



## **TIST HABARI MOTO MOTO**

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### **DRY SEASON PREPARATION**

TIST njia bora suggest that now is a great time to prepare for the next rain season. As we have seen from the recent quantification trips some of you have already started to prepare for the next rainy season. Some of Njia bora must started soon after rain season, because at this time it is easier to dig holes so more work can be done and have a lot of time for preparation before planting season. Holes can be prepared for crops and for planting new trees. Even if the holes cannot be completely prepared, e.g. with manure, they can still be dug and you will continue to find a time for putting manure while you continue to dig the holes. Now is also a good time to start nurseries so there are seedlings ready to transplant at the beginning of the next rainy season.

### **CONSERVATION FARMING !!!!!**

*Have you heard how much difference Conservation Farming makes to Small Group members and their families? Because using Conservation Farming best practices really can change YOUR life. Have you tried it before? Have other Small Groups in your village tried it?*



### **MAANDALIZI YA WAKATI WA KIANGAZI.**

Ushauri wa Njia Bora za TIST ambazo sasa ndiyo wakati wake na baadhi ya njia tayari wanavikundi wamekwisha anza kuzitumia na kuanda kwa ajili ya msimu uja wa kilimo. Baadhi ya njia inabidi kuanza kutumika mapema msimu wa mvua zilizopita kuacha kunyesha. Wakati huo ni rahisi kuchimba mashimo na baadhi ya kazi nyingine nyingi zinaweza kufanyika na kuwa na kipindi kirefu cha matayarisho. Mashimo yanaweza kuchimbwa kwa ajili ya kupanda mazao au miti mingine mipy. Kama mashimo uliyochimba yatakuwa bado hayajakamilika, kwa mfano hayana mbolea, yanaweza kuendelea kuchimbwa na kuendelea kutafuta muda wa kuweka mbolea kabla ya kupanda mazao. Pia huu ni wakati mzuri kuanza kuweka vitalu tayari kwa ajili ya kuotesha miche, Hii itakuwa rahisi na kuwa na miche tayari ya kupandikiza mwanzoni mwa msimu wa mvua.

### **KILIMO HAI !!!!!**

*Je umekwisha sikia jinsi Kilimo Hai kinavyoweza kubadili maisha ya familia ya wanavikundi? Kwa sababu kwa kutumia Njia Bora za Kilimo Hai hakika unaweza kubadili maisha yako. Je umeshawahi kujaribu? Je kuna wanavikundi au watu wengine katika kijiji chako ambao wameshajaribu njia hii ya Kilimo Hai?*

Small group representatives at a seminar made this decision. They believed that Conservation Farming was so important that all the TIST Small Groups should use this sustainable farming method. They believed that if everyone used Conservation Farming, lives would be changed and lives would be saved.

Because you will increase your crop yield and have more food for your family. Even in years when there is little rain, there is some harvest and your family will have grain with CF. When the rains are good, there is a greater harvest, and Small Groups who sell the extra grain have more money for the things they need.

Some Small Groups have used Conservation Farming on some of their land in one year and used the traditional farming method on the rest of their land. They did this to see if it really would make a difference. They have found that it really does -- and soon they will use CF all on all of their land.

Each year that you use Conservation Farming your land will become more fertile. The soil will become richer. With richer, better soil, your crops will grow stronger and you will get a greater yield.

Conservation Farming really can make a difference. It increases the amount of grain at harvest. It saves lives. It helps you feed your family. And remember, to be a TIST Small Group in good standing one acre per group member of Conservation Farming holes needs to be dug by September 30, each year.

Wawakilishi wa vikundi walikubaliana na kuweka utaratibu huu . Wanaamini kuwa Kilimo Hai ni muhimu sana na walikubaliana kwamba vikundi vyote vya TIST vitumie njia hii ya kilimo Hai. Wanaamini kuwa kila mwanakikundi akitumia Kilimo Hai basi maisha ya watu yatabadilika na maisha yatakuwa yameokolewa.

Kwasababu utaongeza kiasi cha mavuno kutoka shambani na utakuwa na chakula cha kutosha katika familia yako. Hata kwa miaka ambayo haitakuwa na mvua za kutosha, bado utaweza kuvuna na familia yako itakuwa na chakula cha kutosha kutoptaka na Kilimo Hai. Wakati mvua zinapokuwa nzuri, yaani za kutosha, kutakuwa na mavuno ya kutosha, na vikundi vinaweza kuuza baadhi ya mazao ya ziada na kuwa na fedha za kununulia mahitaji mengine yanayohitajika.

Baadhi ya vikundi wametumia Kilimo Hai katika sehemu ya shamba kwa mwaka mmoja na kutumia kilimo cha njia za asili katika sehemu ya shamba iliyobaki. Walifanya hivi kuona kama kweli njia hii ya Kilimo Hai inaweza kuonyesha mabadiliko. Wamegundua kwamba ni kweli inaleta mabadiliko na sasa hivi wanatumia njia bora za Kilimo Hai katika maeneo yote ya mashamba yao.

Kila mwaka unapotumia Kilimo Hai udongo wako utakuwa na mbolea yakutoshia. Udongo utakuwa na virutubisho vya kutosha. Na shamba lako linapokuwa na udongo wenye rutuba, mazao yako yatakuwa na nguvu na utavuna mazao yakutoshia.

Ni kweli Kilimo Hai kinaweza kuleta mabadiliko. Kinaongeza kiwango cha mavuno ya mazao. Kinaokoa maisha. Kitakusaidia kulisha familia yako. Na ukumbuke, kuwa ili kikundi chako kiwe mwanachama Hai wa TIST kila mwanakikundi anahitaji kuwa na angalau heka moja ya Kilimo Hai cha kuchimba mashimo ya kiangazi, Kila mtu anatakiwa awe tayari amechimba mashimo ifikapo tarehe 30 Septemba ya kila mwaka

## **Reminders about digging CF holes:**

- ❖ Conservation farming holes have to be dug BEFORE the rains come. It is important therefore to start digging them early.
- ❖ Mark out where you are going to dig your holes. The best thing to use for this is a Teren rope. A Teren rope can be made very easily: get a rope or string and squeeze bottle tops on to it 70cm apart. Each bottle top marks the center of a hole and it makes sure that the holes are correctly spaced out. Mark out the rows of holes using a hoe. Each row should be 90cm apart. Only mark the number of holes that you can dig that day.
- ❖ On the same day as you mark a block of holes, dig the holes. The holes need to be oblong. They should be between 15 cm wide, 35 cm long and 15 cm deep depending on the crop that you are planting.
- ❖ Refill the hole with a manure and soil mixture leaving a space of 5 cm from the top of the hole.

## **SEED COLLECTION**

The collection of seeds can be done throughout the year, depending on the availability of the seeds and methods for keeping those seeds. This means that there are some types of the seeds that can be obtained at certain periods of the year and others need special utensils / containers to store them, depending on how well they keep. There are difference means / methods used to collect seeds for trees. Some of those methods are as follows:

- To collect those seeds that have fallen down / dropped down from the trees.
- To stand on something that will support your weight to pick the seeds when they are on the trees.
- To climb on the trees and pick the seeds.
- To use special tools to collect the seeds.

Which seeds are collected will determine what is grown in the nursery. The seedlings and trees you grow will have different uses: Trees can be used for firewood, timber, as windbreakers, to prevent soil erosion, improve soil fertility, for medicine and decoration.

## **Muhimu kuhusu mashimo ya kilimo hai**

- ❖ Mashimo ya Kilimo hai ni lazima yachimbwe kabla ya mvua kuanza kunyesha. Ni muhimu, hivyo yanatakiwa kuanza kuchimbwa mapema.
- ❖ Weka alama unapoanza kuchimba mashimo yako. Kitu cha muhimu hapa ni kutumia kamba. Kamba hiyo ni rahisi kutengenezwa. Pata kamba au waya na kisha upunguze katika urefu wa sm 70 kutoka kifundo kimoja hai kingine. Kila kifundo kimoja kinakuwa ni katikati ya shimo na hii itakuhakikishia kuwa mashimo yapo katika umbali unaotakiwa. Weka alama za mashimo kwa kutumia jembe. Kila mstari ni lazima uwe umbali wa sm 90. Weka alama za mashimo utakayochimba siku hiyo tu.
- ❖ Kwa siku hiyo, kama ulivyoweka alama za mashimo, chimba mashimo. Mashimo yanapaswa kuwa katika umbo la duara dufu. Ni lazima yawe na ukubwa wa sm 15 upana, sm 35 urefu na kina chake ni sm 15.
- ❖ Fukia shimo na mbolea na mchanganyiko wa udongo acha nafasi ya sm 5 kutoka juu mwa shimo hilo.

## **KUKUSANYA MBEGU ZA MITI**

Ukusanyaji wa mbegu unaweza ukafanyika kipindi chote cha mwaka kwa kutegemea upatikanaji wa mbegu na vifaa vya kuhifadhiya mbegu. Hii ikiwa na maana kuwa kuna baadhi ya mbegu zinazopatikana kwa kipindi fulani cha mwaka na baadhi ya mbegu zinazohitaji vifaa maalumu vya kuhifadhiya kutokana na uwerekano wake wa kuharibika au kufa mapema. Kuna njia mbalimbali zitumikazo kukusanya mbegu za miti. Baadhi ya njia hizo ni kama ifuatavyo:

- Kukusanya mbegu zilizoanguka chini ya mti.
- Kusimama juu ya kitu na kuchuma mbegu juu ya mti.
- Kupanda juu ya mti na kuchuma mbegu.
- Kwa kutumia kifaa maalum kukusanya mbegu

Mbegu zinazokusanywa ndizo zitakazoweza kutambulisha kuwa ni zipi zinastahili kuoteshwya kwenye kitalu. Miche na miti inazooteshwa zitakuwa na matumizi tofauti. Miti inaweza kutumika kwa kuni, mbao, kama makinga upopo, kuzuia mmomonyoko wa udongo, kurutubisha udongo, kwa dawa na mapambo.

**These include:**

- Mellea
- Miarobaini
- Mijohoro
- Mikrismas
- Milusina
- Mikombekombe (Parkinsonia sp).

**Trees can be used for pole and building ,These include**

- Mijoholo
- Grevilea
- Mitiki
- Mkora

**Trees can be used for fruits these include,**

- Guava
- Orange
- Lemon
- Zambalau
- Mango
- Overcado
- Fennesi

**Thees can be used as water sources prevention****Trees can be used for shade these include**

- Mikombekombe
- Christmas
- Mijoholo
- Miarobaaini
- Mimelea

**PREPARING NURSERIES**

It is now time to be starting nurseries. The first thing to do therefore is to choose a suitable place for the tree nursery. The place should have a slight slope so water runs off. The place should be out of floods but near a water source like a river or water tap. It is useful if the nursery is close to where the trees will be planted. Once the site has been chosen, the seedbed needs to be prepared. First, the nursery bed should be surrounded with dried maize stalks or branches as a fence to prevent animals from getting in. After that the fertile seedbed soil should be prepared. There are many ways to make good seed soil. One way is to use 3 parts of topsoil from forest areas, 2 parts of sand and 1 part of manure or plant compost.

**Miongoni mwa miti hiyo ni :**

- Mmelea
- Miarobaini
- Mijohoro
- Mikrismas
- Milusina
- Mikombekombe (Parkinsonia sp)

**Miti ya kujengea na kwa ajili ya nguzo za kujengea, ni pamoja na:**

- Mijoholo
- Grevilea
- Mitiki
- Mkora

**Kukuza miti kwa ajili ya matunda, miongoni mwa miti hiyo ni :-**

- Mapera
- Michungwa
- Milimao
- Mafenesi

**Miti husaidia kutunza vyanzo vya maji, Miti hutoa vivuli, hii ni pamoja na:**

- Mikombekombe
- Mikrismasi
- Mijoholo
- Miarobaaini
- Mimelea

**UTAYARISHAJI WA VITALU VYA MITI.**

Sasa ni wakati wa kuanza kuandaa vitalu. Kwa hiyo Kitu cha kwanza kufanya ni kuchagua eneo ambalo ni zuri kwa kitalu. Eneo ni vizuri likawa na mteremko kidogo ili maji yatiririke, yasituwame. Eneo ni lazima lisiwe katika eneo la mafuriko bali liwe karibu zaidi na chanzo cha maji kama vile mto au kisima. Ni vizuri zaidi pia kama kitalu kikiwa karibu na eneo ambapo miti itapandwa. Mara tu eneo likishakuwa limechaguliwa, majaruba yatakiwa kuanza kuandaliwa. Kwanza, jaruba ni lazima liwe limezungushiwa uzio wa mabua ya mahindi yaliyokauka au matawi ya miti ili kuzuia wanyama wasiingie kwenye kitalu. Baada ya hapo udongo wenye rutuba kwa ajili ya kitalu unaanza kuandaliwa. Kuna njia nyingi za kutengeneza udongo mzuri kwa kitalu. Njia mojawapo ni kutumia sehemu 3 za tabaka la juu la udongo kutoka msituni, sehemu 2 za mchanga na sehemu 1 ya mbolea ya samadi au mboji.

This will ensure that the soil is rich with nutrients to help the seeds grow. The participants arrived at the best practice for raising seedlings. The agreed best practice was:

- 1) You should time when you plant the seed according to how long it will take it to be strong and the right size to transplant into the prepared hole in the field.
- 2) It is best practice to put the seed in some sort of bag or tube filled with the fertile soil mixture so the bag constrains the plant vertically.
- 3) Seedlings should be checked at least every week and probably more often than that.
- 4) When you check the seedlings and look at the roots, you can either clip off the small roots that are coming out or you can just move the seedling in the nursery ***once per week***

Hii itakuhakikisha kwamba udongo una virutubisho vyat kutosha ili kusaidia mbegu kukua vizuri. Washiriki wa semina mbalimbali walifika muafaka wa njia bora za kuotesha miche. Njia bora zilizokubaliwa na washiriki:

- 1) Ni lazima upandikize mbegu kwa wakati muafaka inategemeana na muda wa mbegu kufikia kuwa na afya nzuri na saizi nzuri tayari kupandikizwa kwenye mashimo yaliyokwisha tayarishwa shambani.
- 2) Ni njia bora kupandikiza mbegu kwenye chombo chochote au kiriba kilicho jazwa udongo wenye mchanganyiko uliyo na rutuba, hivyo viriba kitafanya mmea ukue wima.
- 3) Miche ni lazima iwe inafanyiwa uchunguzi angalau kila baada ya wiki na huenda hata zaidi ya hapo
- 4) Pindi unapoifanyia uchunguzi miche yako na uangalie mizizi, unaweza ukatia mizizi ambayo bado michanga au unaweza ukiihamisha hamisha miche kwenye kitalu mara moja kwa kila wiki.

