CONFINDENTIAL

FROM NSSA/92/93/3 MALAWI GOVERNMENT

$\frac{\text{NATIONAL SAMPLE SURVER OF AGRICULTURE}}{\text{GARDEN SURVEY}}$

PART A: IDETIFICATION

Survey Number		(1)	Str
Region/District		(2-3)	En
ADD		(4)	Vi
Project		(5)	Ho
Household Head		(6)	Ga

Stratum			(7-8)
Enumeration Area			(9-11)
Village	-		(12-13)
Household Number			(14-15)
Garden Number			(16-17)

PART B: GARDEN DETAILS

1. What type of garden is it?

Rain-fed garden		1	
Dimba Garden		2	(18)
Irrigated Garden		3	
Other (Specify)		4	

2. Is this your own garden?

Yes	1	
No	2	(19)

3. If yes to question 2, how long have you been in control of the garden?

Less than 2 years	1	
From 2 to 5 years	2	
More than 5 years	3	(20)
Don't know	4	
Specify years		

4. If No to question 2, from whom did you obtain permission to use the garden?

Relative by birth-male	1	
Relative by birth-female	2	
Relative by marriage-male	3	
Relative by marriage-female	4	(21)
Borrowed	5	
Estate/Scheme	6	
Other (Specify)	9	

5. Who was using this garden before?

Relative by birth-male	1	
	1	
Relative by birth-female	2	
Relative by marriage-male	3	
Relative by marriage-female	4	
Village Headman	5	-2
Estate/Scheme	6	
Virgin land	7	
Don't know	8	
Other No-Relative (Specify)	9	

-22

SKETCH:	Draw a sketch of the whole garden indicating clearly all the plots in it.				
North Arrow					

Plot	1st Main	2nd Main	3rd Main	1st Random	2nd Random	Date YSP	Area
No.	Crop	Crop	Crop	Number	Number	Laid	
01							
02							
03							
04							
05							

PART	<u>r C</u> : <u>PLOT DETAILS</u>	
6.	(a) Plot Number	(23-24)
	(b) Operator Number	(25-26)
	Specify Name of the Operator	
	(c) Sex of the Operator	Male1(27)Female2
	(d) Plot Area	(28-31)
7.	What crops are grown in this plot? Indicate Variety if maize, groundnuts or rice is grown.	1st Main Crop
		2nd Main Crop
		2rd Main Crop

8.		e grown in this plot last Season? if Maize, G/nuts or rice	
	•	1 st Main Crop	(32-34)
		2 nd Main Crop	(35-37)
		3 rd Main Crop	(38-40)
(b)	What crops were gro Indicate Variety if M was grown.	wn in this plot before last season? aize, G/nuts or rice	
		1 st Main Crop	(41-43)
		2 nd Main Crop	(44-46)
		3 rd Main Crop	(47-49)

9. Where did the operator obtain seeds which he/she planted in this plot?

Detained from last access		
Retained from last season	1	
Project/Scheme Credit	2	
As seed from ADMARC	3	
As food from ADMARC	4	(50
As food from a market	5	
Bought locally	6	
Other (Specify)2	9	

10. How was this plot ploughed this season?

Not ploughed this season	0	
Tilled by hoeing	1	(51)
Ploughed by oxen	2	
Other (Specify)	9	

RE-SURVEY/ CONTINUATION

Plot No	Stations	Forward bearing	Length Of side	Backward bearing	Plot no	Plot stations From-To	Forward bearing	Length of side	Cumulative Lengths of plot sides	Backward bearing
									1	
									-	

GARDEN MEASUREMENTS

PLOT MEASUREMENTS

Garden Stations from-To	Forward bearing	Length Of side	Backward bearing	Plot no	Plot stations From-To	Forward bearing	Length of side	Cumulative Lengths of plot sides	Backward bearing
A-B					TIOIII TO			piot sides	
B-C									
C-D									
D-E									
E-F									
F-G									
G-H									
H-I									
I-J									
J-K									
K-L									
L-M									
M-N									
N-O									
O-P									
P-Q									
Q-R									
R-S									
S-T									
T-U									
U-V									
V-W									
W-X									
X-Y									
Y-Z									
Z-A									
A-B									
B-C									
C-D									
D-E									
E-F									
F-G									
G-H									
I-J									
J-K									
K-L									
L-M									

RE-SURVEY/ CONTINUATION

Garden Plot No	Stations	Forward bearing	Length Of side	Backward bearing	Plot no	Plot stations From-To	Forward bearing	Length of side	Cumulative Lengths of plot sides	Backward bearing

GARDEN MEASUREMENTS

PLOT MEASUREMENTS

Garden Stations	Forward bearing	Length Of side	Backward bearing	Plot no	Plot stations	Forward bearing	Length of side	Cumulative Lengths of	Backward bearing
from-To					From-To			plot sides	
A-B									
B-C									
C-D									
D-E									
E-F									
F-G									
G-H									
H-I									
I-J									
J-K									
K-L									
L-M									
M-N									
N-O									
O-P									
P-Q									
Q-R									
R-S									
S-T									
T-U									
U-V									
V-W									
W-X									
X-Y									
Y-Z									
Z-A									
A-B									
В-С									
C-D							1		
D-E									
E-F									
F-G							1		
G-H									
I-J	1						+		
J-K									
K-L							+		
L-M									
T-1A1		1					1		

11.	(a) If ploughed by oxen, indicate number of hour/days spent		
	No. Of hours		(52-54)
	No. Of days		(55-57)
	(b) Indicate total amount spent if oxen rented		
	Total amount Not applicable	9	(58-62) (63)
12.	How was this plot ridged this season?		(00)
	Not ridged this season	0	
	Ridged by hoeing	1	
	Ridged by oxen	2	(64)
	Other (Specify)	 9	
13.	(a) If ridged by oxen, indicate number of hours/days spent.		
	No. Of hours		(65-67
	No. Of days		(68-70)
	(b) Indicate total amount spent if oxen rented. Total amount		(71-75
	Not applicable	 9	(76)

14. How was this plot planted this season?

Flat planted	1	
Used last season's ridges	2	
Used this season's ridges	3	(77)
Planted into holes	4	
planted into mounds	5	
Other (Specify)	9	

15. How many times was this plot weeded?

Not weeded	0	
Weeded only once	1	(78)
Weeded twice	2	

16. Was farm yard manure applied in this plot?

Yes	1	(79)
No	2	

17. (a) Was fertilizer applied in this plot?	
	Yes 1 (80) No 1
(b) Application details:	
1st Application Time Type Bags	wt/bag (Office) (81-86
2 nd Application	(87-92
TIME 1. Within 1 week of germinating/8-14 days after transplanting 2. At/before knee height/2-4 weeks after transplanting 3. Between tnee height and tasseling/5-8 weeks after transplanting 4. After tasseling/after 8 weeks after transplanting 9. Other/unknown	TYPE 1. 20:20:0 2. Sulphate of Ammonia 3. DAP 4. 23.21:0+45 5. CAN 6. UREA 7. Mixture of two or mre of above 9. Other

93

18. How was the fertilizer obtained?

Cash	1
Credit	2
Combination of the two above	3
Gift	4
Other (Specify)	5

19. (a) Were you (operator) refused to get loan/credit?

Yes	1	94
No	2) -

(b) If yes, what were the reasons?

Do not to a farmers' club	1	
Previous debt problem	2	0.5
Default club	3	95
Other (Specify)	4	

(c) Why default?

Harvest was not good	1	
Sold inputs	2	
Club Chairman not paid the money to the Govt.	3	(96)
Lack of contact by club officials and extension staff	4	
Other (specify)	9	

20. Did you use pesticides in this plot?

Yes	1	(97)
No	2	

If yes, give details:

_	(Office)		_	Wt/Unit		_,	Pack/Tin		_	Type			
(98-103)													
_									_			_	
(104-109)													

TYPE CODE

- 1. Demethoate
- 2. Carbary 1
- 3. Ripcord
- 4. Decis
- 5. Cymbush
- 6. Karate
- 7. Pyrethrol9. Other/Unknown
- **21**. How were these pesticides obtained?

Cash	1	
Credit	2	
Combination of the two above	3	(116)
Gift		
Other (specify)	9	

22. Was a yield sub-plot laid in this plot?

Yes	1	
No	2	
Whole plot as YSP	3	(117)

Next Plot if necessary Copy information	from identification
	(1-22)
PART C: PLOT DETAILS	
6. (a) Plot Number	(22.24)
(b) Operator Number	(23-24)
Specify Name of the Operator	
(c) Sex of the Operator	Male 1 Female 2 (27)
(d) Plot Area	(28-31)
7. What crops are growing in this plot? I	ndicate Variety if maize, groundnuts or rice is grown.
	1 st Main Crop
	2 nd Main Crop
	3 rd Main Crop

8. (a) What crops were grown in this plot last season? Indicate Variety if Maize, G/nuts or rice was grown.	
1 st Main Crop	(32-34)
2 nd Main Crop	(35-37)
3 rd Main Crop	(38-40)
(b) What crops were grown in this plot before last season? Indicate Variety if Maize, G/nuts or rice was grown.	
1 st Main Crop	(41-43)
2 nd Main Crop	(44-46)
3 rd Main Crop	(47-49)

9. Where did the operator obtain seeds which he/she planted in this plot?

Retained from last season	1
Project/Scheme Credit	2
As seed from ADMARC	3
As food from ADMARC	4
As food from a market	5
Bought locally	6
Other (specify)	9

(50)

10. How was this plot ploughed this season?

Not ploughed this season	0	
Tilled by hoeing	1	
Ploughed by oxen	2	(51)
Other (specify)	9	

11. (a) If ploughed by oxen, indicate number of hours/days spent.

No. of hours		(50.54)
No. of days		(52-54)
		(33-31)

(b) Indicate total amount spent if oxen rented.

Total amount					(58-62)
Not applic	cable	e		9	(63)

12. How was this plot ridged this season?

Not ridged this season	0
Ridged by hoeing	1
Ridged by oxen	2
Other (specify)	9

(64)

13. (a) If ridged by oxen, indicate number of hours/days spent.

No. of hours		(65-67)
No. of days		(68-70)

(b) Indicate total amount spent if oxen rented.

Total amount					(71-75) (76)
Not applical	ble			9	

14. How was this plot planted this season?

Flat planted	1
Used last season's ridges	2
Used this season's ridges	3
Planted into holes	4
Planted into mounds	5
Other (specify)	9

(77)

15. How many times was this plot weeded?

Not Weeded	0	
Weeded only once	1	(78)
Weeded twice	2	

16. Was farm yard manure applied in this plot?

Yes	1	(79)
No	2	

17. (a) Was fertilizer applied in this plot?	Yes 1 (80) No 2
(b) Application details: Time type Bags 1st Application 2nd Application	Wt/bag (Official)
TIME 1. Within 1 week of germinating / 8-14 days after transplanting 2.At / before knee height / 2-4 weeks after transplanting 3. Between knee height and tasseling / 5-8 weeks after transplanting 4. After tasseling / after 8 weeks after transplanting 9. Other / unknown	TYPE 1. 20:20:0 2. Sulphate of Ammonia 3. DAP 4. 23:21:O+45 5. CAN 6. UREA 7. Mixture of two or more of above 9. Other

18. How was the fertilizer obtained?

Cash	1	
Credit	2	
Combination of the two above	3	(93)
Gift	4	
Other (Specify)	9	

19. (a) Were you (operator) refused to get loan/credit?

Cash	1	(94)
Credit	2	

(b) If yes, what were the reason?

Do not belong to a Farmers' club	1	
Previous debt problem	2	
Default club	3	(95)
Other (specify)	9	

-21-

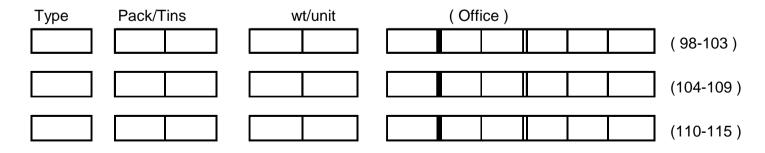
(C) why default	(C)	Why	default
-----------------	-----	-----	---------

Harvest was not good	1	
Sold inputs	2	
Club Chairman not paid the money		
to the Govt.	3	(96)
Lack of contact by club official and		
extension staff	4	
Other (Specify)		
	9	

20. Did you use pesticides in this plot?

Yes	1	
No	2	(97)

If yes/ give details:



TYPE CODES

- 1. Demethoate
- 2. Carbary 1
- 3. Ripcord
- 4. Decis
- 5. Cymbush
- 6. Karate
- 7. Pyrethrol 9. Other/Unknown
- **21.** How were these pesticides obtained?

Cash	1	
Credit	2	
Combination of the two above	3	(116)
Gift	4	
Other (specify)	9	

22. Was a yield sub-plot laid in this plot?

Yes	1	(117
No	2	
Whole plot as YSP	3	

1	2	
- /	1	_

Next Plot if necessary copy information from identification	cation
	(1-22)
PART C: PLOT DETAILS 6. (a) Plot Number (b) Operator Number	(23-24)
Specify Name of the operator	
2. (c) Sex of the operator	Male1Female2
(d) Plot Area 7. What crops are grown in this plot? Indicate variety if maize,	groundnuts or rice is grown.
1 st Main Crop 2 nd Main Crop 3 rd Main Crop	

8. (a) What crops were grown in this plot last season? Indicate variety if maize, G/nuts or rice was grown.	
1 st Main Crop	
2 nd Main Crop	
3 rd Main Crop	
(b) What crops were grown in this plot before last season? Indicate Variety if Maize, G/nuts or rice was grown.	
1 st Main Crop	
2 nd Main Crop	
3 rd Main Crop	

9. Where did the operator obtain seeds which he/she planted in this plot?

r		
Retained from last season	1	
Project/Scheme Credit	2	
As seed from ADMARC	3	
As food from ADMARC	4	(50)
As food from a market	5	
Bought locally	6	
Other (Specify)2	9	

10. How was this plot ploughed this season?

Not ploughed this season	0	
Tilled by hoeing	1	(51)
Ploughed by oxen	2	
Other (Specify)	9	

11.	(a) If ploughed by oxen, indicate number	per of hour/days spent			
			No. Of hours No. Of days		(52-54) (55-57)
	(b) Indicate total amount spent if oxen	rented			(===,
			Total amount Not applicable	9	(58-62) (63)
12.	How was this plot ridged this season?				(/
		Not ridged this season		0	
		Ridged by hoeing		1	
		Ridged by oxen		2	(64)
		Other (Specify)	9	
13.	(a) If ridged by oxen, indicate number	of hours/days spent.			
			No. Of hours		(65-67)
			No. Of days		(68-70)
			ito. Oi dayo		(00 10)
	(b) Indicate total amount spent if oxen	rented.			
			Total amount		(71-75)
			Not applicable	9	(76)

14. How was this plot planted this season?

Flat planted	1	
Used last season's ridges	2	
Used this season's ridges	3	(77)
Planted into holes	4	
planted into mounds	5	
Other (Specify)	9	

15. How many times was this plot weeded?

Not weeded	0	
Weeded only once	1	(78)
Weeded twice	2	

16. Was farm yard manure applied in this plot?

Yes	1	(79)
Νο	2	

Yes 1 (80)
wt/bag (Office) (81-86
(87-92)
TYPE
1. 20:20:0 2. Sulphate of Ammonia 3. DAP 4. 23.21:0+45 5. CAN 6. UREA 7. Mixture of two or mre of above 9. Other

93

18. How was the fertilizer obtained?

Cash	1
Credit	2
Combination of the two above	3
Gift	4
Other (Specify)	5

19. (a) Were you (operator) refused to get loan/credit?

Yes	1	94
No	2	

(b) If yes, what were the reasons?

Do not to a farmers' club	1	
Previous debt problem	2	0.5
Default club	3	95
Other (Specify)	4	

(96)

(c) Why default?

Harvest was not good	1
Sold inputs	2
Club Chairman not paid the money to the Govt.	3
Lack of contact by club officials and extension staff	4
Other (specify)	9

20. Did you use pesticides in this plot?

Yes	1	(97)
No	2	

If yes, give details:

Type	 Pack/	Tin	_	Wt/	Unit	_	(Off	ice)			
											(98-103)
			_			_					
											(104-109

TYPE CODES

- 1. Demethoate
- 2. Carbary 1
- 3. Ripcord
- 4. Decis
- 5. Cymbush
- 6. Karate
- 7. Pyrethrol
- 8. Other/unknown
- 21. How were these pesticides obtained?

Cash		1	
Credit		2	
Combination of the two above		3	(116)
Gift		4	
other (Specify)	·	9	

22. Was a yield sub-plot laid in this plot?

Yes	1	
N o	2	(117)
W hole plot as YSP	3	

(23)	(24)	(25)	(26)	(27)	(28)	(29)	30)	(31)
Crop Type	Date Planted	No.YSP Plants	No.YSP Planting					
J.F			Station				1	
Maize	Month half			No. Cobs harvested	No.cob Missing	Wt. shelled	Reason Zero Yield	Moisture content
Waize					Wissing			(118-142)
				Wt.	wt	Wt.		
G-Nuts				harvested unshelled	sub-sampled unshelled	Sub-sample shelled		
								(143-165)
				Wt. harvested				
Other				shelled				(166,194)
								(166-184)
								(185-203)
				No. Cobs	No.cob	Wt.	Reason	Moisture
Maize				harvested	Missing	shelled	Zero Yield	content
				Wt.		Wt.		(118-142)
				harvested	wt sub-sampled	Sub-sample		
G-Nuts			 	unshelled	unshelled	shelled		(143-165)
				Wt.				(143-103)
				harvested				
Other				shelled				(166-184)
								(105,000)
								(185-203)
				No. Cobs	No.cob	Wt.	Reason	Moisture
Maize				harvested	Missing	shelled	Zero Yield	content (118-142)
				Wt.	wt	Wt.		
G-Nuts				harvested unshelled	sub-sampled unshelled	Sub-sample shelled		
- Truts					unshened	sheried		(143-165)
				Wt. harvested				
Other				shelled				(144.100)
								(166-184)
								(185-203)
Jan = 1	Month Jul = 7					Crop aban		= 1 = 2
Feb $= 2$	Aug = 8					Treatment	by Operator error	= 2 = 3
Mar = 3	Sep = 9					Whole plo	t as YSP	= 4
Apr = 4 May = 5	$ \begin{aligned} Oct &= 10 \\ Nov &= 11 \end{aligned} $					Other (Sp		= 9
June = 6	Dec = 12					•••••	•••••	
First half = 1	<u>Half</u>					<u> </u>		
Second half = 2					442			
Unknown = 3				4	1'1			

PART E: DATE OF INTERVIEW AND CHECKING

	Garden Measuren	nent	Visit 2		Visit		Harvest	
Enumerator	Date	Name	Date	Name	Date	Name	Date	Name
Interview								
Call back								
				•				
Supervisor								
1st check								
2 nd check								
Office								
1st check								
2 nd check								

400 MAIZE	450 ROOT CHOPS	510 BEVERAGE CHOP	S 550 FRUIT TREES
401 Local	451 cassava	511 tea	551 mangoes
402 MH12,MH15,MH16,NSCM	1 41	512 coffee	552 bananas
403 other hybrid	456 sweet potaoes	513 cocoa	553 pawpaw
404 hybrid once grown	457 irish potatoes		554 avocados
405 UCA,CCA,CCC,Tuxpeno	458 yam	519 other/unknown	555 guavas
407 other composite	459 mix/other/unknown		556 oranges
Bantum		520 <u>VEGETABLES</u>	557 lemons
408 mixture	460 GROUNDNUTS	521 cabbage	558 limes
409 other/Unknown	461 chalimbana	522 pumpkin	559 tangarines
	462 manipinta	523 onions	560 grapefruit
410 <u>RICE</u>	463 malimba	524 carrots	561 citrus mixture
411 kilombera	464 RGI	525 tomatoes	562 pineapple
412 other local	465 chitembana	526 squash	563 peach
413 faya	466 mawanga	527 eggplant	564 apple
414 bluebonnet	467 other local variety	528 turnips	
418 mixture	468 mixture	529 chillies/peppers	568 mixture
419 other/unknown	469 other/unknown	530 melons	569 other/unknown
		531 okra	
420 MILLET	470 <u>PULSES</u>		570 <u>TREES</u>
421 bullrush	471 green beans	537 greens/spinsch/lettuce	571 macademia
422 fingermillet	472 ground beans	538 mixture/dimba garden	572 cashew
	473 dolichos beans	539 other/unknown	573 tung
428 mixture (millets)	474 soya beans		574 casala
429 other/unknown	475 white haricot	540 <u>OTHER CROPS</u>	575 gmelina
	476 guar beans	541 sugarcane	576 bluegum
430 <u>SORGHUM</u>		542 ninde	577 cedrella
431 local	478 mixed beans		578 mixture
432 selected local	479 other/unknown	549 other/unknown	579 unknown/other
433 improved			
434 sweet stalk	481 chick peas		580 <u>FALLOW/PASTURE</u>
435 brewing sorghum	482 mixed beans		581 virgin land
438 mixture	483 pigeon peas		582 regenerated
439 other/unknown			bushland
	488 mixed peas		583 fallow
	489 other/unknown		584 grass
440 <u>OTHER GRAINS</u>	490 <u>COTTON</u>		585 grass
441 wheat	499 other/unknown		590 <u>MIXTURE</u>
442 sunflower			(for crop rotation)
443 castor seed	500 <u>TOBACCO</u>		591 maize/groundnuts
444 Sesame	501 dark fired		592 maize/pulse
445 gram	502 sun/air		593 maize/cassava
448 mixture	503 burley		599 other/unknown
449 other/unknown	504 flue cured		
	505 oriental		
	509 other/unknown		