MACADAMIA

Muchui Women Group

Macadamia belongs to the proteaceat family of which over 1000 species are known but there are over two distinct types found edible and are widely cultivated in places like Australia, Hawai, California, Costa Rica, South Africa, Israel, Malawi, Tanzania and Kenya.

Kenya produces 8% of the world's total production of Macadamia nuts. The two edible types include macadamia tetraphylla and Macadamia intergrifolia.

Macadamia is a crop whose characteristics and true types depends entirely on vegetative propagation or what is commonly known as grafting.

The macadamia seedlings are raised from the seed nuts, which should be fresh, reliable, and disease free and are capable of producing healthy seedlings. To know if the seeds are fresh and reliable put the seeds in a container of water. Fresh and reliable seeds will sink while the damaged and non-reliable and immature ones will float.

KIMERU TRANSLATION OF ISI YA NTUGI

Makadamia

Muchui Women Group

Makadamia jethagirwa jari ja mwiriga jwa proteaceat na ithagirwa iri nkuruki ya mithemba 1000, indi kuri na mithemba iri iria arimagwa na ikatukirwa tas irio thigurune ta ya Australia, Hawai, California, Costa Rica, South Africa, Isreal, Malawi, Tanzania na Kenya.

Kenya ni iritaga 8% ya maketha ndene ya nthiguru yonthe. Makadamia jaria jarijagwa ni muthemba jwa “Macadamia Tetraphylla” and “Macadamia Intergrifolia”.

Makadamia jaria jethagirwa jari jameega jabandithagua na miti ingi iria itheri, and itina murimo na iria yiumba kurita maciara jamega. Wenda kumenya kethira nkandania claku ni injega cia kuanda wikire ruujine na iria injega ikenama nthigururu na iria itikuri cierere ruujine.
The tree also absorbs carbon di-oxide to reduce pollution. The tree also attracts rain and helps conserve the environment.

The tree allows for intercropping with other types of food crops and other cash crops like coffee or tea.

It’s a good idea for TIST small groups to plant this tree since its turning to be a major income earner. It is also a good tree for TIST’s greenhouse gas business.

Muchui Women Group has realized the importance of this tree and also the importance of raising the tree seedlings and grafting them.

This group is making good income from the sale of grafted macadamia seedlings. This group urges other TIST Small Groups to also plant these trees and reap the benefits. The seeds are raised in sand and flat or raised beds could be used.

It takes ordinary macadamia seedlings 8-12 years to bear crops but with the technology of grafting it takes less than 3-5 years. To keep the trees healthy it should be pruned. The advantage of this tree is that it is planted as a cash crop and gives the farmers money through the sale of nuts that are of high demand at present.

KIMERU TRANSLATION.

Mbeu ciumithaguana muthanga na nyuma ya kuuma ijukagia miaka 8 mwanka 12 kenda ikura. Miti iria ibandithitue ijukagia miaka ta 3 mwanka 5 igikura. Indi kenda ithirwa irina ugima nbubwega nibuirite gucava.

Wega bwa miti iji iandagirwa mbeca na arimi riboonaga mbeca bendia nkandamia iria ciina thoko injega mono nandi. Miti iji nitethagiria kuguchia ruo ruthuku na kuthongomia nthiguru. Wega bwa mikandamia ni kithirwa no iandanirue na irio bingi ta ka a kana majani biria biandagirwa mbeca kana kiny a irio bietu biria tirimaga.

Nii ithugunia tiriega ikundi binini bia TIST biande miti iji niuntu nituikite ya kureta mbeca inyingi na nigutetheria kiri biashara ya ruo. Gikundi kia Ekuru ba Muchui nikionete wega bwa miti iji na kubandithia miti kenda ikuranga. Gikundi giki nikionaga mbeca inyingi mono kumania na makandamia na nibakwenda amemba ba ikundi bingi baanda miti iji kenda boona mbeca.
When a farmer goes to a tree nursery to buy seedlings for planting in his field, one thing is in his mind, the products and/or services he expects to get from the trees. The earlier he can get these products/services the better it is for her. This implies that she must buy the seedlings with the highest chance to provide these products/services early. With this expected scenario then, the nursery operator must ensure he produces tree seedlings of high quality able to satisfy the customer. But what is meant by seedling quality?

Tree seedling quality is the ability of the seedling to establish quickly in the field and to bring out a tree which gives the desired products and services early. To establish well in the field, a seedling needs a strong root system comprising of roots that are not damaged (injured) or weak (coiled). The most common nursery production system in the tropics is raising seedlings on polythene tubes with a closed bottom and laying them on the ground in well arranged stacks (Fig 1). Watering and other nursery practices are then conducted when seedlings are in that state until they are ready for transplanting. It is cost effective to the nursery operator and majority of common tree species do not take a long time in the nursery hence the production system is sufficient. Some species, however, take a long time in the nursery either because the seedlings take long to establish (such as tropical indigenous species) or value kamundene gaku igia na inya, yendaga kumithurua turatacine turia tuingi rutere rumwe icoke ibangwe bwega amwe tauria yikunania mbicene iji.Kumenyera mbegu ciaku na gwikira ruuji nikwithtagirwa kuuri na raisi mwanka riria mbegu ciaku igakinyi kagita ka kuandwa muundene.

Njira iji niithagirwa iti na goro kiri muandi wa miti niuntu mithemba iria mingi ya miti itithagirwa ikijukia kagita kaaraja muundene.Indi miti ya ntwiire nikaraga muundene kagita gakara mono na niki gitsumi kia kumibandithia na miti iria ikuranganga.Miti iji iujakia kagita kaaraja mono muundene nitethagiria kiri kuthira ruo mono na itumagirwa kiri mirandi ya kwendia ruo ta jwa TIST.
improving practices such as grafting are carried out which require staying in the nursery for longer. Such slow growing species are of high value to carbon credit schemes such as TIST.

The ordinary polythene sheet has smooth sides around which roots tend to coil. At transplanting, the roots are so weak and can not easily anchor in the ground. Roots also tend to coil around or penetrate the container bottom which requires root pruning, easily injuring the roots. To avoid these disadvantages it is recommended to establish seedlings in open bottom tubes and place them on raised beds (Fig 2). These allow automatic root pruning without injury of the roots since when the roots get to the container bottom they get air pruned and tend to strengthen without further elongation. This produces a vigorous root system and the seedling has higher chances to establish faster in the field. It also eliminates the need for labour to do root pruning, a practice that is often forgotten or done late with grievous damage on the roots. Weed control under the beds is also easier.

The raised beds might appear to raise the amount of water spent in nurseries which might be a constraint to nurseries in arid and semi arid areas. Nursery operators have however devised innovations to deal with this constraint. A good innovation observed in Tanzania is digging a trench, placing planks of wood or wire mesh on it and placing the seedlings on the planks or wire mesh. The seedlings thus appear to be on the ground level but the trench under them provides the space which aids air root pruning.

KIMERU TRANSLATION.


Njira ya gutumira rutara niyongagira ruuji ruria rutumiri kiri mbegu ciaku na iji ni thina inene kiri guntu kuria gutina mbura ya kung’ana. Ataararamu ba kumenyera tumuunda nibathuganiritte njira ingi injega cia kumenyera tumuunda kuuma naria Tanzania ya kwinja muguru, na kurikira mbegu ciaku matarabucine kana kiri rutara ruungi. Mbegu ciaku igakara taka irikiri nthinguru indi kurina kanya kuma nthinguru ku gutetheria mbegu ciaku na ruo.

The water is trapped in the trench and through evaporation will moisturize the seedlings and reduce the need for very frequent watering. A polythene sheet can also be placed in the trench to ensure water does not seep into the ground. Such innovations also reduce the cost that may appear to increase with the use of raised seedling beds.

**LAMURIA OFFICE**

Our office is based in Laikipia East covering Lamuria, Tigithi, Marura and Nanyuki locations. We have new trainers on board who are giving us additional capacity to train the Small Groups in our area.

We have established nodes in sweetwaters, Labua and parts of Mirera. This month we are hoping to setup nodes in Matanya, Sirima, Ngari nyiro and Mwiyogo. We are now receiving heavy rains and our Small Groups have to plant more trees and practice Conservation farming so that they can get more yields.

So far we have around 150 registered groups in our office area.

**CHUGU OFFICE**

Chugu office is currently serving Small Groups in six divisions in Meru Central. Small Groups in our office are happy with the TIST program because of the benefits they are receiving from the program and also the cash incentives for their trees. Groups are expecting that TIST pays them at least twice a year.

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**OFISI YA LAMURIA.**

Ofisi yetu ithagirwa iri Laikipia East na itungataga ntuura cia Lamuria, Tigithi, Marura na Nanyuki. Ofisi yetu iri na aritani baria bagututethera na kuritana ikundi bietu.


**OFISI YA CHUGU.**

Ofisi ya chugu itumikagira ikundi binini bia TIST kiri division itantatu ndene ya Meru Central. Ikundi bietu nibikenete mono nintu bwa maciara jaria boonetu kuumania na murandi juju jwa TIST. Mono mono nibakenetue mono ni marii ja miti yao na nibakoromba marii jaja jejage maita jairi o mwanka kenda boonaga mbeca inyingi nkuruki. Ofisi yetu irinamubango jwa kwitheira barina na ntuku inene ya kuanda miti ofisine ya cibu wa Chugu na miti iji ikamenyagira ni amemba ba ofosi iji. Amemba ba ikundi bietu nibakenetue mono ni uritani bubwega bwa TIST bwa urimi bubwega (Kilimo Hai) na ni bombite kwona maketha jamaungi mono. Ofisi yetu niumbite gwitithia murandi juju na mbele mwaka Meru South na baandikithia ikundi 67 ntee re cia Chogoria, Igwanjau, Chuka, Muthambi, na Kiurani na nibombite gutarika ikundi 14 miti na 8 nibiombite kuriwa mbeca cioa.

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Chugu office is looking forward to holding a TIST day at the Chugu Chief’s camp where the land has been dedicated for TIST trees to be maintained by the Field office members.

The Small group members in our office area are grateful for the training they have received on Conservation Farming which has given great yields for the seasons they have been practicing it. We have extended the TIST program to Meru South district where we have 67 registered groups in Chogoria, Chuka, Igwanjau, Muthambi and Kiurani and so far we have quantified 14 groups of which 8 groups have received payment.

**NAROMORU OFFICE**

Naromoru office has been able to establish links with other organizations which deal with no only environmental conservation but in human health as well since that is also one of the TIST program’s core components. The office members attended a Red Cross course on 20th to 22nd October in Nyeri and they were able to learn and be certified in first aid skills.

With the help of TIST the program has established a sub branch of Kenya Red Cross and will open a physical office in Naromoru near the DO’s office. The office is in the process of resuscitating nodes and we have realized the objective of a cluster and we are looking forward to accommodating all our groups in different clusters.

**KIMERU TRANSLATION**

**OFISI YA NAROMORU.**

Ofisi ya Naromoru niumbite kuthithia ngwataniro na mirandini o tiga mantu ja kumenyera nthiguru kuri na kinya umenyeeri bwa uguima bwa mwiiri na bubu nibumwe bwa mantu jaria TIST ikaagira. Amemba ba ofisi yetu nimbeire mucemanionje jwa Red Cross kuuma ntariki 20 mwanka 22 cia mweri jwa ikumi bakiritanagwa mantu ja utethio bwa mpwi kagita karia kathina kooneka.

Kuumanii na ofisi ya Naromoru ya TIST murundi jwa Red Cross niumbute kurugura ofisi Naromoru akui na kwa DO. Ofisi yetu irinjirene ya kwambiria nodi na kugeria kumenya wega bwa kuthithia mwaburi juri jukamemenyera ikundi bietu kiri mwaburi. Kuringana na mbura inene iria tuumbite kwoona, ofisi yetu niumbite kuritana ikundi mantu ja kumithia miti na kuanda miti iria miega na ikathithia bwega gwetu.
This being the rainy season, our office is focusing its efforts on training Small Groups on transplanting their seedlings. We are asking Small Group members to take advantage of the rains and transplant seedling at the right time. We are also providing training on good tree species to plant.

KIMERU TRANSLATION
SEMINA YA IKUNDI BININI BIA TIST.

Kuumani na semina ya ikundi binini bia TIST mweri jwa inana, ikundi bibi ni biaugire mantu jaria bombite kuthithia ndene ya ntuku 40 iria babangite kuthithia kagita ka semina ya mweri jwa itantatu.

BEST SMALL GROUP SEMINARS

During the Best Small Group (BSG) seminars in August, the BSGs reported their achievements on the 40-day action plan developed during the June BSG seminars. All groups reported that they had recruited and trained new groups that were within walking distance of each other. Nine out of the twenty BSGs reported that they had formed a cluster in their area that has at least 40 small groups that are all within walking distance of each other.

Ikundi ni biombite kuritana ikundi bibieru kiri antu aria boomba gwita na maguru.Kuumani na ikundi 20 biria biega ikundi 9 ni biombite kuritana na kuandikithia ikundi binini 40 kana nkuruki kiri ntuura ciao naaria boomba gukinya na maguru.
At the time of the June seminar in Meru, there were 1,587 registered small groups in Kenya. At the time of writing this newsletter, there are 2,189 registered small groups in Kenya. In a period of about 4 months, 602 new Small Groups have been registered. This rapid recruitment of new Small Groups was made possible by the efforts of the BSGs. By doing the recruitment within walking distance to form clusters we can ensure that the TIST program is operated in a cost effective manner while continuing to expand the program.

The next follow-up BSG Seminar will be held in Meru from November 13th to November 18th. For this seminar we are inviting not just the existing 20 BSGs, but we are also inviting other Small Groups that have qualified to be BSGs. In October the TIST field offices were asked to distribute the BSG application forms so that groups that thought they qualified could apply to become BSGs. The following criteria are to be met for your Small Group to qualify as a BSG:

- Number of TIST trees planted by your group that are alive should be 1,200 or more
- Number of TIST Eucalyptus trees planted by your group that are alive should be less than 33% of total live trees
- All of your group members should be practicing Conservation Farming
- Your group should have in its nurseries more than 2,000 seedlings.
- Number of Eucalyptus seedlings your group has in its nurseries should be less than 33% of total live seedlings.
- Your group should have control of enough land to plant 8,000 trees in 8 years. This can include land currently under control and land that your group members can get permission to plant trees in.
- Your group should have signed GHG contract

KIMERU TRANSLATION.


Semina iu ingi ikathithua kuuma Ntariki 13 mwanka 18 cia mweri juju naria Gitoro conference Centre. Semina iji ikethirwa na ikundi bingi bibiega bia TIST biria biumbite kuujuria wirane bwa ikundi bibiega na bietwa semina kuumania na fomu iria gikundi kiojuririe. Gikundi kia gikurukite kwithirwa kiri gikundi gikiega kia thurirwe kuringa na njira iji:-

- Miti iria gikundi kiandite na iri miti ithirwe iri moto ithirwe iri miti 1200 kana nkuruki.
- Miti ya mibao ithirwe itikurukite 33% ya miti iria amemba ba gikundi baandite.
- Amemba bonthe bethirwe bakithithagia urimi bubwega (kilimo Hai).
- Nasari ya amemba ba gikundi ithirwe iri na miti nkuruki ya 2000.
- Mbegu iria yumithitue nasari igakuruka 33% ya miti iria baumithitie.
- Amemba ba gikundi bethirwe bari na muunda jwa kung’ana jwa kuunda miti 8000 ndene ya miaka 8 iria iijite. Muunda juju jwithirwe juri amwe na muunda juria juri jwa thirikari na juria bomba kuewa ruutha rwa kuanda miti.
- Gikundi kithirwe gisainite kontrakti ya Green house Gas (GHG).
- Group should have proof that its members have been meeting regularly and rotating their leadership.
- Group member should be fully aware of TIST values and should abide by those values.

If your group has met all of the above criteria, then please request for a BSG application form from your field office and fill out the same and return to the field office. Your group will then be visited by TIST auditors who will verify if your group has met all the above criteria and if you have provided accurate information on your BSG application form. Once audited successfully your group will be qualified as a BSG and will be invited to the next BSG seminar.

- Gikundi kionanie wiiru bwa kung’ana kethirwa ni bacemanagia na ni bacinjanagia utongeria bwa gikundi.
- Amemba ba gikundi bethirwe bakimejaga mantu jaria TIST ikagiira(TIST Values).

Kethira gikundi kienu nikiingitie mantu jaja, bwitie fomu iji kiri ofisi yenu ya TIST bujuririe na bucokie kiri ofisi.Gikundi kienu kije kirungirwe na antu ba ofisi cia TIST na kethira nibuingitie mantu jaja gikundi gikaandikirwa barua ya gwitwa semina iu ingi.