitin miyondo ak ne kararan; neimuchi** kogochi rurutik kosobcho. Agot iboisien kotoltoleiwek che nirib asi maimuch koib miyonuwek kobwa imbar.

**Chetinye keret ne kararan en bunik;** En abagora komiten susurik ak kutik chechang en imbarenikyok yon miten minutik imbar. Miten tiyongik chemengechen chekinyorunen kelchin en kasarta netinye susurik maanik anan yon itinye Arek koigu amitwogikab alak. Somunyk, Birechik, Kiprorogoik ak Toritik ko chetoreti konemu en Rurutik. Moyome nilon imuchi igeng kerichik cheimuchi kotoretin. Alage Komuchi kotoretin en susurik ak timdo en imbar. Chigit amun kerichik che iboisien asinyorunen kelchin en imbarengu ak inyoru Rurutik che kororon.

**Semberet;** Ngandan ui mising niton ago nyolu

amun keisto timdo en imbar. Alak ko omitwogik en tuga an alak ko kerichik akotinye tobtok che nyorunen segemik omitwogik.

**Kebebertab Oeng B;** Kinyorchin en konetisioni; Konetisiet ne kinyoru en [A] kotoretin inye mising isoengei Susurik ak miyonuuwewekab Rurutik. Lewwnchigei kerichik cheimuchi iboisien en imbarengung en Rurutik chenin. Oyai ngalalet en kurubit asi onyorunen borotet.

**Obsidian website-** Chetinye koboruniok che bo komonut en susurik ak minuwek agobo Rurutik. Cheterotin, choton ko chu:

<http://www.oisat.org/>

<http://www.infonet-biovision.org/default/ovvlmg/-1/pests>

**Management tips specifically on nematodes:**

<http://www.aglearn.net/resources/veglPM/rkn.pdf>

**For more information on natural enemies of pests:**

<http://www.infonet-biovision.org/default/ct/296/recipesForOrganicPesticides>

<http://www.aglearn.net/resources/veglPM/naturalEnemies.pdf>

**To learn more about insect life cycles:**

<http://www.aglearn.net/resources/veglPM/insectLC.pdf>

**Using natural pesticides and/or other natural methods of protection**

**For information on a natural bacterial pesticide**





<http://www.infonet-biovision.org/default/ct/230/recipesForOrganicPesticides>

**For home-made flour preparations:**

<http://www.infonet-biovision.org/default/ct/236/recipes>

**For Organic Pesticides**

<http://www.nzdl.org/gsdllmod>

**For hot water treatment:**

<http://www.infonet-biovision.org/default/ct/233/recipesForOrganicPesticides>

**For natural pesticide using garlic:**

<http://www.infonet-biovision.org/default/ct/232/recipesForOrganicPesticides>

**For natural pesticide using neem:**

<http://www.infonet-biovision.org/default/ct/229/recipesForOrganicPesticides>

**For natural pesticide using pyrethrum:**

<http://www.infonet-biovision.org/default/ct/231/recipesForOrganicPesticides>

**For pesticides using soap:**

<http://www.infonet-biovision.org/default/ct/235/recipesForOrganicPesticides>

**Using the power of the sun to kill pests (solarization):**

<http://www.infonet-biovision.org/default/ct/238/recipesForOrganicPesticides>

**List of plants with crop-protecting properties:**

<http://www.infonet-biovision.org/default/ct/786/recipesForOrganicPesticides>

**Using a push-pull approach using Napier grass and desmodium legume in maize fields:**

<http://www.infonet-biovision.org/default/ct/253/soilFertilityManagement>

**For a list of bio pesticides used in Kenya and distributors:**

<http://www.infonet-biovision.org/default/ct/793/recipesForOrganicPesticides>

**For information on bio-fumigation:**

<http://www.infonet-biovision.org/default/ct/237/recipesForOrganicPesticides>

**For information on copper pesticides:**

<http://www.infonet-biovision.org/default/ct/234/recipesForOrganicPesticides>

**For information on sulphur pesticides:**

<http://www.infonet-biovision.org/default/ct/794/recipesForOrganicPesticides>

**Using traps and bagging:**

<http://www.infonet-biovision.org/default/ct/246/recipesForOrganicPesticides6>

**For information on selective use of chemical pesticides as a last resort:**

<http://www.aglearn.net/resources/vegIPM/pestSelect.pdf>

**For more information on pesticide toxicity:**

<http://www.aglearn.net/resources/vegIPM/pToxInfo.pdf>



## Karanda kilasta: Kilasta ne lelel en laikipia mulot nebo cherongo.

*By David Thuku.*

**K**iboiboi en kilasta nebo karandaamun en 2014 ko kiinetech Mr. Mwangi kasabubu agobo TIST en komostanyon kinam agechek,ko kikiminten Kilasta nebo Tandaka . En inguni ketinye korubisiek 26,chebo korurungutik chemengechen. Miten anyun chechang che kogochut.

Kitinye boibonto amun kigenyoru konetisiet got kogeyai lewenisiet ne botai.Kitinye kondoik choton ko chu:Alice Wanjiru - 0715 247 754, Peter Kiare - 0716 824 874 ak Samson Koech - 0725 466 733.

Ki kongei Kondiochuchok ago tinye Maget komutech kenyorun Kelunoik che miten

barak.Kitinye Kora maget kemin ketik 250,000 toretch missing tolochikab TIST.



*Members of Karandi TIST Cluster after the Cluster meeting last month.*

## HIV/AIDS: Teretab Kamet Komoiti Lakwet (PMTCT).

**K**utikab HIV Komuchi koiti lakwet kobun Kamet.

- Yon nyikis kamet
- Sigetab Lakwet
- Yon Chuchuni Lakwet.

En Oraniton kigochingei Kutik ko ngeten Kamet got koit Lakwet keguren PMTCT. Agot komonyor Kerichek ko miten barak missing kogotoetab kugutik 20% - 45% Miten Oritiwiek chekimuchi keteren asi Moiti Lakwet koyob Kamet.

En July 2013 Kogibit tonochinoik Koyob Nguwong komugul kole asi matagotestai PMTCT kemoche keyai kouni.

- Kiyonchin kole Chitugul netinye kutik ago nyigis konyoru kerichek (ARVs) ak en Sobenyin tugul.
- Ye tesetai ak kerichek ARVs en sobenyin kogochi kora konyor kobasok kutik en borto ago toreti yomoche Lakwet age.
- En kerichek chuton kotinye Daktari



Orurunet amun ine netinye keret. En tuiyetab kilasta Ongalalen Ole chebioso ne tinye kutik koboisien Kerichek.

En emotionuek che u Kenya ak Uganda kotinye chomchinet koreri Lakwet ago en ribet ne miten barak.

En kasarta nebo Orowek 6 kotinye kamuget Lakwet konyor chegab kina asi yeibata kewonchi Omituwogik alak on kongorik ak alak chetinye minolet en borto.

Nyolchin akwet koreri en kasartab kenyi agange Miten alak chetinye chomchinet nebo (2 yrs).

Oret nebo ARVs ye nyorunan chebioson chetinye kutik en sobenyuan Keguran “Option B+” .A got kotinye borto ne gim kimuchi

komwochi Daktari kobagach kerichek.

Agot komonyor Chebioso kerichek en kasartab ne nyigis konyolu konyor konetisiet en Ole negiten sipatali.

Konetik, Oginet memback en kurubit asi Kisomuch konyor konetisietab Teletab logok en kasrtab ne nyigis ana ye rerie Lakwet , konyolchi konyor chigilet.

**References:**

<http://www.avert.org/who-guidelines-pmtct-breastfeeding.htm>

<http://www.emtct-iatt.org/countries/uganda/>

<http://www.emtct-iatt.org/countries/kenya/>

[http://www.healthpolicyproject.com/pubs/164\\_OptionB.pdf](http://www.healthpolicyproject.com/pubs/164_OptionB.pdf)

<http://nascop.or.ke/library/pmtctGuidelines%20for%20PMTCT%20of%20HIVAIDS%20in%20Kenya-1.pdf>

[http://www.who.int/hiv/pub/mtct/programmatic\\_update2012/en/](http://www.who.int/hiv/pub/mtct/programmatic_update2012/en/)

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## **Kinoro TIST Kilasta: Kokuwoutiet Ageneg en kasarta:**

*By Jemima Gatwiri.*

Kitinye kurubisiek 54 ago kitinye Maget en TIST asi Kenyoruren kelunoik chechang. Kitinye en nguni ketik en Kabetisiek che kimine en kasartab ye kinyor Robta.Kaitinye 27,000 ago Komuchi kenyorun 35,000 en kasari,, kitinye Maget keitin ketik 200,000

Kitinye table banking en Kilasta ak kitinye chesire 10,000 chebo Loan che nyoru Membaek.Niton ko komnoteyon asi keitin kabai Kiplegik ak segemik en kenyin ne nyone.



*Members of Kinoro TIST Cluster reading together Mazingira Bora articles during September 2014 Cluster meeting.*