

MICCA FARMERS' TREE PLANTING LOGBOOK



**KITINI CHA WAKULIMA WAPANDAJI MITI
MRADI WA MICCA**

Farmer's Tree Planting Logbook

The purpose of this logbook is to provide information on tree planting to farmers, and to be a future record for the farmer, village leaders, government authorities, certifiers and buyers.

It may be used to:

- show proof of ownership of trees
- show proof that trees were planted and don't come from forest
- benefit farmers from incentive payments if available
- later market the harvest as coming from sustainable/fair trade schemes
- show management practices done to qualify for any organic, traceability or no-residue schemes

Kitini cha upandaji wa miti cha mkulima

Lengo la kitini hiki ni kutoa mwongozo kwa wakulima juu ya uoteshaji wa miti na kuwa kumbukumbu ya baadaye kwa ajili ya wakulima, viongozi wa vijiji, mamlaka za serikali, wathibitishaji na wanunuzi.

Kinaweza kutumiwa kwa ajili ya:

- Kuthibitisha umilikaji wa miti
- Kuthibitisha kuwa miti ilipandwa na kuwa haijatoka msituni.
- Kumnufaisha mkulima iwapo kutatokea mafao ya aina yeyote
- Kumuwezesha mkulima kuuza mazao yake baadaye chini ya mipango ya biashara endelevu/au masoko maalum yanayotoa haki halisi kwa wakulima wadogowadogo.
- Kuonyesha mbinu za utunzaji wa miti zilizotumika ili kuthibitisha uasilia halisi wa bidhaa za masambu, uwezekano wa kufuatilia chanzo au mpango wa vyakula visivyo na mabaki ya kemikali.

TIPS ON SEEDLINGS AND TREE GROWING

At the back of this booklet are tips on how to:

- chose good seeds for tree nurseries
- grow healthy seedlings in nurseries
- prepare planting holes
- look after trees in field
- keep good records in this logbook



DONDOO JUU YA UOTESHAJI WA MICHE NA UPANDAJI MITI

- Mwishoni mwa kitini hiki kuna dondoo jinsi ya:
- Kuchagua mbegu bora kwa ajili ya kitalu cha miti
- Uoteshaji wa miche bora kwenye kitalu
- Uandaaji wa mashimo ya kupanda .
- Uangalizi wa miti kwenye shamba
- Utunzaji bora wa kumbukumbu kwenye kitini hiki.



FARMER DETAILS (TAARIFA ZA MKULIMA)

Name(s) (*Jina / Majina*):

Village (*Kijiji*):

Sub-location/zone (*Kata/Tarafa*):

District (*Wilaya*):.....

FARM DETAILS (TAARIFA ZA SHAMBA)

Farm size (ha/acres):

(*Ukubwa wa shamba - acre*)

Years owned/farmed:

(*Miaka ya umiliki/Ukulima/*)

GPS coordinates (if available):

(*Vipimo vya GPS - Kama vipo*):

Total number all species of trees present now:

(*Idadi ya miti aina zote iliyopo kwa sasa*)

Distance to nearest road (km/miles):

(*Umbali toka barabara ya karibu - km/miles*):

TREE CONTACTS (farmer works with)

**(TAARIFA ZA WANAOFANYA KAZI NA / WASHAURI
WA MKULIMA)**

Names/Agencies of Government Officers:

(Mashirika / Afisa wa serikali):

.....

.....

Names/Titles of NGOS:

(Jina/Jina la Shirika lisilo la Serikali)

.....

.....

.....

Nurseries:

(Bustani za miche/ Vitaru)

.....

.....

.....

Buyers/Companies:

(Mnunuzi/ Kampuni)

.....

.....

.....

Tree Planting Records - Kumbukumbu za upandaji wa miti

Date	Common / local name of tree species	Botanical name of tree species	Nursery source	Number of trees planted	Verifying Stamp / Signature
<i>Tarehe</i>	<i>Jina la kawaida / kiasili la mti</i>	<i>Jina la mti la kisayansi</i>	<i>Busitani ilipotoka</i>	<i>Idadi ya miti iliyopandwa</i>	<i>Alama / Sahihi ya kuthibitisha</i>

MICCA FARMERS' TREE PLANTING LOGBOOK

Where planted in the farm	As single tree, line, block	Number trees alive year 1	Verifying Stamp/ signature	Number trees alive year 2	Verifying Stamp/ signature
<i>Imepandwa wapi katika shamba</i>	<i>Ni mti mmoja, mstari, au kikundi</i>	<i>Idadi ya miche hai mwaka wa kwanza</i>	<i>Alama / sahihi ya kuthibitisha</i>	<i>Idadi ya miche hai mwaka wa pili</i>	<i>Alama / sahihi ya kuthibitisha</i>

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Tree Management practices and observations
Mbinu za utunzaji wa miti na matokeo

Date of practice <i>Tarehe ya kilichofanyika</i>	tree species <i>Aina ya miti</i>	Age of trees <i>Umri wa miti</i>	Practice done <i>Mbinu/utaalam uliofanyika</i>	Observations and notes <i>Matokeo yaliyoonekana</i>

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Tree product harvesting records
Kumbukumbu za kukata au kuvuna mazao ya miti

Date of harvesting <i>Tarehe ya kukata/kuvuna</i>	Tree species <i>Aina ya miti</i>	Age of trees <i>Umri wa miti</i>	Type of product <i>Aina ya mazao</i>	Amount <i>Kiwango</i>	Verifying Stamp / Signature <i>Alama / Sahihi ya kuthibitisha</i>

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TREE PLANTING AND MANAGEMENT TIPS

1. Choosing good seeds for tree nurseries

- Collect seeds from an area that has similar climatic conditions to where the trees will be planted
- Select healthy trees, with good form and a large crown (branch area) preferably with low branches for easier fruit collection.
- Collect from mature trees with big fruits, and not attacked by pests or diseases
- Collect during the peak season when most of the trees are fruiting
- Collect fruits from at least thirty (30) trees which are well spaced (about 50 metres apart)

2. Growing healthy seedlings in nurseries

- It is preferable to sow seeds directly into seedling containers
- Prepare the soil mixture (sand, compost and forest soil) well and put in containers (pots or polytubes)
- Conduct any seed pretreatment procedure necessary before sowing to stimulate germination (consult an extension officer on how to do this)
- Apply clean water as the plants need it before and after germination and reduce the frequency as the seedlings grow
- Shade the seedlings and gradually reduce the shade as they grow

3. Preparing planting holes and field planting

- A site with about three feet of good soil that is easy to dig into and not compacted is needed for good tree growth.
- The hole should be big enough; at least two times the width of the root ball, to give the roots a chance to spread out.
- Plant when there is enough moisture in the ground that has gone about 20 cm in the hole
- Set the seedling in the hole and ensure that the soil line of the seedling is below the surface of surrounding soil
- Fill back the hole and water the seedling thoroughly with a slow stream of water to adequately settle the soil without washing it away

DONDOO ZA UOTESHAJI WA MITI NA MBINU ZA UTUNZAJI WA MITI

1. Kuchagua mbegu bora kwa kitalu cha miti

- Okota mbegu mahali ambapo hali ya hewa inafanana na mahali miti itakapopandwa
- Chagua miti iliyo bora, yenye afya na matawi mapana yasiyo juu sana ili kurahisisha uokotaji
- Okota matunda kutoka kwa miti ambayo imekomaa, ina matunda bora na haijashambuliwa na wadudu au magonjwa
- Okota wakati miti mingi ina matunda yaliyokomaa (kuanzia mwezi wa kumi na mbili hadi wa tatu)
- Okota matunda kutoka kwa miti zaidi ya thelathini ambayo imeachana umbali kama wa mita hamsini

2. Uotes haji wa miche bora kwenye kitalu

- Ni bora kuotesha mbegu kwenye viriba baadala ya kuweka katika kitalu (seedbed)
- Andaa mchanga wako vyema na kujaza kwenye viriba
- Tia mbegu katika dawa ya Gibberellic acid kabla ya kuotesha ili kuharakisha kuota (pata ushauri wa mtaalam juu ya kutumia dawa hii)
- Mwagilia viriba maji kabla na baada ya kuota kama yanavjohitajika na kupunguza miche inavyokua
- Weka miche chini ya kivuli lakini punguza kivuli jinsi inavyokua

3. Uandaaji wa mashimo ya kupanda

- Mahali pema pa kupanda miti panahitaji udongo unaoweza kuchimbwa kwa urahisi kama futi tatu
- Chimba shimo lililo na upana kama mara mbili ya ule wa kitita cha mizizi ya mche unaopanda ili kuwezesha mizizi kunawiri
- Panda miti wakati unyevu ulio shambani ni mwingi na umefikia karibu futi moja chini ya shimo
- Weka mti katika shimo ukihakikisha ya kwamba kitita cha udongo kinachoshika mche kimeingia chini ya ardhi kidogo
- Jaza shimo na udongo na umwagilie maji kwa wingi (lakini kwa nguvu kiasi) ili udongo utulie vyema bila ya kufagiliwa na maji

4. Looking after trees in field

- Inspect your tree regularly so that you will see potential problems such as diseases or pests before it's too late. Discuss with your extension officer early in case of any unusual symptoms
- Keep weeds from invading the planting site by hand-pulling them since they compete with tree roots for moisture and nutrients.
- Watch out for drought conditions and provide water if needed, especially during the first few months
- Watch out for yellowing of leaves and consult your extension officer if the trees need mycorrhiza or fertilizer addition
- Protect the trees from destruction by livestock or other animals

5. Good tree management practices

- Space trees well to avoid competition for air and soil nutrients and encourage growth of the branches (thin later where necessary)
- Provide some shade initially then remove when well established
- Always maintain good air circulation in the tree by pruning to avoid pests and diseases attack
- Monitor the flowering, fruit setting and maturity in order to organize harvesting or collection

6. Keeping good records in this logbook

- Maintain good contacts with staff of government or non-governmental organizations advising you on tree planting and record their details in this logbook
- Ensure every tree planting exercise done is recorded immediately in the book and verified by an officer
- Do not postpone recording of a tree planting exercise for a future date even if only one tree is planted
- Record any tree maintenance exercise you do on your trees such as weeding, pruning, thinning, pesticide use and when harvesting products
- Inspect your trees regularly and record any important observation such as a pest or disease attack or death of a plant among others
- Share your records and observations with the officers you are in contact with regularly

4. Uangalizi wa miti kwenye shamba

- Kagua miti yako mara kwa mara ndiyo uweze kutambua shinda kama vile ushambulizi wa magonjwa au wadudu mapema. Shauriana na mtaalam mapema uanpoona dalili zozote zizizo za kawaida
- Zuia makwekwe yaziishambuliwe miti yako kwa kupalilia kwa sababu yanashindana na miti kwa ajili ya rotuba na maji
- Chunga wakati wa kiangazi ili umwagilie miti maji kama inavyohitajika, isijekauka hasa katika miezi michache ya kwanza baada ya kupanda
- Chunga miti yako kama majani yanapogeuka rangi kuwa ya manjano ili uongeze mbolea au mycorrhiza baada ya kushauriana na mtaalam
- Tunza miti isiharibiwe na mifugo au wanyama wengine

5. Mbinu bora za utunzaji wa miti

- Panda miti ikiwa imeachana vyema isije kushindania hewa au rotuba na ndivyo matawi yapanuke vyema (ikikaribiana kata ile minyonge)
- Tengenza kivuli juu ya miti ikiwa ingali michanga lakini uondoe kivuli inapozidi kukua
- Hakikisha hewa inapita vyema kati ya matawi kila wakati kwa kukata matawi yasiyohitajika ili kuzuia magonjwa na wadudu kushambulia
- Hakikisha unafahamu wakati mti unapotoa maua au matunda ya kwanza na yanapokomaa ili kujiandaa mapema kuokota

6. Utunzaji bora wa kumbukumbu kwenye kitini hiki

- Kuwa na uhusiano mwema na wataalam wa serikali na wa mashirika yasiyo ya serikali na uandike taarifa zao katika kitini hiki
- Hakikisha kila wakati unapopanda miti umenakiri katika kitini hiki na kudhibitisha na mtaalam
- Usihahirishe kuandikia taarifa zozote kuhusu upandaji miti katika kitini hadi wakati mwingine hata kama umepanda mti mmoja tu
- Nakiri jambo lolote umetenda katika kutunza miti kama vile kupalilia, kukata matawi, kukata miti (thinning) au kupulizia dawa
- Kagua miti yako mara kwa mara na kunakiri jambo lolote la muhimu linaloonekana kama vile wadudu, magonjwa, kukauka na mengineyo
- Shiriki nakala zako au mambo ambayo umeona na wataalam ambao wanakushauri mara kwa mara

PRUNING TIPS

- Start pruning early in the life of a tree and continue when necessary as the tree grows.
- Prune trees in the period when they have dormant growth before new leaf growth starts.
- Keep pruning tools clean and sharp to avoid injuring trees or spreading diseases between trees.
- Prune smaller branches since the trees heal faster.
- Prune living branches as close to the stem as possible but when removing dead branches take care to avoid cutting into the collar that has formed at the base.

THINNING TIPS

- Plant your trees at closer than the recommended final spacing then remove some later (thin) since you can not tell their differences when they are young.
- Thin the trees which appear weak when competition starts in order to leave the more vigorous ones to grow to maturity and produce better quality products.
- If possible discuss your thinning plans with your forest extension officer.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

The best time to plant a tree was ten years ago
The second best time is **NOW**



Muda muafaka wa kupanda miti ilikuwa ni miaka kumi iliyopita
Nafasi muafaka ya pili ni **SASA**