LIBRARY.

Project Working Paper No.15



Kenya Forestry Reseach Institute

ADIL

Japan International Cooperation Agency

Main Survey Report for Training Impact Evaluation for Meru District (Kitui Centre)

Presented by Working Group on Training Effect Evaluation for Training Sub-Committee (TSC).

Prepared by T. HIROTA

January 1996

Kenya/Japan Social Forestry Training Project

LIBAARY

Project Working Paper No.15



Kenya Forestry Reseach Institute

Japan International Cooperation Agency

Main Survey Report for Training Impact Evaluation for Meru District (Kitui Centre)

Presented by Working Group on Training Effect Evaluation for Training Sub-Committee (TSC).

Prepared by T. HIROTA

January 1996

Kenya/Japan Social Forestry Training Project

Table of contents

1

Contents	Page number
INTRODUCTION	1
1 SUMMARY OF MAIN SURVEY	2
2 HOUSING, LAND AND LIVESTOCK	3
 2.1 HOUSING MATERIALS 2.2 POSSESSION OF LAND 2.2.1 Shamba 2.2.2 Grazing land 2.3 LIVESTOCK 	
3 MEMBERSHIP	5
3.1 Membership	5
4 TREE PLANTING ACTIVITIES	6
4.1 FIRST PLANTING	6 6
4.3 PLANTED SEEDLINGS WITHIN LAST ONE YEAR	
4.5 PLACES AND SPECIES PLANTED	8
4.5.1 Compound	8 8
4.5.3 Shamba	9
4.5.4 Boundary of shamba	
4.5.5 Grazing land 4.5.6 The other places	
4.6 PURPOSE OF TREE PLANTING.	11
4.7 UTILIZATION OF TREES.	
4.8 INCOME GENERATION	
5 NURSERI WORKS	
5.1 NURSERY ESTABLISHMENT 5.2 Form of Nursery	
6 PLANTING TECHNIQUES	
6.1 ACQUISITION OF KNOWLEDGE AND TECHNIQUES ON PLANTING	
6.2 TREE PLANTING PROBLEMS.	
6.3 TRANSMISSION OF TECHNIQUES.	
6.4 NEW TECHNIQUES TRIED.	
7 OTHERS	
CONCLUSION	
APPENDIX 1 QUESTIONNAIRE DEVELOPED FOR KITUI T	RAINEES 19
APPENDIX II RAW DATA OF THE MAIN SURVEY AND PRE-	-SURVEY 27

Introduction

The survey of training effect evaluation has been carried out by way of house-to-house visits especially for farmers and FTA's, in1993 (1991's participants) and 1994 (1992's participants) and the results from 1993 survey were compiled into Project W orking Paper No. 13. However the surveys had been carried out at intervals between a course and a course. Since we hold a course per month and the survey areas covered 8 districts of the Eastern province, it took two or three months to conduct only one survey and those expenses were also large. Those things were a hindrance to the smooth operation of our training courses.

On the other hand Follow-up Workshops had been carried out for three days per district every year. The significance of Follow-up Workshops are to solve problems farmers are facing in Agroforestry and planting activities after the course. And it is very convenient because they come from the same district. Therefore we tried to use this opportunity of Follow-up Workshop in conducting main survey on training effects as an alternative way to the time-consuming house-to-house visits.

The object of survey is farmers who have participated training courses at Kitui at least one year before. They are directly nominated by the Social Forestry Training Project for the workshop. The main survey (after-training survey) was carried out during the Follow-up Workshop in Meru in June 1995 and this reports is analysis of the results. 1 Summary of main survey

The object of survey is 21 farmers in Meru, and from the previous Meru district (including parts of Tharaka/Nithi and the whole of Nyambene district), who attended a Follow-up Workshop at Meru town.

We sorted out the above farmers' pre-survey data from the file, and compared it with this time main survey data. The main survey form is shown in Appendix I, and those data in Appendix II.

2 Housing, land and livestock

2.1 Housing materials

Although 7 % of farmers had houses made of stones at pre-survey time, this increased to 20% at main survey time. This indicated modernization of housing as part of the improvement of house environment. However, 7% of farmers had houses made of unburnt bricks at main survey. It is considered that probably the materials were cheap and easily available.



Fig. 2.1.1 Housing materials

2.2 Possession of land

2.2.1 Shamba

Shamba area reduced from pre-survey to main survey, because owners of 1-3 acres increased from 27% to 33% and 11-20 acres was reduced from 7% to 0%. This could be considered because of loss by inheritance or other factors.



Fig. 2.2.1 Shamba

3

2.2.2 Grazing land

Figure 2.2.2 shows an increase of farmers without grazing land from 0% to 14%, and 1-3 acres from 71% to 79%. 4 - 10 acres decreased from 29% to 0%. 11-20 acres appeared as 0% to 7%. The role of grazing land is important to prevent damage of the plants. The general tendency of decreasing grazing land could be considered to mean that some grazing lands were lost by inheritance or other factors.



Fig. 2.2.2 Grazing land

2.3 Livestock

As the previous item 2.2 mentioned, decrease of grazing land is considered to be concerned with number of livestock. As figure 2.3.1 shows the ratio of farmers with no heads of cattle increased from 7% to 13%, and those without goats from 27% to 33%. The farmers who have more than 10 goats decreased from 14% to 0%. Generally livestock has tended to decrease.



Fig. 2.3.1 Cattle



Fig. 2.3.2 Goats

3 Membership

3.1 Membership

It is important to organize a group to carry out planting activities. The group usually makes the work easier and more active by assisting one another, but on the other hand it has problems such as discrimination, prejudice, conflicts e.t.c. in organizing the group andwithin the group. Figure 3.1.1 shows 90% of farmers were members of such groups during the pre-survey time, however this decreased to 81% in the main-survey. Some farmers left the group due to some reason. The group which carried out planting activities were 53% of the group. This could be an indication of the need for extension on planting activities for the group







Fig. 3.1.2 Group activities

4 Tree planting activities

4.1 First planting

Farmers who started planting activities more than 10 years ago increased from 38% at pre-survey to 52% at the main survey time. It is a natural increase by passage of time.



Fig. 4.1.1 First planting

4.2 Number of trees planted to date

As figure 4.2.1 shows, the farmers who planted 1-49 trees to date decreased from 14% to 10%, however the category of more than 500 trees increased over two times of pre-survey's report. This indicates that farmers continued to plant trees.



Fig. 4.2.1 Number of trees planted to date

4.3 Planted seedlings within last one year

As figure 4.3.1 shows, the farmers who planted 1-99 trees in the last one year increased from 60% to 80% and those who planted none were 0% at the main survey time.



Fig. 4.3.1 Planted seedlings within last one year

4.4 Surviving trees

The percentage of farmers with more than 500 surviving trees increased from 20% to 47%. It is considered that aquisition of knowledge and techniques on tree planting and management resulted in continued increase in tree planting activities as well as in number of surviving trees.



Fig. 4.4.1 Surviving trees

4.5 Places and species planted

4.5.1 Compound

52% of farmers planted Grevillea robusta in their compound, and 29% of them planted Croton megalocarpus, followed by Casuarina equisetifolia (24%), Eucalyptus spp. (24%).



Fig. 4.5.1 planted trees in their compound

4.5.2 Boundary of compound

48% of farmers planted Grevillea robusta in the boundary of the compound, and *Dovyalis caffra* was planted by 24% of farmers. However Common species in ASALs like *Euphorbia tirucalii* was only planted by 10% of the farmers.



Fig. 4.5.2 Planted trees in the boundary of compound

4.5.3 Shamba

48 % of farmers planted *Grevillea robusta* in their shamba. The other typical species were *Eucalyptus spp*, *Cordia africana* and *Croton megalocarpus*. A featuring point was *Catha edulis* (Miraa) which was planted by some farmers.





4.5.4 Boundary of shamba





Fig. 4.5.4 Planted trees in boundary of shamba

4.5.5 Grazing land





Fig. 4.5.5 Planted trees in grazing land

4.5.6 The other places

In the other places especially as wood lot *Eucalyptus spp*. (24%), *Grevillea robusta* (10%) and *Croton megalocarpus* (10%) were planted.



Fig. 4.5.6 Planted trees in the other places

4.6 Purpose of tree planting.

As figure 4.6.1 shows there is generally same tendency in purpose of tree planting between pre-survey and main survey. Most of all (76%) were for firewood and pole timber and next was for shade with 57%. To create shade was also the most common purpose of tree planting according to past pre-survey (page 7, Project W orking Paper No. 10). Major part of Meru district is high potential area. In these areas timber is the staple forest products. However ASALs also occupy 30% of the land in Meru where most of the farmers who attended Kitui course come from. In these ASALs areas they also wanted shade trees to protect them from sunshine and drought.



Fig. 4.6.1 Purpose of tree planting

4.7 Utilization of trees.

This figure 4.7.1 was graphed from data of main survey only. Since 86% of farmers have already used trees as firewood and 76% as pole/ timber, it is concerted with answer in the previous section 4.6. This quite high ratio of wood utilization is encouraging for training course organizers because this is the most direct benefit from tree planting. A much higher utilization can be expected in the near future when the trees grow, which could be a strong incentive for farmers to plant more trees.



Fig. 4.7.1 Utilization of trees

4.8 Income generation

Figure 4.8.1 shows that 29% of the farmers have been getting income every year from sales of their tree products e.g. seedlings, poles, timbers and fuelwood. 33% replied that they expect such income in the future although the trees have not yet grown enough at present. 57% of the farmers are using trees only for self or house consumption.

The ratio of 29% may not be satisfactory, however, considering their short history of tree planting and lack of good market, this figure could be appreciated at present stage of development. As the income generation from trees is the most essential incentive for tree planting, it will be neccessary to improve environment on transport and market to promote sales of tree products.





5 Nursery works

5.1 Nursery establishment.

The farmers who have established nurseries increased from 67% to 71% in the main survey time. However farmers who answered "No" were still 29%, the major problem being shortage of water. It would be advisable, if there is no water soure around, to use group nurseries.



Fig. 5.1.1 Nursery establishment

5.2 Form of Nursery

As the figure 5.2.1 shows, private nurseries increased from 33% to 62%, and group nurseries decreased from 53% to 43%. These figures indicate that some farmers left group nursery and established their own nurseries. Improved knowledg and techniques on nursery management and income from sales of seedlings may have motivated the farmers to own their private nurseries.

Average number of seedings produced in one private nursery increased to 11790 seedlings, about 10 times as much as in the pre-survey (figure 5.2.2). This number of seedlings, much beyond for their private use, would indicate their strong motivation by sales of seedlings.

Figure 5.2.3 shows that 43% of the farmers sold their seedlings. Number of seedlings sold is unknown from this figure, however, comparing these two figures 5.2.2 and 5.2.3, quite a few farmers seem to be getting a good income from sales of seedlings. This is again an encouraging figure. As an example, one farmer raised 4000 seedlings mainly for sale and gift, and planted the remaining about 100 seedlings on his farm within one year.



Fig. 5.2.1 Form of nursery









6 Planting techniques.

6.1 Acquisition of knowledge and techniques on planting

Figure 6.1.1 was graphed only by presurvey's data. About half of farmers aquired knowledge and techniques on planting from Forest Department.



Fig. 6.1.1 Acqusition of knowledge and techniques on planting

6.2 Tree planting problems.

The item of "insects, animals, disease", which was covered by "technical matters" in pre-survey, was separated in main survey because many farmers had problem in tree protection in pre-survey. It explains the decreased problems in "technical matters" in main survey, and the major remaining technical problems are on budding, grafting and pruning techniques.

Except for these two items, most of other types of problems have increased. It should be noted, however, that complaining of more problems does not neccessarily mean that their operations are becoming unsuccessful. New problems may arise when one pursues more successful results. For example, unavailability of sufficient seeds and materials becomes bigger problem when the farmers try to expand the scale of their nurseries.

Apart from it, many farmers are still facing problems in insufficient seeds and materials such as tubes as well as lack of tools e.g. water cans, jembes and wheel barrows. As regards the problem in materials, except for limited material support from outside, it should be ideally addressed by the farmers themselves through more income generated from tree products etc., or by improvement of local financial system.



Fig. 6.2.1 Tree planting problems

6.3 Transmission of techniques.

As figure 6.3.1 shows, 81% of the farmers communicated to group member on social forestry techniques. Including other categories, 67% to neighbour and 57% to others, the high proportion of farmers who extended techniques shows that farmer-to-farmer contact is an effective and important measures for extension works, which also expands our training effects.



Fig. 6.3.1 Transmission of techniques

6.4 New techniques tried

86% of the farmers tried in the field new techniques learnt in the Kitui Training course. Among these techniques 44 % of farmers put into practice planting & tending techniques as figure 6.4 below shows, such as micro-catchment, terrace planting and wind break planting to protect crops. 11 % of the farmers made and

used portable shade type, that can control the exposure of seed & seeddlings to the sun in nursery works, and it could be evaluated as an ingenious contrivance.







Fig. 6.4.2 New techniques carried out

7 Others

Some farmers requested that herbal/medicinal trees and plants be included in the textbook because medicines and chemical products are expensive to buy. They expressed their concern to plant more trees to control famine and drought.

Conclusion

Evaluation report on training effects from main survey in 1993 was already compiled as Project W orking Paper No. 13. One purpose of this new reports is to try the new method, taking the opportunity of Follow-up W orkshop for the main survey, as an alternative measures to house-to-house visits which required much time and energy. Consequently this type of main survey has proved to be an effective and time-saving method. One disadvantage of this method might be the lack of observation by surveyors on the spot which would enable collection of more detailed information. However the saving of time and resources brought by this type of survey can compensate enough for the disadvantage which could also be covered by other opportunities of field visits.

Apart from the method of survey itself, the results on the training effects from this report seem to be quite encouraging for the organizers of the training courses. Comparing with Workig Paper No.13, there are in general similar favorable tendencies in the results from two surveys, for example, increased number of planted trees and seedlings raised. In short the results indicate strengthened interest and more active participation of the farmars in tree planting and management activities.

One feature of the survey this time was the data on utilization and sales of tree products, which was not covered in the pevious survey. These data showed e.g. 86% of the farmers already used their planted trees for firewood and 76% for pole/timber, and 43% of the farmers sold their seedlings and 29% got constant income from various trees products. This trend of utilization and, in particular, of income generation is very important in promoting tree planting as it creates incentives to plant trees and shows a sign of possible self-reliance of the farmers in tree planting activities in the future. We hope that the farmers be able to utilize and sell more tree products and, at the same time, more favorable environment on marketing and transport be created for the farmers.

Appendix |

Questionnaire developed for Kitui trainees

Main Survey Form for Farmers' Course

							Date	e :	risa de
			Interv	iewer : _			e - Mary Di	ing té à sua	ч, ^т
			Interv	iewee : _		M	1	y a transit	Agent son
					District	·		an ta Ma rin Managaria ang kanalan kana	
					Division	:			- 6.85
					Location	:		C	- 9
	Ν	Mailing Addres	s:						
			Date of trainin	ng at K.T.	.C. :				
1.	What	kind of materia	ls is your hou	se made o	f?				
	(a) Sto	one (b) Burnt l	orick (c) Uni	ourntbrick	(d) Mi	ud & Wo	od		
2.	How n	nany acres of lar	d do you have	?					
	(1)	Shamba	(a)	0 acres	(b) 1-3 (c) 4-10	(d) 11-20	(e) 21 or more	e
	(2)	Grazing land	(a)	0 acres	(b) 1-3 (c) 4-10	(d) 11-20	(e) 21 or more	e
		Ū							
2.1	Hown	any percentage	of this do you	cultivate	2 ?				
	(a) 0%	6 (b) 1 - 50 %	(c) 51 - 99 %	(d) 10	0%				
		, ,							
3.	Hown	nany head of an	imals do vou l	nave ?					
	(1)	Cattle	(a) 0 head	(b) 1-10	(c) 11-2	20 (d) 2	1 or more		
	(2)	Goats	(a) 0 head	(b) 1-10	(c) 11-2	20 (d) 2	1 or more		
	(2)	Sheen	(a) 0 head	(b) 1-10	(c) 11-2	20 (d) 2	l or more		
21	Form	oncep	ou keep them	?					
3.1.	FOFWI	at purpose uo y	ou keep them	•					
	(1)		and the second						1.00 (p. 7.0
	(2)	Goats :							
	(3)	Sheep :			******	an cokurta An			odmastr.
					10				

- 4. Are you a member of Group?
 - (a) Yes (b) No

(If replied "Yes")

- 4.1 What kind of group do you belong to ?
 - (a) On forestry (b) For economic benefit (c) Others :

5. Have you ever planted trees except fruits?

(a) Yes (b) No

(If replied "Yes")

- 5.1. When did you start planting trees for the first time?
 - (a) 10 or more years ago (b) 5-9 years ago (c) 1-4 years ago
- 5.2. So far how many trees (except fruits) have you planted in your land?
 - (a) 1-49 trees (b) 50-99 (c) 100-499 (d) 500 or more
- 5.3. So far how many trees planted (except fruits) are surviving in yourland?
 - (a) 1-49 trees (b) 50-99 (c) 100-499 (d) 500 or more

5.4. How many seedlings (except fruits) did you plant within last one year in your land ?

(a) 0 seedlings (b) 1-49 (c) 50-99 (d) 100-499 (e) 500 or more

5.5. How many trees are surviving at these places. Evaluation of techniques by interviewer.

Place planted trees	Number of surviving trees for each species	Evaluation of techniques
Compound		
Boundary of compound		
Shamba		
Boundary of shamba		

Gra	zing land
Tł	ne other
place	(specify)
٠	For what purpose have you planted these trees ? (You may select one or more)
	(a) Ornamental (b) Shade (c) Firewood (d) Chacoal making (e) Fodder
	(f) Fertilizer (g) Pole/Timber for construction
	(h) Others :
.1	Have you already utilized your trees (wood, foliage, etc.) for the following purposes?
	(a) firewood (b) pole/timber (c) charcoal making (d) fodder
	(e) fertilizer (f) not yet used (trees are too young)
.2	Have you ever got incomethrough sales of your trees (pole, timber, firewood, etc.)?
	(a) got constant income every year (b) got income a few times
	(c) expect income in the furture (d) private or family consumption only
7.	Are your aising any seedlings in a nursery?
	(a) Yes (b) No
	(If replied "Yes")
′.1 .	Whose nurserv is it ?
	(a) Private / Individual (b) Group (c) Others(specify) :
-	
/.2.	How many seedlings a year do you raise in such a nuisery ?
	(a) Private / Individual :
	(b) Group
	(c) Others :
7.3	Have you or your groupsold or given some of the seedlings produced in the nursery to someonee.g.
	other villages ?
	(a) only used by yourself or group members (b) sold (got income) (c) given (free of charge)

7.4. Do you have any changes of nursery activities after training course at K.T.C.?

Whic	h kind of problems are you facing onforestry activities ?
(a) L	ack of materials, specify them
(b) L	ack of tools, specify them
(c) La	ack of water
(d) D	Difficult to collect seeds
(e) D	Damage by insects, animals or desease
(f) T	echnical matters, specify them
(g) W	Ve are too busy with other works
(h) L	Lack of cooperation among the members
(i) O	thers (specify) :
Have (a) Y	e you tried the new techniques which you learnt in the training course at K.T.C.?
Have (a) Y (If re Whic	e you tried the new techniques which you learnt in the training course at K.T.C.? (es (b) No eplied "Yes") ch kind of techniques have you tried ?
Have (a) Y (If re Whic	e you tried the new techniques which you learnt in the training course at K.T.C.? (es (b) No eplied "Yes") ch kind of techniques have you tried ?
Have (a) Y (If re Whic	e you tried the new techniques which you learnt in the training course at K.T.C.? (/es (b) No plied "Yes") ch kind of techniques have you tried ? e you taught any persons techniques that you learnt in the training course at K.T.C. ?
Have (a) Y (If re Which Have (a) Y	e you tried the new techniques which you learnt in the training course at K.T.C.? (es (b) No eplied "Yes") ch kind of techniques have you tried ? e you taught any personstechniques that you learnt in the training course at K.T.C. ? (es (b) No
Have (a) Y (If re Which Have (a) Y (If re	e you tried the new techniques which you learnt in the training course at K.T.C.? (es (b) No eplied "Yes") ch kind of techniques have you tried ? e you taught any personstechniques that you learnt in the training course at K.T.C. ? (es (b) No eplied "Yes")
Have (a) Y (If re Whic ——— Have (a) Y (If re To w)	e you tried the new techniques which you learnt in the training course at K.T.C.? (es (b) No eplied "Yes") ch kind of techniques have you tried ? e you taught any personstechniques that you learnt in the training course at K.T.C. ? (es (b) No eplied "Yes") hom have you taught the techniques?

- 11. What are your expectations for enhancing tree planting activities in the future?
- 12. Is there any useful idea you think could be included in the bookyou were given?

.

Fomu ya Ukaguzi Mkuu ya mafunzo ya Akina mama/Wakulima

						Tarehe :
	Mhoji :					
Ν	Mhojiwa :					
	Wilaya : Tarafa :					
	Mtaa :					
Tafadl	hali zungushia alama ya	a (√), jawabu lal	ko kwa m	aswal	i haya	yafuatayo.
3	, , , , , , , , , , , , , , , , , , ,		- 1955			
1.	Nyumba yako imejeng	wana vifaa gani	. ? 			
	(c) Matofali yasiyo ya	kuchomwa(Mat	ofali bar	wa idi) (c	l) Udo	ngona miti au mbao
2.	Una ekari ngapi za sha (1) Shamba :	amba ?				
	(a) ekari 0 (b	o) 1-3 (c) 4-10	(d) 11-2	0 (e)	Zaidi	ya 21
	(2) Shamba la malisho	(a) = (a) + (a)	(d) 11 (0 (a)	Zaidi	va 21
	(a) exall 0 (l	0) 1-0 (C) 4-10	(u) 11-2	.0 (9)	Laiui	yuzi
3.	Una mifugo wangapi ?					
	(1) Ng'ombe:	(a) 0 (b) 1-10	(c) 11-2	0 (d)	Zaidi	ya 21
	(2) Mbuzi:	(a) 0 (b) 1-10	(c) $11-2$	(d) (d)	Zaidi	ya 21
	(3) KONQOO:	(a) U (D) 1-1U	(c) 11-2	υ (α)	Zalul	yazı
3.1.	Madhumuni yako yaku	weka hawa mif	ungoni ni	ni?		
	(1) Ng'ombe:					
	(2) Mbuzi:					
	(5) Konuoo.					
4.	Wewe ni mwanachama (a) Ndiyo (b) La	wa kikundi?				
101 601	(Ikiwa jibuni " ndiyo")					
4.1	Unahusika na kikundi	cha aina gani?	nicitu			
	(b) Kinachohusu mapa	to na mahitaii v	ako			
	(c) Vingine, taja	······································				
-		- d		:4:	unte 7	
5.	(a) Ndio (b) La	nda, umewani ki	upanda m	iti yo	yote (
	(Ikiwa jibuni "ndivo")					
5.1.	Ulianza, kupanda miti	lini kwa mara y	ya kwanz	a ?		
	(a) Miaka 10 au zaidi i	liyopita (b) M	liaka 5-9	iliyop	ita (c) Miaka 1-4 iliyopita
5.2	Mpaka sasa ni miti nga	ini umepanda kv	va shmba	lako	mbali	na ile va matunda?
0.4.	(a) 1-49 (b) 50-99 (c)	100-499 (d) Z	Caidi ya 5	500	-invuit	ju mutunuu .
- 0	Maaka caca -i miti	ni kati wa ila -1	- 	h	. h ! 1	
5.3.	inaendelea kukua?	uu kati ya ile ul	iyopanda	snam	ioani la	aku (mbani na matunda) imebaki
	(a) 1-49 (b) 50-99 (c)	100-499 (d) Za	aidi ya 50	00		
- 4	NI:			-		
5.4	NI miche ngapi (mbali $(a) 0$ $(b) 1-49$ $(c) 50$	ya matunda) ul 99 (d) 100.400	(o) Z_{a}	amba	ni lako	o ndani ya mwaka mmojauliyopita ?
	(u) 0 (u) 1-17 (c) JU-	>> (u) 100-499	(e) Zal	ui ya	500	
5.5	Ni miti ngapi iliyobak	i na inaendele k	ukuakat	ika se	hemuł	nizi. Ukanguzi wa maarifa va mhoii
maswa	ali.			esses.		
	Pahali miti imepa	ndikizwa		Kia	si cha	miti inaoendelea kukua kwa kila aina
						tofauti ya miti

	Ua-inje ya boma
	Mpaka wa boma
	Shambani
	Senemu ya malisno
	Sene zingine taja
6.	Je, hiyo miti uliipanda kwa shauri au mathumunigani? (Unaweza kuweka alama(√), zaidi ya moja) (a) Urembo au mapambo (b) Kivuli (c) Kuni (d) Utengenezaji makaa (e) Chakula cha mifugo (f) Mbolea (g) Mbao za ujenji/fito (h) Madhumuni mengine (Taja):
6.1	Umeisha anza kutumia miti yako (Kuni, chakula na kadhalika) kwa madhumuni yafutayo ? (a) Kuni (b) Fito/Mbao (c) Utengezaji makaa (d) Chakula cha mifugo (e) Mbolea. (f) Bado hujatumia (kwa sababu ya uchanga wa miti)
6.2	Umesha wahi kuwa na mapato ya kifedha kutokana na mauzo ya miti yako (fito, bao, kuni na miti)? (a) Ninapata mapato yasioyopungua kila mwaka (b) Nina pata mapato mara chache (c) Miti hii ni kwa faida yangu binafsi au kwa matumizi ya jamii pekee.
7.	Unakuza miche yoyote kwa bustani ya miche ? (a) Ndiyo (b) La (Ikima jibuni "ndiyo")
7.1	Hiyo bustani ya miche ni ya nani ? (a) Yako binafsi (b) Kikundi (c) Nyingine, taja :
7.2	Unakuza jumlaya miche ngapi katika bustani hiyo ? (1) Yako binafsi :
7.3	Mweisha uza au peana mtu yoyote kwa mfano kijiji (wewe au kikundi chenu) kiasi chochote cha ile miche mnayo kuza kwa bustani? (a) Inatumiwa na wewe au wanachama kikundi pekee (b) Inauzwa (kwa kuleta mapaco) (c)Inaneanwa hila malino
7.4	Umepata mabadiliko ya ukuzaji na ustawishizaji wa miche katika bustani yako ya miche tangu utoke kwa mafunzo huko K.T.C.?
8.	Unakatabiliwa na shida gani katika shughuli za ukuzaji na utuzaji wa miti kwa jumla? (a) Ukosefu wa vifaa, vitaje
9. 9.1	Umejaribu kutumia ujuzimpaya uliyojifunza kutokana na mafunzo uliyopewa kule K.T.C? (a) Ndiyo (b) La (Ikikwa jibuni "ndiyo") Ni ujunzigani uliyojaribu?
	25

- 10. Umejaribu kumfunzamtu yoyote ujuzi ule ulijifunza kwa mafunzokule K.T.C. (a) Ndiyo (b) La (Ikiwa jibunu"ndiyo")
- 10.1
 - Ujuzi huo umefunzanani?

 - (a) jamii yako
 (b) Majirani
 (c) Wanachama wa kikundi/vikundi
 - (d) Wegine ____

Kwa siku zijazo, una matarajio gani kuhusu uendelezaji wa upandaji wa miti ? 11.

Unalo wazo lolote ambalo unafikiria ni muhimukuogezwa katika kile kitabu ulipewa? 12.

Appendix II

.

1 Changes

Raw data of the main survey and pre-survey

1

3
2
E
SU
2
0
5
Z
er
5

Tota	21	20	19	18	17	16	15	14	13	12	=	10	9		7	6	5	4			_	Γ	No	-
-	Mar,94	Mar,94	Mar,94	Jan,94	. Jul,93	May,93	Mar,93	Feb,93	Feb,93	May,92	Feb,92	Feb,92	Feb,92	Jul 91	Jul,91	Mar,91	Mar.91	Mar,91	Mar, 91	Mar, 91	Mar,91		Course	
																						Ston	Γ	Hou
-	-	-	-		-	-			-			-	-	-	-	-	-	-	-	-	-	B.B		se ma
					-	-								-	-				-	-	-	3 Ub		ateria
10				-	-	-	-			-		-	-	-	-		\vdash	-	-	-	-	BM		5
12		-		-	-	-	-	-		-	-	-	-	-	1	1			-	_	_	W	5	r -
								-						-		_					-	0 1-	ham	
	F	-		-	-	-	-	-			-			-	-	-	-			-	-		Ja	
-			Ē	Ē	-		-	-	-	-		-	-			-			-	-	-	0 -20		н
-												-	1				-		-		-	21		w ma
N	-				-						1	1		1	1	-		-	-	-	-	0	\vdash	ny ac
14		_	_	_	_	_	-	_	-	_			1		1		-		_		_	1-3	ĺ	res
N																1				-		-10	Gra	
_																		_				-20	zing	
														1								21-	and	
																						0		Cult
_	-		-	-	-	-	-					-	-	-	-	-	-	-	-	-	-	-50 -		ivatilir.
	\vdash	-	-	-	-	-	-	-	-	-	-	-	_		_			-	-	_		-99 1		ng lan
-	\vdash	\vdash	-	-	-	\vdash	-	-	-	-	-	-	_		-		-	-	-		_	odc	-	ā
19	-	-	1	F								-					-						ណ្ឌ	공
-		Γ	Γ			Γ	Γ							-	-	-	-	-	-	-	-	0 -20	ttle	W ma
						F										-	-		-	-	-	21.		iny h
7				-					-	-		1		1				-			-	0	\vdash	ead o
14	-	-	-		-	-	1				-		1		1	1	٦		-	1		-10	Goat	fanir
																						-20	5	mals
					_	_	_					_	_		_				_			21-		
17	_		_	-	_	-	_	_	_	_	_	-	-	-	-		_		_	_		fes	Memt	Group
																2						No	ershi	
4 10	t.	F	-		\vdash									-		1		-		Н	-	(a)		1
-	F		-	F	-		-	F	-	-		-	-		-	-	-		-			(b)	at ki	
					F	-											Ē			-	-	(c)	nd of	
																							No	Te
11	-	-	_						-	_				_	_	-	_			_	_	10-	1st	e pla
6						-					-	-	-					-	1			5-9	planti	nting
4				-			-															14	ng	
N					1		-															1-49	How	
	Γ												Γ								-	50-	many	
4	\vdash		-	-	┝	-		-	H	-	-	-	-	\vdash	-	-		-	-	-	-	- 66	tree	
ω												-									-	661	s pla	
12	-		-						-	-			_	-	_	-	_	-	-	-		500-	nted	
N				Γ			_		Γ				Γ	Γ					Γ	Γ	Γ	14	No.	1
			Γ	T	F	1	F	Γ	T		1	-	-	F				t	F		t	9 50	of su	
4	-	-	-	-	-	1	-	-	\vdash		-	-	_	L				1	L	-		-99 -	irvivi	
5			L	-										_			_		-		-	499	ng tre	
10	_		_											Γ							Γ	500	es	
			E	E	F	F	F	T	Ē	Ē		F	Ē	t	F	F	1	-	T	-	1	0	Pla	
	1									Γ		Γ				Π	Γ	Γ	Γ	Γ	Γ	T	nted	
7	\vdash	-	-	-	-	-	-	\vdash	\vdash	\vdash	-	-	\vdash	-	\vdash	-	-	-	-	┝	-	19 5	seec	
10	-		-			L		-	L			-			-		-	-	-	-	_	66-0	lings	
N						Γ								Γ				Γ	Γ	Γ	Γ	49	last	
	T	T			1	T	T	T	T	1	T	1	F	t	T	F	t	t	1	t	t	9 50	sease	1
N	1	1		1	L	_	1	1	-	-				1		1_				1	L	P	B	1

Sur	n Buin																																				
No Con	punodu																								Danne	don' o		-									
Eu/	ti Ju/p	r Cr/m	Neem Eu/	sa Gr/r Cas	su Schi	Cypr	Macr	r A/se	Mang	A/me	Ta/i	Co/a	Mira	i/a AL	/gu/Me	/v Bao	b Acad	Se/S	Eucal	Eu/a	u/mo	/eulE	u/c Do	10/	Gr/r	CVDL	Ju/Dr	Schi	Do/c	Macr	Ta/i	Anna	-u/ri K	i/a Ra	/a Cac	I A/n	Arar
-	-	1	+	+	+											-				T			-		N	-									-		
2	4	-	-		-										_	_									4	[T		T	ł	$\left \right $		
3			_	1									t						T	T	t	t	+		-	-	ľ			T	T	t	t	+	+	-	
4				-	1								T	+	+	+				T	\dagger	\dagger	+					-		1	T	T	T	╀	+	-	
5		-		-				L					t	+	+	+			T	T	t	\dagger	+	-	2 1					t	t	t	t	\dagger	+	+	
3			$\left \right $	+			ľ	ľ			T	T	1	+	+	-					†	\dagger	+	+	7				-	1	Ŧ	1	1		+	-	
0 1	-	ŀ	-		+									-	-	-					-				4	-		-		1							
2		-	-	-	_				-	1	-	-	1	-		_					-	-									-	-					
8			-	_									\vdash	-	-	-	-			F	\vdash	\vdash	$\left \right $		5						T	T	-	-	-	-	
6		-		1				L.					t	-	-	-		-	-		ſ	t	-	-					-	T	T	t	t	+	-	-	
10													t		+	-			1	T	t	t	+			1			-	T	T	T	t	t	+	-	
11	_	-	-	-	-								t	+	+	-			T	ŀ	ŀ	t	┼	+	1	1				t	T	t	t	+	+	+	ļ
12					-								t	+	+	+			T	1	t	\dagger	+	+	0	1	1			1	1	1	1	+	+	+	
:::	+	T	1.				1						1	+	+	+			1	1	1	+	+	-					-				1	-	-	_	_
2	+		-		_							-	-								_	-		-		_	_							-	-	_	
14			-	1								-											-	-	5				-			T	T	\vdash		L	
15			-	-										\vdash						T	t	F			-					T	T	t	t	1-	╞	╞	
16				-	-							Γ	F	\vdash	-	-			-	T	t	+	$\left \right $			L				T	T	T	T	1	┝	-	
17												-	F	-					T	T	T	t	-	-						T	T	t	t	\uparrow	+	-	
18				11	1							Γ		+						T	ſ	t	+	+				ľ		T	T	T	1	┢	╀	+	-
10	-		L		-							T	t	$\frac{1}{1}$	-	-	ľ		T	1		\dagger	+	+						T	T	t	t	\dagger	+	\downarrow	4
00	Ļ	ŀ	$\left \right $	+	-						T	T	1		-					1	1	+	+	-	N	4				1	1	1	1	+	+	4	
2.0	+	-		+	ŀ					T	T	T	1		+	+			T	t	1	+	+	-					-					-	-	_	_
17	4		-	-		ľ	ľ			ľ	ľ	1	1	-	-	4	-			1	1	1	-		N								-		_	_	_
Total	-	9	4	2 11	5 4	-	-		-	-	-	4	-	-	-		2	-	2	-	-	-	-	1 6	0 10	4	-	4	5	-	2	-	2	2	-	3	-
		-	252	Acacia en				HOEB		Icdoc B				2				1.01.00			1	•															
		•		Ide mana	i					Davoa				3	0		nuprior	emun			ib/n	ä	ucalyptu	s globu	SD		Leuc		Leuca	ena le	ococe	phala	0	U/en	Ole	a europ	aea
			Val	Acacia alb	ida			Ba/a		Balanit	es aeg	lyptica		5	E	Crot	on meg	alocarp	SU	u	u/sa	ш	ucalyptu	s salign			Ki/a		Kigelia	africar	EL		0)c/u	Oct	ea usar	nbarens
		•	1/me	Acacia me	lifera			Ca/si		Cassia	siamea			δ	5	Cypr	ess			u	u/ti	Ē	uphorbia	tirucal			Mang		Mangit	era ind	ica		4	opo	Pod	ocarpu	s milan
		*	1∕ni	Acacia nilo	otica			C/sp		Cassia	specta	abilis		Do)c	Dovy	alis caf	fra		, w	bony	Ċ	albergia	melanix	vlon		Macr		Crotor	macro	stachv	ę	U.	6/9	Ses	hania s	eshan
		1	1/se	Acacia ser	negal			Call		Callian	dra cak	othrysu	5	Euc		Euca	hyptus :	dds		0	Vse	5	iricidia s	epium			Mira		Mirra				5	chi	Sch	inus m	olle
		4	1/to	Acacia tor	tilis			Casua		Casuar	ina equ	uisetifo	9	Eu	C	Euca	hyptus (citridora		0	ir/r	0	revillea r	obusta			Me/v		Mellia	volkens	:5		S	e/ar	Ses	bania o	randiflo
		4	N/gu	Albizia gur	nmifera			Co/a		Cordia	african	E .		Eu/	ca	Euca	hyptus (camaldu	lensis	,	u/pr	Ť	uniperus	procera			Muto		Annon	a sene	qalensi	ŝ	-		Tar	narindu	s indica
		4	Avoc	Acacia alb	ida			C/mo		Combr	etum n	nolle		Eu/	E	Euca	hptus I	naculat			ara	T	raranda	mimos	ifolia		Neen	_	Azadi	rachta	-india		F	- / ma	Tor	cilcuim	mentall

29

••

		-		_	-		01	-	ω	2	-	0	9	8	7	6	S	4	ω	N	-		-
-										-												Podo	Γ
_									_								-					T/m	1
				Γ	Γ									-	-			-		-		e C/m	
10			-	\vdash	\vdash	\vdash			-	-							-		-		-	10 Co/	1
N	6 28 6 19	-	-	┝	\vdash	\vdash		=	-	-	-	-	-	-	-	-	-	-	-	-	-	e Ne	
-		-	-	-	┝	-	-	-	_	-	-		-	_	-	_	-	-	-		-	emL	
-								-														euca (
-								_														i/m	
_							_															Avoc	
_						_																Euca	
_			_																			A/al	
5																					-	-	
-	1	-	3	2	-	3	N	6	з	3	3	-	4	3	3	ω	3	3	-	-	1	Co	Sh
6	-		1		\vdash	\vdash	\vdash		-	-	-	-	-	-	-		-	-	_	-	1	/a Se	amba
N	-	-	_	-					-	_	_	_	_	_	_	_	_	_		_	-	s/s	
ω	-			-				-													-	euca (
6								-					1			-			-	-	_	Cr/m	
-																				1		Сург	
N	-																			L		Ju/pi	
_											e li											r Eu/g	
																				-	-	I Eu/	
_								-		-			-			-				1		sa Gr/	
•	-			-		-		-	-		1	-	1	-	-	1		-		-	_	'r Ca	
ω			-	-	-	-		-	-	-	1		-	_	_	1				-	_	su Be	
-		-	_	-				-	_						1				1000		-	enja A	
N			_		-	_	_						_	-	-							cacil	
N												-	_		1				_			Mina	
N									-						-							Mang	
_															1							Avoc	
_																						Ki/a	
																			-			Me/	
_														-				-				V Oc.	
-	-	-										-		1		-	-	_		-	-	/u Eu	
4	_		-	-	-	-	\vdash		1		-	-	-	-		-	-		1			cal E	5
-	_	_	-	_	-	_					-			-	_	_						Wc C	
-	_			_					1			_	_)/eu	
N			1																			Co/e	
_								_														Macr	
N																				-		Ebo	
-							F	Ē	-				-				-	-	-	-		Tri	
-				-		-		-			-	-	-	-	-	-	-	-	-	-	-	ch Pc	
N			-	-	\vdash	\vdash	-		-	-			-	-	H	-	-		-	-		do C	
-			-	-	-				_	1 8			-				_					a/si /	
-			_	-	-						_	_					L					AV gu	
-					-					1												Jaca	
		-															Γ					Calli	1
	1 2 2 1 1 1 1 1 1 50 6 2 3 6 1 2 1 3 10 3 1 2 2 2 1 1 1 1 4 1 1 2 1 2 1 2 1 2 1 1 1 1 1																						Tyme (xmo Cor/n Neer Lucad (Xm) Cord Sext Lucad (Xm) (xmo Cor/n Neer Lucad (Xm) Mang Ance (Ma Mang

2

nus

Te/b

•

5

30

Terminalia brownii

Mainsurvey,Meru

2
8
=
S
5
7
õ
3
-
5
(D)
Ċ

Total	21	20	19	18	17	16	15	14	13	12	=	10	9		7	6	s	4	ω	N	_	Γ	No
-																F				ŕ		Schi	Boun
	-				-		H									-	-	-		F	-	CY	ndary
ω	-	\vdash	H	-	-		-	H	-	-	-	-	-	-	\vdash	-	-	-	-	-	-	or EL	of Sh
6	_	-	_	-	-	-	-	\vdash	H	-	-	_		-	-	-			-	-	-	Ical G	amba
7	-	-			-		-	-								-			-		L	i/r	
ω	-							-									_					Do/c	
ω	-					_										_						Casu	
_																F				T		Aca	11
														-	-			-	-	-	-	ci Ba	
-	-		-		-	\vdash		-	-	-	-	-	-	-	\vdash	-	-	-		-	-	a E	$\left \right $
-	_	_	-		-			-			-		_	-			_	_				1/ti S	
-	_	_	_	-	-								-									e/s	
2								_					_									Leuca	
_													_									Jaca	1
_																				-	-	Euc	11
								H			-	-		-	\vdash	\vdash	-	-	-	-	-	al Ma	
N	_	-	-	-	-	\vdash		-	-	-	-	-	-	-	-	-	-	-	-	-	-	M Bur	
-	_		_	-	-					-		_										luto	
-										-												Te/b	
-								_														Ebon	
-						Γ																Co/	11
								-									-	-	-	\vdash	-	a Ki	
-	-	-	-	-	-		-	-	\vdash	-	-	-	-	-	-	-	-	-	-	-	-	a Po	
-	_	-	-	-	-	-	-	-					_		-	-						1 opc	
	_		-																			Val	
-			_																			A/to	
			_																			A/se	11
_	_																				1	2 C/s	11
4				-	-								-		-	-	-	-	-		-	0	
ω	4	1	ω	-	N	2	N	S	-	ω	N	-	ω	N	-	ω	ω	-	-	N	-	0	6
2	-	-	-	-	-	-		-	-						-	-					-	r/m L	razing
5					-		-	-					-								_	euca	land
ω		_											-						-			Se/s	
4				_							_											Schi	11
																F		F				Cas	
	-		-			F			H		-	-	-		-	-		-	-	\vdash	-	iua Min	
-		-	-	-	-	-		-		\vdash	-	-	-	-	-	-	-	-	-	-	-	M	
-	-	-		-	-				-						-					L		ang	
-	_													-							L	TI	
-														-								Ba/a	
-			-																		Γ	Jaca	11
													-						-	-	-	Euc	11
2	-	-	-	-	-		\vdash	-	H	H	-	-	-		-	-	-	-	\vdash	\vdash	-	cal EL	
-	-	-	-	-		\vdash	-	-	-	H	-		-		-	-						1/cal	
-	_			_				-														iB/m	
2							_	_														Gr/r	
-			_																			Co/	11
													-									e Se	
-	-	-	H	H	-		H	-	\vdash	-	H	-	-	-	-	-	-	-	\vdash	-	-	gr G	
-	-	-		-	-	\vdash	-			-			-		4							Vse .	
	_																					2	

Mainsurvey, Meru

ed		1	1	-	-	Г	-		-			-				-			-				-	a
frais		-	\vdash		\vdash	\vdash	-		-	-	-		1			-		1		1		1	1	0
pose o	dlings	(q)	\vdash	-	\vdash	-	-	-	-	-	-	1		1	-	-	1	-		1	_	_		0
Pur	See	(a)	-	\vdash	\vdash			-	-		-	-	-	00	00	00	00	00	20	00	00	00	00	02
		-Pre												-150	240	-11	4	45	14	80	30	3	295	1201
		otal			1000	8000	40000	14000	5000		3000		5000	5000	50000	2400	400	4500	1500	10000	3000	300	40000	00100
	5	ther T	-					-					-			-			-		-			ŀ
	eedling	o dno			000				4000					5000	0000	2000		3000	1000	0000	3000			0000
	many s	te G				000	000	000	000		000		000		000 4	400	400	500	500	-		300	000	000
	How	er Priva	_			8	40	14	_				5		10	_			_	-	_	_	40	
58	ery	up Oth	-		1			-	-		-	_	_	1	1	-	-	-	-	1	-	-	_	
activitio	e Nurs	e Gro				1	1	1	-		-		1		1	-	1	-	1			-	1	
rsery a	Whos	Privat																						
Z	No	-	-	-	_	-	-	-	_	-		1 1		_	_	_	-	_	1	-	-	-	-	
	1	c) (o		H	-	-	Η	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
e l) (q)			-		H		-									-					-	-
Inco		(a)			-	-	-						-		-								-	
		(t)																			-			•
		(e)			-	1	-	-			-		-		1	-		-		-			-	:
		(p)		-		-	-	-			-		-		-	-		-	1	-	-	-	-	:
5		(c)				-	-	-					-						-	-			-	1
IZATK		(q)	-	-	-	-	-	-		-	-		-	-	-		-		-	-		-	-	
3		(a)	-	-	-	-	-	-		-	-	-	-		-	-	-	1	-	-	-		-	
1		Ther																					-	
	se trees	Timber C	-	-	-	1	1	1			-	1	-	-	1	1			1	1		1	1	
	ed the	ertil	-	-	-	-	-	-			-			-	-	-		-	1			-	1	
	u plant	-odde	-	1	-	-	-	-			-			-	-	-			1			-	-	1
	ave yo	harcof		1	1			-			-		-	-		-			1				-	1
1	- BSO	iui	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			-	-	
	E.	4 K	-	-	-	-		-	-	-	-	-	-	-	-		H	-	-	-		-	-	-
1.	what	Sha																		_				Ľ
1.	For	Oma		-	-	-		-				-				-			-				-	
			-		-	m				-					2				e	-		-		
		a Eu/c		\downarrow	_			_				_	_						11		_		_	
		Co	_	_	4	4	4	-	_		_	_	_		-		_		1				_	
		u Gr/r	4	-	_	-	-			_	_	_			-		_	_					_	
		0/e	_	-	_									_		_		_						
	ļ	Ba/a																						ľ
	lace	Casu				-																		
	ther p	Cr/B				-													-					
	The o	Eucal	-		-	1														-				
	-	F	2		-	-		2	Э	2	3		2			4	2	1	-	-	-	2	e	
		1										11 11		<u> </u>										

32

Mainsurvey, Meru

	Whi	ch ki	jo pu	pro	blem	700				New		Exte	insio	E		1	
0										Tech	niques	_					
	(a)	(q)	(c)	(p)	(e)	(£)	(6)	£	Ξ	Yes	No	Yes	Ŷ	(a)	(q)	(c)	Ð
-			-	-	-						1	-				-	
N	-	-	-	-						-		1		-	-		-
m				-	-				-		-	-					-
4	-	-		-	-	-			-	-		-		-	-	-	
20	-	-	-	-	-					-		-		-	-	-	-
9	-	-	-	-	-	-			-			1		-	-	-	-
1	-	-		-	-	-	-	-	-	-		-				-	
8	-	-			-			-	-	-		-		-	-	1	-
6	-	-		-						-		-			-	-	-
12	-	-	-	-					-	-		-				-	
=	-	-	-		-	-			-	-		-		-			-
12	-	-	-									-		-	-	1	
13								-		-		-				1	-
14	-	-	-	-	-	-				-		-		-	-	-	-
15	-	-		-								-				1	-
16	-	-						1	-			1		-	-	1	-
17		-		-	-			-				-		-	-	1	-
18	-	1	-	-		-			-	-		-		-	-	-	
19									-	-		-		-	1	1	
20				-							1	1		_	-		
2	-	-	-	-						-		-		-	-	-	
-			0.			4	•					10			11		

33

leru
\geq
-
>
C
2
5
S
ê
-

	House materials	How	w many a	cres			How	many head (of cattle	Membe	Ir- Tree pha	nting						Tree of	anting (Yes	1		
No Course		Shamba		5	azing land	Cattle	_	soats	Sheep	ship	No 1st	planting	How many	trees planted	d No. of sur	viving trans	Planter	A seedlings	last seasor	For wh	1 Dirmos	aned a
	Stone B.B Ub.B M&	W 0 1-3 -10 -20	0 21- 0	1-3 -1	0 -20 21-	0 -10 -21	0 -12 0	10 -20 21-	0 -10 -20	21- Yes N	0 10-	5-9 1-4	1-49 50-9	9 499 500	- 1-49 50-	99 499 50	10 1	40 50-00	499 500	- Orna S	and a long	Charle
1 Mar,91			1	11	1 1	1	-	_	-	1		-		-					222	-	-	
2 Mar,91			1	1	1	-			-	-	1			-		-	+			-	-	1
3 Mar,91			1	1	1 1	1	-		-	-	-			-		-				-	-	1
4 Mar,91			1	1	1 1	1	11		1	1	-			-		-				-	-	1
5 Mar,91		1 1		-	1	1		1	1	1	-			-		+-	+			+	-	1
6 Mar,91			-	-	1 1	1		1		1	-			-		-				-	-	-
7 Jul, 91			-		1	1		1	1	1	1					-		-		-	-	-
10, Jul 91			1			_	1	1	1		1	-				-		-		t	-	1
9 Feb,92		1 1			1	-	11		1	1		-		-		-		-		t	-	-
10 Feb,92		1		-		1			-	1		-		-						-	-	-
11 Feb,92		1 1 1		-		-		1	1	-		-					+	-			-	
12 May,92		1 1		-		-		-	-	-		-		-				-	-		-	-
13 Feb.93		1 1			-	-		1	-	-		-					+-	F				1
14 Feb,93		1 1		-				-	1	-		-			-		+	-		-		-
15 Mar,93		1 11 11		-		-		1	11	-		-	-		-		-			+	ŀ	-
16 May,93		1 1		-					1	-		-	-		-		-	-		t	+	-
17 Jul 93		1 1 1		-		-	-		1	1		-	-		-			-		-	-	-
18 Jan,94		1	F	-		-	-		-	-		-							-	+-	+-	-
19 Mar, 94	1 1					-		-	1	-	-		-	-		-			-	t	-	-
20 Mar,94		1 1 1	_	-		-		-	-			-				-	+	-	-			-
21 Mar,94			1		1	1		1	1	-	1	-			-		-		-	-	-	-
otal	1 1	4 5 8 1	0																			

$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	1	1			-	1-	1	-	-	-	E	-	1	-	1	-	T	T	T	-	T	-	1	-	T	-	1
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	1	2	Sau	Ξ		Ľ		1			Ľ						L	1	L	L				L	L	L	1
Numery activities Read of pool Numery activities Numery activities <t< td=""><td></td><td>2</td><td></td><td>(e</td><td>-</td><td>-</td><td>-</td><td>-1.</td><td>-</td><td>-</td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		2		(e	-	-	-	-1.	-	-	-																
$ \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	1	2	De la	2	-	1	t	t	-	-	1	t	t	+	1	t	+	1	T	1	\vdash			1	1		T
Numery activities	l		Ē	1	-	-	+	+	-	-	-	⊢	+-	+-	┢	┢	+	+	+	-	-	┢	-	-	+-	-	┝
$ \begin{array}{ $	1			υ			1			T			1_														
Numery activities	1			â	-	-	-	•	-	-	-		Г	1													
Musery articles Inversion Recent mode with a properitie of a coccet mode vision and the family found from the family form the family fami	1		3		-	1-	+-	+	-	-	-		1	+	+	t	+	+	1	-	1		\vdash	\vdash	1		t
Numery activities Reserve activities Numery activities	į	Ľ	1	-	_		1	+	-		-	-	1	1	-	-	+	+	1	-	-	L	-	-	-	-	⊢
No Interfactor Number Notes	9			22									1			1											
No Intersty activities Intersty activities Intersty activities Intersty activities Intersty activities Month intersto betward Month intersty activities Mo	1		4,	1				1						1													
No. Intrasty activities Form Monor varianty and intrast activities Minter Material	N,	1	5	1			T	1	1				1	1	T	T	1	1	1		1		1	1	1	1	Γ
No Intersy arcticities Inter				2									1						1								
No Hursery activities Recent from training in Kfull Genetic With Kind of polylem Dow of the appropriate species With Kind of polylem Dow of the appropriate species 2 1 1 1 1 1 0 0.0	2			22				1								1	1										
No Numery activities From Numery activities From Numery activities Numery activities <t< td=""><td>1</td><td></td><td>t</td><td>H</td><td>-</td><td>-</td><td>+-</td><td>+</td><td>-</td><td>-</td><td>-</td><td>-</td><td>+</td><td>+</td><td>+</td><td>+</td><td>-</td><td>+</td><td>+</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td><td>-</td><td>-</td><td>+</td></t<>	1		t	H	-	-	+-	+	-	-	-	-	+	+	+	+	-	+	+	-	-	-	-		-	-	+
No Nursery activities Nursery activities Mark ind of poble Mine 1 Index of the stress No Writes Nursery activities Mine Mine <t< td=""><td>Š</td><td></td><td></td><td>ξl</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Š			ξl												1											
No Intractor Number Number </td <td>ě</td> <td>Ż</td> <td></td> <td>1</td> <td>-</td> <td></td> <td></td> <td>1</td> <td>_</td> <td>_</td> <td></td> <td>_</td> <td>-</td> <td>-</td> <td>1</td> <td></td> <td>1</td> <td>1</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>1</td> <td></td>	ě	Ż		1	-			1	_	_		_	-	-	1		1	1	-					-	-	1	
No Intractor Intractor Intractor Numeror <			1	릐												-	1	-	1								~
No Intresty activities Intresty activities Finant Montence Montence <t< td=""><td>1.</td><td></td><td>3</td><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td>1</td></t<>	1.		3	3										1		-										-	1
No Intresty activities Intresty activities From Monor you got the techniques on tree paining an Krut Centre Wrut Centre Wrut Centre Minesty activities Wrut Centre Minesty activities	1		1	1				Т	1	8				Γ	T	-		Γ	Γ	1	Γ						-
No Nursey activities Interpretation From Nursey activities From Nursey activities N	12		13	5				t	1		-		1	1-	1-	1-		1-	1-	-	-	-		-	1	1-	a
Non- Nursery activities From viory activities From viory activities Musery work Mu	15		E	1	-	-	⊢	t	┥	-		-	-	1-	-	-	-	+	1	=		-	1	-	+	-	
Non-services Nursery activities Nursery activities Float whom you to the techniques on troo painting so far except now training in Ktuti Centre White Supplicity No Perdeferal Transcription Nursery activities Seed collection Nursery work Mursery	P		1	1	-	-	-	┝	+	-	-	-	-	+-	+-	+=	+-	+-	-	-	-	-	-	-	-	-	
Non- Investory activities From whom you got the certhiques on too planting so far except now training in Ktul Centre Ministery	1ª		F	1	_	_	-	1	+	_		-	-	F	Ľ	Ľ	Ľ.	F	1			-	-	Ē	1	-	L
No Intractive state Numery settifies From whom you got the techniques on teo planting as far except new training in firtui Centre With the setting as far except new training in firtui Centre 1 1 1 Numery value Choice fortui Choice fortui Canady Choice fortui	12		15	1	_		-	1	1					1-	1-	1-		-	1-	1-	L	1_		-	1-	-	1°
No Intracty activities Financy from with any or got the techniques on tree planting an fixul Centre Pedde fertil Trabe/Conter NN Wrose Nursery How many seedings Seed collection Nursery work Choice of the appropriate species 1 1 N No Nursery activities Monetal frame/or the factory for the private factor for the private factory for the private factor for the prive factor for the private factor for	S		13	1			L	L				-	L	1-	-	-		L	1-	1-			-	L	L	-	a
No Intracry activities From whom you got the techniques on tree planting so far except new training in Ktuit Centre Podde fertil Timber/Other Private Group Private Conce of the appropriate species 1 1 1 Private Group Drug Private Group Private Conce of the appropriate species 2 1	1	0	Z	2				Γ	T	1						Γ	Γ	Γ	-		Γ	Γ	Γ	Γ	-	Γ	-
No Investory activities Ferrar Activities Ferra	1	SC in	1		1			Γ	T	1						Γ		Γ	Γ						Γ	Γ	Γ
No Intracy activities From Money activities Money activititities Money activities	1	SDe	18									1		1	1									1	1		
Notes Nursery activities From when yearing in Ktui Centri No Buparred these trees No Wrose Nursery Normany secting so far except now training in Ktui Centri 1 1 1 1 Nores Nursery Normany secting so far except now training in Ktui Centri 2 1 1 1 1 1 1 2 1 1 1 1 1 1 3 1 1 1 1 1 1 1 3 1		te	1.5	1	1		-	Г	t		-	-	-	1	1		1	1	-	-	-	-		-	1	-	4
No Nursery activities Finu whom you got the techniques on tree planting so far except now training in Ktul Cambine on tree planting to the approximation of the approximating approximation of the approximation of the approxima	IT.	Drip	N		1				1							1			1						1		
No Intractive activities From whom you get the techniques on tree planting so far except now training in Ktu No Murrenty activities Nurrenty activities Seed collection Nurrenty decide 1 1 1 1 1 1 1 1 2 1	3	2d	E	t	+	-	-	-	$^{+}$	+	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	0
No Intresty From whom yearing in K Founded frees No Whose Nursery How many seatings Seaf collection Nursery work Choice of the Chain of the	Ē	ap	1-						1									L							L		Ľ
No Intrestry activities From whom you got the techniques on training and training activities From whom you got the techniques on trae planting activities No 0 Dupther these trees No Whose Nursery How many seedings Seed collection Nursery work Once of activities 1 1 1 1 1 1 Nursery work Once of activities Once of	Y	the	1 2	1	1				ſ	I	T			-	-			Γ							Г		5
No Intresty activities From whom you got the techniques on tee planting so far except now training to far except now training to the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the constraint of the family Group F.D. (Doff) Choice close of the clos		jo	5				8.1		1																		
No Nursery activities From whom you got the techniques on tree planting so far except now ta No Nursery activities Nursery activities Nursery work Clop 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 3 1	Ē	Se.	R	T	T				T	Τ			-			-		-						-			4
No Nursery activities From whom you got the techniques on tree planting so far except now 0 Our planted these trees No Wose Nursery How many seedings Seed collection Nursery Work C 1 1 1 1 1 1 1 1 1 2 1	5	ho	am						l													1					
No Nursery activities From whom you got the techniques on tree planting so far except n No Verpose Nursery Norsery activities Nursery activities 1 1 Nursery activities Nursery activities 2 1 1 Nursery activities 3 1 1 Nursery work 4 1 1 1 5 1 1 1 6 1 1 1 7 1 1 1 1 8 1 1 1 1 1 8 1 1 1 1 1 9 1 1 1 1 1 10 1 1 1 1 1 1 11 1 1 1 1 1 1 1 11 1 1 1 1 1 1 1 1 11 1 1 1<	8	-	5	┝	+	+	-	-	ł	+	+	+	-	-	-	-	-		-		-	-	-	-	-	-	-
Nursery Nursery How many seed finate Form whom you got the techniques on tree planting so far excet 1	L I		A PO	┝	+	+	-		┝	+	+	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-
No Intraction From whom you got the techniques on tree planting as far exiting as far exitenexiting as far exitenexiting as far exiting as far e	e		÷						L														1				
No Intractive contraction From whom you got the techniques on tree planting so far Nursery Nursery Nursery Nursery Nursery Nursery 1 1 1 Nursery Nursery Nursery Nursery 2 1 1 1 Nursery Nursery Nursery 3 1	ě		-	-	+	+	+	-	┝	+	+	+	-	-	-	-	-	-		-	-	-			-		-
No Nursery activities From whom you got the techniques on tree planting so No Ou planted these trees No Whose Nursery Norsery work Z 1 1 Nursery work Nursery work Z 1 1 1 Nursery work Z 1 1 1 1 1 Z 1 1 1 1 1 1 Z 1 1 1 1 1 1 1 Z 1<	far		N.																								-
No Intresty activities From whom you got the techniques on troe planting No Ou planted these trees No Whose Nursery How many seedings Seed collection Nursery Work Z 1 1 1 1 1 1 1 Z 1 1 1 1 1 1 1 Z 1 <	8	1	0	-	+	+	+	-	┝	+	+	+	-	-	-	-			_	-	-		-	-	_	_	-
No Nursery activities From whom you got the techniques on tree plant No Ou planted these trees No Whose Nursery How many seedings Seed collection Nursery work 2 1 1 1 No Nursery Nursery 2 1 1 1 No No No No 2 1 1 1 No No No No 3 1 1 1 1 No No No No 3 1 1 1 1 No No No No No 4 1	Bui		F.C	1	1									-				-	-				-			-	-
No Nursery activities From whom you got the techniques on troo planted these trees Nursery without activities 1 1 1 1 Nursery Nursery without activities Seed collection Nursery without activities 2 1 1 1 1 1 Nursery without activities Seed collection Nursery without activities 2 1	ant	ž	dn		Т	T		3	Г	T		1		-	-	-			-								4
No Intraction From whom you got the techniques on trocurs 1 Nursery activities No many seedlings Seed collection Nursery 2 1 1 1 No many seedlings Seed collection Nursery 3 1 1 1 1 No many seedlings Seed collection Nursery 3 1 1 1 1 1 No many seedlings Seed collection Nursery 3 1 1 1 1 1 1 Nursery 4 1 1 1 1 1 1 Nursery 5 1	a	ž	Gro		Ł	1	1																				
No Inritiant from whom you got the techniques on Mursery activities From whom you got the techniques on Mursery 1 1 1 1 1 Nursery activities Seed collection Nursery 2 1 1 1 1 1 1 Nursery How many seedilings Seed collection Nursery 3 1 1 1 1 1 1 1 Nursery Nursery </td <td>E</td> <td></td> <td>N</td> <td>-</td> <td>t</td> <td>+</td> <td>-</td> <td></td> <td>t</td> <td>+</td> <td>+</td> <td>+</td> <td>+</td> <td>-</td> <td>2</td>	E		N	-	t	+	-		t	+	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	2
No Nursery activities From whom you got the techniques 1 1 Nursery activities No Minose trues No Minose trues No Minose trues No 1 1 1 1 No Eeded Fertal Timber/Other Private Group Other Family Group F.D O.Min Other More No 2 1 1 1 1 1 1 1 1 No No <td>5</td> <td>nrs.</td> <td>Ē</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td>	5	nrs.	Ē				1							1													
No Nursery activities Nursery activities From whom you got the technique of the collection 1<	63	z	E.	_	+	-	-		L	+	+	-	-	-	4	_	-	_		_	4		_				
No Nursery activities Nursery activities From whom you got the techn 1 1 1 1 1 0 26ed collection 2 1 1 1 1 1 1 0 3 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 3 1	igu,	1	ž		1	1			L	1	1				_		_			_							
No Nursery activities From whom you got the te 1 No Nursery activities No winces has activities 2 1 1 1 3 1 1 1 4 1 1 1 5 1 1 1 6 1 1 1 7 1 1 1 8 1 1 1 9 1 1 1 10 1 1 1 11 1 1 1 9 1 1 1 1 11 1 1 1 1 11 1 1 1 1 11 1 1 1 1 11 1 1 1 1 11 1 1 1 1 1 11 1 1 1 1 1	F		hei							1	1	1						1	1		1						
No Nursery activities From whom you got the family Group Che family Group FD From whom you got the family Group FD Other family Group FD Omer collection 1	te	1	õ	_	1	1		_	L	1	-	1			_					_	1						_
Nursery Activities From whom you got Rodel Fertil Timber Other Private Group Other Family Group Other	the	e	들		1					1					1					-	-	-					3
No Nursery activities From whom yours Fodde Fertil Trunber/Other Nursery activities How many seedings Seed colle 1 1 1 Seed colle Seed colle 2 1 1 1 I I 3 1 1 1 I I 4 1 1 1 I I I 5 1 1 1 I	U	18	0		1				L																		
No Nursery activities From whom yearlings Fodde Fertil TimberOther Private Group Other Private Group Other Family Group Seed ct 1 1 1 1 1 2 1 1 1 1 3 1 1 1 1 4 1 1 1 1 5 1 1 1 1 6 1 1 1 1 7 1 1 1 1 8 1 1 1 1 1 9 1 1 1 1 1 1 10 1 1 1 1 1 1 1 11 1 1 1 1 1 1 1 11 1 1 1 1 1 1 1 1 1 11 1 1 1 1 1 1 </td <td>87</td> <td>ş</td> <td>0</td> <td></td> <td>1</td> <td>T</td> <td>T</td> <td></td> <td>1</td> <td>T</td> <td>ŀ</td> <td>-[</td> <td>T</td> <td>-</td> <td>-1</td> <td>-1</td> <td>-</td> <td>-</td> <td>T</td> <td>T</td> <td>T</td> <td>T</td> <td>T</td> <td>1</td> <td></td> <td>-</td> <td>2</td>	87	ş	0		1	T	T		1	T	ŀ	-[T	-	-1	-1	-	-	T	T	T	T	T	1		-	2
No Nursery activities From whom Fodde Fertil Timber/Other Private Group Other Family See 1 1 1 1 1 1 See See 2 1 1 1 1 1 See See See 3 1 1 1 1 1 1 See	S	ř	늡	-	+	+	-		-	+	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-
Nursery Attivities Florm will Ro Bup planted these trees No Whose Nursery How many seedlings \$ 1 1 1 1 1 1 1 \$ 2 1 1 1 1 1 1 \$ <td>5</td> <td>ee</td> <td>Lot</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	5	ee	Lot	1						1	1			1			1				1						
Nursery Nursery How many seedlings Fodde Fertil Timber Other Private Group Other Family 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 3 1 1 1 1 1 1 1 1 4 1	M	3	y G	-	+	+	+		┝	+	+	+	-	-	+	-	-	-	-	-	-	-	-	-	-	-	5
No Nursery activities How many seedlings Fodde Fertal Timber Other Ni Mose Nursery How many seedlings 1 1 1 No 2 1 1 How many seedlings 3 1 1 1 4 1 1 1 5 1 1 1 6 1 1 1 7 1 1 1 8 1 1 1 9 1 1 1 2000 13 1 1 1 2000 13 1 1 1 2000 13 1 1 1 2000 13 1 1 1 30 16 1 1 1 2000 13 1 1 1 30 13 1 1 1 30 1 1 1 1	E	1	imi		1				1	1		1				1					1					-	
No Nurrsery activities 1 Nurrsery activities 1 1 1 1 2 1 3 1 4 1 5 1 6 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 6 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E	_	L.	-	+	4	-		1	+	+	-	-	4	-	_	_	_	_	4	-	_	_	_	_	_	_
No Nursery activities 1 Nursery activities 1 1 2 1 3 1 4 1 5 1 6 1 7 1 8 1 9 1 10 1 11 1 12 1 13 1		S	the		1		1			1																	
Nursery Nursery Activities No Bup Banted these trees No Winose Nursery How many see 1 1 1 How many see 2 1 1 How many see 3 1 1 How many see 4 1 1 1 Souther Private Group 5 1 1 1 Souther Private Group 6 1 1 1 1 Souther Private Group 1 1 1 1 1 1 Souther Private Group 1 1 1 1 1 1 Souther Private Group 1 1 1 1 1 1 1 Souther Private Group 1 1 1 1 1 1 Souther Private Group 1 1 1 1 1 1 1 Souther Private Group 1 1 1 1 1 1 1 Souther Prin		din	0	-	+	+	-	_	+	+	+	+	-	-	-	_	_	_	_	_	-	_	_	-		-	-
Nursery Activities Nursery Activities Foulde Fertil Timber 1 1 1 2 1 1 3 1 1 4 1 1 5 1 1 6 1 1 7 1 1 8 1 1 9 1 1 10 1 1 11 1 1 12 1 1 13 1 1 14 1 1 11 1 1 11 1 1 12 1 1 13 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 10 1		1995	9			1										ğ	8	S	200				S			8	00
Nursery Nursery How main Fodde Fertil Timber Other Private 1 1 1 How main 2 1 1 How main 3 1 1 How main 3 1 1 How main 4 1 1 How main 5 1 1 How main 6 1 1 How main 7 1 1 How main 8 1 1 How main 9 1 1 How main 10 1 1 How main 11 1 1 How main 11 1 1 How main 11 1 1 How main 12 1 1 How main 13 1 1 1 How main 13 1 1 1 How main 1 1 1		S AL	Gro		1				1							S	201	22	3			1	N			10	62
Nursery Nursery How Foddel Fertil Timber Other Nursery How 1 1 1 How 2 1 1 How 3 1 1 1 4 1 1 1 5 1 1 1 6 1 1 1 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 400 1 1 1 1 1 50 1 1 1 1 1 1 50 1 1 1 1 1 1 50 1		E	e	Г	T	1			Г	T	1		1					8	0			30				8	20
No Nurrsery activities 1 Fodde Fertil Truber Other Phrate Group Other 2 1 1 2 1 1 3 1 1 4 1 1 5 1 1 6 1 1 1 1 1 6 1 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		MC	iva															40(5(5	50
No Nursery activities 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 3 1 1 1 1 1 1 4 1 1 1 1 1 1 1 5 1 1 1 1 1 1 1 1 6 1		Ť	à	L	1			_	1	1									_							_	
Nursery Nursery activities No Nursery Nouse Nursery Fodde Fertal Timber No 2 1 1 No Norsery 3 1 1 1 No Norsery 3 1 1 1 1 No Norser 3 1 1 1 1 1 No No Norser 3 1 </td <td></td> <td></td> <td>he</td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>ſ</td> <td></td>			he	1					ſ																		
Nursery activities No Bundact fensil Timber Other Ninose Nurser Fodde Fensil Timber Other Private Group 2 1 1 1 1 2 1 1 1 1 3 1 1 1 1 4 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2	lõ	1	-	_			+	-	_		_	_	_	_		-	_	_	-	_	_	_	_		-
Nursey activities Nursey activities Rodde Fertil Timber Other Private Gi 1 1 1 2 1 1 3 1 1 4 1 1 5 1 1 6 1 1 1 1 1 6 1 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ie.	Ser		1					1						-	-	-	-	-		-		-			-	80
No Nursery ac Fodde Fertil Timber Other No Whose 1 1 1 2 1 1 3 1 1 4 1 1 5 1 1 6 1 1 1 1 1 6 1 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	N.	La V	6	1	_				1	1						_									_		_
Nursery Nursery No our planted these trees No Who Prive No No 2 1 1 3 1 1 4 1 1 5 1 1 6 1 1 1 1 1 6 1 1 1 1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ŝ	8	1		1				ſ			-						-	-			-				-	S
Nurss Nurss No Outplanted these trees No IV 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 3 1 1 1 1 1 1 6 1 1 1 1 1 1 1 7 6 1 1 1 1 1 1 1 1 8 1	2	P	1	1	1				I																		
No Outplanted these trees Ni Fodde Fertil Timber Other Ni 2 1 1 1 3 1 1 1 1 4 1 1 1 1 6 1 1 1 1 10 1 1 1 1 11 1 1 1 1 11 1 1 1 1 11 1 1 1 1 12 1 1 1 1 11 1 1 1 1 1 11 1 1 1 1 1 1 11 1 1 1 1 1 1 1 11 1 1 1 1 1 1 1 11 1 1 1 1 1 1 1 1 1	IIS I	E	10	+	-	_		-	+	+	4	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	
No Outplanted these trees Fodde Fertil Timber Othe 1 2 1 1 2 1 1 3 1 1 1 4 1 1 1 6 1 1 1 11 1 1 1 12 1 1 1 13 1 1 1 14 1 1 1 15 1 1 1 16 1 1 1 1 15 1 1 1 1 16 1 1 1 1 17 1 1 1 1 16 1 1 1 1 1 17 1 1 1 1 1 1 16 1 1 1 1 1 1 1 17 1	Ž	Ž	1.	1	-	_	-	1	1	1	_			Ē		_	_	-	-			_		_		_	-
No Ou planted these trees Fodde Fertil Timber O 1 2 1 1 2 1 1 3 1 1 4 1 1 6 1 1 1 1 1 6 1 1 11 1 1 12 1 1 13 1 1 14 1 1 13 1 1 14 1 1 13 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 19 1 1 11 1 1 12 1 1 13 1 1 1 1 1 1 1			14		1			1															1			-	-
No Outplanted these tree 6 outplanted these tree 1 1 1 2 1 3 1 4 1 5 1 6 1 1 1 6 1 11 1 12 1 13 1 13 1 13 1 14 1 13 1 14 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 19 1 11 1 12 1 13 1 11 1 12 1 13 1		1 5	¢	1	_		_	L	1					-		_			_								_
No Outphamed these 2 1 1 2 1 1 2 1 1 2 1 1 3 1 1 6 1 1 1 1 1 6 1 1 11 1 1 12 1 1 13 1 1 14 1 1 13 1 1 13 1 1 13 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 19 1 1 19 1 1 19 1 1 19 1 1 19 1 1 11 1	1	1	1	8	-	-	-	-	-[-	-	1		-	-	-	-	-	-			-	-		-	-	16
No Out planted the 1 1 2 1 2 1 3 1 4 1 6 1 10 1 11 1 12 1 13 1 14 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 11 1 15 1 16 1 17 1 18 1 19 1 19 1 19 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1	1	15								1																	
No Out plainted 2 1 2 2 2 3 3 1 6 1 6 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 19 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 19 1 19 1 11 1 12 1 13 1	1	1t			-	-	=	F	+	-	-	-	-	-	-	-	-	=			-	-	-		-	-	m
No Out plant 2 1 2 2 2 3 3 3 11 5 6 1 6 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 11 1 12 1 13 1 16 1 17 1 18 1 19 1 19 1 11 1 12 1 13 1	1	10	t																						1 g		-
No OUP 1 604 3 3 <td>1</td> <td>te</td> <td>H</td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>+-</td> <td>+</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td>-</td>	1	te	H		-	-	-	+-	+	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-
No No No <	1	10	4				1	ľ						[[[-			-	-	11
N N N N N N N N N N N N N N N N N N N	H	13		4	_	-		-	+	-	-	_	-	-		-											
	1	\$	2	1	-	1.0	۳	1	1	5	9	~	0	0	12	=	12	13	14	15	16	17	18	19	20	21	tal
	- 1	2				_	-	1	1	-				1		_		1								1	10

Presurvey,Meru

yea		1 F		-	1	T	T	1-	-	T	Τ	T	T	Т	T	Г	T	T	Τ	Т	Г	Т	Τ	1
110	nigu	(e)	-	-	1-	-	-	-	+-	t	1	1	T	T	T	t	t	T	1	T		T	1	-
Bui	tech	10	T	1	T	T	T	1	1	T	1	T	T	T	T	T	t	T	t	T	T	1	T	-
mm	able	0		1-	1	T	-	-	1	1	T	T	t	1	t	T	T	T	T	T	T	T	1	
or co	tat	19	-	-	-	-	+-		1	+	+	+	+	+	+	+	\uparrow	-	+	+	t	+	+	-
nt fo	xpec	()	-	-	-	+-	+-	-	t	+	1	+	+	+	1	+	+-	+	+	+	+	+	+	-
명	E E	6	⊢	┝	+	+	+	+	+	+	┢	+-	+	+	+	+	┢	+	\vdash					
ct to	plar	1-49					1												1					
axpe	o be	-		F	+	1-	t	T	\uparrow	\mathbf{T}	1	1		1	\uparrow	t	1	1	t	t				
Ne	es t	66					1	1										1						
n ha	f tre	6-	-	-	-	+-	+-	+-	+	+	+	\vdash	\vdash	-	-	┝	\vdash	-	-	-	┢	-	-	
o yo	lo. o	8																						
-	~	(4)				1	+	+		\vdash		1	-	-	=	F		-	\vdash	\vdash	1	┢	+	
-		(B)		1			1	T	T			1	-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1										
bler		(£)											-											
f pro) (e)					1	1			-	-	-		-	-	-	-		L			-	-
lo pu		p) ((:		-	-	-	-	\vdash	F	F	=	1-	1-	L	-	-	1-	-	-	-	-	-	F	-
h ki		b) (q		-	-	-	+	+	-	-	-	-	-	-	-	-	-	-	-	30 2000 1 1 1 1 1 2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Whic		(a) (-	-	t	1	1	1	-	1	-	-	-	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
T	S	No						L	E		F	T	T	F	T	T	T	T		T	F	-	T	
	Deck	ther					-	Γ	Γ		Γ			Γ		Γ	Γ					-	Γ	-
	tes	0	-	-	-	-	-	-	-	-	-	-	\vdash	-	-	-	-	-	-	-	-	-	-	
antre	opria	O.M																		1				
ui Ce	udde	0.1							-		-	-	-	-	-	Г	Г	1	1	-	-	T	-	
L Kr	the :	dnc		-		-	-	T			-	-	1			F	1	t	t	1	1	1	-	
Bu	e of	, Gr	_	_		-					_	L			1 1 4000 22000 1<									
train	hoict	lime								-			-		1-	-								
MO	0	망	+	-	-	-	-	-	-	-	-	_	-	-	-	-	-	-	-	-		-	-	
bt	t	her		-	-				-					1	-			-				-	\vdash	
exce	ł	ð	4	-	-	_			_	_	_	_		_		-			L	L				
lar		N.															-	-	-		-			1
os Be	t	0		-					-		-	-		-	-	-	-			-		\vdash	-	-
antir	ž	g	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	\vdash	-	-	-	-
d bi	Ň	Gro																						
S L	Irser	Vin														-						-		
163 0	ž	0 Fa	_	_	_			-	-	_	_	_	-	_	_						_		-	
nigt		erN	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-				
tecl		5 Of																						
the	5	Nin.								000														
got	lecti	0	-	-	-		-		-		1	-	-	-			-	-						
Xor	D CO	E E	-	-	-	-	-	-		-	-	_	_	_		_	-		-	-	-	-	-	
vhon	See	Grou																						
W LLC		Vin					Γ	Γ		-						-			-		-	-	-	-
Ľ.	_	Sr Fa	_	-	-		-		-	_											_	L		-
	sBu	Othe				1		1																
	eedl	9				T	Γ	T	1				00	00	8	8	-			8	-	-	00	
	ny s	Gro											SO	200	220	30				20			100	
	w ma	ate													8	200			30				00	
	HOY	Priv				L									4	L								J
		Othe																						1
Sa	ery) dn				1	T	1	F	-	-	-	-	-	-	-	-	-		-	-	-	-	ł
tivit	Nurs	Gro				L	L							de la Br										
/ ac	ose	ate							-						-	-			-				-	ĺ
rsen	Wh	Priv																						
N	No	F		-	-					-	-						-				-	-		ĺ
	5	Othe																					-	Í
	tree	ber	-	-	-	-	-	-			-	-	-	1	-	-	-	-	-	-	-	-	-	ł
	ese	Tim			L		L																	۱
	d th	ertil	-	1	-	-	-	-			-	1	1	-	-			-	-			-	-	ľ
	lante	de F	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	_	_	+
	d no	Fodu									1											-	-	
_		1	-	N	m	4	2	9	2	8	6	0	-	N	m	4	22	6	N	8	1	1	-	h

