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**HISTORIA YA KIKUNDI CHA MSAMARIA
MATONGORO KONGWA**



Kikundi kilianza mwaka 2000 kikiwa na wanachama 10 wanaume 3 na wanawake 7, kikundi hiki tulikianza tu mara baada ya kusikia habari za Tist tukahamasika ndipo tukaanzisha kikundi hiki, tulianza kwa kupanda miti kwa kutumia elimu tuliyopewa na Shirika la TIST katika makanisa yetu, na semina mbalimbali tulizokuwa tukifanya. Tokea hapo tulihamasika vizuri katika suala la upandaji miti na tuliipenda sana kazi ya kupanda miti, na mpaka sasa tuna miti 3038 iliyo hai, pamoja na Tist kutotutembelea kwa muda mrefu kikundi chetu hakikukata tamaa ya kuendelea kujishughulisha na shughuli nyingine kama kikundi ikiwa ni pamoja na kuendelea kupanda miti kwa kila mwana kikundi katika maeneo yanayotuzunguka ili kuzidi kuboresha mazingira yetu, na mwaka huu tulipanda miti 214. Tuliipenda sana Tist na tunaendelea kuipenda na kuipoke kwa moyo mkunjufu tena, maana imesababisha tumeboresha mazingira yetu katika kijiji chetu na kufanya kipendeze kwa kupitia vikundi vidogovidogo vilivyoanzishwa na UMET.



**MSAMARIA SMALL GROUP – MATONGORO
KONGWA**



The group was started in 2000 with 10 members, 7 women and 3 men. We have started the group soon after heard about TIST and we encouraged. We started by planting the trees by using training we received from TIST through our churches and from different seminars. From there we encouraged with tree planting and we loved very much to plant trees. Now we have 3038 live trees, even though TIST did not visited us for long time our group did not discouraged we have started other activities and continue to plant trees for every member in the area surrounding so as to protect our environment, this year 2010 we have planted 214 trees. We loved very much TIST and we will continue to love with all our heart because it teach and train us to protect environment of our village and now it looks so nice this is the product of the training form UMET

Tist imetupatia faida nyingi sana ikiwa ni pamoja na Elimu ya mazingira ambayo imetufanya tusi isahau UMET daima, kwa kuangalia kazi nzuri ya upandaji miti katika kijiji chetu. Pia tumejifunza kufanya kazi pamoja kwa ushirikiano na haswa kwa upande wa akina mama, tumepata elimu ya kujishughulisha kuliko kuwa tegemezi kwa waume zetu, na ndio maana hata ukiangalia katika Mradi wa Tist asilimia kubwa ya wanachama ni wanawake katika vikundi vidogovidogo. UMET imetuwezesha kupata malipo ambayo yametusaidi katika mahitaji mbalimbali ya nyumbani na hata katika kilimo.

Kwakipindi hicho ambacho UMET walikuwa hawaji kutuhamasisha Tulifanikiwa kujiunga na mashirika mengine ya ufugaji mbuzi na ng'ombe kwa kupitia vikundi vya upandaji miti vilivyoanzishwa na UMET. Kama inavyoonekana kwenye picha huyo ni ng'ombe ambaye tulipewa katika kikundi chetu kwa ajili ya ufugaji. Tulisikitika sana UMET kutuacha kwa kipindi hicho chote, kwani kwa kasi tuliyokuwa nayo kama tungeendelea tungekuwa na miti mingi sana katika kikundi chetu.

Hata hivyo Tumeipokea UMET tena na tunaahidi kushirikiana na wafanyakazi wa Tist kuhakikisha tunapanda miti ya kutosha na kikundi chetu kikawa kikundi Bora kuliko vikundi vyote vya UMET. Kwa maandalizi ya mwakani tumepanga kupanda miti 3000 na sasa tayari tupo katika harakati za kuandaa vitaru kwa msimu ujao.

Tunawashauri wanavikundi wenzetu, wafanye kazi kwa bidii na kujishughulisha na miradi mingine mbalimbali ikiwa ni pamoja na ufugaji, bustani za mbogamboga nk. Pia tunaomba wanavikundi tuwe wakweli na waaminifu na tuache kutoa taarifa za uongo, kwani kwa kufanya hivyo kutasababisha kuwakatisha tamaa wale wanaotwezesha na kufanya Mradi wa UMET kurudi nyuma katika swala la mazingira kwa ujumla

Kilimo

Soma shuhuda kutoka kwa Watu jinsi maisha yao yalivyo badilika kwa kutumia Kilimo cha kuhifadhi Mazingira kwa kupitia maada zifuatazo:

- Vikundi vidogo vinavyotumia njia madhubuti za kuhifadhi Mazingira kila mara vinaonekana kupata Mazao, Hata wakati wa miaka mibaya kabisa wakati Mvua ni chache na isiyo aminika.
- Katika miaka mizuri mazao huwa mazuri na yakupendeza vikundi vidogo ambavyo hutumia mbinu za kuhifadhi mazingira hupata mazao mazuri na kuona tofauti kubwa katika mazao yao. vikundi vingine vimepata ongezeko la mazao mara 5-10 zaidi.
- Kwa wakulima wanaotumia njia ya asili hawana uhakika wa mavuno kwa miaka mingi mavuno ni madogo na wakati mwingine hakuna kabisa.
- Kilimo hai hutumika kwa kuchimba mashimo ya mazao na kuyafukia kidogo kwa mbolea ya asili au samadi, hivyo mbegu hupata virutubisho zaidi kuliko kupanda katika udongo usio na mbolea.

TIST provide many benefits, one big benefits is the training on the environment that cause never ever to forget UMET by seeing the good work of tree planting in our village. We have learned to work together especially in women side we have learned not to depend on our men, this is true and evidence is by looking at UMET the big number of members are women. UMET provide to us the payments that enable us to buy different things for home uses and in our farms.

Through TIST We joined with other NGO's and we started the cow and goat projects. As it seen on the picture down, it is cow that were given from NGO's.

Now we alive again and we are promising to work hand with hand with TIST/UMET by planting trees and we need our group to be one of the best groups in all TIST groups. We have planed next year to plant 3000 trees now we have started to prepare the nurseries.

We are encourage small group members to work hard and participate with other project like keeping cow and goat and gardening. Also we are encourage the small group members to be honest and transparent and not to give out the inaccurate data, by doing that we will discourage the ones who provide the services for the tree planting and cause the project to discontinue.

Agriculture

Read terimonies from people about how conservation farming has made a difference to their lives is probably the best form of teaching

- Small groups that use conservation farming best practices always seem get. some harvest, even in the very worst years when rainfall is little and unreliable.
- In good years the harvest can be spectacular! Small groups who use conservation farming are seeing a huge difference in their crop yields. Some groups have reported 5-10 times improvement in their crop yields.
- Farmers who use traditional farming methods cannot always be certain that he or she will get any harvest. Most years the harvest is small, and sometimes there is no harvest.
- Conservation farming works by digging the holes for the crops and filling the holes half full with good soil and manure or compost. The seeds therefore get many more nutrients than if they were planted in normal soil.

- Rutuba zaidi husaidia mbegu kuota na kuwa mmea wenye nguvu na kutoa mazao zaidi. Matundu ya kupandia hulinda mbegu na kuwazeshia kupalilia magugu kuzunguka mmea unao ota.
- Mashimo ni kitu muhimu kabisa. Mvuua inapokuja badala ya kuchukua udongo mzuri pamoja na mbegu maji huzama chini katika mashimo na kusaidia mbugu ziote zaidi. mchanganyiko wa mashimo na mbolea ndio unaoshika maji yawe pamoja na mbegu kwa muda mrefu zaidi kwahiyu jua linapokuja tena halikaushi maji yote kwa haraka

Dawa za asili za kuhifadhi mazao

Taarifa hii ni kwa wale ambao wanatumia njia za asili za kuhifadhi mazao kwanye vifaa vya asili kama Kihenge, Kilindo, Idong'ha. Njia hii imejaribiwa na kuona inafanya kazi kwa zao la mahindi. Mfano huu ni kwa ajili ya kuhifadhi mahindi gunia 10, lakini unaweza kutumia kwa ajili ya mazao kiasi chochote chini au zaidi ya gunia 10 kwa kadiri uwezavyo.

Mahitaji

- Lita 5 za mbegu za mwarobaini zilizokauka
- Mahindi gunia 10 (kila gunia liwe na ujazo wa debe 7) mahindi yawe yamekauka vizuri
- Kilindo, Kihenge au Idong'ha vinatengenezwa kwa miti, udongo na kinyesi cha ng'ombe. Kinyesi cha ng'ombe husilibwa vizuri ndani

KUHIFADHI MAZAO

Jinsi ya kuhifadhi mazao.

- I. Twanga mbegu za mwarobaini na kupata unga wake
- II. Nyunyiza unga wa mwarobaini vikombe viwili ndani ya kilindo kabla ya kuweka mahindi.
- III. Weka magunia 3 ya mahindi kwenye kilindo
- IV. Nyunyiza tena lita 1.5 za unga wa mwarobaini juu ya mahindi ya kwenye kilindo
- V. Weka magunia mengine 3 ya mahindi
- VI. Nyunyiza tena lita 1 ya unga wa mwarobaini juu ya mahindi
- VII. Weka kiasi cha mahindi kilichobaki, halafu nyunyiza kiasi cha unga wa mwarobaini uliobaki.
- VIII. Unaweza kufunika kilindo chako kama kuna ulazima mfuniko unaweza kutengenezwa kwa miti, udongo na kinyesi cha ng'ombe.
- IX. Mazao yanaweza kudumu kwa muda wa miaka 3 bila kuharibiwa na wadudu yakiwa ndani ya kilindo na huku unaendelea kuyatumia.

- The extra nutrients help the seeds to grow into stronger plants with greater yields. The holes protect the seeds and you can weed around the holes without hurting the germinating plants.
- The holes are very important. When the rains come instead of washing the good soil and the seeds away, the water goes into the holes and helps the seeds grow more. The combination of the holes and the manure means that the water is held near the seeds for longer so when the sun comes out again it does not take all the water away as fast.

Traditional crop storage

This information is for those who store their grain in a traditional crop store (kihenge, kilindo, Idong'ha). The following practice has been tried and found to be effective for maize. The example is for 10 bags of maize, but the process can be scaled up or down as necessary.

Requirements

- 5 kg of dried by neem seeds
- 10 bags of maize (each bag contains 7 tins of maize. A tin is a 20litre container). The maize should be dried and cleaned.
- Traditional crop store made of wood, soil and animal dung. The inside of the store is plastered with animal dung.

How to store

- I. Grind the neem seeds to get a powder.
- II. Sprinkle two cups of the neem seed powder over the floor of the store.
- III. Pour in three bags of maize into the store.
- IV. Pour 1.5kg of neem seed powder over this maize.
- V. Add another three bags of maize.
- VI. Pour 1kg of seed powder over this.
- VII. Add the remaining four bags of maize, then the remaining seed powder.
- VIII. The store can be covered with soil, dung and wood if desired.
- IX. The stored crops can last for three years without being destroyed by pests. The crops can continue to be used throughout the years.

Upandaji miti

Tafadhali soma sehemu hii kuna orodha ya maswali na majibu. Unaweza kupitia orodha ya maswali kama mafundisho mafupi.

1. Je tupande jamii ipi ya miti katika maeneo yetu?

Miti mizuri ni ile inayoota kirahisi katika maeneo yetu. Chagua inayokufaa.

2. Je miti yote inafaa?

Si kweli, baadhi ni migumu kuitunza, inaweza kuwa sumu kwa wanyama au kusababisha ukame. Chagua itakayofaa katika eneo lako.

3. Je miti hutoa mbegu kila mwaka?

Miti mingi hufanya hivyo, lakini chunguza miti yako ili uhakikishe. Baadhi hutoa mbegu bora kila baada ya miaka 2-3.

4. Ni mti gani mzuri kwa kukusanya mbegu?

- Kusanya mbegu kutoka kwenye miti yenye afya na ambayo huzaa kwa wingi.
- Epuka miti iliyojitenga mmoja mmoja, katika hali hiyo mbegu zake huwa hazina dume kwahiyo zinakua mbedu hafifu.
- Epuka miti isiyozaa na yenye umbo baya.
- Ni afadhali kuchagua miti iliyo katika msongamano wa miti mingine yenye afya ya kabila hiyo hiyo. utapata mbegu nzuri kutokana na iliyo na maua yaliyo sambaa badala ya miti iliyo na maua yaliyojikusanya pamoja.
- Mti mzuri ni ule ambao unataka kutumia. Kwa mfano mti mzuri kwa mbao umenyooka, ulio na matawi machache na kukua kwa haraka. Miti mizuri kwa malisho iwe inayokua haraka na kuwa na matawi mengi yenye mashina mengi na kukua kwa haraka na majani yenye kukua kwa haraka yanapopunguzwa. miti mizuri ya matunda ni ile yenye kuwa na matunda mengi na mazuri.
- Jaribu kuchagua miti inayokua katika ukanda ule kama unaotaka kupanda.
- Chagua miti iliyo komaa na sio michanga.

5. Ni wakati gani tukusanye mbegu?

- Jifunze wakati ambao mbegu huiva.
- Waulize wenyeji wa sehemu hiyo au uchunguze mti wewe mwenyewe.
- mwingine mbegu huwa zimekomaa wakati tunda linapobadilika rangi, kukauka au kudondoka kutoka kwenye tawi.
- Mbegu nyingi huwa tayari kukusanywa wakati zikianguka kutoka mtini zenyewe.

Tree Planting

For this section there are a list of questions and Answers. You can either choose to go through the list as a mini-lecture,

1. Which tree species should we grow in our area?

The best ones are those growing naturally in the area. Select ones that meet your needs.

2. Are all trees good?

Not necessarily! Some may be difficult to control, be poisonous to your animals or use too much water. Choose ones you know will benefit your area.

3. Do trees produce seeds every year?

Most trees do, but observe your local trees to be sure. Some may only produce good quality seeds every 2-3 years.

4. Which is a good mother tree to collect seeds from?

- Collect seeds from healthy trees that are good seed producers.
- Avoid isolated trees. In this case the seed is likely to have been self-pollinated which leads to poorer quality seeds.
- Avoid unproductive trees and ones with a bad shape
- It is better to choose a tree in the middle of a healthy group of trees of the same species. Seeds will be higher quality from trees with flowers that are spread out rather than closely together.
- The exact type of tree depends on what you want to use the tree for. For example, good trees for timber are straight, few branches and fast growing. Good trees for fodder should be fast growing, many branches with multiple stems, and fast growing leaves with the ability to recover after being pruned. Good fruit trees should obviously have good quantities of healthy fruit!
- Try to choose seeds from a tree growing at the same altitude and soil type as where you want to plant.
- Choose a mature tree, not a young one.

5. When do we collect the seeds?

- Learn the time of the year when the seeds are ripe.
- Ask other local people or observe the tree yourself.
- Sometimes seeds are ripe when the fruit or pods change color, become dry, or break easily from the branch.
- Most seeds are ready for collection when they fall from the tree naturally

6. How do we collect the seeds?

- It is helpful to clear the area around the bottom of the tree first. Many seeds can be collected from the ground. Inspect the seeds for insect damage.
- The tree can be climbed to collect the seeds, but take care!
- Some fruit dry open and disperse their seeds without falling to the ground. These are hard to collect if the seeds are small. Collect the fruit or pods after they are ripe but before they have split or fallen to the ground. Then dry the fruit or pod in a clean, sheltered place to obtain the seeds.
- Some seeds can be knocked from the tree with a long stick.
- Try putting a sheet under the tree and gently shaking the tree.

6. Je, tunakusanyaje mbegu?

- Ni vizuri kusafisha mazingira yanayo zunguka mti kwanza. Mbegu nyingi zinaweza kukusanywa chini. kagua mbegu kama zimeharibiwa na wadudu.
- Unaweza kupanda juu ya mti kuangua mbegu, lakini kuwa mwangalifu!
- Kwa matunda yaliyokauka, hupasuka na kusambaza mbegu bila yenyewe kudondoka chini. ni vigumu kukusanya kama mbegu ni ndogondogo. kusanya mbegu au maganda baada ya kuiva lakini kabla hayajapasuka au kudondoka chini. halafu kausha matunda au maganda katika sehemu safi na salama ili kupata mbegu.
- Baadhi ya mbegu unaweza kuziangua kwa kutumia fimbo ndefu.
- Tandika turubai au mkeka chini ya mti halafu tikisa mti kwa uangarifu.
- Kwa miti mirefu njia iliyo rahisi, unaweza kuunganisha kipago na mti mrefu na imara. Upande mwingine unaweza kuunganisha kwa kamba.
- Elewa kwamba jamii nyingine za mbegu huwezi kuzikusanya chini na nyingine zinajiolea zenyewe. Hii ni miche inayojiolea chini ya miti. hii inaweza kuhamishiwa kwenye vitaru. hii ni njia bora kwa miti ambayo ni vigumu kupanda katika vitaru au mbegu hizo ni vigumu kukusanya.
- Mbegu zote lazima ziondolewe kwenye matunda au maganda. na hii inaweza kufanyika kwa mikono, au kuanika juani mpaka zikauke na kupasuka.

7. Tutatambujaje kama mbegu ni bora?

- Kwanza iangalie mbegu. tunganisha mbegu ndogo, nyepesi, na zenye rangi tofauti kuliko nyingine. baadhi zinaweza kuwa zimeharibiwa na wadudu.
- Njia bora kwa mbegu zenye ganda zilowekwe kwenye maji. Kawaida mbegu bora huzama na mbaya huelea
- Unaweza kujaribu kuotesha. chukua kiasi kidogo cha mbegu (20-100). Ziwekewe dawa kabla. weka mbegu kwenye tambala ndani ya kopo. funika na tambala lingine kwa juu, lowesha na weka sehemu yenye joto (sio moto). Chunguza dalili za kuota kwa mbegu na hakikisha tambala lina unyevu. Wakati uchipuaji unianza weka rekodi ya siku na namba. Kawaida jaribio huchukua wiki mbili kutegemea na jamii ya mbegu. uchipuaji zaidi ya asilimia 50 ina maanisha una mbegu nzuri, jamii ya mbegu ndogo ina uchipuaji wa asilimia 5.

8. Tunapanda au kuhifadhi mbegu?

- Baadhi ya mbegu hazihifadhiwi zina pandwa moja kwa moja (hasa laini, mbichi, mbegu za matunda au zilizo na mafuta mengi)
- Kwa mbegu zenye ganda gumu njia nzuri ni kuziweka safi na kavu.
- Mbegu zilizo ndani ya matunda/kokwa zitolewe na kukaushwa. Kuzikausha anika siku 2-3 juani.
- Hifadhi mbegu kwenye mifuko ya karatasi au debe mbali na jua ni vizuri (epuka mifuko ya nailoni kwani hufanya mbegu kulowa na kuoza). Hakikisha chombo ni safi na kisichopitisha hewa.

- For tall trees a simple tool can be made by attached one end of a pair of shears to a long, strong stick. The other handle can be attached to a rope
- Note that some seed species cannot be collected from the ground and have to be collected as *wildlings*. These are newly germinated seedlings found growing under mature trees. These can be transplanted to pots in your nursery. This is often the best method for trees that are hard to grow in a nursery or whose seeds are hard to collect.
- All seeds must be removed from their fruit or pods. Hand, or putting the fruit/pod in the sun and waiting for it to dry and split can do this.

7. How can we tell if the seed is good?

- Firstly look at the seed. Discard ones that are smaller, lighter or a different color than the others. Insects may damage some.
- For some hard-coated species floating in water is a good test. Normally the good seed sinks and the bad seed floats.
- You can do a simple germination test. Take a small counted number of seeds (20-100). Do any pre-treatment needed. Put the seeds on a damp cloth in a bowl. Cover with another fold of the cloth, moisten it thoroughly and put in a warm (not hot) place. Check the seeds daily for signs of germination and keep the cloth moist. When germination begins keep a record of the day and number. The test usually lasts about two weeks depending on the species. Germination of over 50% means you have good seed. Small-seeded species having only 5% germination are still worth keeping.

8. Do we plant or store the seeds?

- Some seeds do not store and should be planted straight away (especially soft, fleshy seeds, fruit tree seeds or seeds with high oil content).
- For seeds harder coats the basic rule is to keep the seed clean, dry and cool.
- Seeds should be removed from the fruit/cone and dried thoroughly. To dry the seeds put them in the sun for 2-3 days.
- Storing in a paper bag or metal container out of the sun is good (avoid plastic bags as this makes the seed sweat and rot). Make sure the container is clean and airtight.
- Label the container with the name of the seeds and the collection date.
- Remember that the germination ability of the seeds will decrease with time. If seeds have been stored for too long they may expire.

9. Do all seeds germinate?

- The percentage of seeds, which germinate, varies greatly between species. Some seeds require some form of pre-treatment.

10. What kind of pre-treatment might be needed?

- If the seeds have a very small or thin coat often no treatment will be needed.
- Seeds that have thick coats will need some form of pretreatment. Some need to have their seed coat cracked with a hammer or a stone. Seeds should be planted immediately after cracking.

- Weka alama ya jina na siku ya kukusanya mbegu kwenye chombo.
- Kumbuka uwezo wa kuchipua kwa mbegu utapungua kulingana na muda. kama mbegu ikihifadhiwa kwa muda mrefu zinaweza kuharibika.

9. Je mbegu zote huchipua?

- Idadi ya mbegu kuchipua hutegemeana sana jamii ya mbegu. Baadhi ya mbegu zinahitaji maandalizi ya awali.

10. Maandalizi gani ya awali yanayohitajika?

- Kama mbegu ina ganda laini au jembamba haihitaji maandalizi.
- Kwa mbegu zenye gamba gumu zitahitaji maandalizi ya awali. nyingine huhitaji kupasuliwa kwa nyundo au jiwe. mbegu zipandwe haraka baada ya kupasuliwa.
- Baadhi ya mbegu zinahitaji kukwanguliwa au kukatwa ili kusaidia maji kupenya. usikate gamba lenye mbegu maana hapo mbegu ndipo inapoanza kuchipulia.
- Nyingine zinahitaji kulowekwa katika asidi kwa dakika 5-20 kabla ya kupandwa.
- Njia nyingine kwa mbegu zenye gamba gumu ni kuzichemsha kwa dakika 5-halafu weka mbegu kwenye maji baridi. hii husaidia kulainisha gamba na maji kupenya.
- Baadhi ya mbegu unaweza kuziloweka kwenye maji ya kawaida kwa masaa 12-24.
- Baada ya maandalizi ya awali mbegu zote zipandwe moja kwa moja.

11. Je Tunapandaje Mbegu?

- Baadhi ya mbegu zilizoanza kuchipua unaweza kuzipanda moja kwa moja kwenye shamba.
- Jamii ambazo zitahitaji vitu muhimu kwa uotaji zipandwe kwanza kwenye vitalu.
- Muda wa kuota kwa mbegu hutegemea aina ya mbegu, joto kiasi cha maji na umri wa mbegu.
- Upandaji hufanywa kabla ya msimu wa mvua kuanza.
- Kwa maelekezo ya jumla, upandaji wa moja kwa moja mbegu ipandwe na kufukiwa vizuri kwa udongo. halafu palowanishwe.
- Fuata maelekezo ya vitalu.

12. Je Miche Hutokana Na Mbegu Tu?

- Baadhi ya jamii ya miti hutoa viotea (yaani viotea hukua kutokea kwenye mmea rasmi). Hivi vinawezwa kukatwa na kupandwa sehemu nyingine. Ukataji hufanyika kwenye matawi ya miti midogo angalau yenye vifundo vitatu au matawi matatu. chagua tawi refu, lenye afya, likate kwa ncha na ondoa majani. panda tawi angalau vifundo viwili chini, angalau uache kimoja juu. mwagilia mpaka uchipue. Mche unaokua kwa njia hii unasifa sawa na mmea mama na ina faa kuhakikisha ukuaji wa mti unaozalisha.

- Some seeds just require a small cut in the seed coat to help water infiltrate (nicking). Do not cut the part that was attached to the pod or capsule as this part contains the baby plant.
- Others need to be soaked in mild acidic solutions for 5-20 minutes before sowing.
- Another method for hard-coated seeds is to boil them in water for 5-10 minutes. Then put the seeds in cool water. This weakens the coat and helps water to enter.
- Some seeds can be soaked in normal water for 12-24 hours.
- All seeds, once pre-treated, need to be planted straight away.

11. How do we plant the seeds?

- Some seeds that germinate readily can be sown directly into the field or into pots. Species that require special conditions to germinate are sown into a seedbed first.
- The time taken for germination depends on the seed type, the temperature, the amount of water available and the age of the seed.
- Generally sowing is done just before the rainy season starts.
- As a general guide, for direct sowing seeds should be planted at a depth two to three times their diameter and should be covered firmly with soil. The soil should then be kept moist.
- Details on seedbeds are to follow.

12. Do seedlings grow only from seeds?

- Some tree species produce root suckers (young plants growing from the mother plant's roots) These can be cut and transplanted. Cuttings can be taken of a young tree branch with at least three nodes or buds. Choose a long, healthy branch and make a clean, angled cut. Strip off the leaves. Plant the cutting into soil at least two nodal lengths deep, with at least one exposed. Keep it watered until sprouting occurs. Seedlings grown in this way will have the same characteristics as the parent tree and can be useful for making sure a productive fruit tree is grown.