Table K-19 Results of Farm Household Survey (19)

	Count / 0	1	2	*	7	5	9	7	8	6	Total (0-9)
5105a				 							
5105b											
5105c											
5105d											
5105c											
5105a 5105b 5105c 5105d 5105c 5105f 5106a 5106b 5106c 5106d 5106c 5106f											
5106a											
\$106b								_			
5106c											
5106d											
\$106e											
5106f											

Table K-18 Results of Farm Household Survey (18)

ı			I			
	5107a	5107b	5107a 5107b 5107c 5107d 5107e 5107f	\$107d	5107e	\$107f
Average	0.0	0.0	102.5	0.0	102.5	0.0
	5107a	\$107b	5107a 5107b 5107c 5107d 5107c 5107f	5107d	5107e	5107f
Count / 0						
2						
3						
4						
\$					•	
9						
7						
8						
6						
Total (0-9)						

	52012	52015	\$201c	52012 S2016 S201c S201d S201e S201f S201g S201h	5201c	5201f	5201g	\$201h
Average	4.4	8.0	4.9	1073.6	1073.6		3.2	
	5201a	\$201b	5201c	5201a 5201b 5201c 5201d 5201e 5201f 5201g 5201h	5201e	5201f	5201g	5201h
Count / 0						0.0%		0.0%
						75.0%		0.0%
2						12.5%		0.0%
w	<u> </u>					12.5%		0.0%
4						0.0%		0.0%
S						%0.0		0.0%
9						2000		0.0%
7			_			0.0%		0.0%
8						20.0		0.0%
٥				ļ 		0.0%		0.0%
Total (0-9)						100.0%		0.0%

Table K-20 Results of Farm Household Survey (20)

	5202a	\$202b	5202c	S202d	5202c	5202£	5202a 5202b 5202c 5202d 5202c 5202f 5202g 5202h	5202h	_	
Average		1.1	3	4.2 1556.1 1556.1	1556.1		0.9			_
	5202a	\$202b	5202a 5202b 5202c 5202d 5202c 5202f 5202g 5202h	5202d	5202c	\$202f	5202g	5202h		_
Count / 0						0.0%		0.0%		
-						2000		0.0%		_
64						25°48		0.0%		
3						12.5%		0.0%		
4						20.0		9.0%		-
\ °	0					0.0%		30.0		
9	150					20'0		0.0%		
						0.0%		0.0%		
						20.0%		0.0%		_
5	0					0.0%		.0. <i>9</i> %		
Total (0-9)						100:0%		0.0%		_

Table K-21 Results of Farm Household Survey (21)

53012	4301 k	,				
	2,50	530 ic	53014	5301c	\$301f	5301a 5301b 5301c 5301d 5301e 5301f 5301g
Average						

	5301a	5301b	5301c	5301b 5301c 5301d 5301c 5301f 5301g	5301c	\$301f	5301g
Count / 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1	0.0%	0.0% 100.0%	83.3%	%6.0%	0.0%	0.0%	0.0%
7	:00:0%	0.0%	8.3%	9.1%	81.8%	14,3%	42.9%
3	90.0	0.0%	8.3%	0.0%	18.2%	85.7%	0.0%
4	0.0%	0.0%	0.0%	20.0	0.0%	0.0%	57.1%
5	0.0%	0.0%	90.0	0.0%	0.0%	0.0%	0.0%
٩	%0.0	0.0%	20.0	0.0%	0.0%	0.0%	0.0%
7	\$0.0	250.0	20.0%	200	0.0%	0.0%	0.0%
8	0.0%	0.0%	0.0%	200	0.0%	90.0	0.0%
6	%0.0	0.0%	20.0	0.0%	0.0%	0.0%	0.0%
Total (0-9) 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100,0%	100.0%

Table K-22 Results of Farm Household Survey (22)

	5302a	5302b	5302b 5302c 5302d	5302d	5302e	5302ť	5302a 5302b 5302c 5302d 5302c 5302f 5302g
Average							

	5302a	5302b	5302c	5302a 5302b 5302c 5302d 5302c 5302f 5302g	5302c	5302f	5302g
Count / 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1	0.0%	81.0%	4.8%	66.7%	38.5%	0.0%	0.0%
177	100.0%	9.5%	47.6%	26.7%	38.5%	0.0%	0.0%
3	20.0	%56	47,6%	20.0	23.1%	0.0%	0.0%
4	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%	2500
\$	0.0%	0.0%	0.0%	%000	0.0%	0.0%	0.0%
9	20.0	2000	90.0	200	0.0%	20.0	250.0
7	0.0%	0.0%	0.0%	∞0.0	0.0%	0.0%	0.0%
8	20.0	20.0	0,0%	000	3500	0.0%	0.0%
6	0.0%	0.0%	0.0%	250.0	0.0%	0.0%	0.0%
Total (0-9) 100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	100.0%	100.09	100.0%	0.0%	20.0

Table K-23 Results of Farm Household Survey (23)

	5303a	5303b	5303c	5303d	5303a 5303b 5303c 5303d 5303e 5303f 5303g	5303f	5303g
Average							

0.0%	0.0%	100.0%	:00.0% 100.0%	250 001	100.0%	100.0%	Toral (0.9) 100.0%
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6
0.0%	0.0%	%0.0	0.0%	0.0%	0.0%	0.0%	8
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6
0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5
0.0%	0.0%	20.0	0.0%	0.0%	0.0%	0.0%	4
0.0%	0.0%	50.0%	50.0%	\$0.0%	0.0%	0.0%	3
0.0%	0.0%	50.0%	0.0%	33.3%	0.0%	100.0%	2
0.0%	0.0%	0.0%	50.0%	16.7%	100.0%	9:00	1
0.0%	%0'0	20.0	0.0%	0.0%	0.0%	0.0%	Count / 0
5303g	5303e 5303f 5303g		5303d	5303c	5303a 5303b 5303c 5303d	5303a	

Table K-24 Results of Farm Household Survey (24)

1740	5401a 5401b 5401c 5401d 5401c 5401g 5401b 5401i 5401	5401c	5401d	5401c	5401f	\$401g	5401b	5401i	5401;
Average 149.1	1 322.4	165.9	0.0	0.0	0.0	0.0	58.3	0.0	0.0

5401j											
5401i											
5401h											
5401a 5401b 5401c 5401d 5401f 5401g 5401h 5401i 5401j											
5401£											
5401e											
5401d											
5401c											
5401b										_	
5401a											
	Count / 0	1	2	3	7	5	9	7	8	6	Total (0-9)

Table K-25 Results of Farm Household Survey (25)

	5402a	5402a 5402b 5402c 5402d 5402c 5402f 5402g 5402h 5402i 5402j	5402c	5402d	5402e	\$402f	5402g	5402h	5402)	5402]
Average 211.6 188,4 13.3	211.6	188,4	13.3	32.0	0.0		0.01 140.0 44.3	4.4	0.0	õ

54	Count / 0	1	2	8	4	8	७	7	\$ 6	Total (0-9)
629										
5402b										
5402a 5402b 5402c 5402c 5402f 5402g 5402h 5402j 5402j										
5402d										
5402e										
5402f	,									
5402g										
5402h										
\$402										
5402j										

Table K-26 Results of Farm Household Survey (26)

5505		5505	0.0%	50.0%	0.0%	\$0.0%	0.0%	0.0%	0.0%	0.0%	200	0.0%	100.0%
5504	320.0												
5503		5503	71.4%	28.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
5502		5502	0.0%	26'06	0.0%	9.1%	0.0%	0.0%	20.0	20.0	0.0%	0.0%	100.0%
5501		1055	38.9%	61.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	Average		Count / 0	1	2	3	4	S	9	7	8	6	Total (0-9) 100.0% 100.0%

(27)
Survey
usehold S
M Farm Ho
Results of §
Table K-27

	6101a	61015	6101c	6101d	6101a 6101b 6101c 6101d 6101e 6101f 6101g 6101h 6101i 6101j 6101k	6101f	6101g	6101h	61011	6101j	6101k
Average		3.3	0.1	2.0	0.0	0.2	0.3	0.2	2.5		
						:					
	6101a	6101a 6101b 6101c 6101d 6101c 6101f 6101g 6101h 6101i 6101j 6101K	61010	61014	6101c	61015	6101g	4101A	6101i	6101j	6101k
Count / 0	20.0									0.0%	0.0%
1	45.8%	!								96.0%	6.7%
7.1	41.7%									0.0%	86.7%
3	8.39									4.0%	6.7%
4	4.2%									0.0%	0.0%
5	20.0									0.0%	0.0%
è	20'0									0.0%	0.0%
7	0.0%									0.0%	0.0%
8	9.00									0.0%	0.0%
6	0.0%									0.0%	0.0%
Total (0-9) 100.0%	100.0%									100.0%	100.0% 100.0%

Table K-28 Results of Farm Household Survey (28)

6102a 6102b 6102c 6102d 6102c 6102f 6102g 6102h 6102i 6102j 6102k

Average		3.1	0.1	0.2	000	0.2	0	0.2	2.5		İ
							l				
	6102a	6102a 6102b 6102c 6102d 6102e 6102f 6102g 6102b 6102; 6102j 6102k	6102c	6102d	6102e	6102f	6102g	6102h	6102	61023	6102k
Count / 0	0.0%									0.0%	20°C
1	45.8%									96.0%	6.75
7	41.7%									×00	×6.7%
3	8.3%									4.00	6.7%
4	4.2%									0.0%	0.0%
S	0.0%									0.0%	0.0%
9	0.0%									0.0%	0.0%
7	0.0%									0.0%	0.0%
80	0.0%									0.0%	30°0
6	0.0%									0.0%	0.0%
Total (0-9) 100.0%	100.0%									100.0%	100.0% 100.0%
									١		

6103a 6103b 6103c 6103c <th< th=""><th></th><th></th><th>ğ</th><th></th><th></th><th>5</th><th>í</th><th></th><th>3</th><th>3</th><th></th><th></th></th<>			ğ			5	í		3	3		
0.0 0.0 0.0 0.0 0.0		6103a	6103b	6103c	6103d	6103e	6103f	6103g	6103h	6103i	6103]	6103k
	Average		9.0	0.0	0.0		0.0	0.0		9.0		

6103j 6103k	0.0% 0.0%	100.0% 0.0%	0.0% 100.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	100.0% 100.0%
6103i 6	_	10			- - -			-			31
6103a 6103b 6103c 6103d 6103c 6103f 6103g 6103b 6103i											
6103g											
6103f											
6103e											
6103d											
6103c									_		
61035			Ŀ								
6103a	20.0%	33.3%	250'0	0.0%	66.7%	0.0%	0.0%	200	0.0%	0.0%	100.0%
	Count / 0	1	7	3	4	\$ 11.5	9	4	8	6	Total (0-9) 100.0%

Table K-30 Results of Farm Household Survey (30)

0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0	 6104a	6104b	6104a 6104b 6104c 6104d 6104c 6104f 6104g 6104b 6104h 6104 6104	6104d	6104e	61045	6104g	610ch	6104i	6104j	6104k
	 	9.0			0.0	0.7	0.0		1.2		

6104a 6104b 6104c 6104d 6104e 6104f 6104g 6104h 6104i 6104j 6104k	0.0% 0.0%	100.0% 0.0%	0.0% 100.0%	%0.0 %0.0	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	20.0 %0.0	20 00: 20 00:
6104g 6104t											-
e 6104f	_	_									
104d 6104											_
6104c 6											
6104											_
6104a	0.0%	50.0%	0.0%	200	20.0%	0.0%	0.0%	%0.0	0.0%	0.0%	10005
	Count / 0	1	2	3	4	\$	9	7	8	6	Total (0.0) 100 05

Table K-31 Results of Farm Household Survey (31)

	6105a	6105b	6105c	6105d	6105a 6105b 6105c 6105d 6105c 6105c 6105g 6105h 6105i 6105j 6105k,	61055	6105g	6105h	6105i	6105j	6105k
Average		1.5	0.1	0.1	0.0	0	0,0	0.0	1.3		
	6105a	6105b	6105c	6105d	6105a 6105b 6105c 6105d 6105e 6105f 6105g 6105h 6105i 6105j 6105k	6105f	6105g	6105h	6105i	6105j	6105k
Count / 0 0.0%	0.0%			-						000	2000

6105a 6105b 6105c 6105d 6105e 6105f 6105g 6105h 6105i 6105j 6105k	e 0.0%	30.0 a	0.0% 100.0%	80.0	6 0.0%	0.0%	6 0.0%	b 0.0%	6 0.0%	%O'O	100.0% 100.0%
6105	0.0%	100.0%	0.09	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.09
6105i											
610Sh											
6105g											
6105f											_
6105e											
6105d											
6105c											
6105b											
6105a	0.0%	10.0%	×0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
	Count / 0	1	2	3	7	5	9	7	8	6	Total (0.9) 100.0%

Table K-32 Results of Farm Household Survey (32)

	6106a	6106a 6106b 6106c 6106d 6106c 6106f 6106g 6106b 6106i 6106j 6106k	6106c	6106d	6106e	6106f	6106g	6106b	61061	6106j	6106k
Average		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	61062	6106a 6106b 6106c 6106d 6106c 6106f 6106g 6106h 6106i 6106j 6106k	6106c	6106d	6106e	6106f	6106g	6106h	6106	6106	6106k
Count / 0	20°0						-			0.0%	0.0%
1	%0°0									0.0%	0.0
2	%0'0									0.0%	0.0%
3	<u>0.0%</u>									0.0%	0.0%
4	200									20.0	0.0%
5	0.0%									0.0%	0.0%
9	200									0.0%	0.0%
7	%0.0									0.0%	0.0%
8	%0.0									0.0%	0.0%
6	20.0				-					0.0%	0.0%
Total (0-9)	%0.0									0.0%	0.0%

Table K-33 Results of Farm Household Survey (33)

								•		
	6107a	6107b	6107c	6107d	6107e	61075	6107g	6107h	6107i	6107a 6107b 6107c 6107d 6107e 6107f 6107g 6107h 6107i 6107j 6107k
Average		7.0	7.0 1.5	0.3	0.1	0.7	1.5 0.3 0.1 0.7 0.6 0.3 5.0	0.3	5.0	

6107a 6107b 6107c 6107d 6107c 6107f 6107g 6107h 6107i 6107j 6107k	0.0%	0.0%	0.0% 100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	20.0%	100.0% 100.0%
6107	0.0%	100.0%	0.0%	%0.0	0.0%	0.0%	0.0%	20.0	0.0%	20.0	100.0%
6107i											
6107h											
6:07g											
61075											
6107c											
6107d											
6107c											
6107b											
6107a	0.0%	0.0%	0.0%	3,100.0%	20.0	20.0	0.0%	0.0%	0.0%	0.0%	100.0%
	Count / 0	1	2	3.	4	5	9	7	8	6	Total (0-9) 100.0%

Table K-34 Results of Farm Household Survey (34)

מינים ליינים מינים ליינים מינים מיני	-01- OF01-	-	 Carolina Carolina Car	25050	بمعصم	0000	2000	***
Versee 0.1 1200.0 105.9	105.9		0.1	73.3	8.8			

0.00% 0.00% 0.00% 0.00% 0.00% 0.00% 0.00%	6201a 6201b 6201c 6201d 6201c 6201f 6202a 6202c 6202d 6202c 6202f	30.0 and	\$0.0% \$0.0% \$0.0% \$0.0%	0.05 0.0% 0.0% 0.0%	35.55 370.00 370.001 80.02 33.3.3.3	0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0	%0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0	80.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0	%0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0 %0.0	\$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0 \$0.0	%0°0 %0°0 %0°0 %0°0 %0°0	
	01c 6203d 6			l		1	20.0%		50.0	0.0%		
	6201a											
6201a		Count / 0	1	2	3	4	5	9	7	8	6	

Table K-35 Results of Farm Household Survey (35)

4e 6204f			62032 62036 6203c 6203d 6203e 6203f 6204a 6204b 6204c 6204d 6204c 6204f	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%	200 200
62033 62035 62036 62036 62036 62036 62043 62040 62040 62040 62040			74d 620	0.0%	0.0% 0.	0.0% 0.	0.0% 0.	0.0% 0.	0.0% 0.	0.0% 0.	0.0% 0.	0.0% 0.	200
620	0.0	}	4c 620	0	0	0	0	0	0	•	0	•	
8	3		629										
629	0.0		6204										L
6204a	0.0		6204a						L				
6203f			6203f	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	90.0	0.0%	200
6203e			6203e	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2000
6203d		Ì	6203d	20.0	0.0%	90.0	0.0%	0.0%	.0.0 %	0.0%	0.0%	0.0%	5
6203c	0.0		6203c										
62035	0.0		62035					<u> </u>					
6203a	0.0		6203a	-									
	Average			Count / 0	7.	2	3	4	S	٥	7	8	C

Table K-36 Results of Farm Household Survey (36)

80.0

Total (0-9)

	6205a	6205a 6205b 6205c 6205d 6205e 6205f 6206a 6206b 6206c 6206c 6206f	6205c	6205d	6205e	620Sf	6206a	62065	6206c	6206d	6206e	6206f
Average	0.6	17.5	10.9				0.0	0.0	0.0	·		
	6205a	62052 62055 6205c 6205d 62056 6205f 6206a 6206b 6206c 6206d 6206c 6206f	6205c	6205d	6205c	6205f	6206a	6206b	6206c	6206d	6206e	62065
Count / 0				0.0%	0.0%	20.0				20.0%	0.0%	0.0%
1				90.0	0.0%	0.0%				%0.0	0.0%	0.0%
63				0.0%	0.0%	0.0%				20:0	0.0%	0.0%
3				100.0%	100.0% 100.0%	0.0%				20.0	0.0%	0.0%
4				0.0%	i	0.0% 100.0%				0.0%	0.0%	0.0%
5				20.0	0.0%	0.0%				20.0 m	0.0%	0.0%
9				0.0%	0.0%	20.0				0.0%	20.0	0.0%
7				0.0%	0.0%	0.0%				20.0	2000	0.0%
8				0.0%	90.0	90.0				0.0%	0.0%	0.0%
6				0.0%	9.0%	0.0%				0.0%	20.0	0.0%
Total (0-9)				100.0%	100.0% 100.0% 100.0%	100.0%				0.0%	2000	0.0%

Table K-37 Results of Farm Household Survey (37)

	6301	6302	6303 6304		6305	6306
Average	28.3	42.5	33.2	74.2	0.0	178.2

6301 63	Count / 0	 7	Ċ	4	8	9	7	8	6	Total (0-9)
6301 6302 6303										
6304										
6305 6306										
6306										

Table K-38 Results of Farm Household Survey (38)

ĺ											
	3	9	6403	§	6405	6401 6402 6403 6404 6405 6406 6407 6408 6409 6410 6	6407	8408	\$ \$210	6411a	64115
Average											

	6401	6402	6403	6404	6405	9059	6407	6408	6409	6410	6410 64113	\$ 5135
Count / 0	26.5%	0.0%	20.0	0.0%	45.8%	0.0℃	8.3%	0.0%	0.0%	0.0%	20.0	0.0%
1	73.5%	50.0%	64.0%	\$2.0%	41.7%	60.0%	79.2%	62.5%	48.0%	37.5%	36.4%	28.6%
2	20.0	37.50	36.0%	8.0%	12.5%	4.0%	0.0%	25.0%	44.0%	45.8%	4.5%	90.0
3	0.0%	0.0%	0.0%	32.0%	0.0%	0.0%	0.0%	12.5%	8.0%	16.7%	22.7%	57.1%
4	0.0%	12.5%	20.0	8.0%	0.0%	16.0%	12.5%	0.0%	20.0	0.0%	27.3%	14.3%
5	0.0%	9.0°%	20.0	0.0%	0.0%	0.0%	0.0%	0.0%	80.0	0.0%	20.0	0.0%
9	%0.0	0.0%	20.0	2500	0.0%	20.0	0.0%	9.0%	20.0	0.0%	9.1%	0.0%
7	సం.0	0.0%	0.0%	20.0	ى0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
8	0.0%	0.0%	20.0	₩0.0	0.0%	<u> చ</u> 0:0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
9	0.0€	0.0%	0.0%	0.0%	0.0%	0.0%	200	0.0%	20.0	0.0%	0.0%	0.0%
Total (0-9)	100.0% 100.0% 100.0% 100.0%	100.0%	300.001	350.001		20.001 20.001	30.001	300.05	100.0% 100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	300.0%

Table K-39 Results of Farm Household Survey (39)

64110 64120 64120 64120 64120 64120 6413 6414 6415	
6412b 6412c 64	
1c 6412a	
64]	Average

	6411c	6412a	6411c 6412a 6412b 6412c	6412c	6412d	6412d 6412e	6413	6414	6415
Count / 0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%
1	0.0%	0.0%	20.0	9.0%	20.0	0.0%	50.0%	11.8%	56.7%
2	0.0%	0.0%	0.0%	0.0%	0.0%	20.0	0.0%	0.0%	0.0%
3	0.0%	10.0%	%0 00	0.0%	20.0	0.0%	800	5.9%	33.3%
4	0.0%	70.0%	100.0%	0.0%	0.0%	0.0%	0.0%	5.9%	0.0%
\$	100.0%	0.0%	20.0	0.0%	0.0%	0.0%	0.0%	29.4%	90.0
9	0.0%	20.0%	0.0%	0.0%	0.0%	2000	0.0%	47.1%	0.0%
7	20.0	0.0%	20.0	0.0%	0.0%	0.0%	9.00	20.0	0.0%
8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	20.0	0.0%	0.0%	20.0	0.0%	0.0%	0.0%	0.0%	0.0%
Toral (0.9) 100.0%	100.05		100.0% 100.0%	0.0%	0.0%	0.0%	0.0% 100.0% 100.0%	100.0%	100.0%

Table K-40 Results of Farm Household Survey (40)

	7101	7101 7102 7103	7103	7201	7202	7203	7301	7302	7302 7303	7304	7305	338
Average					1956.2					3476.2		62833
	7101	2012	7103	7201	7202	7203	7301	7302	7303	7304	7305	738
Count / 0	20.0	0.0%	%0°0	11.8%		0.0%	20.6%	0.0%	0.0%		0.0%	
1	20.0	20.0%	20'0S	88.2%		100.0%	79.4%	50.0%	50.0%		6.3%	
2	28.6%	40.0%	0.0%	0.0%		0.0%	0.0%	7.7%	29.2%		12.5%	
3	0.0%	∞0.0	0.0%	0.0%		0.0%	20.0	9.0%	20.8%		6.0%	
4	4 71.4%	0.0%	0.0%	0.0%		20.0	0.0%	42.3%	2000		3.1%	
5	20.0	20.0%	25.0%	0.0%		20.0	0.0%	0.0%	0.0%		15.6%	
6	0.0%	10,0%	0.0%	0.0%		∞0.0	0.00	0.0%	0.0%	_	56.3%	
7	20.0	10.0%	25.0%	0.0%		0.0%	0.0%	20.0%	0.0%		6.3%	
8	0.0%	0.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	0.0%	_	0.0%	
6	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	250.0	20.0%		0.0%	
Total (0.9) 100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	100.0%	100.0%		100.0%	300.001	100.0% 100.0% 100.0% 100.0%	100.05		100.0%	

Table K-41 Results of Farm Household Survey (41)

528.8 17.6

1989.8

Average

100.0%			100.0%		0.0% 100.0%	0.0%	0.0%	100.0%	100.0%	Total (0-9) 100.0% 100.0% 100.0%	6-6)
0.0%			0.0%		0.0%	20.0	0.0%	0.0%	0.0%	0.0%	6
0.0%			0.0%		0.0%	0.0%	0.0%	16,7%	17.6%	3.0%	တ
0.0%			0.0%		0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	7
0.0%			0.0%		0.0%	0.0%	0.0%	16.7%	0.0% م	15.2%	٥
0.0%			0.0%		0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	5
0.0%			11.8%		0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	4
0.0%			0.0%		0.0%	0.0%	0.0%	16.7%	23.5%	9.1%	3
0.0%			11.8%		0.0%	0.0%	0.0%	0.0%	17.6%	33.3%	2
52.9%			76.5%		47.1%	0.0조	0.0%	16.7%	41.2%	36.4%	1
47.1%			200		\$2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	Count / 0
8206	8205	8204	8203	8202	8201	8105	8104	\$103	8102	8101	

Table K-42 Results of Farm Household Survey (42)

1876.4

Average

	8301	8302a	8302b	8302c	8303	8304	8305	8306	8307	8308	8401	8402
Count / 0	8.8%	0.0%	250.0	9.0%	6.3%	0.0%	47.1%	0.0%		0.0%	0.0%	
I	2716	3,4%	2000	6.7%	56.3%	200	0.0%	0.05		0.0%	80.8%	
2	0.0%	10.3%	12.0%	6.7%	31.3%	0.0%	52.9%	11.8%		91.3%	3.8%	
3,	-0.0%	62.1%	16.0%	6.7%	0.0%	300.001	20.0	0.0%		0.0%	200	
4	20.0	17.2%	20.0%	33.3%	20.0%	20.0	250.0	\$2.9%		4.3%	15.4%	
S	0.0%	3.4%	32.0%	20.0%	20.0	0.0%	0.0%	0.0%		0.0%	0.0%	
9	0.0%	3.4%	20.0%	26.7%	3,1%	20.0	0.0%	35.3%		4.3%	0.0%	
7	20.0	0.0%	20.0	0.0%	20.0	0.0%	0.0%	0.0%		20.0	0.0%	
8	0.0%	%O'0	2000	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	
6	0.0%	200	0.0%	0.0%	3.1%	0.0%	0.0%	0.0%		0.0%	000	
Total (0-9) 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	300.0%	100.0%	100.0%		100.0% 100.0%	100.0%	

Table K-43 The Detail of Questionnaires and Answer Codes for Questionnaire

Code	ltem	0	1	2	3	4	5	6	7	8	9
2100	Housing Conditions	340	存变物。	<u> एक्स</u> ्राह्य			1 9 1 3 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
2101	Master's House	3		4.00	25次2000		45.50	9 1935	25 C 36 P	* 1 4 4 4	
2101a	Duration after Built (year)				<u> </u>						
21015	Wall Material		Pole	Pole/Med	Brick (B)	B-Cement	B/Mud	Others			
2101c	Roof Material		Thatch	Iron Sheet	Asbesios	CemeniStab	Others				
21013	Floor Material		Oung/Mud	Cement	Others						
2101e	Shape of Building		Round	Rectangle	Square	Others	<u> </u>				
2102	Family House				F. 331.5		Partify.				SER EL
	Duration after Built (year)				<u></u>		<u> </u>				
21026	Wall Material		Pole	Pole/Mad	Brick (B)	B/Cement	8/Mvd		ļ		
2102c	Roof Material		Thatch	Iron Sheet	Asbestos	CementSlub	Others	<u> </u>	<u> </u>		ll
21024	Floor Material		Dung/Med	Cement	Others		<u> </u>		 		LI
2103e	Shape of Building		Round	Rectangle	Square	Others	<u> </u>		ļ		
2103	Kitchen Hut					交通的规范					
2103a	Duration after Built (year)								ļ		L
21035	Wall Material		Pole	Pole/Mud	Brick (B)	B/Cement	B/Mod		 		
2103c	Roof Material		Thatch	Iron Sheet	Asbestos	CementSlab	Others		ļ		
2103đ	Floor Material		Dung/Mud	Cement	Others		<u> </u>		ļ	<u>-</u>	l
2103e	Shape of Building			Rectangle	Square	Others			<u> </u>		
2104	Granary		<i>3.</i> 66	10.110	8 3 3 C	13.64	5 % %				
2104a	Duration after Built (year)						 		ļ		
2104b	Wall Material		Pole	Pole/Mud	Brick (B)		B/Mud	 	 		L
2104c	Roof Material		1hatch	fron Sheet	Asbestos	CementSlab	Others	ļ	 		
21041	Floor Material		Dung/Mod	Cement	Others	ļ		ļ			
2104e	Shape of Building		Round	Rectangle	Square	Officers	10,500	ļ	9.00		
2105	Toild	1031374	(ixivisi	34.35	a. 3 7-4-1	Station is	\$1 V . * ;	2.2.2.	<u> </u>		
2105a	Duration after Built (year)	1		<u> </u>	<u>L</u>		L	<u> </u>	<u> </u>	l	L

[6-4-	To a second	0	1		1	4		6	7	8	9
Code.	Item		Pole	Pole/Mud	Brick (B)	B/Cement	8/Mud				
	Wall Material		Thatch	fron Sheet	Asbestos	CementStab	Others		· · ··· - ·-·		
·	Roof Material			Cement	Others						
	Floor Material		Round	Rectangle	Square	Others					
	Shape of Building	য়েছে প্রস্তু	Kodriu	Rectarigie	Square Starks	54.552			5.323	7	
	Emergency Shed	3.50 (23)	577733	\$60 (\$-\$166 \$41)	4 () () () () () ()	<u> </u>					,
2106a	Duration after Built (year)			Pole/Mud	D=-1 (D)	8/Cement	8/Mud	 -			
	Wall Material		Pote		Brick (B)	CementSlab					
			Thatch	Iron Sheet	Astesios	Cemenistas	Olikis				
21064	Floor Material			Cement	Others						
2106e	Shape of Building	1000 A 1 1 1 1 1 1	Round	Rectangle	Square	Others	<u> </u>		हुडास		7 (19 (19 (19 (19 (19 (19 (19 (19 (19 (19
2200	Water Supply	ş-1000	13 (100)	14.800	3 5 3 C 6 C	35.44					2.2 4.14
2201	Source of Water	None	Borehole	Well	River	Others					
2202	Who dug well?		Myself	District	Government	Others		L			
2203	ls well protected?	No	Yes					·			
2204a	Amount of Water (Summer)	No	Yes								
22046	Amount of Water (Winter)	No	Yes								
2205	Who controls well?		Myself	Community	Others						
2206	Duration after Dug (Yeas)							<u></u>			
2207	Depth of Well (meter)										
2203	Who fetches water?		Head	Wife	Son	Doughter	D-in-law	Parent	Grand Child	Others	
-2209	Distance from Source of Water (meter)					<u></u>					
2210	Daily Water Consumption (liter)					<u></u>			<u> </u>		
2211	Quality of Water		Excellent	Good	Faic	Bad	<u> </u>				···
	Fuel and Lighting		等数数数	10000	8.8			50.0		NY 1/201	8 6 3 16
	Kind of Evel) <u></u>	Fire Wood	Others		<u></u>	<u></u>				
2302	Where fuel collected?		Mountain	Garden	Others						
2303	Who collects fuel?		liead	Wife	Son	Daughter	D-in-law	Parent	Grand Child	Others	

Code	Item	0	j.	2	3	4	5	6	7	8	9
2304	Cost for Fuel (23 per month)										
2305	Adequacy of Fuel	No	Yes								
2306	Kind of Lighting		Paraffin	Garden	Others						
2307	Payment for Lighting	No	Yes							·	
2308	Cost for Lighting (Z\$ per month)								<u> </u>]
3100	Income	SUPE			化分配						
3101	Income from Maize				2.20.023						
3101a	Quantity in Cash (kg)										
3)01Ъ	Value in Cash (Z\$)								<u> </u>		
	Quantity in Commodity (kg)				<u> </u>			<u> </u>			
31014	Value in Commodity (Z5)							l			
3101e	Total Value in Cash (Z\$)				<u> </u>						
3101f	Name of Gainer		Husband	Wife	Son	Daughter	D-in-law	Parent	Grand Child	Others	Family
3102	Income from Cotton			14.3	3 N (\$ 1) 1			Y	4,400	7.	
3102a	Quantity in Cash (kg per year)		<u> </u>				L				
3102ъ	Value in Cash (ZS per year)				l						
	Quantity in Commodity (kg per year)			<u> </u>	<u> </u>						
3102d	Value in Commodity (Z\$ per year)				[<u> </u>
3102e	Total Value in Cash (Z\$ per year)										
3102f	Name of Gainer		Husband	Wife	Son	Osughter .	O-in-taw	Parent	Grand Child	Others	Family
3200	Food										
3201	Spending on Food (Z\$ per month)				<u> </u>						
3202	Help from Other Sources	<u> </u>	<u> </u>			<u>.</u>			<u> </u>		
3203	Kind of Food Received	<u> </u>	ļ		<u></u>						
3204	Amount of Food Received (ZVmonth)										
3300	Expenditure		1. 1. 7.		34.59.		2.1				534534
3301	Foodstuff (25 per month)	<u> </u>			l				<u> </u>		<u> </u>

Code	Item	0	T	2	1	4	1 5	6	7	8	9
3302	Tobacco (7\$ per month)	<u> </u>	 '	<u> </u>	- -	[<u>'</u>		 	<u>'</u>	 	l
3303	Alcohlic Drinks (Z1 per month)				l		l	1	 -	 	l
	Soft Drinks (Z\$ per month)	- 					l	 			l
3305	Cloths (ZS per month)						·				
3306	Foot Wear (Z\$ per month)			l						i	
	Building of House (Z\$ per month)						l		· · · · · ·	ļ	
	Furniture (Z\$ per month)	-					-		 		1
	School Fee (Z& per month)			l		· · · -			ļ		
	Medical Treatment (Z\$ per month)								 		
3311	Travel (Z\$ per month)			<u> </u>						†	
	Refund of Debt (25 per month)									İ	
	Travel Experiences						<u> </u>				
3401	Within District						35%]	4.2395.59
3301a	Destination		Center	Rural	Ex-province						
3401b	Frequency	None	1/week	2/month	Umonth	1/2 month	1/3 month	1/6 month	l/year	Others	
	Purpose		Work	Purchase	Sell	Others					
	Accompany with		Alone	Family	Others						
3402	Within Province			3.75-87			181,640				
3402a	Destination		Center	Rural	Ex-province						
34026	Frequency	None	1/week	2'month	1/month	1/2 month	1/3 month	1/6 month	l/year	Others	
3402c	Purpose		Work	Purchase	Sell	Others		<u> </u>			
	Accompany with		Alone	Family	Others						
3403	Out of Province		300	A (\$1.55)	经现代		14 (14 Y			12 C. Sec.	1965
3403a	Destination		Center	Rurat	Ex-province				<u> </u>		
3 403b	Frequency	None	1/week	2/mooth	1/month	1/2 month	1/3 month	1/6 month	1/year	Others	
3403c	Purpose		Work	Purchase	Sell	Others	<u> </u>	<u></u>			
34034	Accompany with	L	Alone	Family	Others	l	L		<u></u>	<u> </u>	

Code	ltem .	0	1	2	3	4	5	6	7	8	9
4100	Assets and Implements		2393U		10,44			10.0			
4101	Ox Plough		हें गुरुरके हैं ,				18,3		3 1 1 1 1 1 1 1		1.6
4 012	Number Owned 🕜										
4101b	Duration Used (Year)										
4102	Ox Harrow	1. M. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		33 65							
4!02a	Number Owned										
	Duration Used (Year)									l 	·
4103	Ox Planter	3. CA 🐪	神经		<u> </u>	14 - Frie	5. <u>15.5. 5. 5</u>	1 2 2 2 2 2 2 1			
4103a	Number Owned										
	Duration Used (Year)		<i>अवस्था</i> प्रस्तात्त्व	70317 4711				·		TENER OF	
	Ox Cultyator	网络沙克	1000	Moking		क्रार्टिहर्को छ			<u> </u>	3 3 3 3 3	AWA
41044	Number Owned	-		ļ							
	Duration Used (Year)	entroperations	TROPENSION AND	ক্রাক্সকার ভারত	35.00	4 4 5 3 3 5 4 7	raja ja rapija ya sa	eggs ar ever	र संख्यास्ट्र	<i>र्स्स्ट</i> ूड्र	ক্ষেত্রকর ব
41(5	Ox Cart	13,12,13		\$45.00			A YES		그 같은 역	\$5.000 W.V.D.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Number Owned					- -					
	Duration Used (Year)	- N. 2 ' 2 ' 2 ' 2 ' 2 ' 2 ' 2 ' 2 '	a হা স্থা	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.000 2.00	। इन्ह्रास्ट्रा					T 10 TE 1 TE 1
	Water Cart			3000	45347.				2. 7.74	132	
	Number Owned				ļ <u>.</u>	ļ <u></u> .					
	Duration Used (Year)	an escape b	1 3 2 1 1 4 7 7 7	TUSCHER STATES	राज्या स्टास्	- 1, - 1, - 1, - 1, -					, , , , , , , ,
	Knapsack Sprayer	12436							<u> 6., 5. s.,</u>	1, 1, 1, 1, 2, 2	
	Number Owned			İ	<u> </u>	ļ					
	Duration Used (Year)	7775 9750 47	4 9 9 8 1,2 9 1 3 7	7.00 #7.4 K	्रक च बच्च	7 (V) + 5 (H) + 1					12 1 2 T
	ULY Sprayer	49.403		月香月日 夕		[X][M]]	A PAR				
	Number Owned						ļ				
	Duration Used (Year)	1	স্তালতে ভাষাক	- स्ट्राइन के फ्लंड	ব্রাদ্ধ হয় বাবিদ্ধ	1 1 d 24. <u>3</u> 13	7,775				~~;
4100	Tractor Control of the Section of th	0.83123	eropeties.	374.53	diami.	ार्कसर्थे द	7 44 7 11		113 _ 1_3	اخت تنظ	
1109a	Number Owned	<u></u>	<u> </u>	J	<u> </u>	<u> </u>	<u> </u>	L	<u> </u>	L	LJ

		·						·			<u>_</u>
Code	Item	0	1	2	3	4	5	6	7	8	9
	Duration Used (Year)							, , , , , , , , , , , , , , , , , , , 			
4110	Plough-tractor Drawn	35	100	. is . is it		11, 12.16	15.6	4,1.2.	3.0		<u> </u>
4110a	Number Owned	L									
	Duration Used (Year)							ranger of the second			जनसङ् <u>ञ</u> ्
4111	Row Cultivator diffo	495 82				45.45 A			To the second	10000	
4111a	Number Owned										
	Duration Used (Year)										
4112	Planter-ditto	3/4/15		AAR 6 宋	16 Table 1	<u> 1847 (21-92</u>	<u> 10.034</u>	<u> </u>	<u> </u>	18 1 je	
4112a	Number Owned										i
	Duration Used (Year)	l				7-7-6		, , , , , , ,			TKE SE
4113	Trailer-ditto	3.5	34,71%	36436							
41133	Number Owned	ļ <u> </u>									
41135	Duration Used (Year)		, , , , , , , , , , , , , , , , , , 	113.5	- इ.स.स.च्यास	্রতে সংগ্রহণ বিশ্বস্থান	National Contract	<u>,</u>		400,000	
4114	Wheelbarrow	- 6. AS - 16.L	8. 1. 3.	STATE OF	5 ইন্ড্রাই	7.50	7				
4114a	Number Owned										
41145	Duration Used (Year)		75 TO 10 TO	manager a majeratem ta	275,243 C 127	ं कर द्वार क		- - (0 1, 7, 7, 7)	্জায়	क्षा कराइका स्टब्स	grand a
4115	Itan i Punip for Water	40.25		<u> </u>	新門家				·	5740,77	
4115a	Number Owned						<u></u>				
	Duration Used (Year)			5.77 L 5 A. 7	and the same of the same of the same of the same of the same of the same of the same of the same of the same of	ক্ৰেছে মুখ্যা ন ক	aprincipi (T	1 1 2 2 3 5 1 7 T 3 T	2008	<u> चुक्त</u>	ক্ষ্যালয় কৰা ব
4116	Milling Machine			33.5	(2019)9				<u> </u>		
4116a	Number Owned						. 				
	Duration Used (Year)			 	E + A -07572771	Windstein (2017)	9 125 1 72 5		en en en en en en en en en en en en en e	TO FLORIDA	28 8 8 8 C
4117	Bicycle	83.28	Section 1	13.11.55	<u> 1868. </u>						5.4.17.6
	Number Owned	 									
	Duration Used (Year)	 	nedukti negaziri.		इ.स.च्याच्याच्या	2000000000	10 sa Y 15 00		- 	347 537 57	BON TO THE
4118	Motor Bike	3.5.500	WE 3 (2)	15,1740		景数为汉			KP4AT	3% BUS	
4)18a	Number Owned	<u> </u>		L	L	L	L	L			i

Code	Item	0	1	2	3	4	5	6	7	8	9
	Duration Used (Year)										
4119	Motor Vehicle				N WW E				2.214.48.43		
4119a	Number Owned										
4119b	Duration Used (Year)										
4120	Radio			1	39130T			i de e della		5.5.68 (1.5.68)	
4120a	Number Owned										
4120b	Duration Used (Year)					,	. ,				
4121	Television							1 % (18)	154 137		32 3 22
4121a	Number Owned										ļ
4)21b	Duration Used (Year)										
4200	Implements Required		表表表示					1,3571,57			455
4201	1st Required Implement		Plough	Cultivator	Planter	Wheelbarw	Water Cart	Tractor	Harrow	Sprayer	Others
4202	2nd Required Implement		Plough	Cultivator	Planter	Wheelbarw	Water Cart	Tractor	Harrow	Sprayer	Others
4203	3rd Required Implement		Plough	Cultivator	Planter	Wheelbarw	Water Cart	fractor	Harrow	Sprayer	Others
4204	4th Required Implement		Piough	Cultivator	Planter	Wheelbarw	Water Cart	Fractor	Папом	Sprayer	Others
4205	5th Required Implement		Piough	Cultivator	Planter	Wheelbarw	Water Cart	Tractor	Harrow	Sprayer	Others
5100	Land Holding								1 . 4.5		
5101	Houses	43-1451	1.65				3,000		4.54.63		Parky or
51012	Purchased Land (Acre)	<u> </u>					 	<u> </u>			ļ
5101b	Rented Land (Acre)	<u></u>	<u></u>		<u></u>				<u></u>		ļi
5101c	Communal Land (Acre)								<u> </u>		
51013	Leased Land (Acre)				<u> </u>			ļ	<u> </u>	<u> </u>	
L	Total Land (Acre)		<u> </u>	<u></u>							ļ
51011	Irrigated Land (Acre)							ļ		 	
5102	Arable Land			[# de art	A	At Miles	PAR 32.8	d'a la la la la la la la la la la la la la	4-14-3		
510?a	Purchased Land (Acre)	<u> </u>		L			1				
5102b	Rented Land (Acre)	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	L	l	L	L

Code	liem	0	1	2	3	4	5	6	7	8	9
5102c	Communal Land (Acre)										
51024	Leased Land (Acre)										
5102e	Total Land (Acre)										
51026	Irrigated Land (Acre)										
5103	Garden			3.88			3, 3				\$3.00 A
5103a	Purchased Land (Acre)										
5 1035	Rented Land (Acre)										
5103c	Communal Land (Acre)										
51033	Leased Land (Acre)										_,
	Total Land (Acre)										
5103f	Irrigated Land (Acre)										
5104	Fallow Land										
	Purchased Land (Acre)		 	l			<u></u>				
	Rented Land (Acre)						 				
	Communal Land (Acre)										
	Leased Land (Acre)					ļ					
	Total Land (Acre)										
5104f	Irrigated Land (Acre)		লক্ষ্ম ক্রেন্ত্র করু ব	Teneral Property	18.8 <u>20.7 (</u> 0.18.0 (0.18.0)	DO E SURVISION	Test de la Seconda	ere and a second	Total Control	াল এন কে কে ব	1995 स्टब्स्ट
	Grazing Land	S 8- 85°	<u> </u>			16.231	U Volt			0.5840	\$\$ \$\$\$.\$\$
	Purchased Land (Acre)					<u>.</u>	ļ				
	Rented Land (Acre)						_				
	Communal Land (Acre)										
	Leased Land (Acre)										
5105e	Total Land (Acre)									<u> </u>	
	Irrigated Land (Acre)	N 6 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	क्ता क्राक्रमा	74758 S S S S S	र स्थापन स्थापन	7372237	100.08 - 10	- 19 7		 	
	Pond etc.	14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	\$ 4.5		学学校	NXV		Existing (A 5 4 3 1 .	765.732
5106a	Purchased Land (Acre)				l		L			lI	

Code	Îtem	0	1	2	3	4	5	6	7	8	ŷ
	Renied Land (Acre)										
	Communal Land (Acre)										
51064	Leased Land (Acre)										
5106e	Total Land (Acre)										
51061	Irrigated Land (Acre)						., ., ., ., ., ., ., ., ., ., ., ., ., .		- A #		जर्मसम्बद्धाः
5107	Total Land	÷ 3 ; ; €	1000	多数	108813	9960					3.803.8
	Purchased Land (Acre)										
5107b	Rented Land (Acre)										
5107c	Communal Land (Acre)										
51070	Leased Land (Acre)										
5107c	Total Land (Acce)										
5107f	Irrigated Land (Acre)				The second second	The residence	44044 1 1 min	de Galerine	7.00 S 3450 F	1880 No. 1882 R	केन केरिकेट हैं
5200	Crop Information			100	3000	3.3.3	3 SEC. 15	14 14 44 44	5-3-41-7-18 	\$12 NA	38868
5201	Crop Information :	3200		13.73	\$ 19.50°	346336	1394 X.	14.246.15		<u> </u>	<u>Sidareti</u>
5201a	Area Cropped (Acre)										
5201b	Time of Sowing (month)							ļ <u>.</u>			
5201c	Time of Havestng (month)							ļ			
52016	Total Production (kg)					ļ			ļ		
5201e	Quantity Sold in Market (kg)								<u> </u>		
5201f	Market		СМВ	СМВ	Others	ļ					
	Unit Price (Z\$/kg)						 				
5201h	Water Source for Irrigation				River	Others	Citation of the	Sec. 4 2.3.	CONTRACTOR AND THE		
5202	Maine	公文 交	※※※	的計算	301637	A. S. S. S. S. S. S. S. S. S. S. S. S. S.	\$435 gt. 33	594 (C)		707 se 2019	100000
5202a	Area Cropped (Acre)										L
5202b	Time of Sawing (month)	L			l	 					
5202c	Time of Havestng (month)	<u></u>			ļ	ļ	ļ				
5202d	Total Production (kg)		<u> </u>	l	<u> </u>	L	<u> </u>	l	l	L	L

Code	Item	0	1	2	3	4	5	6	7	8	9
5202e	Quantity Sold in Market (kg)										
5202f	Market		СМВ	GMB	Others						
5202g	Unit Price (Z\$/kg)										
	Water Source for Irrigation		Borehole	Well	River	Others			7.	<u> </u>	4 Y V 2
5300	Cropping Practices				X 3.7.7	1,713	1. S. S. S. S. S. S. S. S. S. S. S. S. S.	3	35,40° 53		18 (19 T)
	Cotton	1. C. S. K.			137.36		13.65%	1	384334		<u> </u>
	Ploughing Method		Hands	Oxen	Tractor						
5301b	Ownership of Plough Tool		Own	Hired	Borrowed				ļi		
5301c	Place to Get Seed		СМВ	Seed Coop	Others						
5301d	Type of Fertifizer	None	Compound	Others							
5301¢	Time of Pertilizer Application	None	Before Plant	At Plant	After Plant	Others					
53016	Type of Insecticide	None	Agrithrin	Cabaryl	Roger	Others					
\$301g	Time of Insecticide Application	None		Nov.	Dec.		feb.	Others	र कारता १४ ३४	সমস্থার সমস্থার	YES DESCRIPTION
5302	Milie (1710) Sylvan Janes (18	App. All	3,000	经常数	W 38-5%	15896	780 E	7.57.00	25 A A A A A A A A A A A A A A A A A A A	Properties	\$ * 2 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \ 10 \
	Ploughing Method		Hands	Oxea	fractor						
5302b	Ownership of Plough Tool		Own	Hired	Borrowed						
5302c	Place to Get Seed		СМВ	Seed Coop	Others						
5302d	Type of Fertilizer	None	Compound	Others	<u>.</u>						
5302c	Time of Fertilizer Application	None	Before Plant	At Plant	After Plant	Others					
5302f	Type of Insecticide	None	Agrithrin	Cabaryl	Roger	Others			ļ		
5302g	Time of Insecticide Application	None	Oct.	Nov.	Dec.	Jan.	l'eb.	Others	TO BUILDING	respondence	'A
5400	Crop Budget				(S.)						(*) 1987 : 1888 188
5401	Crop Budget :	2 3 70	A 60.15	62152	13.4.6	(A59) (A	Sec. 17	13. 1. 1.	23,4885	3730	13863333
54011	Seed (25 per year)			<u> </u>	<u> </u>	<u> </u>					Ĺ
54015	Fertilizer (ZS per year)			<u> </u>		· · · · · · · · · · · · · · · · · · ·	ļ	 _		ļ <u>-</u>	
540tc	Pesticide (Z\$ per year)			<u></u>					<u> </u>		ļ
54014	Ploughing (ZI per year)	<u></u>	<u> </u>	L	<u> </u>	L	İ	L	L	L	L

Code	Item	0	1	2	3	4	5	6	7	8	9
5401e	Fuel of Tractor (Z\$ per year)										
54016	Repair of Tractor (Z\$ per year)										
5401g	Wage of Workers (Z\$ per year)										
540!h	Transport (Z4 per year)										<u> </u>
5401i	Others-1 (Z\$ per year)										
5401j	Others-2 (Z\$ per year)										
5402	Maize :	read the	Section .	\$40.00 B	11.24	\$ 85.0	郭克克 克	200	3 3 W 1		(VE) (5.5)
	Seed (Z\$ per year)										
5402b	Fertilizer (25 per year)								<u> </u>		
5402c	Pesticide (Z\$ per year)									ļ,	L
54028	Ploughing (2\$ per year)										
	Fuel of Tractor (Z\$ per year)										
5402f	Repair of Tractor (ZS per year)		-						<u> </u>		
	Wage of Workers (Z\$ per year)										
5402h	Transport (ZS per year)										
5402i	Others-1 (Z3 per year)										
5402j	Others-2 (Z\$ per year)										
	Tree Crop Information	, t/o v		交替的 等	\$ (0.80)	1974		3 1838	$\sqrt{2} s \in X_{n-1}$		\$X\$ 13.5
	Have you cropped trees?	No	Yes								ll
	Kind of Crop		Mango	Guava	Banana	Others					
5503	Have you sold Tree Crop?	No	Yes								
5504	Value Sold in Market (Z\$)										L
	Place of Market		Consume	Market	Others	12.00					l
	Livestock Holding			<u> </u>	WALLS.		% - 988				
	Cow			XXXX.			88.33	3/4/4	200	10000	\$2.00V
	Purpose of Breeding		Breeding	Ploughing	Eating/Sell	Others					
61016	Number in Last Year			L	l	<u> </u>			l		LJ

Code	Item	0	1	2	3	4	5	6	7	8	9
6101c	Change (Ealen)	_									
61018	Change (Sold)									,	
6101c	Change (Bought)							l		<u> </u>	
	Change (Born)										
6101g	Change (Died)									· .	
41019	Change (Lost)							<u> </u>		L	
6101i	Number at Present							~			
	Feeding Method		Grazing	Paddock	Others		<u> </u>			<u> </u>	
6101k	Source of Forage				Others					V-1.5. 1. 1. 1. 1.	
6102	Bull Sull		$\mathcal{F}_{i} = \{ i, j \in I \}$		5 431.444	1.0	多の多寸		36,125	30 Feet	表数这个
6102a	Purpose of Breeding		Breeding	Ploughing	Eating/Self	Others					
6102Ь	Number in Last Year									ļ	
6102c	Change (Eaten)										
61028	Change (Sold)										
6102e	Change (Bought)										
6102f	Change (Born)										
6102g	Change (Died)			. 					L		
	Change (Losi)									·	·
6102i	Number at Present										
6102j	Feeding Method			Paddock	Others						
6102k	Source of Forage		Paddock	Communal	Others	Paramanananananananananananananananananan				75. KYZ # 7 V S	
6103	Rejter Constitution of the	1, 2, 4, 7, 3					<u> </u>	4.446	24 C	244843	S 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	Purpose of Breeding		Breeding	Ploughing	Eating/Self	Others	· · · · · · · · · · · · · · · · · · ·		ļ		
61035	Number in Last Year			·							
	Change (Eaten)										
6103d	Change (Sold)				·	<u> </u>			L		
6103e	Change (Bought)				l	<u> </u>	L	l	l	l	l

Code	ltem -	0	1	2	3	4	5	6	7	8	9
6103f	Change (Born)										
	Change (Died)										
6103h	Change (Losi)										
6103i	Number at Present										
6103j	Feeding Method		Grazing	Paddock	Others						
6103k	Source of Forage		Paddock		Others			 	ļ		
6104	Calves - Cal					13/24/20	3137 4 17 3		4 6.2		
6101a	Purpose of Breeding		Breeding	Ploughing	Fating/Seli	Others		L			
	Number in Last Year					<u> </u>					
6104c	Change (Faten)						ļ	ļ			
_	Change (Sold)		L			.	<u> </u>				
	Change (Bought)		<u> </u>	·		.	ļ				
6104f	Change (Born)										
6104g	Change (Died)										
	Change (Lost)										
	Number at Present				ļ		l				
	Feeding Method		Grazing	Paddock	Others						
	Source of Forage		Paddock	Communal		,,,,,,,, ,			. ,		
6105	Bullock										
	Purpose of Breeding		Breeding	Ploughing	Eating/Sell	Others				i	
	Number in Last Year										
1	Change (Ealen)			·							
61054	Change (Sold)										
6105e	Change (Bought)									.	
	Change (Born)						ļ				
	Change (Died)							 			
6105h	Change (Losi)			L	<u> </u>	l	<u> </u>	L	L		

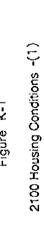
Code	Item	0	1	7	3	4	5	6	7		9
	Number at Present	×	[<u>-</u>						· · · · · · · · ·		İ
	Feeding Method		Grazing	Paddock	Others						
	Source of Forage		Paddock	Communal	Others			İ			1
	Sheep			Mark.	73734S	2 5 3 4	3.35	19.74			10 X 475 c
	Purpose of Breeding		Breeding	Ploughing	Eating/Sell	Others					
6106Ь	Number in Last Year										
6106c	Change (Eaten)										
61063	Change (Sold)						<u> </u>	<u></u>			İ
6106e	Change (Bought)										
6106F	Change (Born)										
6106g	Change (Died)										
6106h	Change (Lost)										Ĺ
6106i	Number at Present										
	Feeding Method		Grazing	Paddock	Others						
6106k	Source of Forage				Others						
6107	Goat				<u> </u>	77.34					
6107a	Purpose of Breeding		Breeding	Ploughing	Eating/Sell	Others					
6107ь	Number in Last Year									L,	
6107c	Change (Eaten)	_i									
61073	Change (Sold)										
6107e	Change (Bought)										
6107f	Change (Born)										
6107g	Change (Died)										
6107h	Change (Lost)										
6107i	Number at Present										
6107)	Feeding Method		Grazing	Paddock	Others						
6107k	Source of Forage		Paddock	Communal	Others						J

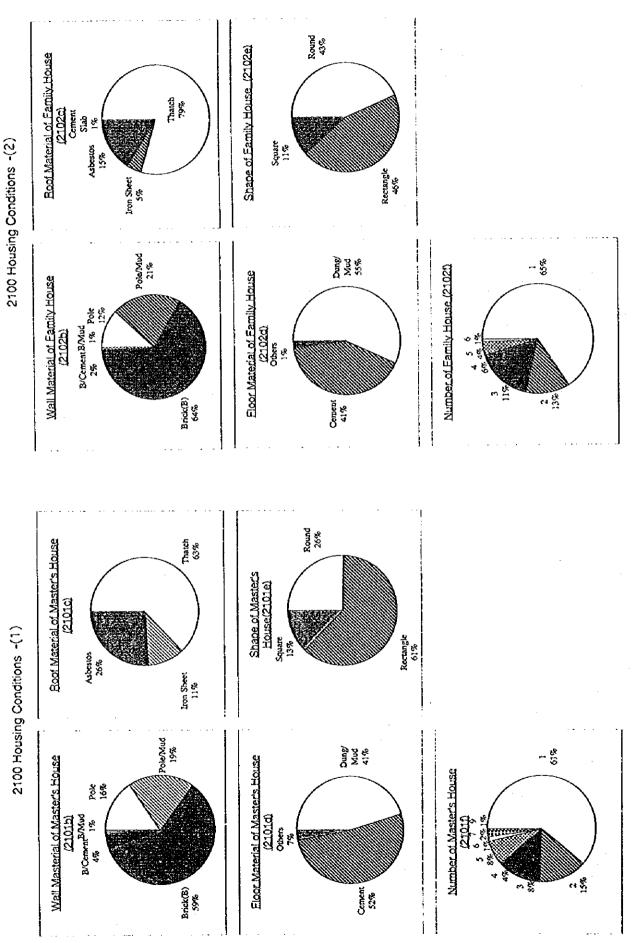
Code	Item	0	1	2	3	4	5	_	4	8	9
6108	Donkey			3475		X 10 11 11	700 T 30			V 9 7 7 7 7 7	
6108a	Purpose of Breeding		Breeding	Ploughing	Faling/Sell	Others					
61085	Number in Last Year								,		
6108c	Change (Eaten)										
61083	Change (Sold)				ļ						
6108e	Change (Bought)						[
6108f	Change (Born)					<u> </u>			<u> </u>		
6108g	Change (Died)						[
6108h	Change (Lost)										
6108i	Number at Present										
6108j	Feeding Method		Grazing	Paddock	Others		 			<u> </u>	L
6108k	Source of Forage		PadJock	Communal	Others						
6200	Livestock Production										EX. 14
6201	Cante						y Page				10,500 356 1
6201a	Quantity Sold (head)				l				Ì	<u></u>	
6201b	Unit Price (kg per head)									<u> </u>	
620tc	Value Sold (ZS)						<u> </u>				
62013	Place of Market		CSC/DM8	Private	Locally	Others					
6201e	Means of Transport		On Foot	Truck	Others						
6201f	Who sold products?		Husband	Wife	Son	Daughter	D in law	Parent	Grand Child	Others	
6202	Goat	r,* : 2				\$ Y 2x 2					K SV PO A
6202a	Quantity Sold (head)										L
6202Ъ	Unit Price (kg per head)										
6202c	Value Sold (Z\$)										
6202d	Place of Market		CSC/DMB	Private	Locally	Others					
6202e	Means of Transport		On Foot	Truck	Others						
6 202f	Who sold products?		Husband	Wife	Son	Daughter	D-in-law	Parent	Grand Child	Others	

Code	Item	0	1	2	3	4	5	6	7	8	9
6203	Sheep		78. T.	33030	5.9455	\$725E				335, C.	
62032	Quantity Sold (head)										
6203b	Unit Price (kg per head)	,									
6203c	Value Sold (Z\$)										
62034	Place of Market		CSC/DMB	Private	Locally	Others				<u> </u>	
6203e	Means of Transport		On Foot	Truck	Others		L			<u> </u>	
62036	Who sold products?		Husband	Wife	Son	Daughter	D-in-law	Parent	Grand Child		
6300	Expenses for Catale										
6301	Procurement of Cattle (Z\$ per year)					<u> </u>					
6302	Veterinary Supply (ZS per year)					<u> </u>			ļ 		
6303	Veterinary Fee (23 per year)		<u> </u>				ļ		<u> </u>		
6304	Forage (ZS per year)							 			.
6305	Transport Cost (7.5 per year)				ļ			<u> </u>			
6306	Others (7\$ per year)			0.7557 54.75 247	200 F. S.		accerera		11277233		
6100	Information on Livestock			45.634.	12 C. 18	E 750		<u> 1844 - 1</u>		100000 P	
640L	Ownership of Cattle	No	Yes		ļ		<u></u>				
6402	Reason for No Ownership		No Money	Died	Others	<u> </u>					
6403	Method of Herding		Individual		Paddock	Others	 	 _			
6401	Who herds Cattle?		Men	Women	Children	Others			ļ		
6405	Purchase of Veternary Supply	No.	Yes			 					
6406	Frequency of Dipping (Summer)		2/month	I/month	1/2 month	Others			ļ	,	
6407	Frequency of Dipping (Winter)		2/month	I/month	1/2 month	Others	ļ		l	 	
6408	Kind of Winter Feed		Grazing	Stalk	Others			<u> </u>	ļ	ļ	
6409	Amount of Grass (Summer)		Enough	Shortage	Few		ļ	ļ	<u> </u>		
6410	Amount of Grass (Winter)		Enough	Shortage	Few			ļ	ļ		
	1st Problem for Cattle	None	Grazing	Dipping	Water	Disease	Thieves	Others			
64116	2nd Problem for Cattle	None	Grazing	Dipping	Water	Disease	Thieves	Others	L	L	LJ

Code	Item	0		2	3	4	5	6	7	8	9
		None	Grazing	Dipping	Water	Disease	Thieves	Others			
	3,4 4,4 5,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4		Grazing		Water	Diseasc	Poieves	Others			
			Grazing		Water	Disease	Thieves	Others			
			Grazing	Dipping	Water	Disease	Thieves	Others			
		None	Grazing	Dipping	Water	Disease	Thieves	Others			
	1st Problem for Other Animals	None	Grazing	Dipping	Water	Disease	Thieves	Others			
	Availability of Veternary Services	No	Yes							!	
	Frequency of Veterinary Services	l 	2/ month	l/ month	I/2 month	1/ 6 mon t h	I/ year	Others			
	Reason for No Veterinary Services		No Service	No Money	Others					·	
	Problems in Daily Life					张郑 道				<u> </u>	
7101	1st Problem	2	Money	Food	Cloth	House	Water	Disease	Others		
	2nd Problem		Money	Food	Cloth	flouse	Water	Disease	Others		
	3rd Problem	<u> </u>	Money	Food	Cloth	House	Water	Disease	Others		-
7200	Schooling	1905 A.M.	35 W.E.	1000		\$54.60°	经验 证				<u> 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 1987 - 198</u>
7.	Children of Schooling Age	No	Yes								
	Distance to Primary School (meter)	· · · · · · · · · · · · · · · · · · ·									
	Means to Go to School		On Foot	Bicycle	Bus	Others					
7300	Medical Services	19.88%	319 (6.65)	1973	7. 19. K. 38	35000	11.0			53. 3	
	Experience of Medical Treatment	No	Yes			L				<u> </u>	
	Name of Major Disease		Malaria	Asthnia	Diambea	Others		ļ		 .	
	Method of Cure	None	Clinic	Hospital	Medicine	Others					
7301	Distance to the Nearest Clinic (meter)				·			<u> </u>			
	Frequency to Go to Clinic Unstance to the treatest		2/ month	1/ areath	1/2 month	1/6 month	l/year	Others			
7306										3	7970 10
8100	LL point (motor) Problems in Production	0.33	THE STATE OF THE S	表表生		14.32	\$ 11.0			<u> </u>	<u> 1878 (18</u>
	1st Problem	None	Water	DroughtPW	Agro-input	Credit	Transpost		WildAnimal		
	2nd Problem	None	Water	DroughtPW	Agro-input	Credit	Transport	Armyworm	WildAnimal	Others	L

Code	Item	0	1	2	3	4	5	6	7	8	9
8103	3rd Problem	None	Water	DroughtPW	Agro-input	Credit	Transport	Armyworm			
810-1	4th Problem	None	Water	DroughtPW	Agro-input	Credit	Transport		WildAnimal		
8165	5th Problem	None		DroughtPW			Transport		CminAbltW		- 5755. %
8200	Agricultural Credit 1	11.5	100			100	137.2	34 17 3	\$6.50 A	\$54.30	<u> 4303 m.</u>
	Experience of Agricultural Credit	No	Yes								
8202	Year of Experience (year)										
8203	From where?		AFC	СМВ	Private	Others					
8204	How much? (23)						ļ				
8205	Interest Rate (% per Annom)						ļ				
8206	Have you refunded?	No	Yes							ragio e e e	7 A 7
8300	Imigation	\$ 7.1.1 (a) \$ 9.		X 33 X		154.55	7,244.1	##1.#		<u> </u>	<u> </u>
8301	Will to Crop in Dry Season	No	Yes								
8302a	1st Posibble Crop in Dry Season		Wheat	Cotton	Maize	Vegetables		Others			
8302b	2nd Possible Crop in Dry Season		Wheat	Cotton	Maize	Vegetables		Others			
830?c	3rd Possible Crop in Dry Season		Wheat	Collon	Maize	Vegetables	Beans	Others			
8303	Reason for Selection of Crops		Fast Cash	Consume	Others						
8304	Reason for No Crop in Dry Season		Water	Technical	Others			<u> </u>			
8305	Have you heard about Kudu Dam?	No	Yes								
8306	Who informed?		Relatives	Officers	Others	ļ					
8307	When informed? (year)									<u> </u>	
8308	Comments on Kudu Dam		Wanted	Nothing	Others	20029-004	NAMES OF STREET	<u>তথ্যসূত্র কর্ম</u>	क्षात्रकारण ः	ग ाइग् टस्टा	3 275 6755
8400	Soil Conservation (22 1 1 1 1 2 2 2	345,00					W. T.		\$ 6.900	<u> 13 fo 11</u>	3-23-34
8401	1st Technique for Soil Conservation	<u> </u>	ContourRdg				ļ <u></u>	:			_
8402	2nd Technique for Soil Conservation	<u> 1</u> _	ContourRdg	Plant Grass	Use Manure	Others	<u> </u>	l	l	L	L







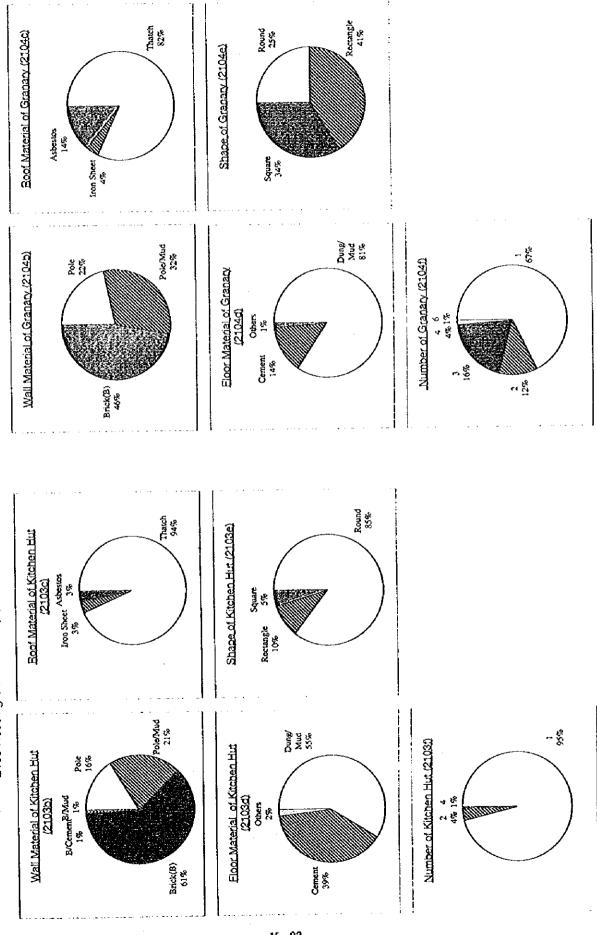


Figure K-1 2100 Housing Conditions -(5)

2100 Housing Conditions -(6)

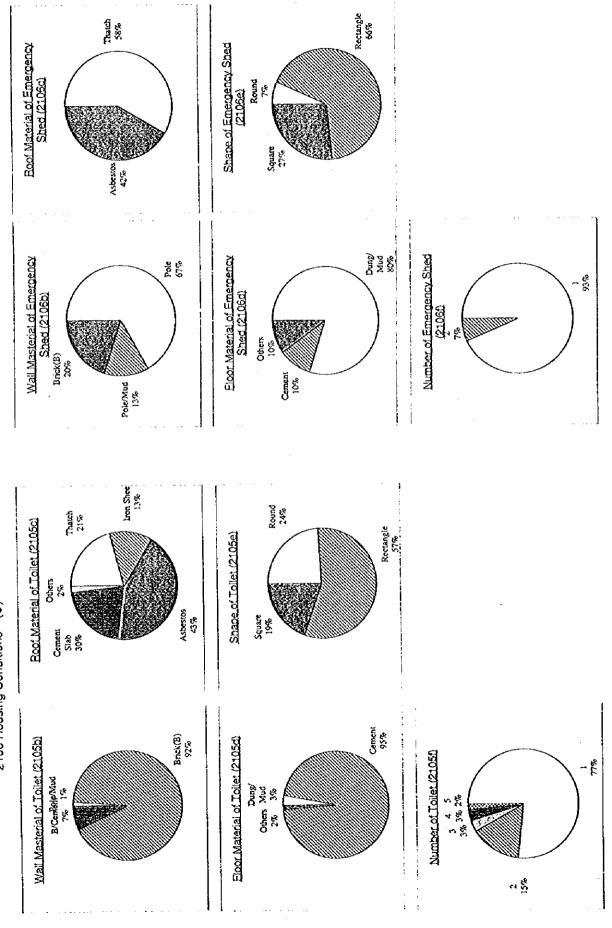
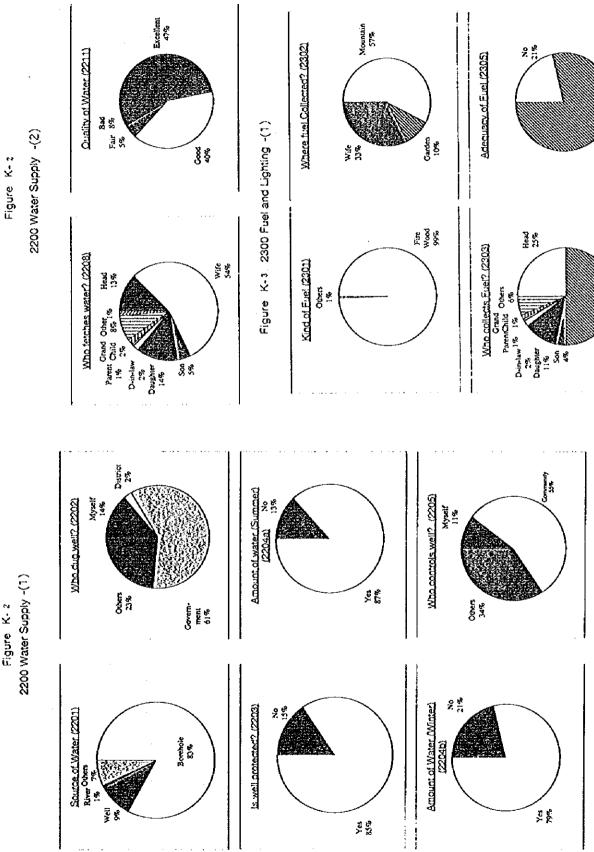


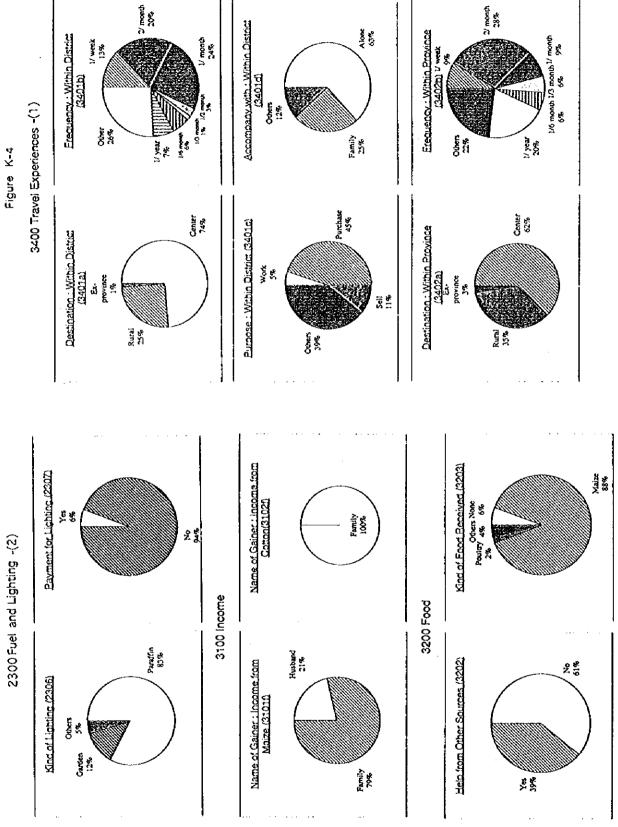
Figure K- 2



ĽŹ

Wife

2300 Fuel and Lighting -(2) Figure K-3



3400 Travel Experiences -(2)

4100 Assets and Implements -(1)

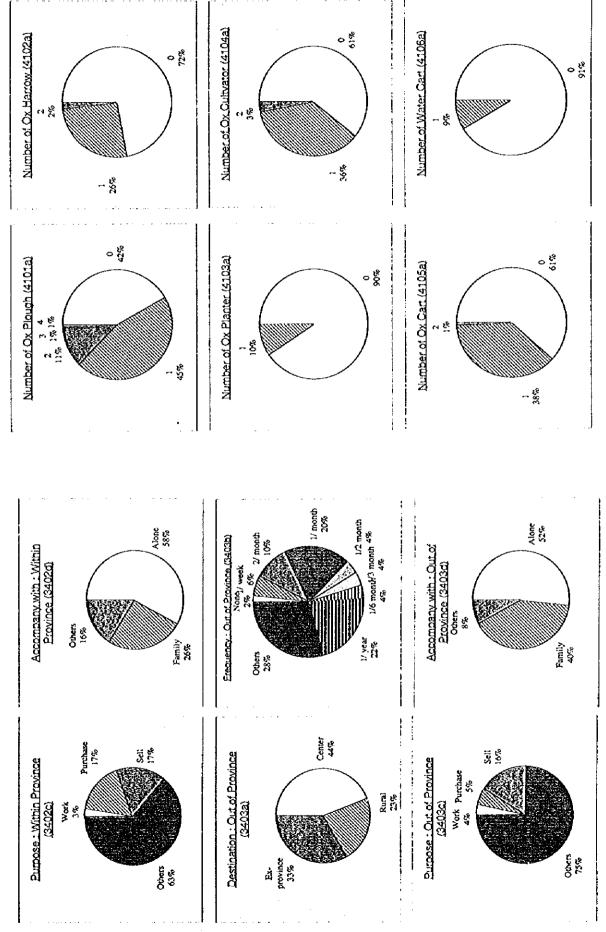
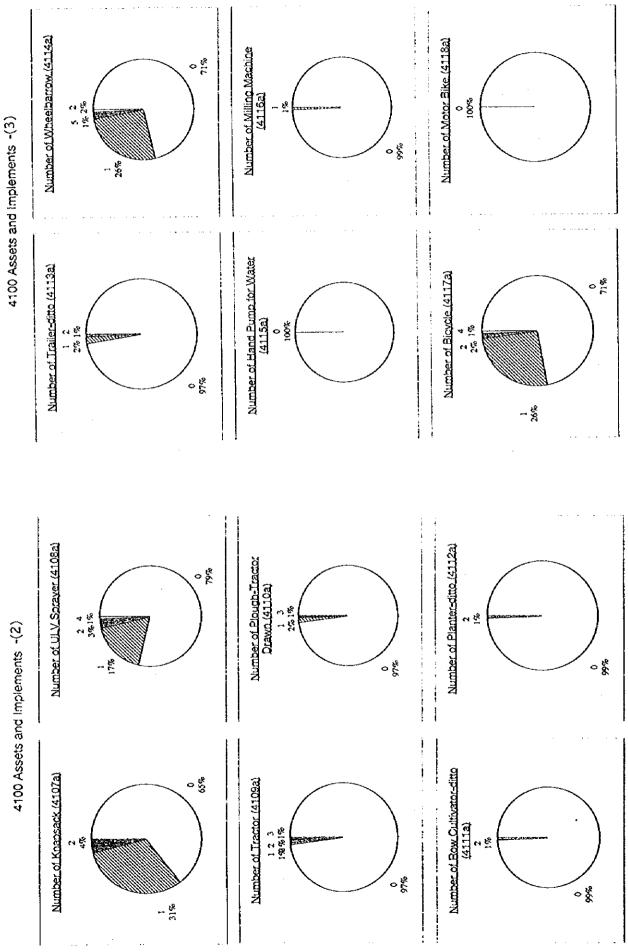


Figure K-5

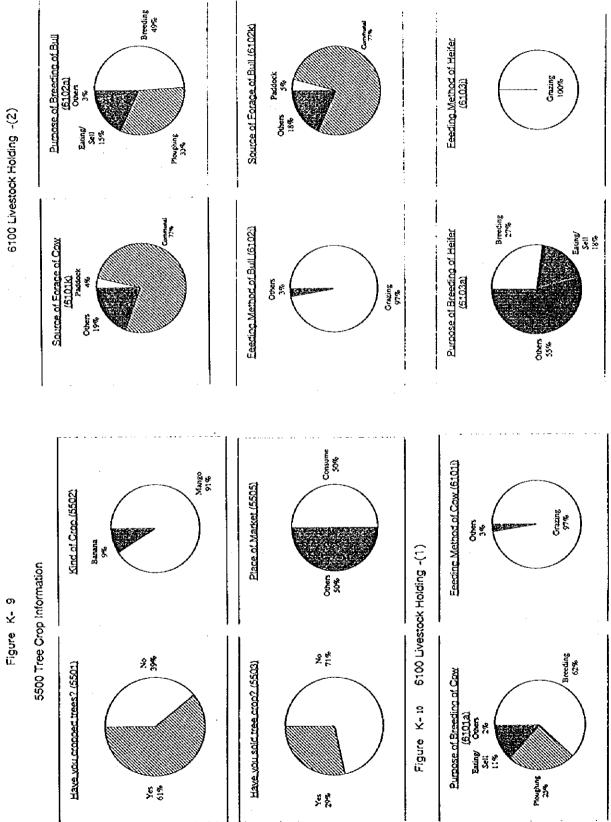


Water 30% 4th Required Implement (4204) Market for Maize (52020 88 88 88 Others Cultivator 14% 7% 4200 Implements Required -(2) Harrow 14% g H Sprayer 14% Figure K- 6 Figure K-.7 5200 Crop Information Planter 14% % G € 5th Required implement (4205) 3rd Required Implement (4203) Market for Cotton (52010 Obers 29% Tractor 14% 13% B o 13 2nd Required Implement (4202) Number of Badio (4120a) Figure K-6 4200 Implements Required -(1) 4100 Assets and Implements -(4) ~ % ļ Figure K-5 1st Required Implement (4201) Number of Television (4121a) Number of Motor Vehicle (4119a) 3,5 3,6 ુ ફુ 3=

Type of Fertilizer for Maize Maize (5302b (5302d) 5300 Cropping Practices -(2) 10% K Others 27% Figure K- 8 8 8 g Before Plant 39% Time of Fertilizer Application for Place to Get Seed for Maize (5302c) Ploughing Method for Maize (5302a) At Plant 38% Oxen 100% Octobers 48% Type of Fertilizer for Cotton (5301d) others 5300 Cropping Practices -(1) Roger 86% Figure K-8 At Plant 82% Time of Fertilizer Application for Cotton After (5301.e) Time of Inserticide
Application for Cotton
(53010) 8 % Ploughing Method for Cotton (5301a) \$ 6 % Jan. 57%.

Composite Sound

Figure K- 10 6100 Livestock Holding -(2)

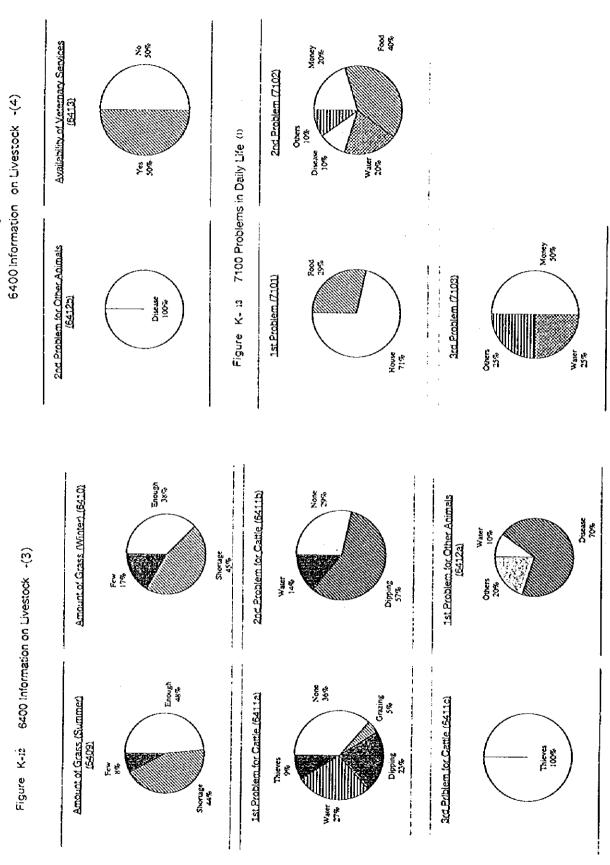


Source of Forage of Goat (6)0Zk) Q 9,0% 9,0% Eating/ Scill 80 6100 Livestock Holding -(4) Figure K-11 6200 Livestock Production -(1) Figure K- 10 Esecting Method of Goat (\$107)) Place of Market for Cattle (6201d) Grazing 100% Locally 80% Purpose of Breeding of Calves (6104a) 6100 Livestock Holding -(3) Figure K-10 Communal 70% Purpose of Breeding of Bullock Source of Earage of Heifer, (61,03k) Eceding Method of Calves (5104) Grazing 100% Others 30%

Figure K- 12 6400 Information on Livestock -(2)

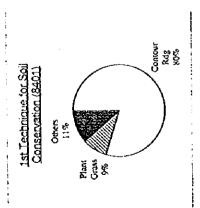
Men 52% Grazing 62% Frequency of Dipping (Summer) Who herds Cattle? (6404) Kind of Winter Eeen (5408) Women 8% OSec Others XX Childen 32% Neg 2 2/month 86% Individual 64% χ & δ κ Purchase of Veternary Supply (6405) Frequency of Dipping (Winter) (6407) Method of Herding (6403) % % % Paddock 36% No Money 57% Husband 75% Place of Market for Goat (6202d) Who sold products? Locally 1005 6400 Information on Livestock -(1) 6200 Livestock Production -(2) 88 0.4 5.8 Figure K-11 9 F00. Husband 60% 28 Means of Transport for Goat (6202e) Ownership of Cattle (6401) Who sold products? :Cattle Figure K- 12 S S × 45. Soler Soler

Figure K-12 6400 Information on Livestock -(4)



Water 40% 7.5 0.88 From where? (8203) 2nd Problem (8102) Figure K- 16 8200 Agricultural Credit -(1) Others 12% Others 18% 8100 Problems in Production CMB 12% Agro-input 24% Figure K-15 Ago-inper 16% 28 Water 48% Experience of Agricultural Credit (8201) Transport 17% 3nd Problem (8103) 1st Problem (8101) Water 16% Ogbers. Others 17% Agro-input 5% Power Notes Wild Animal % % % Malaria 50% Erequency to Go to Clinic (7305) 1/ month 13% Name of Major Disease (7302) Means to Go to School (7203) 27 month 6% On Foot 100% 7200 Problems in Daily Life Figure K-13 (2) Others 42% 7300 Medical Services Others 86% S S S Children of Schooling Age (7201) Method of Cure (7303) 2 K Figure K- 14 Hospital 29% %% %%% 88% × %

Who informed? (8306) Others 100% 8300 Irrigation -(2) Figure K- 17 , % % Fast Cash 2,8 Reason for Selection of Crops (8303) Nothing 94% Have you heard about Kudu Dam? (8305) ------Others 2% Consume 30% ≿ 4 8 8 1st Possible Crop in Dry Season 8200 Agricultural Credit -(2) Beans 24% Figure K- 17 8300 Imgation -(1) Figure K- 16 8 t Maize 23% Have you refunded? (8206) Willto Crop in Dry Season (8301) × % Beans 23% 2 %



APPENDIX L

PROJECT EVALUATION

APPENDIX L. PROJECT EVALUATION

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L-1 Explanatory Note on Project Evaluation

L-1-1 Economic and Financial Analyses

Both the economic and financial analyses of projects are conducted in monetary terms with the difference lying in the definition of projects costs and benefits. Financial analysis evaluates the commercial viability of a project from the viewpoint of the project entity - all expenditures incurred on the project and revenues arising from it are taken into consideration. This form of analysis is necessary to assess the degree to which a project will generate revenues sufficient to meet its financial obligations, which is an important issue in financial planning.

Economic analysis attempts to assess the overall impact of a project in achieving national economic objectives of a specific country. The impact of project is assessed in the context of the national economy rather than in the context of the project entity. Economic analysis differs from financial analysis both in terms of identification and evaluation of inputs and outputs and therefore in the composition of "cost" and "benefit". The benefit from a project constitutes the extent to which the end-product contributes to the achievement of national objectives, cost reflects the degree to which the achievement of those objectives is sacrificed by diverting the resources required by the project from alternative uses.

L-1-2 Valuation of Prices and Conversion Factor

(1) Economic Prices of Traded Goods and Services

It is necessary to make an initial distinction between those goods and services traded internationally at the margin and those are not. These are respectively referred to as "traded" and "non-traded" goods and services. The term "traded" means that the goods and services concerned are actually imported into or exported from the country and are not subject to binding quantitative restrictions such as import quotas or to prohibitive trade taxes (i.e. taxes that are so high as to prevent trade

from occurring). All other goods and services are treated as "non-traded". The valuation of these two categories of goods and services is different.

In case of traded goods, it can usually be assumed that the country concerned can buy and sell such goods at prevailing prices. In this case, traded goods and services are valued at their "border" prices net of any trade taxes or subsidies existing in the country. These are the CIF prices in the case of imports and the FOB prices in the case of exports. The prices are calculated by using official exchange rate and then adjusted for local transport and distribution cost, though trade taxes or subsidies are not included in the prices used in economic evaluation of projects.

Production or use of traded goods generally does not affect border prices since the impact on global demand and supply may well be small. However, in cases where such an assumption is not justified and project inputs or outputs are considered as influencing border prices, the marginal costs or marginal revenues, as the case may be, should be used in the valuation of these traded commodities. Changes in prices that arise because of the project will also affect demand and supply of the goods and services involved elsewhere in the economy. The effects of these changes in addition to the effect on foreign trade will also have to be taken into account in evaluating a project.

(2) Economic Prices of Non-Traded Goods and Services

The valuation of non-traded goods and services tends to be more complex than the valuation of traded goods and services because production or use of non-traded goods in a project often affects domestic market prices of these and hence the use of these goods by other users or producers. The use of non-traded goods as a project input may be met partly by reducing consumption of the goods elsewhere and partly by increasing domestic production. If the use of a non-traded input by the project affects only the amount of use by others, the input's economic price should be derived from its marginal value to users (demand price). If the project affects only the level of production, then the economic cost should be derived from the input's marginal cost of production (supply price).

In most cases, the valuation of non-traded goods and services will be at the supply price or cost of production. However, it should be noted that there will be several cases where the price structure for non-traded goods and services departs significantly from the structure of marginal cost. For example, peak load power or power supply to rural areas may be priced well below marginal cost, railway tariffs may not fully reflect the transportation costs of goods both by commodity and by destination, and road transport rates may not reflect the costs of highway development and maintenance. It is necessary that such discrepancies between price and marginal cost be taken into account in the valuation of non-tradeable goods and services.

(3) Conversion Factors

According to the procedure suggested in the above, treadeables should be valued in terms of border prices, and non-tradeables in terms of opportunity costs measured in domestic market prices. There remains the task of bringing the two sets of prices into correct alignment; two approaches are possible in this regard. The first is the shadow exchange rate approach, which converts the border value of tradeable inputs and outputs into an equivalent value in domestic market prices. The second is the conversion factor approach, whereby the domestic price valuation on non-tradeable goods is converted to an equivalent value in border prices. The advantage of the conversion factor approach is that it can take into account the distortions in the pricing of non-tradeable inputs and outputs that are specific to the project. It may be noted that the shadow exchange rate and conversion factors are not meant to reflect any balance of payments disequilibrium; they only reflect the distortions between border prices and domestic prices which may be present even if the balance of payment is equilibrium.

So far, conversion factors for specific commodities and services have been described. However, the data on benefits and costs may often be available in the form of values for aggregates of commodities. For instance, the aggregates may be "costs of domestic machinery", "civil construction", "transport and distribution margins", or, for the shadow wage calculation, "value of agricultural output foregone". In such cases,

group conversion factors (GCF) could be used.

GCFs are defined as weighted averages of commodity conversion factors for an appropriate set of commodities. For instance, the GCF for civil construction may be a weighted average of the conversion factors for steel, cement, bricks, skilled and unskilled labor. GCFs are approximations and may be calculated for general use for any magnitude on the benefit or cost side when the analysis of the magnitude in terms of specific commodities is difficult or time consuming. The calculation of the GCFs requires (a) an estimate of the conversion factors for the component commodities; and (b) a set of weights for aggregation. Foreign trade and border tax data and similar sources can provide information for the estimation of conversion factors for component commodities, and data for the weights can be obtained from general statistical sources, such as the consumer expenditure surveys, crop production statistics, and censuses of manufacturing.

There will be some items for which even a GCF can not be readily estimated. In such cases, use can be made of a standard conversion factor (SCF) defined as a weighted average of commodity conversion factors for all commodities produced or consumed in the economy.

In certain situations, commodity specific or groups conversion factors may not be available for any time. In such case, the first step is to correct any underpricing or overpricing of the critical non-tradeable inputs relative to marginal cost. In the second step, the principal tradeable inputs used to produce the critical non-tradeable outputs should be segregated and valued at border prices. If these two steps are taken, the residual non-tradeable element can be converted with an SCF into an equivalent value in border prices. This procedure would capture most of the adjustment required for the inputs in question.

If SCF is used to convert the entire cost of non-tradeable output valued at market prices, the approach is equivalent to the use of a shadow exchange rate (SER). The only difference would be that with the use of SCF, all the values of non-tradeable inputs and outputs will be adjusted to be expressed in therms of border prices, whereas with the use of SER, all the values of tradeable inputs and outputs will be adjusted to be

expressed in terms of domestic prices. This will not affect the ranking of projects or the calculations of internal rates of return but if a major part of the adjustment for non-tradeable inputs and outputs is made with the use of GCFs or commodity specific conversion factors, the two approaches will not be equivalent except in the unlikely event of all conversion factors being equal to the SCF. The real advantage of the conversion factor approach is in the more thorough treatment of non-tradeable inputs and outpit.

Conversion factors are basically ment to be used in converting domestic prices of non-tradeable outputs into equivalent border prices. Tradeable goods can be valued directly in terms of border prices, but since the conversion factors for non-tradeable outputs are derived on the basis of the conversion factors of closely related substitutes and complements, it is necessary to have conversion factor for tradeable goods. Conversion factors are also useful in estimating group conversion factors for both inputs and outputs. Finally, even though tradeable goods can be border-priced directly, it is convenient to have the conversion factors of commonly encountered project inputs and outputs on hand.

Conversion factor for each specific commodity can be computed in the following formula:

$$\alpha_1 = \frac{M_1 + X_1}{(M_1 + TM_1) + (X_1 + TX_1)}$$

Where, a_i = Specific Commodity Conversion Factor

 M_1 = Value of imports of i number of commodity

X₁ = Value of exports of i number of commodity

'IM₁ = Value of taxes on imports of i number of commodity

TX : = Value of taxes on exports of i number of commodity

GCF and SCF can be worked out by grouping related commodities and by aggregating all commoditities in the above formula, respectively.

L-2 SOCIAL EVALUATION IN THIS MASIER PLAN

L-2-1 Methodology

It is often the case that which income group shall be benefited from the project is neglected in the project evaluation. As a result, in some cases, the project for a lower income group is not adopted simply because EIRR of the project is lower than the opportunity cost of capital. In order to solve this problem, in this master plan, the social evaluation with SIRR (Social Internal Rate of Return) shall be introduced for the purpose of incorporating the income distribution function of the project into the project evaluation.

SIRR is one of the internal rate of which comes from multiplication of the economic price by SBI (Social Benefit Index). SBI is an indicator which illustrates how many times of the project benefit is valued as much as that for the average beneficiaries of the whole economy. In other words, SIRR is a concept that value of one Zimbabwe dollar project benefit for richer beneficiaries is socially more valuable than that for poorer beneficiaries. In general, SBI shall be calculated through the following procedures.

(a) Calculation of Shadow Income Weight (SIW) of benefit in each income group

```
SIW (n) = (AI / I (n)) e

Where,

SIW (n) = Shadow Income Weight in Income Group n

AI = Average Income

I (n) = Income in Income Group n

e = Elasticity of Marginal Utility (Usually, e = 1)
```

(b) Calculation of Social Benefit Index (SBI)

$$SBI = \sum_{n=1}^{k} \times SIW(n)$$
Where,

SBI = Social Benefit Index

SIW (n) = Shadow Income Weight in Income Group n

k = Numbers of Income Group

The SBI worked out in these processes, indicates how many times the benefit enjoyed by the project's beneficiary could be valued in comaparison that the project benefit would be shared by the average income group in the country.

In this Master Plan, SIRR, which is calculated by the social benefit (the economic multiplied by SBI), measures the income distribution effect of the project.

L-2-2 Results of Social Evaluation

(1) Income Distribution in Zimbabwean Economy

The income disparity between small-scale farmers and large-scale farmers is considerably large in the agriculture sector of the Zimbabwean economy. According to the World Development Report (World Bank) in 1994, while in Zimbabwe the lowest 20% income group occupies only 4% of the whole economy, the highest 20% income group occupies 62.3%. Figure L-1 illustrates the Lorentz curve of the Zimbabwean economy, indicating the large income disparity. Under this situation, in case of the project evaluation, it is more important to examine who is benefited by the project than to calculated only EIRR.

In other words, it is absolutely necessary to quantify the effect of income distribution by the project using the social internal rate of return (SIRR).

(2) Calculation of SIRR

(a) Calculation of Shadow Income Weight (SIW) in each Income Group

As is shown in Table L-15, compared with the average income of Z\$3, 816 in the agricultural sector, the annual income for large-scale commercial employees is Z\$4,407, that for small-scale commercial

farmers is Z\$4,027, tand those for communal and resettlement farmers is Z\$2,527. As a result, the shadow income weight of respective farming group is estimated at 0.87, 0.95 and 1.51.

(b) Calculation of Social Benefit Index

As is shown in Table L-15, the value of benefit for the beneficiaries in the study area is estimated at 1.26 times as much as that for the average income group in the agricultural sector of Zimbabwe.

(3) Result of SIRR Calculation

SIRR is a discount rate at which the net production value of the social benefit adjusted by SBI is same as that of the cost. The result of the calculation of SIRR in each scenario is summarized below, and its calculation basis is as per Tables L-16 (a - c).

Scenario	SIRR (%)
B - 2	11.72
B - 1	10.64
۸	9.45

Table L-1 Standard Conversion Factor from Trade Statistics

	lable L-1 Standard Conversion ractor more statistics	รเดีย เล่น	5	י ממע	ימרוז רונים		(Unit: Million Z\$)
2	Item	1988	1989	1990	1991	1992	Average of 5 Years
-	1) Total Imports of Goods & Services (CIF)	1163.6	1318.3	1505.2	1645.7	1782.1	1483.0
7	1) Total Exports of Goods & Services (FOB)	1664.9	1693.5	1747.9	1693.8	1527.6	1665.5
m	2) Total Custom Duties & Import Taxes	452.5	482.5	532.2	625.1	675.2	553.5
4	2) Total Export Taxes	0.0	0.0	0.0	0.0	0.0	0.0
ß	2) Total Export Subsidies	0.0	0.0	0.0	0.0	0.0	0.0
ဖ	1+2	2828.5	3011.8	3253.1	3339.5	3309.7	3148.5
	1+2+3-4+5	3281.0	3494.3	3785.3	3964.6	3984.9	3702.0
∞	Standard Conversion Factor SCF = 6/7	0.862	0.862	0.859	0.842	0.831	0.851

1) Quarterly Digest of Statistics, Sep 1994 from Central Statistical Office 2) Trade Statistics Division, Central Statistical Office Notes:

Table L-2 Consumption Conversion Factor from Trade Statistics

							(Unit: Million Z\$)
8	ltem	1988	1989	1990	1991	1992	Average of 5 Years
-	1) Total Imports of Goods & Services (CIF)	512.1	547.8	639.1	727.8	800.1	645.4
7	1) Total Exports of Goods & Services (FOB)	689.4	652.3	665.2	685.2	639.2	666.3
ო	2) Total Custom Duties & Import Taxes on Consumption Goods	285.2	248.5	280.1	322.2	342.3	295.7
4	2) Total Export Taxes on Consumption Goods	0.0	0.0	0.0	0.0	0.0	0.0
Ŋ	2) Total Export Subsidies on Consumption Goods	0.0	0.0	0.0	0.0	0.0	0.0
မှ	1+2	1201.5	1200.1	1304.3	1413.0	1439.3	1311.6
2	1+2+3-4+5	1486.7	1448.6	1584.4	1735.2	1781.6	1607.3
ω	Consumption Conversion Factor CCF = 6/7	0.808	0.828	0.823	0.814	0.808	0.816
	AND LONG TO THE POOR AND AND AND AND AND AND AND AND AND AND	- 350					

1) Quarterly Digest of Statistics, Sep 1994 from Central Statistical Office 2) Trade Statistics Division, Central Statistical Office Notes:

Table L-3 Conversion Factors for Seed, Chemical & Fertilizer

Total		100.0	0.677	100.0	0.650
Tax & Duties	0.000	6.6	0.000	6.6	0.000
Fuel	5) 0.620	20.6	0.128	38.9	0.241
Transportation	4) 0.705	3.8	0.027	3.8	0.027
Unskilled Labour	3) 0.409	23.5	960.0	17.4	0.071
Skilled Labour	2) 0.816	1.2	0.010	1.8	0.015
Non-traded Goods		17.6	0.150	12.7	0.108
Traded Goods	1.000	26.7	0.267	18.8	0.188
Cost Component Traded Good	Conversion Factor	Composition of Cost (%)	Adjusted Conversion Factor	Composition of Cost (%)	Adjusted Conversion Factor
V_{\perp}	item	pəc	PS .	Toxilit194	Shemical &

1) Standard Conversion Factor from Trade Statistics (0.852)

2) Consumption Conversion Factor from Trade Statistics (0.816)

3) Consumption Conversion Factor from Trade Statistics (0.816) X Shadow Wage Rate from world Bank Estimation (0.500)=0.409

4) Estimated from Conversion Factors for Truck & Train 5) Conversion Factor for Oil from World Bank Estimation (0.620)

Table L-4 Price Structure of Maize

			Cor	nstant 1995 P	rice
	Cost Item	Unit	Financial	Conversion Factor	Economic
1)	Projected 2000 FOB Export Price of Maize(US), No.2, Yellow	US\$/t	144.0	n.r.	144.0
	Projected 2000 FOB Export Price of Maize(US), No.2 Yellow(US\$1=Z\$8.3871)	Z\$/t	1,207.7	n.r.	1,207.7
2)	Corresponding FOB Export Price Durban	Z\$/t	1,296.5	n.r.	1,296.5
	Export Tax (0%)	Z\$/t	0.0	0.000	0.0
	Export Subsidy (0%)	Z\$/t	0.0	0.000	0.0
3)	Port Handling Charge	Z\$/t	24.0	0.409	9.8
4)	Estimated GMB Export Margin (5.0%)	Z\$/t	60.6	0.816	49.4
5)	Transport and Handling Charge from Project Area to Durban	Z\$/t	364.4	0.713	259.8
6)	Approved Agent Margin (5.0%)	Z\$/t	40.4	0.816	33.0
7)	Packing Charge	Z\$/t	18.0	0.409	7.4
	Farmgate Price	Z\$/t	789.1	1.188	937.1

Notes: 1) World Bank Commodity Price Forecasts for 2000 Price in 1990 Constant US
Dollar Adjusted to 1995 Constant US Dollar Using MUV Index of 103.9

- 2) Considered to reflect the long-term relationship between FOB Durban and FOB Gulf Ports
- 3) National Railway of Zimbabwe, Kadoma Office
- 4) Grain Marketing Board, Sanyati Depot
- 5) Refer to Table 9-7
- 6) Grain Marketing Board, Sanyati Depot
- 7) Grain Marketing Board, Sanyati Depot

Table L-5 Price Structure of Wheat

			Cor	istant 1995 Pi	rice
	Cost Item	Unit	Financial	Conversion Factor	Economic
1)	Projected 2000 FOB Export Price of Wheat(Canadian), No.1 Western Red Spring 13.5%	US\$/t	225.8	n.r.	225.8
	Projected 2000 FOB Export Price of Wheat(Canadian), No.1 Western Red Spring 13.5%(US\$1=Z\$8.3871)	Z\$/t	1893.8	n.r.:	1893.8
2)	Corresponding FOB Export Price Durban	Z\$/t	1923.5	n.r.	1923.5
	Export Tax (0%)	Z\$/t	0.0	0.000	0.0
	Export Subsidy (0%)	Z \$ /t	0.0	0.000	0.0
3)	Port Handling Charge	Z\$/t	24.0	0.409	9.8
4)	Estimated GMB Export Margin (5.0%)	Z\$/t	90.5	0.816	73.8
5)	Transport and Handling Charge from Project Area to Durban	Z\$/t	364.4	0.713	259.8
6)	Approved Agent Margin (5.0%)	Z\$/t	66.2	0.816	54.0
7)	Packing Charge	Z\$/t	20.6	0.409	8.4
	Farmgate Price	Z\$/t	1357.8	1.118	1517.7

Notes: 1) World Bank Commodity Price Forecasts for 2000 Price in 1990 Constant US
Dollar Adjusted to 1995 Constant US Dollar Using MUV Index of 103.9

- 2) Considered to reflect the long-term relationship between FOB Durban and FOB Canada
- 3) National Railway of Zimbabwe, Kadoma Office
- 4) Grain Marketing Board, Sanyati Depot
- 5) Refer to Table 9-7
- 6) Grain Marketing Board, Sanyati Depot
- 7) Grain Marketing Board, Sanyati Depot

Table L-6 Price Structure of Cotton

		Con	stant 1995 Pi	ice
Cost Item	Unit	Financial	Conversion Factor	Economic
1) Projected 2000 CIF Export Price of Cotton (Outlook"A"Index), Middling(1-3/32)	US\$/t	1,683.2	n.r.	1,683.2
Projected 2000 CIF Export Price of Cotton (Outlook"a"Index), Middling(1-3/32) (US\$1=2\$8.3871)	Z\$/t	14,117.2	n.r.	14,117.2
2) Corresponding FOB Export Price Durban	Z\$/t	13,058.4	n.r.	13,058.4
Export Tax (0%)	Z\$/t	0.0	0.000	0.0
Export Subsidy (0%)	Z\$/t	0.0	0.000	0.0
3) Port Handling Charge	Z\$/t	64.0	0.409	26.2
4) Estimated COTTOCO Export Margin	Z\$/t	618.8	0.816	504.9
5) Yielding Ratio of Cotton Lint from Seed	Z\$/t	33.3	n.r.	33.3
6) Ginning Cost	Z\$/t	61.6	0.816	50.3
7) Transport and Handling Charge from Project Area to Durban	Z\$/t	418.6	0.710	297.2
8) Packing Charge	Z\$/t	49.6	0.409	20.3
Farmgate Price	Z\$/t	3,591.3	1.059	3,803.8

Notes: 1) World Bank Commodity Price Forecasts for 2000 Price in 1990 Constant US

Dollar Adjusted to 1995 Constant US Dollar Using MUV Index of 103.9

- 2) Considered to reflect the long-term relationship between FOB Durban and FOB Europe
- 3) National Railway of Zimbabwe, Kadoma Office
- 4) COTTOCO, Sanyati Depot
- 5) COTTOCO, Sanyati Depot
- 6) COTTOCO, Sanyati Depot
- 7) Refer to Table 9-7
- 8) COTTOCO, Sanyati Depot

Table L-7 Transport and Handling Charge from Project Area to Durban

(A) Maize & Wheat

Transport and Handling	Vehicle	Distance (km)		Financial Cost (Z\$/t)	Conversion Factor	Economic Cost (Z\$/t)
Project Area→ Sanyati Depot	Truck	40	0.40	1)		
Handling Charge at Sanyati Depot	n.r.	n.r.	n.r.	1) 5.0	0.409	2.0
Sanyati Depot → Kadoma Depot	Truck	110	0.40	1) 44.0	0.680	29.9
Handling Charge at Kadoma Depot	n.r.	n.r.	n.r.	1) 5.0	0.409	2.0
Kadoma Depot → Beitbridge	Train (in Zimbabwe)	400	0.20	80.0	0.730	58.4
Beitbridge → Durban Port	Train (in South Africa)	1,340	0.16	2) 214.4	0.730	156.5
TOTAL COST	n.c.	1,890	n.r.	364.4	0.713	259.8

NOTES: 1) GMB, Sanyati Depot

2) National Railway of Zimbabwe, Kadoma Office

(B) Cotton

Transport and Handling	Vehicle	Distance (km)	Unit Cost (Z\$/t · km)	Financial Cost (Z\$/t)	Conversion Factor	Economic Cost (Z\$/t)
Project Area→ Sanyati Depot	Truck	40	0.50	1) 20.0	0.680	13.6
Handling Charge at Sanyati Depot	n.r.	n.r.	n.r.	1) 7.2	0.409	2.9
Sanyati Depot → Kadoma Depot	Truck	110	0.50	1) 55.0	0.680	37.4
Handling Charge at Kadoma Depot	n.r.	n.r.	n.r.	7.2	0.409	2.9
Kadoma Depot → Beitbridge	Train (in Zimbabwe)	400	0.22	88.0	0.730	64.2
Beitbridge → Durban Port	Train (in South Africa)	1,340	0.18	2) 241.2	0.730	176.1
TOTAL COST	n.r.	1,890	n.r.	418.6	0.710	297.2

NOTES: 1) COTTOCO, Sanyati Depot

2) National Railway of Zimbabwe, Kadoma Office

Table L-8 Financial & Economic Prices of Locally-Traded Farm Output

Price Crop	Financial Price (Z\$/kg)	Conversion Factor	Economic Price (Z\$/kg)
Sugar Bean	1) 2.240	0.851	1.906
Green Maize	2) 400.0	0.851	340.4
Groundnuts	1) 2.355	0.851	2.004
Sunflower	1.472	0.851	1.253
Onion	3) 2.000	0.851	1.702

NOTES: 1) Financial prices of sunflower, groundnuts and sugar bean are GMB producer prices.

²⁾ Financial price of green maize is local market price, and unit is 1000 cobs.

³⁾ Financial price of onion is local market price.

Table L-9 Financial & Economic Prices of Farm Inputs

P			r				
			1	2	3=1-2	4	5=3X4
	Item	Unit	Financial	Sales	Financial Price	Conversion	
<u> </u>	 		price	Tax	Less Sales Tax	Factor	Price
	Cotton Seed	Z\$/kg	0.63	0.00	0.63	0.677	0.43
	Maize Seed	Z\$/kg	3.30	0.00	3.30	0.677	2.23
	Wheat Seed	Z\$/kg	4.88	0.00	4.88	0.677	3.30
Seed	Sugar Bean Seed	Z\$/kg	0.90	0.00	0.90	0.677	0.61
S	Sunflower Seed	Z\$/kg	9.60	0.00	9.60	0.677	6.50
	Ground Nuts Seed	Z\$/kg	4.84	0.00	4.84	0.677	3.28
	Onion Seed	Z\$/kg	9.60	0.00	9.60	0.677	6.50
	Compound D	Z\$/t	1296.00	129.60	1166.40	0.650	758.16
	Compound L	Z\$/t	1657.00	165.70	1491.30	0.650	969.35
Fertilizer	Compound S	Z\$/t	1779.00	177.90	1601.10	0.650	1040.72
Fer	Ammonium Nitrate	Z\$/t	1222.00	122.20	1099.80	0.650	714.87
	Manure	Z\$/t	50.00	5.00	45.00	0.650	29.25
	Gypsum	Z\$/t	310.00	31.00	279.00	0.650	181.35
	Carbaryl	Z\$/kg	84.00	8.40	75.60	0.650	49.14
	Agrithrin	Z\$/I	136.00	13.60	122.40	0.650	79.56
	Atrazine	Z\$/kg	32.40	3.24	29.16	0.650	18.95
ਜ਼	Endosulfan	Z\$/kg	81.00	8.10	72.90	0.650	47.39
Chemical	Dithane	Z\$/kg	63.50	6.35	57.15	0.650	37.15
ð	Thiram	Z\$/kg	54.00	5.40	48.60	0.650	31.59
	Mancozeb	Z\$/kg	63.00	6.30	56.70	0.650	36.86
	Copper Oxychloride	Z\$/kg	23.30	2.33	20.97	0.650	13.63
	Thiodan	Z\$/kg	7.00	0.70	6.30	0.650	4.10
L	Rogor	Z\$/I	50.00	5.00	45.00	0.650	29.25
	Scotch Cart	Z\$/Unit	3000.00	300.00	2700.00	0.851	2297.70
ii.	Cultivater	Z\$/Unit	625.80	62.58	563.22	0.851	479.30
uipni	Wheelburrow	Z\$/Unit	586.00	58.60	527.40	0.851	448.82
Machinery & Equipn	Plough	Z\$/Unit	395.40	39.54	355.86	0.851	302.84
, y	Sickle	Z\$/Unit	33.00	3.30	29.70	0.851	25.27
achir	Ное	Z\$/Unit	20.00	2.00	18.00	0.851	15.32
🗵	Napsak Sprayer	Z\$/Unit	759.00	75.90	683.10	0.851	581.32
	Tractor	Z\$/Unit • day	400.00	0.00	400.00	0.851	340.40
뉚	Skilled Labour	Z\$/man · day	11.00	0.00	11.00	0.816	8.98
Lanour	Unskilled Labour	Z\$/man · day	6.00	0.00	6.00	0.409	2.45
Ľ	Draft Animal Labour	Z\$/ox ⋅ day	5.52	0.00	5.52	0.409	2.26
Charge	Handling Charge	Z\$/ha	16.70	0.00	16.70		
Ö	ZFA Fee	Z\$/ha	8.33	0.00	8.33	0.816	6.80

Table L-10-a Conversion Factors for Construction Cost, Operation & Management Cost and Replacement Cost (Scenario A)

	1 Traded Good Non-1	Non-traded Skilled	Unskilled	Transferred	2	
100.0 1.00	& Services	Service Labour	Labour	Values	Conversion Factor for	1 X 2
100.0	1.000			0.000	Each Cost Item	
(1) Kudu Dam 16.4 35.0 n.r. 0.350 (2) Medium Size Dam 2.0 35.0 n.r. 0.350 (3) Kudu Irrigation Project 77.6 45.0 n.r. 0.450 (4) Agriculture Research Center 1.6 60.0 n.r. 0.100 (5) Rehabilitation of Road 2.0 10.0 n.r. 0.100 (7) Rehabilitation of Boreholes n.r. 0.600 n.r. 0.600 (7) Rehabilitation of Boreholes n.r. 0.000 n.r. 0.000 (8) Land Rectamation & 0.1 60.0 n.r. 0.000 n.r. 0.000 (1) Salary & Wages n.r. 0.000 n.r. 0.000 (2) Fuel & Oil 30 n.r. 0.000 n.r. 0.000 (3) Spare Parts & Materials 50.0 75.0 n.r. 0.300 n.r. 0.200 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r	n.r.	יני.	n.r.	טיני	ח.ר.	0.781
(2) Medium Size Dam 2.0 35.0 1.7. 0.350 (3) Kudu Irrigation Project 77.6 45.0 1.0.450 (4) Agriculture Research Center 1.6 60.0 1.0.0	35.0	0.01 10.0	20.0	5.0	100.0	
(2) Medium Size Dam 2.0 35.0	0.350	256 0.082	0.082	0.000	0.769	0.126
(3) Kudu !rrigation Project 77.6 45.0	35.0	 		5.0	100.0	
(3) Kudu irrigation Project 77.6 45.0 (4) Agriculture Research Center 1.6 60.0 (5) Rehabilitation of Road 2.0 10.0 (6) Expansion of Collection & 0.3 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (8) Land Reclamation & 0.0 10.0 Soil Conservation 0.1 0.0 0.0 (1) Salary & Wages 0.0 13.0 75.0 (2) Fuel & Oil 13.0 75.0 (3) Spare Parts & Materials 0.1. 0.300 (4) General Expenses 6.7 30.0 0.000 (1) General Expenses 6.7 30.0 0.000 (1) General Expenses 6.7 30.0 0.000 (2) Fuel & Oil 0.000 (3) Spare Parts & Materials 0.000 (4) General Expenses 6.7 30.0 0.000 (5) Spare Parts & Materials 0.000 (6) TS.0 0.0000 (7) General Expenses 0.0000 (8) TS.0 0.0000 (9) TS.0 0.00000 (10) TS.0 0.00000000000000000000000000000000	0.350	256 0.082	0.082	0.000	0.769	0.015
(4) Agriculture Research Center 1.6 60.0 (5) Rehabilitation of Road 2.0 10.0 (5) Rehabilitation of Road 1.7 0.100 1.7 (7) Rehabilitation of Boreholes 0.1 60.0 10.0 10.0 Soil Conservation 0.1 0.0 10.0 10.0 10.0 (1) Salary & Wages 0.1 13.0 75.0 10.1 (2) Fuel & Oil 13.0 75.0 10.1 (3) Spare Parts & Materials 50.0 75.0 10.1 (4) General Expenses 6.7 30.0 75.0 10.0 10.0 75.0 10.0 10.0 75.0 10.0 10.0 75.0 10.0 10.0 75.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 75.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 1	45.0			5.0	100.0	
(4) Agriculture Research Center 1.6 60.0 (5) Rehabilitation of Road 2.0 10.0 (6) Expansion of Collection & n.r. 0.3 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (8) Land Reclamation & 0.0 0.0 10.0 Soil Conservation n.r. 0.100 Operation & Maintenance Cost 100.0 n.r. (1) Salary & Wages n.r. 0.000 (1) Salary & Wages n.r. 0.000 (2) Fuel & Oil n.r. 0.750 (3) Spare Parts & Materials 50.0 75.0 (4) General Expenses 6.7 30.0 (7) General Expenses 6.7 30.0 (7) General Expenses 6.7 0.300	0.450	170 0.082	0.082	0.000	0.784	0.608
(5) Rehabilitation of Road 2.0 10.0 (5) Rehabilitation of Road 2.0 10.0 (6) Expansion of Collection & 0.3 60.0 Deposit Points 0.1 60.0 0.1 0.0 (7) Rehabilitation of Boreholes 0.1 60.0 0.0 10.0 0.0 10.0 0.0 0.0 0.0 0.0 0.	60.0			5.0	100.0	
n of Road 2.0 10.0 n.r. 0.100 s	0.600	128 0.082	0.041	0.000	0.850	0.014
(6) Expansion of Collection & 0.3 60.0 Deposit Points (7) Rehabilitation of Boreholes 0.1 60.0 (8) Land Reclamation & 0.0 10.0 Soil Conservation n.r. 0.100 Operation & Maintenance Cost 100.0 n.r. 0.000 (1) Salary & Wages 30.3 0.0 (2) Fuel & Oil 13.0 75.0 n.r. 0.750 (3) Spare Parts & Materials 50.0 75.0 (4) General Expenses 6.7 30.0 n.r. 0.300	10.0			5.0	100.0	
(6) Expansion of Collection & 0.3 60.0 Deposit Points 0.1 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (7) Rehabilitation of Boreholes 0.1 60.0 (8) Land Reclamation & 0.0 0.0 10.0 Soil Conservation 0.10 0.100 Operation & Maintenance Cost 100.0 0.0 (1) Salary & Wages 0.0 0.00 (2) Fuel & Oil 0.75.0 (2) Fuel & Oil 0.75.0 (3) Spare Parts & Materials 50.0 75.0 (4) General Expenses 6.7 30.0 (7) General Expenses 0.00 75.0	0.100	469 0.082	0.082	0.000	0.732	0.015
(7) Rehabilitation of Boreholes 0.1 0.600 (7) Rehabilitation of Boreholes 0.1 60.0 (8) Land Reclamation & 0.0 10.0 10.0 Soil Conservation & 0.0 10.0 10.0 0.100 (1) Salary & Wages 0.1 13.0 75.0 (2) Fuel & Oil 13.0 75.0 11.1 0.750 (3) Spare Parts & Materials 50.0 75.0 (4) General Expenses 6.7 30.0 11.1 0.300	60.0	5.0 10.0	10.0	5.0	100.0	
n of Boreholes 0.1 60.0 n.r. 0.600 n.r. 0.600 n.r. 0.100 n.r. 0.100 n.r. 0.100 n.r. 0.100 n.r. 0.000 n.r. 0.000 n.r. 0.000 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750	0.600	128 0.082	0.041	0.000	0.850	0.003
ation & 0.0 10.0 ttion tion ttion n.r. 0.600 ttion n.r. 0.100 n.r. 0.000 n.r. 0.000 n.r. 0.750 n.r. 0.750 enses 6.7 30.0 n.r. 0.300 n.r. 0.300	60.0	5.0 10.0	10.0	5.0	100.0	
ttion & 0.0 10.0 ttion n.r. 0.100 enance Cost 100.0 n.r. ges 30.3 0.0 n.r. 0.000 n.r. 0.750 n.r. 0.750 enses 6.7 30.0 n.r. 0.300 n.r. 0.300	0.600	128 0.082	0.041	0.000	0.850	0.001
### Title	10.0	5.0 10.0	20.0	5.0	100.0	
ges 30.3 0.0 n.r. o.000 n.r. 0.000 n.r. 0.000 n.r. 0.75.0 n.r. 0.75.0 n.r. 0.75.0 n.r. 0.75.0 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300	0.100	469 0.082	0.082	0.000	0.732	0.000
ges 30.3 0.0 n.r. 0.000 n.r. 0.000 n.r. 0.000 n.r. 0.750 m.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.750 n.r. 0.300 n.r. 0.300 n.r. 0.300 n.r. 0.300	n.r.	ויני. חייני	n.r.	n.r.	ייני.	0.760
### Materials	0.0	30.0	65.0	5.0	100.0	
8 Materials 50.0 75.0 n.r. 0.750 enses 6.7 30.0 n.r. 0.300 n.r. 0.300	0.000	000 0.245	0.266	0.000	0.511	0.155
& Materials 50.0 75.0 enses 6.7 30.0 n.r. 0.300 n.r. 0.300	75.0		10.0	5.0	100.0	
& Materials 50.0 75.0 n.r. 0.750 enses 6.7 30.0 n.r. 0.300 100.0 75.0	0.750	043 0.041	0.041	0.000	0.874	0.114
enses 6.7 30.0 n.r. 0.300	75.0	5.0	10.0	9.0	100.0	
enses 6.7 30.0 n.r. 0.300	0.750	0.043	0.041	0.000	0.874	0.437
100.0 75.0	30.0		10.0	5.0	100.0	
100.0 75.0	0.300	426 0.041	0.041	0.000	0.808	0.054
	100.0 75.0	5.0 5.0	10.0	5.0	100.0	
	0.750	043 0.041	0.041	0.000	0.874	0.874

Table L-10-b Conversion Factors for Construction Cost, Operation & Management Cost and Replacement Cost (Scenario B-1)

	-	Traded Good	Non-traded	Skilled	Cuskilled	Transferred	0	
Cost Items	Share(%)	& Services	Good & Service	Labour	Labour	Values	Conversion Factor for	1 X 2
		1.000	0.852	0.817	0.409	0	Each Cost Item	
Investment Cost	100.0	n.r.	n.r.	n.r.	n.r.	n.r.	טיגי	0.755
(1) Kudu Dam	0.0	35.0	30.0	10.0	20.0	9.0	100.0	
	ח.ר.	0.350	0.256	0.082	0.082	0.000	0.769	0.000
(2) Medium Size Dam	25.1	35.0	30.0	10.0	20.0	5.0	100.0	
	ח.ר.	0.350	0.256	0.082	0.082	0.000	0.769	0.193
(3) Kudu Irrigation Project	3.2	45.0	20.0	10.0	20.0	5.0	100.0	
	חיר	0.450	0.170	0.082	0.082	0.000	0.784	0.025
(4) Agriculture Research Center	7.6	60.0	15.0	10.0	10.0	5.0	100.0	
	חי	0.600	0.128	0.082	0.041	0.000	0.850	0.065
(5) Rehabilitation of Road	15.0	10.0	55.0	10.0	20.0	5.0	100.0	
	n.r.	0.100	0.469	0.082	0.082	0.000	0.732	0.110
(6) Expansion of Collection &	2.2	60.0	15.0	10.0	10.0	5.0	100.0	
Deposit Points	n.r.	0.600	0.128	0.082	0.041	0.000	0.850	0.019
(7) Rehabilitation of Boreholes	0.5	0.09	15.0	10.0	10.0	5.0	100.0	
	n.r.	0.600	0.128	0.082	0.041	0.000	0.850	0.004
(8) Land Reclamation &	46.4	10.0	55.0	10.0	20.0	5.0	100.0	
Soil Conservation	.r.c	0.100	0.469	0.082	0.082	0.000	0.732	0.340
Operation & Maintenance Cost	100.0	n.r.	n.r.	n.r.	חיני.	טיני	n.r.	0.760
(1) Salary & Wages	30.3	0.0	0.0	30.0	65.0	5.0	100.0	
	ח.ר.	00000	0.000	0.245	0.266	000.0	0.511	0.155
(2) Fuel & Oil	13.0	75.0	5.0	5.0	10.0	5.0	100.0	
	۵.۲.	0.750	0.043	0.041	0.041	0000	0.874	0.114
(3) Spare Parts & Materials	50.0	75.0	5.0	5.0	10.0	5.0	100.0	
-	n.r.	0.750	0.043	0.041	0.041	000.0	0.874	0.437
(4) General Expenses	6.7	30.0	50.0	5.0	10.0	5.0	100.0	
		0.300	0.426	0.041	0.041	0.000	0.808	0.054
Replacement Cost	100.0	75.0	5.0	5.0	10.0	5.0	100.0	
	r.	0.750	0.043	0.041	0.041	0.000	0.874	0.874

Table L-10-c Conversion Factors for Construction Cost, Operation & Management Cost and Replacement Cost (Scenario B-2)

_	•	Traces Cood	מסטמייים כול	Coll. A.C.	Cellivaria	Transferred	٥	
	Chocolo		300000000000000000000000000000000000000			1 (1) (1) (1) (1) (1) (1) (1)	11 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	· ·
Cost Items	Share(%)	& Services	Good & Service	Labour	Labour	Values	Conversion Factor for	Z X F
		1.000	0.852	0.817	0.409	0	Each Cost Item	
Investment Cost	100.0	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	0.744
(1) Kudu Dam	0.0	35.0	30.0	10.0	20.0	5.0	100,0	
	n.r.	0.350	0.256	0.082	0.082	000.0	0.769	0.00.0
(2) Medium Size Dam	0.0	35.0	30.0	10.0	20.0	5.0	100.0	:
	ח.ר.	0.350	0.256	0.082	0.082	000.0	0.769	0.000
(3) Kudu Irrigation Project	0.0	45.0	20.0	10.0	20.0	5.0	100.0	
	n.r.	0.450	0.170	0.082	0.032	000.0	0.784	0.000
(4) Agriculture Research Center	5.9	0.09	15.0	10.0	10.0	5.0	100.0	
	n.r.	0.600	0.128	0.082	0.041	000.0	0.850	0.050
(5) Rehabilitation of Road	21.2	10.0	55.0	10.0	20.0	5.0	100.0	
	ח.ר.	0.100	0.469	0.082	0.082	000.0	0.732	0.155
(6) Expansion of Collection &	3.2	60.0	15.0	10.0	10.0	5.0	100.0	
Deposit Points	n.r.	0.600	0.128	0.082	0.041	000.0	0.850	0.027
(7) Rehabilitation of Boreholes	0.7	0.09	15.0	10.0	10.0	5.0	100.0	
	n.r.	0.600	0.128	0.082	0.041	0.000	0.850	0.006
(8) Land Reclamation &	0.69	10.0	55.0	10.0	20.0	5.0	100.0	
Soil Conservation	n.r.	0.100	0.469	0.082	0.082	0.000	0.732	0.505
Operation & Maintenance Cost	100.0	n.r.	n.r.	n.r.	n.r.	יט'ני	n.r.	0.760
(1) Salary & Wages	30.3	0.0	0.0	30.0	65.0	5.0	100.0	
	n.r.	0.000	0.000	0.245	0.266	000.0	0.511	0.155
(2) Fuel & Oil	13.0	75.0	5.0	5.0	10.0	5.0	100.0	
	n.r.	0.750	0.043	0.041	0.041	000.0	0.874	0.114
(3) Spare Parts & Materials	50.0	75.0	5.0	5.0	10.0	0.0	100.0	
	ח.ר.	0.750	0.043	0.041	0.041	0.000	0.874	0.437
(4) General Expenses	6.7	30.0	50.0	5.0	10.0	5.0	100.0	
	n.r.	0.300	0.426	0.041	0.041	000.0	0.808	0.054
Replacement Cost	100.0	75.0	5.0	5.0	10.0	5.0	100.0	
	n.r.	0.750	0.043	0.041	0.041	0.000	0.874	0.874

Table L-11-a Financial & Economic Project Cost (Scenario A)

(Unit: thousand Z\$)

Company and the Company of the Compa	Financial	Conversion	Economic
Cost Items	Cost	Factor	Cost
Investment Cost			
(1) Kudu Dam	430,500	0.769	331,055
(2) Medium Size Dam	237,700	0.769	182,791
(3) Kudu Irrigation Project	1,826,000	0.784	1,431,584
(4) Agriculture Research Center	41,200	0.850	35,020
(5) Rehabilitation of Road	53,400	0.732	39,089
(6) Expansion of Collection & Deposit Points	8,000	0.850	6,800
(7) Rehabilitation of Boreholes	1,700	0.850	1,445
(8) Land Reclamation & Soil Conservation	0	0.732	0
Total	2,598,500	0.780	2,027,784
Operation & Maintenance Cost			
(1) Salary & Wages	9,583	. 0.511	4,897
(2) Fuel & Oil	4,112	0.874	3,594
(3) Spare Parts & Materials	15,814	0.874	13,821
(4) General Expenses	2,119	0.808	1,712
Total	31,628	0.760	24,024
Replacement Cost	anguero 💃 al Laguardo medicinale de medicinario que mensión de Pende actividad.		
Total	25,950	0.874	22,680

Table L-11-b Financial & Economic Project Cost (Scenario B-1)

(Unit: thousand Z\$)

	Financial	Conversion	Economic
Cost Items	Cost	Factor	Cost
Investment Cost	, префилограйствовода Э. В туте расперия из прина из советствовода Э.		
(1) Kudu Dam	О	0.769	0
(2) Medium Size Dam	97,900	0.769	75,285
(3) Kudu Irrigation Project	0	0.784	0
(4) Agriculture Research Center	27,200	0.850	23,120
(5) Rehabilitation of Road	53,400	0.732	39,089
(6) Expansion of Collection & Deposit Points	8,000	0.850	6,800
(7) Rehabilitation of Boreholes	1,700	0.850	1,445
(8) Land Reclamation & Soil Conservation	286,600	0.732	209,791
Total	474,800	0.749	355,530
Operation & Maintenance Cost			
(1) Salary & Wages	3,151	0,511	1,610
(2) Fuel & Oil	1,362	0.874	1,190
(3) Spare Parts & Materials	5,220	0.874	4,562
(4) General Expenses	697	0.808	563
Total	10,430	0.760	7,926
Replacement Cost			
Total	23,860	0.874	20,854

Table L -11-c Financial & Economic Project Cost (Scenario 8-2)

(Unit: thousand Z\$)

and the second property common particular and extension and decision and decision of the second common particular and the second com	Financial	Conversion	Economic
Cost Items	Cost	Factor	Cost
nvestment Cost			
(1) Kudu Dam	o	0.769	0
(2) Medium Size Dam	0	0.769	0
(3) Kudu Irrigation Project	0	0.784	0
(4) Agriculture Research Center	14,800	0.850	12,580
(5) Rehabilitation of Road	53,400	0.732	39,089
(6) Expansion of Collection & Deposit Points	8,000	0.850	6,800
(7) Rehabilitation of Boreholes	1,700	0.850	1,445
(8) Land Reclamation & Soil Conservation	300,800	0.732	220,186
Total	378,700	0.740	280,099
Operation & Maintenance Cost			
(1) Salary & Wages	2,531	0.511	1,293
(2) Fuel & Oil	1,086	0.874	949
(3) Spare Parts & Materials	4,176	0.874	3,650
(4) General Expenses	560	0.808	452
Total	8,353	0.760	6,345
Replacement Cost		Common annium annium (Cr. 15-84-95), a 15-5	ndet if a militaria karanasi militaria manasi i mi
Total	18,900	0.874	16,519
I OI al	19,900	0.074	10,313

Table L-12-a Net Production Value (Scenario A, Irrigated, 2010, Communal & Resettlement Farm)

	Item	Item Target	Farmgate	Gross	Production	Net	Area	Total Net
		Yield	Price	ction	Cost	Production		Production
Crop		(Kg/ha)	(Z\$/kg)	Value (ZS/ha)	(28/ha)	Vatue (Z\$/ha)	(ha)	Value (ZS)
NOTTON	LL	2,700	3.591	9,695.7	2713.4	6,982.3	3675.0	25,659,953
	ш	2,700	3.804	10,270.8	1461.5	8,809.3	3675.0	32,374,178
MAIZE	F	5,400	0.789	4,260.6	1884.5	2,376.1	7350.0	17,464,335
	1LJ	5,400	0.937	5,059.8	1076.2	3,983.6	7350.0	29,279,460
WHEAT	я	4,500	1.358	6,111.0	2355.6	3,755.4	7350.0	27,602,190
	ш	4,500	1.518	6,831.0	1369.3	5,461.7	7350.0	40,143,495
SUGAR BEAN	lL.	1,350	2.240	3,024.0	1547.1	1,476.9	1837.5	2,713,804
	Э	1,350	1.906	2.573.1	870.3	1,702.8	1837.5	3,128,895
GREEN MAIZE	Ա	4,050	0.400	1,620.0	1324.9	295.1	1837.5	542,246
	ш	4,050	0.340	1,377.0	779.8	597.2	1837.5	1,097,355
GROUNDNUTS	님	2,250	2.355	5,298.8	1992.5	3,306.3	1837,5	6,075,234
	យ	2,250	2.004	4,509.0	1175.1	3,333.9	1837.5	6,126,041
SUNFLOWER	IJ.	0	0000	0.0	0.0	0.0	0.0	0
	Э	0	0.000	0.0	0.0	0.0	0.0	0
NOINO	u.	000'6	2.000	18,000.0	3766.9	14,233.1	1837.5	26,153,321
	ш	000'6	1.702	15,318.0	2094.4	13,223.6	1837.5	24,298,365
TOTAL	UL.	n. r.	n. r.	n. r.	ח. ז.	ח. ר.	25725.0	106,211,083
	Ш	n. r.	ט יני	7	ח. ני.	ח. נ.	25725.0	136,447,789
NOTES :	II.	Financial Value						

F = Financial Value E = Economic Value

Table L-12-b Net Production Value (Scenario A, Rainfed, 2005, Communal & Resettlement Farm)

	Item	Item Target	Farmgate	Gross	Production		Area	Total Net
		Yield	Price	Production Value	Cost	Production Value		Production Value
Crop		(Kg/ha)	(Z\$/kg)	(Z\$/ha)	(Z\$/ha)	(Z\$/ha)	(ha)	(\$2)
NOTTON	ŭ.	006	3.591	3,231.9	2476.1	755.8	32643.6	24,672,033
	ш	006	3.804	3,423.6	1353.6	2,070.0	32643.6	67,572,252
MAIZE	u.	1,300	0.789	1,025.7	1164.9	-139.2	40804.5	-5679986
	ш	1,300	0.937	1,218.1	6.889	528.2	40804.5	21,552,937
WHEAT	u.	O	0.000	0.0	0.0	0.0	0.0	0
	ш	0	00000	0.0	0.0	0.0	0.0	0
SUGAR BEAN	T.	0	0.000	0.0	0.0	0.0	0.0	0
	m	0	0.000	0.0	0.0	0.0	0.0	0
GREEN MAIZE	u.	o	0.000	0.0	0.0	0.0	0.0	0
	w	0	0000	0.0	0.0	0.0	0.0	0
GROUNDNUTS	H	999	2.355	1,318.8	1242.3	76.5	4080.45	312,154
	Ħ	095	2.004	1,122.2	736.3	385.9	4080,45	1,574,809
SUNFLOWER	u.	200	1.472	736.0	729.7	6.9	4080.45	25,707
	Ξ	500	1.253	626.5	471.7	154.8	4080.45	631,654
ONION	il.	0	0.000	0.0	0.0	0.0	0.0	0
	ш	0	0.000	0.0	0.0	0.0	0.0	0
TOTAL	டி	ח. נ.	n. r.	ח. נ	n. r.	η, ι.	81609.0	19,304,201
	E	٦, ٦	n. n.	. c.	ט. נ.	טיני	81609.0	866'669'06
NOTES :	EL.	Financial Value						

F = Financial Value E = Economic Value

Table L-12-c Net Production Value (Scenario A, Rainfed, 2010, Communal & Resettlement Farm)

	Item	Item Target	Farmgate	Gross	Production	Net	Area	Total Net
/		Yield	Price	ction	Cost	Production		Production
				Value		Value		Value
Crop	/	(Kg/ha)	(ZS/kg)	(Z\$/ha)	(ZS/ha)	(ZS/ha)	(ha)	(2S)
COTTON	u.	006	3.591	3,231.9	2476.1	755.8	17228.0	13,020,922
	w	006	3.804	3,423.6	1353.6	2,070.0	17228.0	35,661,960
MAIZE	u_	1,300	0.789	1,025.7	1164.9	-139.2	21535.0	-2997672
	w	1,300	0.937	1,218.1	689.9	528.2	21535.0	11,374,787
WHEAT	L	0	0.000	0.0	0.0	0.0	0.0	0
	ш	0	0.000	0.0	0.0	0.0	0.0	0
SUGAR BEAN	u.	o	0.000	0.0	0.0	0.0	0.0	0
	<u> </u>	0	0.000	0.0	0.0	0.0	0.0	0
GREEN MAIZE	U.	0	0.000	0.0	0.0	0.0	0.0	0
	w L	0	0.000	0.0	0.0	0.0	0.0	0
GROUNDNUTS	<u>L</u>	999	2.355	1,318.8	1242.3	76.5	2153.5	164,743
	ш	95	2.004	1,122.2	736.3	385.9	2153.5	831,122
SUNFLOWER	ய	200	1.472	736.0	729.7	6.3	2153.5	13,567
	m	200	1.253	626.5	471.7	154.8	2153.5	333,362
ONION	u.	0	0,000	0.0	0.0	0.0	0.0	0
	ய	o	0.000	0.0	0.0	0.0	0.0	0
TOTAL	u.	i.	ח. ר.	n. r.	n.r.	n. r.	43070.0	10,187,993
	m	i: C	n. r.	ח. ני	ስ. ፫.	n. r.	43070.0	47,867,869
NOTES :	#! [L	Financial Value						

F= Financial Value E= Economic Value

Table L-12-d Net Production Value (Scenario A, Irrigated, 2010, Small-Scale Commercial Farm)

	Item	Item Target	Farmgate	Gross	Production		Area	Total Net
	. /	Yield (Ko/ha)	Price (78/kg)	Production Value (7S/ba)	Cost (75/ha)	Production Value (75/ha)	(a.c.)	Production Value (78)
NOTTOO	/ ц	3,000	3.591	10,773.0	_	8,059.6	2950.0	23.775.820
	ш	3.000	3.804	11,412.0	1461.5	9,950.5	2950.0	29,353,975
MAIZE	u	6,000	0.789	4,734.0	1884.5	2,849.5	1475.0	4,203,013
	ш	6.000	0.937	5,622.0	1076.2	4,545.8	1475.0	6,705,055
WHEAT	tu.	5,000	1.358	6,790.0	2355.6	4,434.4	1475.0	6,540,740
	w	2,000	1.518	7,590.0	1369.3	6,220.7	1475.0	9,175,533
SUGAR BEAN	li_	1,500	2.240	3,360.0	1547.1	1,812.9	737.5	1,337,014
	Ш	1,500	1.906	2,859.0	870.3	1,988.7	737.5	1,466,666
GREEN MAIZE	I.	4,500	0.400	1,800.0	1324,9	475.1	737.5	350,386
	m	4,500	0.340	1,530.0	8.677	750.2	737.5	553,273
GROUNDNUTS	LL .	2,500	2.355	5,887.5	1992.5	3,895.0	737.5	2,872,563
	w	2,500	2.004	5,010.0	1175.1	3,834.9	737.5	2,828,239
SUNFLOWER	ււ	0	0.000	0.0	0.0	0.0	0.0	0
	Ш	0	0.000	0.0	0.0	0.0	0.0	0
NOINO	ᄔ	10,000	2.000	20,000.0	3766.9	16,233.1	1475.0	23,943,823
	w	10,000	1.702	17,020.0	2094,4	14,925.6	1475.0	22,015,260
TOTAL	u.	n. r.		. u	n. r.	r. r.	9587.5	63,023,358
	ш	Ċ	٦, ٢	2.5	ח. ני	ċ	9587.5	72,098,000
NOTES :	iL	Financial Value						

F = Financial Value

Table L-12-e Net Production Value (Scenario A, Irrigated, 2010, Large-Scale Commercial Farm)

4	140	tom Tayant	Tarra cate	Gross	Production	Net	Area	Total Net
/	<u></u>	Yield	Price	Production	Cost	Production		Production
<u> </u>				Value		Value		Value
Coo Coo	/	(Kg/ha)	(ZS/kg)	(ZS/ha)	(ZS/ha)	(Z\$/ha)	(ha)	(ZS)
COLLON	Ш .	3,000	3.591	10,773.0	3491.6	7,281.4	2200.0	16,019,080
	ш	3,000	3.804	11,412.0	1844.9	9,567.1	2200.0	21,047,620
MAIZE	U.	6,000	0.789	4,734.0	2342.7	2,391.3	1100.0	2,630,430
	w	6,000	0.937	5,622.0	1328.5	4,293.5	1100.0	4,722,850
WHEAT	u.	5,000	1.358	6,790.0	2813.8	3.976.2	1100.0	4,373,820
	<u>u</u>	5,000	1.518	7,590.0	1621.5	5,968.5	1100.0	6,565,350
SUGAR BEAN	u	1,500	2.240	3,360.0	2005.3	1,354.7	0.0	0
	ա	1,500	1.906	2,859.0	1122.6	1,736.4	0.0	0
GREEN MAIZE	<u> </u> u	4,500	0.400	1,800.0	1758.3	7.12	0.0	0
	ш	4,500	0.340	1,530.0	1021.9	508.1	0.0	0
GROUNDNUTS	L -	2.500	2.355	5,887.5	2810.7	3,076.8	1100.0	3,384,480
	w	2.500	2.004	5,010.0	1574.4	3,435.6	1100.0	3,779,160
SUNFLOWER	U.	0	0.000	0.0	0.0	0.0	0.0	0
	m	0	0.000	0.0	0.0	0.0	0.0	0
NONO	L	10,000	2,000	20,000.0	4585.1	15,414,9	1650.0	25,434,585
	ш	10,000	1.702	17,020.0	2494.3	14,525.7	1650.0	23,967,405
TOTAL	lu.	٦. د.	נינ	n. r.	n. r.	ח, ר.	7150.0	51,842,395
	ш	ć	ט. ני	n. r.	n. r.	ח, ר.	7150.0	60,082,385
NOTES :		Financial Value						

F= Financial Value E= Economic Value

Table 9-12-f Net Production Value (Scenario B-1, Irrigated, 2010, Communal & Resettlement Farm)

	Item	Item Target	Farmgate	Gross	Production	Net	Area	Total Net
		Yield	Price	Production	Cost	Production		Production
	/	(KC/DA)	(75/kg)	Value (ZS/ha)	(ZS/ha)	Value (ZS/ha)	(ha)	Value (ZS)
NOTION	/ L	2.700	3.591	9,695.7	2713.4	6,982.3	82.8	577,785
	ш	2,700		10,270.8	1461.5	8,809.3	82.8	728,970
MAIZE	L	5,400	0.789	4,260.6	1884.5	2,376.1	165.5	393,245
	m	5,400	0.937	8,059.8	1076.2	3,983.6	165.5	659,286
WHEAT	u.	4,500	1.358	6,111.0	2355.6	3,755.4	165.5	621,519
	ш	4,500	1.518	6,831.0	1369.3	5,461.7	165.5	903,911
SUGAR BEAN	u.	1,350	2.240	3,024.0	1547.1	1,476.9	41.375	61,107
	w	1,350	1.906	2,573.1	870.3	1,702.8	41.375	70,453
GREEN MAIZE	u.	4,050	0.400	1,620.0	1324.9	295.1	41.375	12,210
	ш	4,050	0.340	1,377.0	8'644	597.2	41.375	24,709
GROUNDNUTS	ட	2,250	2.355	5,298.8	1992.5	3,306.3	41.375	136,796
	w	2,250	2.004	4,509.0	1175.1	3,333.9	41.375	137,940
SUNFLOWER	u_	0	0.000	0.0	0.0	0.0	0.000	0
	ш	0	0.000	0.0	0.0	0.0	0.000	0
NOINO	և	000'6	2.000	18,000.0	3766.9	14,233.1	41.375	588,895
	w	000.6	1.702	15,318.0	2094.4	13,223.6	41.375	547,126
TOTAL	u. —	n. r.	ים" ני	n. r.	ח. ני	ח. ני	579.25	2,391,556
	ш		i i	n, r.	n. r.	n.r.	579.25	3,072,396
NOTES :	11 11	Financial Value						

F = Financial Value E = Economic Value

Table L-12-g Net Production Value (Scenario B-1, Rainfed, 2010, Communal & Resettlement Farm)

/	Item	Target	Farmqate	Gross	Production	Net	Area	Total Net
/	· Carron William	Yield Yield	Price	Production	Cost	Production		Production
	~ ~~			Value		Value		Value
Crop	/	(Kg/ha)	(ZS/kg)	(ZS/ha)	(ZS/ha)	(ZS/ha)	(ha)	(ZS)
COTTON	IL.	006	3.591	3,231.9	2476.1	755.8	46177.2	34,900,728
	w	006	3.804	3,423.6	1353.6	2,070.0	46177.2	95,586,804
MAIZE	u.	1,300	0.789	1,025.7	1164.9	-139.2	57721.5	-8034833
	w	1,300	0.937	1,218.1	6.689	528.2	57721.5	30,488,496
WHEAT	U.	o	0.000	0.0	0.0	0.0	0.0	0
	ш	0	0.000	0.0	0.0	0.0	0.0	0
SUGAR BEAN	u.	O	0.000	0.0	0.0	0.0	0.0	0
	ш	O	0.000	0.0	0.0	0.0	0.0	0
GREEN MAIZE	Ա	O	0.000	0.0	0.0	0.0	00.0	0
	w	0	0.000	0.0	0.0	0.0	00.0	0
GROUNDNUTS	u.	580	2.355	1,318.8	1242.3	76.5	5772.15	441,569
	ш	260	2.004	1,122.2	736.3	385.9	5772.15	2,227,704
SUNFLOWER	ц.	005	1.472	736.0	729.7	6.3	5772.15	36,365
	ш	200	1,253	626.5	7.174	154.8	5772.15	893,529
NOINO	u.	0	0.000	0.0	0.0	0.0	0.0	0
	រោ	0	0.000	0.0	0.0	0.0	0.0	٥
TOTAL	u.	n. r.	ט. ר.	n. r.	n. r.	n. r.	115443.0	27,307.464
	ш	'J 'U	n, r.	n. r.	n. r.	n. r.	115443.0	128,303,004
NOTES :	II.	Financial Value						

F = Financial Value E = Economic Value

Table L-12-h Net Production Value (Scenario B-2, Rainfed, 2010, Communal & Resettlement Farm)

	Item	Item Target	Farmgate	Gross	Production		Area	Total Net
/		Yield	Price	Production	Cost	Production		Production
				Value		Value		Value
Crop	/	(Kg/ha)	(ZS/kg)	(Z\$/ha)	(ZS/ha)	(ZS/ha)	(ha)	(SZ)
COTTON	щ	006	3,591	3,231.9	2476.1	755.8	46977.6	35,505,670
	Ш	006	3.804	3,423.6	1353.6	2,070.0	46977.6	97,243,632
MAIZE	űL.	1,300	632.0	1,025.7	1164.9	-139.2	58722.0	-8174102
	uı	1,300	0.937	1,218.1	6.689	528.2	58722.0	31,016,960
WHEAT	Ա	0	0.000	0.0	0.0	0.0	0.0	0
	ш	0	0.000	0.0	0.0	0.0	0.0	0
SUGAR BEAN	ш	0	0.000	0.0	0.0	0.0	0.0	0
	w	0	0.000	0.0	0.0	0.0	0.0	0
GREEN MAIZE	止	0	0000	0.0	0.0	0.0	0.0	0
	ш	0	0000	0.0	0.0	0.0	0.0	0
GROUNDNUTS	LL	560	2.355	1,318.8	1242.3	76.5	5872.2	449,223
-	w	560	2.004	1,122.2	736.3	385.9	5872.2	2,266,317
SUNFLOWER	u.	200	1.472	736.0	729.7	6.3	5872.2	36,995
	Ш	005	1.253	626.5	471.7	154.8	5872.2	909,017
NOINO	u.	0	0.000	0.0	0.0	0.0	0.0	0
	w	0	0.000	0.0	0.0	0.0	0.0	0
TOTAL	u.	ח, ר.	n. r.	n. r.	n. r.	n, r.	117444.0	27,780,791
	m	טיני	บะ	n. r.	n. r.	r.	117444.0	130,526,909
NOTES :	II U.	Financial Value						

F = Financial Value E = Economic Value

Table L-13-a Crop Budget (Without Case, Communal & Resettlement Farm)

	-						ETON 1	- - -	3647	SHE	VE BE AN	CBO	NUMB T	CP/4	NONUTS	SIRE	LONER		JON .
Crop	ľ	Quantity (1 Unit	Unit Cost		MZE I		HON		Con (24 Day)				Cost(25 The)		i i			1	
lem 🔍	-	-	(25.1kg) (LOSI(2 \$/112)		LOSE(Z B. PRO)	CESTIN	COSIZOTOR	ol	COSILERIES	Quarty C	COSILET THE	379	CCS(25/8)	303		0	-05(25)10)
Yeld Samuale		kg-ha Z1.Kg		0.789		3.591		0.006		0 000		0 000		2.355		1.472		0 000	
Farmgate		****	l	0.937		3.804		0.000		0.000		0.000		2.004		1.253		0.000	
6 Production	r F	Z\$. Tha			793 8		2520 9		0.0		0.0		0.6		892.5		446.0		0.0
Value I	E	1	l	1	942.6	l	2670.4		90		0.0		00		759.5	L	379.7		0.0
Effoduction I	F	ZS Tra			962.7		1877.2		0.0		0.0		0.0		807.9		597.4		0.0
Cost (E	1		لـــــا	554.3		1007.3	<u> </u>	00		C .0	L	0.0		467.6		391.0	LI	0 .D
Seed									r			,	1	500	242.0	36 0	253.0	,	9.0
	F E	kg/ha	A.r.	25.0 25.0	82.5 55.8	25 0 25 0	15.8 10.8	ŧ	0.0		0.0	ļ	0.0	500	164.0	30.0	195.0		a 0
	÷.	ky ha	nr.	0.0	0.0	0.0		}·—-·	00	·	0.0		- 50		0.0	0.0	0.0		0 0
Variety	Ę	.,,	n/	0.0	0.0		0.0	!	0.0		0.0	I	00		0.0	0.0	0.0		0 .0
ferdire	_	1		,				1			·		1	·					
	f	kg.fra	1 296	200.0	259.7	0.0	0.0		0.0		0.0	Γ	0.0	35.0	45.4	0.0	0.0		6.0
	ε		0.758	200.0	1516	0.0	0.0	<u> </u>	00		00	} ₹. ⊷. ·	0.0		26.5	0.0	0.0		9.0
Campound L	1	kg/?:a	1.657	0.0	0.0	250.0	4143	í	0.0		0.0	ĺ	0.0	0.0	0.0	0.0	0.0	}	0.0
	<u>E</u> .		0 909	0.0	0.0	250 0	242 3		1		0.0	Ĺ —	0.0	0.0	0.0	30.0	0.0 \$3.4	- 1	0.0
Compound 5	Ţ	Lg/ba	1.779 1.040	0.6 0.9	0.0	0.0	00		0.0	ĺ	0.0	j	0.0	1	0.0	30.0	31.2	• •	0.0
	r	£g.ħa	1 222	200.0	Z 44.4	150.0	183.3		0.0]	0.0		0.0	20.0	24.4	0.0	0.0	ŧ	0.0
	E		0.715	200 0	143.0	150.0	107.3	ļ	0.0	ļ	0.0	•	00		14.3	0.0	0.0		0.0
,	r	kg/ha	0.050	00	0.0	0.0	0.0	1-	0.0		0.0	1	0.0		0.0	9.0	0.0	·	9.0
	E		0 629	0.0	00		0.0	1	6.0	<u> </u>	0.0		0.0	0.0	0.0	0.0	0.0	 └─┴	0.0
Сурялт	F	% g-ħa	0.310	80	00	0.0	0.0		0.0	i	0.0	Į.	0.0		0.0	0.0	0.0		0.0
	f		0.181	0.0	0.0	00	. 00	1	0.0		0.0	<u>L</u>	0.0	0.0	6.0	0.0	0.0	il	0.0
Chemic al	_1					, — . 	·	····	1	<u></u>		J	1			0.01	0.0	,	0.0
	F	kg flu	\$4,00 43.14	0.0	•		0.0		0.0		0.9 0.0		6.0	1		0.0	0.0	1 1	0.0
	<u> </u>	L/3va	43.14 136.00	0.0			340.0	+			0.0	-	0.0		0.0	0.0	0.0		0.0
Agristvín	E		79 56	0.0	4	1	198.5		0.0		0.0		0.0				0.0	, ,	0.0
Asrazine	ŕ	kg.74	32.40	0.0			0.0		0.0		0.0		0.0	0.0	6.0	0.0	0.0	1 1	0.0
l	E		18.95	00	0.0	0.0	0.0	1	0.0	l	0.0		0.0	0.0	****	0.0	0.0	1	0.0
Endesultan	F	kg/ha	81.0C	0.0	0.0	0.0	0.0	1	0.0	i	0.0	}	00				0 (0.0
	£		47.39	00			0.0	+	00		0.0	+	0.0			0.0	0.0		0.0
	•	lg√ha	63.50	0.0	1	1	0.0	ì	0.0	ŧ .	0.0	1	0,0	1	i	0.0	9.0 9.0		0.0
	<u> </u>		37.15 \$4.00	0.0			0.0	+	00		0.0	1	0.0				0.0	-	0.0
]		kg/ka	31.50	00			1	1	00		000		0.0	1		0.0	0.0		0.0
	ī	lghi	63 00	0.0		·		+	0.0		00	· i	0.0	+		0.0	0.0	1 —	0.0
			36.86	0.0	1	!	00	1	00	,	00		0.0	0.0	00	0.0	0.0	,† 1	0.0
Соррег	7	kg/ha	23 3 0	0.0	00	00	00)	0.0		0.0)	9.0	0.0	0.0	0.0	0.0	/ T	0.0
Oryalithuride	E		13.63	0.0	0.0				0.0		0.0	1	0.0	1		<u>ا</u>	0.0	1	0.0
	•	9/11≥	7.00	00	1	1	í °°	1	0.0		0.0	•	00	1		. ,	0.0		0.0
├ }	-		4.10	- 00				·	0.0		0.0		0.0	+	!	1	0.0	t	0.0
Roger		M	50.00 29.75	l			75.1 43.1		00	1	0.0	i	0.0	1	1		0.0	1 1	0.0
Machinery & Equip	i.		1	<u> </u>		1	1	3	1	4	<u> </u>	<u> </u>	1					1	
h	4	he	50 00	1.0	50.0	1.0	50.9	0	0.0		00	J	0.0	1.0	500	1.3	50.0	1	0.0
	E		42 55	10	42.6	1.0	421	6	0.0		0.0	·	0.0	1.0	42.6	1.0	42.4		0.0
Cultivates	F	Pal	10.43	1.0	10.4	1.0	10.	ď	0.0)	0.0	٥	0.0			1.0	10.4	1 1	0.0
L	E		5 53	+	·	+			0.0	+	0.6		0.0		<u> </u>	1.0	8.5		0.0
Wheelburrew	ſ.	p4	9.77	1 13	1	1	1	1	0.0	i	0.0		0.0		i .		9.1		0.8 0.0
	÷		831	1	D 8 3		6.	4	0 (+	0.0		0.0			·	6.1		0.0
Plough	έ	1/8	6 5 9 5 6 1			•			"		0.4		0.0	1			S.		0
Sickle	5	tu	0.55				+		0.		0.0		6.6			·	0.	+	0.0
	ī		0.47				1		9.1	3	0.1	0	0.0				O.	5	0.0
ike	ī	h	0.33	8.0	0:	1.0	0.	3	00		0		0.0	1	1		0.		Ģ.(
ļi	E		0 28	·				4	0.9		0.5		01						0.1
Knapsack	F	N	12 65		1		1	4	04		0.		9.1	1			0.		0.1
Sorayes	-		107/			· }	4		01	+	0.		0.0		-				0.1
Tractor	F E	ha	\$7.16 45.63	1		1	1		0.1		0.		0					1 1	0.1
Lateur	L			1	<u></u>	1	4	<u>-1</u>		1	1	<u>-</u> t		-1	·	k 1	ı	1 !	
	1	man •	6.00	30.	6 150	85.0	510	0		0	Ø.	0	7 0	50.0	300.0	10.0	60.	0	0.9
	۱ (day.?u	2.45		•		1		0.1	1	0 .		Q.	0 50	122.5	10.0	24.	s	0.1
Unskilled Labor	F	man -	6 66	0.			150	0	0.	0	0	0	0.	0 0	0 0.1	0.0			0
	E :	day/tre	2.43						_ a	+	0.		0						0
Draft Animal	[]	Ċx •	5.52				1		0.	1	0		0			ì		1	0.
Labor	E	day he	2.20	10	ol 27.	6 20.0	45	4		·	.1	ป	1 0	0 10.	55.	10.0	22	· !	0
Charge			T	J .	0 16	7 1.5	0! 15	7	0	0	7 0		0.	0 1.0	Q 15.	1.0	16	7	0.
Handing	:	PH.	16.76 13.63	•	E .				0		"		0.				Į.		0
Charge	1	lap .	8 33	 -						-+	0		0.						0.
188144	١,	~	6.80		1	4		1	0.				6.	1	4			ı	0
& A Fee																			
Macsi:	<u>1 –</u> .							- 1											
	r	ha	38,1	7 7.	0 35	2 1.	0 39	₹	0.	0]	0.		0.			,	,		L.
Macsi:	f C	ha Z\$-ft-a	38.1. 31.1°			2 1.		.2	0. 0	0	0.0	.0	0.	0 1.		1.0	,	2	0.

Table L-13-b Grop Budget (Without Case, Small-Scale Commercial Farm)

	_,			—— 			IYON I		EAJ .		IF REAN	CDC	ENMALA	CROL	NO NUTS	SUN	FLOWER	ه ۱	NON
Crop	1	Quantity Urst	Unit Cost		AGE Fost <i>O</i> S .Mail								Cost(2\$/7w)					_	
em ***	-	kg/ha	1637793	2,340		1,300		0		0		0		504		719		0	
Famgate	F	25/X0		0.789		3.591		0.000		6.000		0 000	1	2.355		1.472		0.000	
Price	£			0.937		3.864		0.000		0.000		0.000		2.004		1.253		0.000	
noitxborf.a	f	25/ha		· [1846 3		4663.3		0.0		0.0 0.0		0.0		1993.4 1611.2		1058.4 900.9		0 .0
Vale	E F	Z\$/Tra			2192 6		4945 Z Z453.9		0.0		00		0.0		1464.7		693.4		0.0
Production Cost	E	15/114	Į		816.1	1	1346.5	'	0.0		00		0.0		873.1		456.0	l	60
iced	لتا	· · •															r		
iturded	ŧ	kg/ha	Ar.	0.0	0.0	0.0	0.0		0.0	1 1	6.0	ı	0.0		9.0 0.0	40.0 40.0	•	1 1	0.0 0.0
/ariety	£		n.c.	30.0	143.5	30.0	28.5	0.0	0.0	0.0	0.0		0.0	60.0	435.6	40.0	0.0		0.0
kew Sociation	ŧ	kg/ha	4.4. 11.1.	30.0	100.5	30 0	19.2	0.0	i		0.0	1	6.0	66.0	295.2		0.0	\$ I	0.0
/ariety] 'ert3izer	LÈ.			1		1			L			·		. —					
cinpound 0	ŧ	kg.ha	1.296	2500	324.0	0.0	0.0		00		0.0		0.0			0.0	I		6.0
	E		0.758	250.0	189.5	0.0	497,1	<u> </u>	0.0	-	0.0		0.0	700.0 0.0	151.6		0.0	+	0.0
Compound i.	f	kg√ha	1,657 0,969	0.0	0.0 0.0	300.0	290.7		0.0		9.0	:	0.0		0.0	I	0.0		0.0
Compound S	F	1g/ha	1.779	0.0	0.0	0.0	0.0		0.0		9.0	1	0.0	0.0	0.0	30.0	1	1 1	0.0
	E		1,640	0.0	0.0	0.0	0.0	L	0.0		0.0	·	0.0		0.0		31 2		0.0
Алитогіот	F	kg/ha	1.722	250 0	305.5	200.0	241.4	į	0.0		0.0	1	0.0			Į.	1	! i	0.0 0.0
Strate	F	kg/hu	0.715	250.0	178.6	200.0]	143.0	ļ —	0.0	t 	0.0		0.0		0.0		 	1	0.0
Manure	Ę	"	620.0		00	0.0	0.0		0.0	ı	0.0	1	0.0	0.0			+	+	0.0
Gyp: suim	F	tg/ha	0.310	00	0.0		0.0		0.0	Į.	0.0		0.0	1	l		1		0.0 80
	ŧ	اـــــــــــــــــــــــــــــــــــــ	0.151	0.0	0.0	0.0	0.0	'l	0.0	1	0.0	i	0.0	190.0	16.1	0.0) O.	'i	- BO
Chemical	E	Leon	84.00	2.5	210.0	3.5	294 (3	0.0	a —	0.6]	0.0	0.0	(o.c	0.0	0 .	0	0.0
Carburyf	E	kg/ha	49.14	2.5	ľ	1 :	t .	ı	0.0	ı	0.0	1	0.0	1	-		t		0.0
Agrithein	F	\$ Pa	136.00		0.0	3.5	476.0	1—	0.0	1	0.		0.0		•	•	,		0.0
	E	ļ	79.56	0.0			278	j	0.0	·	0.4	_	0.0		ļ. <u> </u>	+		- 1	0.0
Aliazine	£	kg/ha	32.40 18.95	0.0	ı		0.0 0.0		0.0	1	0.		0.0	1	1	f	(1	0.0
Endusaltus	f	kg/ha	81,00	0.0			0.0		0.0	+	0		0.0		0.	0.4	0.	0	0.0
2.100.22.23	٤		47.39	و.و	0.0	0.0	0.0		0.0	-	0.	1-	0.1			+		-+	0.0
Entrane	۴	kyha	63.50	0.0	1		0.0	1	0.6	i	0.	,	0.1		1	1	ı .	•	9.0
	Ł	ko/ha	37.15 54.00	$-\frac{0.0}{0.0}$		+	O.0		0.0	-	0	+	1			_			0.0
Paan	ľ	l spina	31 59	0.0			0.0	1	0.0	1			0.6		63.	2 0.	0	0	0.0
Микегер	F	kg/ha	63.90	0.0	0.0	0.0	0.6	•	0.0	4	0		0.1		1	I	1		0.4
	E	ļ	36.86	0.0	ŧ-——		0.0	-	0.0	+	0		0.1			_		·+	0.0
Copper	Į F	kg/ha	23.30 13.63	0.0	4		0.4	•	0.0		٥		0.0	1	1				0.0
Orychhoride Triodan	5	kg/ha	7.00	1	·		0.0	·	0.0	+	0.	+	0		0.	0 0.	0 9	0	0.0
	ļ		4,10	0.0	0.0	0.0	0.1	<u>-</u>	0.9	· • · · · ·	0.		0.1	_				-1	
Rogor	F	l/1×	50.00	•	1		1		0.0		0.	1	0.1					1	
Machinery & Eq.	E	<u> </u>	29.25	0.0	0	1.5	43.	ži	7	<u>.</u> i	1	<u> </u>	<u>`</u>	<u> </u>	1	-1	1	-i	
Scotch Earl	F		50.00	1.0	50.0	1.0	50.	0	0.	0	0.	0	0.	0 1.0	50.	0 1.		1	0
	£		47.55	1.0	ŧ		·		0			-+	0.	+	·		· }		0.0
Cultivates	ŀ	ha	10.43	ſ					0.		0.	1	0.						0.
	1 6	to	9.74						1 0		1	+		-	·				0.
Wheekunow	1,	"	8.31	£		1			0.	ı	0		0.	1	5.	3 1.	0 8	+	
Plaugh	5	Na	6.55			4	r .	1	0		0	Ł	0.		1			6)
	٤		5 61						0			-4	0.					6	0
Sickle	1:	i	0.4						0.		l °] 0		1		ι	1	G.
Hoe	- ;		0.3	·	·			-1	0		0		ō.	4	0	3 1.	0	3	0.
l	<u> </u>	1	0.24	8 1.0	0	3 1.0	0		a		0		- 0		- {			3	
Krapsack	1		12.61		1		4	1	0.			1	0 0.	4				.0]	0. 0.
Sprayur	- -		10.7. 57.1				+						- 0						
Tractor	1,	1	48 6					ő			0		_ 0	Į.			1	0	0
Labor	:	_1					.,											-1	
Fanily Labor	T		6.0				1	1	٥		0		0.	•	1			1.0] 1.5	0.
	-14	day he	2.4	-+		_					0	-				0 0		 	1 - "
Unsided Labor	' '	1	6.0	1					Ĭ		"					0 0		.0	0
Orah Arimal	Ŧ		5.5						0		1 0	.0	0	0 19.					0
t abor	1	E day/ha	1 22	6 10.	0 55	6 20.1	45	<i>?</i>	0	<u>ol</u>	0	.0	0	0 10	055	6 10	.0] 22	6	0.
Charge	_		T	- I		7 1.5	0 16	7	0	٠,		.0		ol 1	0 16	7 1	.0] 16	.7	1 0
Handing		F Pa	36.7 13.6	1	1			4	1	.0		.0]	0				ı	1.6	0
Charge & Afee		T he	83					3		.0	· • · · · · · · · · · · · · · · · · · ·	.0	0			3 1		3.3	0
" " " "			6.8	1		•		В		0	<u> </u>	0		0	6] 6	e .	.0	.a]	
ntest;	- -											Ta		<u> </u>	0 35	<u>ы</u> .	0 31		1 0
Affican		i ha	38.1							.0 .0	l .	.5		.0 1 .0 1.	1			[2]	
There are b	- 1	<u> </u>	31.1	4	469		2204	_		0		0		0	426		364		0
Interest Nat Production	_1	f 25 ha																	

Table L-13-C - Crop Budget (Irrigated, Communal & Recettlement Farm)

									gated, Comr						=				NO.1
C100	1	Quantity	Unit Cost		126		ITON .		HEAT	Sugar			N MAIZE		NO NUTS		FLOWER		DON TOTAL CONT
em ·		Linia	(2\$/Kg)		ost (2\$.1ha)		05t(2\$ /ha)		Cost(Z\$/ha)(951 (2% This)		Cost(Z\$/fill)		Cost(25/10)		Cost(Z5/ha)		021(17.46)
Yeld		kg/ha	:	5,400		2,700		4,590		1,350		4,050		2,250		0 000	i	9,000	
amgate	*	2\$/Kg		0.789		3 591		1.358	:	2.240 3.906		0.400 0.340		2.004		0.000	•	1.702	
Tite	E :	ZS∕ha		0.937	4260.€	3 804	9695.7	1.516	6111.0	7.3.	3024 0	0.370	1620.0		5298.8	<u> </u>	Ú. O		16000
5.Production √a&e	r r	Exita			5059.8		10270.8		6831.0		2573.1	1	1377.0		4509.0		0.0		15318
Productions	í	25/24			1394.5		2743.4		2355.6		1547.1		13249		1992.5		0.0		3766.
ost	ε				1076.2		1461.5		1359.3		870 3	LI	779.8		1175.1	l	0.0		2094
ed .																			
ardard	٤	kg/ha	n,r.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		00		0.0	0.0	0
riety	٤		n.r.	0.0	0.0	0.0			0.0 390.4	80.6	108.0	40.0	0.0 195.0		530.8		0.0	30.0	432
ow.	1	kg/ha	r,r.	40.0	135.0 134.0	40.0 40.0	38.0 25.6		264.0	80.0	22.8	40.0	134.0	, ,	393.6	[0.6	, ,	292
ariety ztávo			nr.	40.01	7,75.0	11			201.01							,	-	L 1	
ongound 0	F	kg/ha	1.296	300 0	388 5	0.0	0.0	600.0	777.6	300.0	388 8	200.0	259.2	309.0	385.6		0.0	0.0	0
	E		0.759	300.0	227.4	0.0	0.0	600.0	454.8	300 G	227.4	200.0	151.6	300.0	227.4	l	00	0.0	0
ompound L	F	kg/ha	1.657	00	0.0	3500	580.0	0.0	0.0	0.0	0 .0	0.0	0.0	9.5	0.0	l.	. 0.0	0.0	6
	ľ		0.369	60	6.0	350.0	339.7	0.0	0.0	0.0	0.0	0.0	0.0		0.0	1	0.0	700.0	FZ45
ompound \$	ļ	kg/ha	3,779	0.0	0.0	0.0	00		0.0 0.0	0.0	0.0 0.0	0.0	0.0 0.0		9.0 0.0		0.0	700.0	728
 :	-		1.040	300.0	366.6	0.0 250.0	305.5	350 O		200.0	244.4	200.0	244.4		244.4		0.0	300.0	366
mmonium		hydra 	0.715	300.0	214.5	250.0	1788		250.3	200.0	143.0		143.0	200.0	143.0		0.0	300.0	214
Strate Linkse	+	kg/lu	9.050	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0		0.0		00	0.0	-
	Ē		0.029	0.0	0.0	0.0	6.0	0.0	6.0	0.0	0.0	0.0	0.0		0.0		0.0	9.0	0
ypsum	ī	kg/ha	0.310	0.0	0.0	0.0	0.0	1	00	0.0	0.0		0.0		0.0	1	0.0	1 1	
	E	!	0.181	0.0	0.0	0.0	G . 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7	0.0	0.0	
herric at						F	36.2.5	0.0	0.0	1.0	64.0	1.5	126.0	0.0	0.0	3	0.0	0.0	•
arbaryl	F	lg ha	54.00 49.14	25	210.0 122.9	3.0 3.0	257.6 147.4		1	1.0	43.1	1.5	73.7		ì		0.0		·
lg-khim	†-	L7u	136.00	1	0.0	1	272 0			0.0	0.0		0.0			-3	0.0		340
AT HERE!	ľ		79.56	(I	0.0	1 1	159.1		1	0.0	0.0	0.0	0.0	0.0	0.0	D	0.0	2.5	198
licatine	17	kg/ha	32.40	÷	97.2	00	0.0	6.0	90	0.0	0.0	1.5	48.1	0.0	0.0	0	0.0		(
	٤	<u> </u>	18.95	3.0	56 9	0.0	0.0	0.0	-	0.0	0.0	+	28.4	<u> </u>		. +	9.0		(
ndosultan	1	kg/ha	81.00		0.0		0.0			0.0	0.0	1	0.0	5	•		0.0		(
	٤	ļ	47.39	0.0			0.0	Į	1	0.0	0.0	+	0.0	+	0.6		0.0		99
Diffunc	!	ìg∕ha	63.50	1 1	0.0	}	0.0		ł	3	0.0		0.0				0.0	1 1	s:
	╁	eg ha	37.15 54.00	1	0.0		162.0		1	4	0.0	+	0.0			4	0.6	+	162
1 FM (#11	١.	'''	31.59		0.0		94.8			()	0.0	0.0	0.1	2.0	63.	2	0.0	3.0	94
Marknieb	17	kg ha	63.00		0.0	+	0.0		0.0	1.0	63.0	0.0	0.0	9.0	0.0	9	0.0	0.0	
	₹ €	1	36 86	0.0	0.0	0.0	6.0	00	0.0	1.0	36.9	+		4	0.0		0.0		
Сперег	F	ko/tu	23.30	1 1	0.0	1		1			35.0	1	6.		l .		0.0		
Oxyctihoride	E		1363		- 00	4	0.4	+	1		20.4				<u></u>	+	0.0		- (
Thiodus	1	1 -	7.00	1	0 .0	ì	i		1	1 1	0.0		i .			1	0.0		! ;
George	- -		50.00	1	0.0	4	125.1	}		++	0.6						0.1	1	
Rogor	1.	1	79.25		l	1		1	1	0.0	0.0	0.0	0	0.0	0.	٥	0.4	0.0	
Mahirery & Eq	, ign	1													,		 -		
Scotch Cart	Ţŝ	ha .	50.00	L	•	•		1			50.0		1				0.1		
	_ 5	· ! ·	42.5						1		42.5	· 	 		+	-1	0.1	1	4
Cultivator	1:	he	10.43	!	!	1	ŧ .		į.	1 1	10. 8:	1		ı		1	0.	1	
	- 		9.7	+	!		₩	-+		1	<u>.</u>		+	- 		_			
₩енижение •	1	ha	9.7.	. ا	8.		8.	3 1	o	1.0	8.	3 1.6) i	3 1.4	£	3	0		
Nooyh	+;	ha	6.5			· f		6 1.	6.6	1.0	6.	6 1.0	6.	6 1.0	6	6	0.	Ł	
		1	5.6	1		1		6 1.	0 5.6		\$.					.~	0.		
Sekle	7	fee	0.5				F		ì	1 6	0.						٥	1	
_,	-19		0.4	- +			<u> </u>			→ {	0.			-+	4		Q.		
Hoe		i i	0.3		1		1		1	3 1	0. 0.	1	1		1	1	0.		i .
Va v.ct		_	126	· • ———	-		+				12	-}					ō.		! — —
Knapisack Sprayer	- 1		10.7	1	1	1	1			1 1		•	1		1		0.	•	<u> </u>
Tractor	-+-	i Ne	57.1				·									•	0.		
			48.6		1		1	o o.	o] 0.1	0.0	0	0 0	o <u>l</u> o	0 0	o <u>l</u> o	<u>. ol</u>	0.	0.0	<u>.</u>
Labor									-,			-,1		-1			·· r		
Family Labor	- 1	man	6.0	ī	i .	3	1		1			ì	1		1	ı	0.	0] 150.0 0[150.0	1
	-		2.4	_1	+		+					.0 40. .0 0.				0	0	-1	1
Unskilted Labor	- 4		2.4	1	1	1	1		3			0 0	i			.0		1	1
Draft Aranul	-1-	E day/1•a F ox •	5.5						_1						4		0		
Labor Labor		E day.?*	2.2		1		į	1			1		1	1	•		<u> </u>	0 20.0	1
Charge		-1																-,	
Handong	T	F ha	167	0 1	0 16	7 10	0 16	.7	0 16		ı							0 1.0	1
(hage	1.	ξ	13.6						.0 13				-+		_+	1	0		+
& Afce	- 1	F ha	8.3		1				.0] 8.		1	3 1		1.3] 1.		3		.0 1.0 .0 1.0	1
	1	£	6.5	1.	이 6	.8 1.	oj 6		0 6.	5] 1.0	. 6	- Sj 1.	<u>vį 6</u>	[8] 1.	VI6	5.8	1	4	Ί
htest:		<u> </u>	1		o!	71	0 38	JE -	0 34	2 1.0	38	2 1.	0 35	1.2	0 35	<u>.</u>	. 0	0	Г—
ATC LOWS		f hu E	38.1			1			0 34		1	ı ı		- 1	1		- 1	0	1
interest Not Production		F. 25.7va	1	1	2376		6532		3755		1476	_	295		3300			ď	142
PARTERIN	- 1	F. 25:74 E	i	1	3583		8805		5461	•	1702	- 1	\$97		3333	1		.0	1324

Table L=13-d Grop Budget (krigated, Small-Scale Commercial Farm)

<u></u>	- 1	A	un Cost	M	M2E	. co	TION		EAT		R BEAN		NMAKE	GRO)	NONUTS	SUNFLOWER	1 0	raon
Crop		Quantity Unit			- 1		Cost(Z\$/1u)		.				· · i			Quartity Con(25/16)	1	
I Keid	\dashv	kg/fia		6,000		3,000		5,000		1,500		4.500		2,500		ol	10,000	
2 Farmonte	F	28 Kp		0.789		3.591		1.358		2.240		0.406		2.355		0.000	2.000	
Price	E			0.937		3 804		1.513		1.906		0.349		2.004		0.000	1.702	
3 G.Production		2 % -Tva			4734.0		10773.0		6790.0	1	3360.0		1500 6		5887.5	0.0	ļ [20000 0
Value 4 Production	E	Z\$/ha			\$622.0 1884.5		11412.6 2713.4		7590.0 2355.6	-	2859.0 1547.1		1530.0 1324.9		5010.0 1992.5	0.0	\vdash	17020.0 3766.9
Cost	į	E Ser : IG			1076.2		1461.5		1369 3		8703		779.8	Î	1175.1	0.0	[2004.4
Seed	1																	
Standard	F	kg/ha	R.r.	0.0	0.0	0.0	0.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1 1	00
Valety	E		n.r.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	0.0	+⊦	0.0
New	F	kg/Na	R.F.	40.0 40.0	139.0 134.0	40.0 40.0	38 0 25.6	80.0 80.0	390.40 264.0	80.0 80.0	108.0 72.8	40.0 40.0	195.0 134.0	80.0 80.0	580.8 393.6	0.0	30.0	432.0 292.5
Variety FestAcor	- 1		L		134.5	10.0	13.0			122:31		10.0	134.0	00.0	3,33.0		30.01	
Compound D	F	kg/ha	1,296	300.0	388 8	0.0	0.0	600.0	777.6	300.0	335.8	200 0	259.2	300 0	385 5	0.0	0.0	0.0
	E		0.758	300.0	227.4	0.0	0.0	600.0	454.8	300.0	227.4	200.0	151.6	300.0	227,4	0.0		0.0
Compound L	F	kg/ha	1.657	0.0	0.0	350.0	580.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	. I	0.0
	E		0.969	0.0	0.0	350.0	339.2 0.0	6 .0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	700.0	1245.3
Compound S	E	kyfta	1.046	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		728.0
Americani	F	kg/ha	1.222	300.0	366.6	250.0	305.5	350.0	427.7	200.0	244,4	500.0	244.4	200.0	244.4	0.0	 	366.6
Minrate	E		0.715	300.0	214.5	250.0	178.8	350 0	250.3	200.0	143.0	200.0	143.0	200.0	143 0	0.0	300.0	214.5
Manure	F	kg/ha	0.050	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			0 079	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Суралп	£	kg/ha	0.310	0.0 0.0	00	0.0	0.0 0.0	0.0	0.0		0.0	0.0	G.0	0.0 0.0	0.0	0.0		0.0
Chenik al	LIL					التتب						•		L		· · - · - · - · · · · · · · · · · ·	r1	
Carbaryf	f	kg/ha	54.00	2.5	210.0	3.0	252.0	0.0	0.0	1,0	54.0	1.5	126.0	0.0	6.0	0.0	0.0	0.0
	Ę		49.14	2.5	127.9	3.0		0.0	00	1.0	49.1	1.5	73.7	0.0	0.0	0.0		0.0
A _s pithrin	f	Viv	135.00 79.56	0.0	0.0	2.0 2.0	272.0 159.1	1.0	136.0 79.6	0.0	0.0	0.0	0.0	0.0 0.0	0.0	0.0		340.0 198.9
Atrazine	F	kg/ha	32.40	3.0	97.2	0.0	0.0	0.0	0.0	0.0	6.0	1.5	1	0.0	0.0	- 00		0.0
~1102.00	Ē		18.95	3 0	56.9	0.0	0.0	0.0	0.0	0.0	8.0	1.5	28.4	0.0	0.0	0.0	1 1	0.0
Endosulfan	F	kg/ha	\$1.09	0.0	00	0.0	0.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
	E		47.39	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	1	0.0
Oithme !	F	kg/ha	63 50 37.15	0.0 6.0	0.0	0.0	0.0	0.0	0.0 0.0	6.0 0.0	0.0	0.0	0.0	0.0 0.0	0.0	9.0	, ,	95.3 55.7
The art		kg/ha	54.00	0.0	0.0		162.0	0.0	0.0	0.0	9.0	0.0	0.0	2.0	108.0	0.0	i — — I	162.0
	ε	•	31.59	0.0	0.0	3.0	94.8	0.0	0.9	0.0	0.0	0.0	0.0	2.0	63.2	0.0	30	94.8
Marcozeb	F	kg/ha	€1.00	0.0	0.0	0.0	0.0	0.0	0.0	1.0	63.0	0.0	00	00	0.0	0.0	0.0	0.0
	٤		36.56	0.6	0.0		0.0	0.0	0.0	1,0	36.9	0.0	0.0	0.0	0.0	0.0		0.0
Coppe	١٠	kg/ha	23.30	0.0	0.0	0.0	0.0	0.0	0.9 0.9	1.5	35.0	0.0	0.0	3.0	46.6	0.0		0.0 0.0
Oxychhoride Thiodan	-	kg/ha	7.00	0.0	0.0 G.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	2.0	27.3	0.0		0.0
1: 1/01.7	٤	-2/	4.10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Rogor	F	l/he	50.00	0.0	0.0	2.5	125 0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Q .0	0.0
	Ę		29.25	0.0	Q.C	2.5	73.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Machinery & Equ	ŕ,		1200	1.0	50.0	1.0	50.0	1.0	50.0		50.0	1.0	500	1.0	50.0	0.0	1.0	50.0
Scotch Cart	•	ha	50.00 42.55	1.0	42.6	1.0	42.6	1.0	42.6	1.0	42.6	1.0	47.5	1.0	42.6	0.0		42 6
Cultivater	F	hu	19.43	1.0	10.4	1.0	10.4	1.0	10.4	7.0	10.4	1.0		1.0	10.4	0.0		₹0.4
	٤		8.68	1,0	8.9	1.6	6.9	1.0	8 9	1.0	8.9	1.0	8.9	1.0	6.9	0.0	4	8.9
Wheelburrow	٤	te	9.77	1.0	9.8	1.0	3.8	1.0	9.8	1.0	9.8	1.0	9.8	1.0	9.8	0.0	i i	9.8
<u></u>	E	That	5.31 6.59	1.0	8.3 6.6	1.0	83 6.6	1.0	1.3 6.6	1.0	8.3 6.5			1.0	6.6	0.0	<u></u>	8.3 6.6
Prough	[142	5.61	1.0	5.6	1.0	5.6	1.0	5.6	1.0	5.6		1 1	1.0	5.6	0.0		5.6
Sickle	7	'n	0.55	1.0	0.6			1.0	0.6		0.5			1.0		0.0	ŧ	0.6
L	٤		0.47	1.0	0.5	f	0.5	1.0	0.5		0.5			1.0		0.0		0.5
ikre	[]	lu .	0.33	1.0	0.3	1.0	0.3	1.0	03	1.0	03		1 1	1.0		0.0	: 1	0.3
	₹ 5	- hu	0.28 12.65	1.0	12.7			1.0	12.7	1.0	0.3 12.7	1.0		1.0		0.0		12.7
Knapsack Sprayer	ξ.	14	10.77	1.0		1		1.0	10.8	1 1	10.5		1 1	1.0		0.0	i I	10.8
loctor	F	ha	57.14	4 - — - i	0.0	₹——	t	⊢—	00	`	0.0			0.0				0.0
L	E		45.63	00	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Labor			, — — — — — — — — — — — — — — — — — — —			1				1		1	,			ı	J 400 =1	
Skilled Labor	E	man ·	6.09 2.45	60 0 60 0	360.0 147.0		600 0 245.0		360 Q 147,0	1 1	360.0 147,0	40.0 40.0		60.0 60.0		0.0		900.0 367.5
Unskilled Labor		day:Tes anan -	6 00	0.0	6.0		249.0		0.0	ł ——— - {	0.0			0.0	-	0.0		0.0
	Ē	dzy. Na	2.45	1 1			98.0	0.0	0.0	0.0	0.0					60		0.0
Draft Arimal	F	Ot .	5.52	20.0					110.4	20.0	110.4	10.0	55.2	20 €	t I	0.0		110.4
Labor	E	Cay/Tea	2.26	20.0	45.2	20.0	45.2	20.0	45.2	20.0	45.2	100	25.6	20.0	45.2	0.0	20.0	45.2
Crarpe	·		16.70	1.0	16.7	1.0	16.7	1.0	16.7	1.0	16.7	1.0	16.7	1.0	16.7	0.0	1.0	167
Nunding Charge	ľ	That	15.70	1.0	13.6			1.0	13.6		13.6		1 !	1.0	k I	0.0	1 1	116
3 A Fee	1	79	8 33			_			8.3	1	8.3	+	1	1,0		0.0		
	E		6.80			1	6.8	1.0	6.8	.0	6.8	1.0	5.8	1.0	6.5	0.0	1.0	6.8
L																		
Mest:				T		7				1 1								
AFC Loan	[:]	ha .	39.17					1.0	352		38 2		4	1.0		00		0.0
	E	ta 25/ha	39.17 31.15			1.0 1.0		1.0	35 2 31 2 4434.4	1.0 1.0	38 2 31.2 1812.9		4	1.0		0.0		0.0

Table L-13-e Crop Budget (Irrigated, Large-Scale Commercial Farm)

1 Yeld 3 3g 2 Farmgate F 25 Price E 3 3 G Production F 25 Cost E 5 4 Production F 25 Cost E 5 Standard F kg New F kg Variety E 6 Compound D F kg Compound D F kg E 7 Compound F Kg E 7 Compound F Kg E 7 Compound F Kg E 7 Compound F Kg E 8 Compound	thit gytta gytta syrta sgytta	AL AL AL AL	90 0 978 977 99 99 99 99 99 99 99 99 99 99 99 99	4734.0 5672.0 7342.7 1328.5 0.0 0.0 198.0 134.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3,009 3,591 3,804 0,0 40,0 40,0 350,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0 0,0	10773 C 11412 O 3431.6 1544.9 0.0 0.0 35.0 25.6 0.0 550.0 339.2 0.0 6.0 305.5 178.8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6790.0 7590.0 7590.0 2813.6 1621.5 0.0 9.0 390.4 264.0 0.0 0.0 0.0 0.0 427.7 250.3 0.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3360 0 2859 0 2005 3 1122.6 0 0 103 0 22.8 388.8 227.4 0 0 0 0 0 0 244.0 0 0 0 0 0 0	0.400 0.349 0.400 0.349 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	1800 0 1530 0 1753 3 1021 9 0 0 0 0 153 0 134 0 259 2 151.6 0 0 0 0 0 0 244.4 143 0 0 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	5387.5 5010 C 2810.7 1574.4 0 C 0 C 580 5 393.6 353.8 227.4 0 C 0 C 0 C 244.4 343.0 0 C 0 C	Quartity	00 00 00 00 00 00 00 00 00 00 00 00 00	10,000 2,000 1,702 0,0 30,0 30,0 30,0 0,0 0,0 0,0 700,0 700,0 900,0 900,0 0,0 0,0 0,0 0,0 0,0 0,0	20000.0 17020.0 4555.1 2494.3 0.0 0.0 432.0 292.5 0.0 0.0 1724.3 728.0 966.6 214.5
Z Farrigate	Siring (Siring	7.7. 0.7. 0.7.58 1.657 0.959 1.779 1.040 1.272 0.715 0.050 0.029 0.319 0.181 34.00 43.14 136.00 79.56 32.40	0.789 6.937 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	5672 0 7342 7 1328 5 0 0 0 0 198 0 134.0 355.8 227.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	3.531 3.804 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	11412 0 3491.6 1544.9 0.0 0.0 0.0 35.0 25.6 0.0 0.0 339.2 0.0 0.0 305.5 178.8 0.0 0.0	1355 1518 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7590 0 2813 6 1621.5 0.0 0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	2240 1 996 0 0 0 0 0 0 80 0 80 0 0 0 0 0 0 0 0 0 0	2859 0 2005 3 1122.6 0 0 108 0 72.8 358.8 227.4 0 0 0 0 0 0 244.4 \$43.0 0.0	0.00 0.340 0.00 0.00 0.00 0.00 0.00 0.00	1530 b 1753 3 1021 9 0 c 0 c 0 c 153 0 134 c 259 2 151.6 0 c 0 c 0 c 0 c 244 4 143 c 0 c 0 c 0 c	0.0 0.0 0.0 0.0 89.0 89.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	5010 C 2810 7 1574 4 0 0 0 0 550 8 393 6 227 4 0 0 0 0 0 0 244 4 1440 0 0 0	0 000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 360.0 0.0	17020 0 4585.1 2494.3 0 0 0 432.0 292.5 0 0 0 0 0 1724.3 7728.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
### ### ### ### ### ### ### ### ### ##	isho isho isho isho isho isho isho isho	1.796 0.758 1.657 0.759 1.677 0.969 1.779 1.000 1.779 0.009 0.310 0.181 34.00 43.14 136.00 79.56 32.40	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5672 0 7342 7 1328 5 0 0 0 0 198 0 134.0 355.8 227.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	3.804 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	11412 0 3491.6 1544.9 0.0 0.0 0.0 35.0 25.6 0.0 0.0 339.2 0.0 0.0 305.5 178.8 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7590 0 2813 6 1621.5 0.0 0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	300.0 300.0 300.0 300.0 300.0 0.0 0.0 200.0 0.0 0.0	2859 0 2005 3 1122.6 0 0 108 0 72.8 358.8 227.4 0 0 0 0 0 0 244.4 \$43.0 0.0	0.0 0.0 0.0 0.0 0.0 0.0 200.0 0.0 0.0 0.	1530 b 1753 3 1021 9 0 c 0 c 0 c 153 0 134 c 259 2 151.6 0 c 0 c 0 c 0 c 244 4 143 c 0 c 0 c 0 c	2 00.4 0.0 9 0 89 0 300.0 300.0 0.0 0.0 200.0 200.0 0.0	5010 C 2810 7 1574 4 0 0 0 0 550 8 393 6 227 4 0 0 0 0 0 0 244 4 1440 0 0 0	l 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 30.0 30.0 0.0 0.0 0.0 700.0 360.0 360.0	17020.0 4585.1 2494.3 0.0 6.0 432.0 292.5 0.0 0.0 1724.3 773.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
3 G Production F 25 Value E 4 Production F 25 Cost E Standard F kg Variety E Fertilizer Compound D F kg Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F kg E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S F E Compound S E E Compound S E E Compound S E E E E E E E E E E	igha syna syna syna syna syna syna syna syn	7.1. 7.7. 7.7. 7.7. 7.7. 7.7. 7.7. 7.7.	300 0 40.0 300 0 300 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5672 0 7342 7 1328 5 0 0 0 0 198 0 134.0 355.8 227.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0.00 0.00 40.00 40.00 0.00 0.00 350.00 350.00 0.00 0.00 0	11412 0 3491.6 1544.9 0.0 0.0 0.0 35.0 25.6 0.0 0.0 339.2 0.0 0.0 305.5 178.8 0.0 0.0	600.0 600.0 600.0 600.0 0.0 0.0 350.0 0.0	7590 0 2813 6 1621.5 0.0 0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	300.0 300.0 300.0 300.0 300.0 0.0 0.0 0.	2859 0 2005 3 1122.6 0 0 108 0 72.8 358.8 227.4 0 0 0 0 0 0 244.4 \$43.0 0.0	200.0 200.0 200.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0	1530 b 1753 3 1021 9 0 c 0 c 0 c 153 0 134 c 259 2 151.6 0 c 0 c 0 c 0 c 244 4 143 c 0 c 0 c 0 c	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0	5010 C 2810 7 1574 4 0 0 0 0 550 8 393 6 227 4 0 0 0 0 0 0 244 4 1440 0 0 0	0.000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 360.0	17020.0 4555.1 2494.3 0.0 0.0 432.0 0.0 0.0 0.0 17245.3 778.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Value	igha syna syna syna syna syna syna syna syn	1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40	300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0	5672 0 7342 7 1328 5 0 0 0 0 198 0 134.0 355.8 227.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0	11412 0 3491.6 1544.9 0.0 0.0 0.0 35.0 25.6 0.0 0.0 339.2 0.0 0.0 305.5 178.8 0.0 0.0	600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0	7590 0 2813 6 1621.5 0.0 0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	2859 0 2005 3 1122.6 0 0 108 0 72.8 358.8 227.4 0 0 0 0 0 0 244.4 \$43.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	1530 b 1753 3 1021 9 0 c 0 c 193 0 134 0 259 2 151.6 0 0 0 0 0 0 244 4 143 0 0 0 0 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	5010 C 2810 7 1574 4 0 0 0 0 550 8 393 6 227 4 0 0 0 0 0 0 244 4 1440 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	17020.0 4585.1 2494.3 0.0 432.0 292.5 0.0 0.0 0.0 1725.3 7728.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
4 Production	igha igha igha igha igha igha igha igha	1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40	300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0	7342 7 1328 5 0.0 0.0 198 0 134.0 383 8 227.4 0.0 0.0 0.0 0.0 366 6 214.5 0.0 0.0	0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0	3491.6 1544.9 0.0 0.0 35.0 25.6 0.0 580.0 339.2 0.0 6.0 305.5 178.8	600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0	2819 8 1621.5 0.0 0.0 990.4 264.0 777.6 454.8 0.0 0.0 0.0 427.7 250.3 0.0	300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	2005 3 1122.6 0.0 0.0 103.0 72.8 388.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	1753 3 1021 9 0 0 0 0 153 0 134 0 259 2 151.6 0 0 0 0 0 0 244.4 143 0 0 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	2810 7 1574.4 0 0 0 0 550 6 393.6 227.4 0 0 0 0 0 0 244.4 343.0 0 0		00 00 00 00 00 00 00 00 00 00 00 00 00	0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	4555.1 2494.3 0.0 0.0 432.0 292.5 0.0 0.0 1245.3 228.0 366.6 214.5 0.0 0.0
Cost E	igha igha igha igha igha igha igha igha	1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40	300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0	1328.5 0.0 0.0 138.0 134.0 383.8 222.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0	1844.9 0.0 0.0 35.0 25.6 0.0 580.0 339.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0	1621.5 0.0 0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 427.7 250.3 0.0 0.0	300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	1122.6 0.0 108.0 72.8; 388.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	1021 9 0 0 0 0 0 193 0 194 0 259 2 151.6 0 0 0 0 244.4 143 0 0 0 0 0 0 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	1574.4 0.0 0.0 5.50 8 393.6 227.4 0.0 0.0 0.0 244.4 143.0 0.0 0.0		00 00 00 00 00 00 00 00 00 00 00 00 00	0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	2494.3 0.0 0.0 432.0 292.5 0.0 0.0 1245.3 728.0 366.6 214.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0
Standard F kg Variety E New F kg Variety F Fernitier Compound D F kg Compound S F kg E-compound S F kg	kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha	1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40	300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0	0 0 198 0 134.9 135.8 3 222.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0	0 0 35.0 25.6 0 0 0 0 580.0 339.2 0.0 0.0 305.5 778.8	600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0	0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 427.7 250.3 0.0	300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	358.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	259 2 151.6 0 0 0 0 244.4 143.0 0 0 0 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	0.0 550 8 393.6 353.8 227.4 0.0 0.0 0.0 244.4 343.0 0.0		9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	0.0 432.0 292.5 0.0 0.0 0.0 1245.3 728.0 0.0 0.0
Variety E New F kg Variety E F kg Fortilizer Compound B E kg E Compound L F kg E Compound L F kg Compound L F kg E Compound L F kg Structe E E S kg E C </td <td>kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha</td> <td>1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40</td> <td>300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0</td> <td>0 0 198 0 134.9 135.8 3 222.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0</td> <td>0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0</td> <td>0 0 35.0 25.6 0 0 0 0 580.0 339.2 0.0 0.0 305.5 778.8</td> <td>600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0</td> <td>0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 427.7 250.3 0.0</td> <td>300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0</td> <td>358.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0 0.0</td> <td>200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0</td> <td>259 2 151.6 0 0 0 0 244.4 143.0 0 0 0 0</td> <td>300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0</td> <td>0.0 550 8 393.6 353.8 227.4 0.0 0.0 0.0 244.4 343.0 0.0</td> <td></td> <td>9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0</td> <td>0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0</td> <td>0.0 432.0 292.5 0.0 0.0 0.0 124.3 728.0 214.5 0.0 0.0</td>	kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha	1.296 0.758 1.657 0.909 1.709 1.272 0.715 0.050 0.030 0.310 0.181 34,00 49,14 136,00 79,56 32,40	300.0 300.0 300.0 0.0 0.0 0.0 0.0 300.0 300.0 0.0	0 0 198 0 134.9 135.8 3 222.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	0 0 40 0 0 0 350 0 350 0 0 0 250 0 0 0 0 0 0 0 0 0 0 0	0 0 35.0 25.6 0 0 0 0 580.0 339.2 0.0 0.0 305.5 778.8	600 0 600 0 600 0 0 0 0 0 350 0 350 0 0 0	0.0 390.4 264.0 777.6 454.8 0.0 0.0 0.0 0.0 427.7 250.3 0.0	300.0 300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	358.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	259 2 151.6 0 0 0 0 244.4 143.0 0 0 0 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	0.0 550 8 393.6 353.8 227.4 0.0 0.0 0.0 244.4 343.0 0.0		9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0 9.0	0.0 30.0 30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	0.0 432.0 292.5 0.0 0.0 0.0 124.3 728.0 214.5 0.0 0.0
New F kg Variety E Fortilizer Compound D F kg E Compound L F kg E E Compound S F kg E Annonium F kg Strate E Surare E Copsum F kg E Chemical Carbary F kg E Chemical	igrha igrha kgha kgha kgha kgha kgha kgha kgha kg	1.296 0.758 1.557 0.909 1.779 1.040 1.222 0.715 0.050 0.029 0.319 0.181 34,00 43,14 136,00 79,55	40.0 40.0 300.0 300.0 0.0 0.0 0.0 0.0 0.0 0.0	198 0 134.0 385.3 227.4 0.0 0.0 0.0 366.6 214.5 0.0 0.0 0.0	40.0 40.0 0.0 350.0 350.0 0.0 250.0 0.0 250.0 0.0 0.0 0.0	38.0 25.6 0.0 0.0 580.0 339.2 0.0 0.0 305.5 778.8 0.0	80.0 80.0 600.0 600.0 0.0 0.0 350.0 0.0	390, 4 264, 0 777, 6 454, 8 0, 0 0, 0 0, 0 427, 7 250, 3 0, 0 0, 0	300.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	108 0 72.8 388.8 227.4 0.0 0.0 0.0 244.4 143.0 0.0	200.0 200.0 200.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	759 2 151.6 0 0 0 0 0 0 244.4 143.0 0 0	80 0 80 0 300 0 300 0 0 0 0 0 200 0 200 0 0 0	550 8 393.6 353.8 227.4 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	30.6 30.5 0.0 0.0 0.0 700.0 700.0 360.0 0.0	432.0 292.5 0.0 0.0 0.0 1245.3 7266.6 214.5 0.0 0.0
Variety E	igrha igrha kgha kgha kgha kgha kgha kgha kgha kg	0.7.58 1.657 0.969 1.779 1.000 1.272 0.715 0.050 0.029 0.310 0.181 34.00 43.14 136.00 79.56 32.40	40.0 300.0 300.0 0.0 0.0 0.0 0.0 0	385.8 227.4 0.0 0.0 0.0 0.0 364.6 214.5 0.0 0.0	40 0 0 0 350 0 350 0 0 0 250 0 250 0 0 0 0 0 0 0	25.6 0 0 0 0 580 0 339.2 0.0 0.0 305.5 778.8 0.0 0.0	80.0 600.0 600.0 0.0 0.0 0.0 350.0 350.0 0.0	777.6 454 8 0.0 0.0 0.0 0.0 427.7 250 3 0.0	390.0 390.0 0.0 0.0 0.0 200.0 200.0 0.0 0.0	72.8 358.6 227.4 0.0 0.0 0.0 244.4 343.0 0.0	200.0 200.0 0.0 0.0 0.0 0.0 200.0 200.0 0.0	734.0 759.2 151.6 0.0 0.0 0.0 244.4 143.0 0.0	80.0 300.0 300.0 0.0 0.0 0.0 200.0 200.0	393.6 353.8 227.4 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	30.0 0.0 0.0 0.0 700.0 700.0 360.0 0.0	292.5 0.0 0.0 0.0 1245.3 728.0 366.6 214.5
Fenilities Compound D	kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha	1.296 0.758 1.657 0.909 1.779 1.040 1.272 0.715 0.009 0.310 0.181 34.00 43.14 136.00 79.56	300.0 300.0 0.0 0.0 0.0 300.0 300.0 0.0	385.8 227.4 0.0 0.0 0.0 356.6 214.5 0.0 0.0	0.0 0.0 350.0 350.0 0.0 250.0 0.0 250.0 0.0 0.0	0 0 0 0 580 0 339 2 0 0 305 5 778 8 0 0	600.0 600.0 0.0 0.0 0.0 350.0 350.0 0.0	777.6 454.8 0.0 0.0 0.0 0.0 427.7 250.3 0.0	300.0 300.0 0.0 0.0 0.0 200.0 200.0 0.0	358.8 227.4 0.0 0.0 0.0 0.0 244.4 \$43.0 0.6	200.0 200.0 0.0 0.0 0.0 200.0 200.0 200.0 0.0	259 2 151.6 0 0 0.0 0.0 244.4 143.0 0.0	300.0 300.0 0.0 0.0 0.0 0.0 200.0 200.0	353.8 227.4 0.0 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 700.0 700.0 360.0 0.0	0.0 0.0 0.0 0.0 1245.3 728.0 366.6 214.5
Compound D F kg E Compound S F kg E Compound S F kg E Annionium F kg Annionium F kg Annionium F kg Compound S F kg Annionium F kg Compound F bg E Commod Carbary F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg Endoughfan F kg	kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha	0.758 1.557 0.969 1.779 1.040 1.272 0.715 0.050 0.023 0.310 0.181 34.00 49.14 136.00 79.55	300 0 0 0 0 0 0 0 0 0 300 0 300 0 0 0 0	222.4 0.0 0.0 0.0 0.0 356.6 214.5 0.0 0.0	0 0 350.0 350.0 0.0 250.0 250.0 0.0 0.0	0.0 580.0 339.2 0.0 0.0 305.5 778.8 0.0 0.0	600.0 0.0 0.0 0.0 350.0 350.0 0.0	454 8 0.0 0.0 0.0 0.0 427.7 250.3 0.0 0.0	300 0 0.0 0.0 0.0 200 0 200 0 0.0 0.0	227.4 0.0 0.0 0.0 0.0 244.4 \$43.0 0.0 0.0	200 0 0 0 0 0 0 0 0 0 200 0 200 0 0 0	151.6 0.0 0.0 0.0 244.4 143.0 0.0 0.0	300.0 0.0 0.0 0.0 200.0 200.0 0.0	227.4 0.0 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 700.0 700.0 300.0 360.0 0.0	0.0 0.0 1245.3 728.0 366.6 214.5 0.0
Compound 6 E Compound 5 F E Compound 6 F E Annonium F Structe E Structe E Copsum F E Copsum F E Copsum F E Chamical E Arterine F E Codosafan F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E Cottane F E E E E E E E E E E	kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha kg/ha	0.758 1.557 0.969 1.779 1.040 1.272 0.715 0.050 0.023 0.310 0.181 34.00 49.14 136.00 79.55	300 0 0 0 0 0 0 0 0 0 300 0 300 0 0 0 0	222.4 0.0 0.0 0.0 0.0 356.6 214.5 0.0 0.0	0 0 350.0 350.0 0.0 250.0 250.0 0.0 0.0	0.0 580.0 339.2 0.0 0.0 305.5 778.8 0.0 0.0	600.0 0.0 0.0 0.0 350.0 350.0 0.0	454 8 0.0 0.0 0.0 0.0 427.7 250.3 0.0 0.0	300 0 0.0 0.0 0.0 200 0 200 0 0.0 0.0	227.4 0.0 0.0 0.0 0.0 244.4 \$43.0 0.0 0.0	200 0 0 0 0 0 0 0 0 0 200 0 200 0 0 0	151.6 0.0 0.0 0.0 244.4 143.0 0.0 0.0	300.0 0.0 0.0 0.0 200.0 200.0 0.0	227.4 0.0 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 700.0 700.0 300.0 360.0 0.0	0.0 0.0 1245.3 728.0 366.6 214.5 0.0
E Compound S F R S E E E E E E E E E E E E E E E E E E E	kgha kgha kgha kgha kgha kgha	0.969 1.779 1.040 1.272 0.715 0.050 0.029 0.310 0.181 34.00 49.14 136.00 79.56 32.40	00 00 00 00 00 300 00 00 00 00 25 25	0.0 0.0 0.0 0.0 356.6 214.5 0.0 0.0 0.0	350.0 350.0 0.0 250.0 250.0 0.0 0.0 0.0	339.2 0.0 0.0 305.5 778.8 0.0 0.0	0.0 0.0 0.0 350.0 350.0 0.0	0.0 0.0 0.0 0.0 427.7 250.3 0.0	0.0 0.0 0.0 0.0 200.0 200.0 0.0	0.0 0.0 0.0 0.0 244.4 343.0 0.0 0.0	0 0 0 0 0 0 0 0 200 0 200 0 0 0 0 0	0 0 0.0 0.0 244.4 143.0 0.0 0.0	0.0 0.0 0.0 200.0 200.0 0.0	0.0 0.0 0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.0 700.0 700.0 360.0 360.0	0.0 0.0 1745.3 728.0 366.6 214.5 0.0
Anthonium F kg Struite E Planure S bg E Gypsum F bg E Chamical Carbaryt 6 6 Aquistrian F s E Anthonium F kg Endouafan S kg Endouafan S kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg	kgha lgha lgha kgha kgha	1.779 1.040 1.272 6.715 0.050 0.029 0.310 0.181 0.181 0.181 0.181 136.00 79.56 32.40	0.0 0.0 360.0 300.0 0.0 0.0 0.0 0.0 0.0 2.5 2.5	0.0 0.0 366.6 214.5 0.0 0.0 0.0	0.0 250 0 250 0 0.0 0.0 0.0	0.0 0.0 305.5 178.8 0.0 0.0	0.0 0.0 350.0 350.0 0.0 0.0	0.0 0.0 427.7 250.3 0.0 0.0	0.0 200.0 200.0 0.0	0.0 0.0 244.4 \$43.0 0.0 0.0	0.0 0.0 200.0 200.0 0.0 0.0	0.0 0.0 244.4 143.0 0.0 0.0	0.0 200.0 200.0 0.0	0.0 0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0 0.0	700.0 700.0 300.0 300.0 0.0	1245.3 728.0 366.6 214.5 0.0
Anthonium F kg Struite E Planure S bg E Gypsum F bg E Chamical Carbaryt 6 6 Aquistrian F s E Anthonium F kg Endouafan S kg Endouafan S kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg Endouafan F kg	kgha lgha lgha kgha kgha	1,040 1,272 9,715 0,050 0,023 0,310 0,181 34,00 49,14 136,00 79,56 32,40	0.0 360.0 300.0 0.0 0.0 0.0 0.0 0.0 2.5 2.5	0.0 366.6 214.5 0.0 0.0 0.0	0.0 250.0 250.0 0.0 0.0 0.0	0.0 305.5 778.8 0.0 0.0	0.0 350.0 350.0 0.0 0.0	0.0 427.7 250.3 0.0 0.0	200 0 200 0 200 0 0.0 0.0	0.0 244.4 343.0 0.6 0.6	0.0 200.0 200.0 0.0 0.0	0.0 244.4 143.0 0.0 0.0	0.0 200.0 200.0 0.0	0.0 244.4 343.0 0.0		0.0 0.0 0.0 0.0	700.0 360.0 360.0 0 0	728.0 366.6 214.5 0.0 0.0
Nitrate E	kg/ha kg/ha kg/ha kg/ha	1.272 9.715 0.050 0.025 0.310 0.181 34.00 43.14 136.00 79.56 32.40	360.0 300.0 0.0 0.0 0.0 0.0 0.0 0.0 2.5 2.5	366.6 214.5 0.0 0.0 0.0 210.0	250 0 250.0 0.0 0.0 0.0 0.0	305.5 178.8 0.0 0.0	350.0 350.0 0.0 0.0	427,7 250 3 0.0 0.0	200 G 200 G 0 G 0 G	244.4 \$43.0 0.6 0.6	200.0 0.0 0.0	244.4 143.0 0.0 0.0	200.0 200.0 0.0	244.4 343.0 0.0 0.0		8.0 0.0 8.0 0.0	360.0 360.0 0.0 0.0	356.6 214.5 0.0 0.0
Nitrate E	kg/ha kg/ha kg/ha kg/ha	9.715 0.050 0.029 0.319 0.181 34.00 49.14 136.00 79.56 32.40	300 D 0.0 0 D 0 O 0 O 2 S 2.5	214.5 0.0 0.0 0.0 0.0 210.0	250.0 0.0 0.0 0.0 0.0 0.0	978.8 0.0 0.0 0.0	350.0 0.0 0.0	250 3 0.0 0.0	200.0 0.0 0.0	\$43.0 0.6 0.6	0.0 0.0 500.0	143.0 0.0 0.0	0.0	343.0 0.0 0.0		0.0 0.0	360.B 0 0 € 0	214,5 0.0 0.0
Manure 5 by Copsum 6 by Chemical Carbaryt 6 by Agistrian F 3 Atrazine F by Chibane F k Chibane F k Ethium 5 k	kg/ha kg/ha kg/ha kg/ha	0 050 0 029 0 319 0 181 34.00 49.14 136.00 79.56 32.40	0.0 0.0 0.0 0.0 2.5 2.5	0.0 0.0 0.0 0.0 210.0	0.0 0.6 0.6 0.6	0.0 0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.6 0.6	0 0 0 0	0.0 0.0	0.0	0.0 0.0		0.0	0 o	0 0 0.0
Cypsom E B Chemical Carboryt E B Agaithrin E B Atracine E B EndosAfan E B Obthone E B Thiram E B	kg/ha kg/ha kg/ha kg/ha	0 023 0 319 0 181 34.00 49.14 136 00 79.56 32.40	2 S 2 S 2 S	0.0 0.0 0.0 210.0	0.6 0.6 0.6	0.0 0.0	0.0 0.0	<u>0</u> 0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	6.0	0.0
E	kg/ha kg/ha kg/ha	0.319 0.181 84.00 49.14 136.00 79.56 32.40	2 S 2 S 2 S	0.0 0.0 210.0 122.9	0.6 0.0	0.0	00	0.0	0.0	00	0.0	0.0			├ i			0.0
E	kg/ha kg/ha kg/ha	94,00 43,14 136,00 79,56 32,40	2 S 2 S 0 G	0.0 210.0 122.9	3.6	0.0			- 1				2.0			0.0	0.0	
Encode at E E E E E E E E E	\$7a kg/ha kg/ha	84,00 49,14 136,00 79,56 32,40	2.5	122.9			1		1		0.0	0.0	0.0	0.0		0.0	0.0	6.0
6	\$7a kg/ha kg/ha	49.14 136.00 79.56 32.40	2.5	122.9								1		'				
E	kg/ha kg/ha	136 00 79.56 32.40	0.0			252.0	0.0	0.0	10	84.0	1.5	126.0	0.0	0.0		0.0	0.0	0.0
E	kg/ha kg/ha	79.56 32.40			3 6	147.4	0.0	0.0	1.0	49.1	1.5	73.7	0.0	0.0		0.0	0.0	0.0
Endos Afan S k E Outhung F k E Diram S k	kg/la	32.40	41.01	0.0	2.0	272.0 159.1	1.0] 1.0	136.0 79.6	0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0	9.0 0.0		0.0	2.5 2.5	340.0 193.9
Endos Afan S k E Outhung F k E Diram S k	kg/la	ı	3.0	97.2	0.0	0.0		0.0	0.0	0.0	7.5	45.6		0.0		0.0	0 0	0.0
Diffung F k			3.0	56.9	0.0	0.0	1 1	0.0	0.0	0.0	1.5	28.4	0.0	0.0		0.0	0.6	9.0
Orthong F k E Thiram F k E	k2/ha	31.00	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	9.0
E Priram F is	kg/ha	47.39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	9.0
Triram F is	1	63 50	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		G.D	1.5	95 3
1		37.95	0.0	0.6		0.0	0.0	0.0	9.0	0.0	00	0.0	0.0	0.0	L	9.0	1.5	\$5.7
	kg/ha .	54 00 31.59	0.0	0.6 0.0		162.0 54.8	0.0	00	6.0 0.0	0.0 0.0	00	0.0	2.0	168.0 63.2		9.6 0.6	3.0	162.0 94.8
Managareto E S	ig/ha	63 00	- 00	0.0		94.8	0.0	0.0	10	63.0	0.0	0.6		63 2	\vdash	0.0	3.0 0.0	34.8 0.0
1		36.86	0.0	0.6	, ,	0.0	i I	0.0	1.0	36.9	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Copper F &	kgha	23.30	0.0	0.0		0.0		0.0	1.5	35.0	0.0	0.0	2.0	45.6		0.0	00	0.0
Oxychronide E		13.53	0,0	0.0	0.6	9.0	0.0	0.0	1.5	20.4	0.0	0.0	2.0	27.3		0.0	6.0	0.0
Prioden F k	#Byrs	7.00	0.0	0.0	0.0	90	1 I	0.0	00	0.0	00	0.0	0.0	3.0		0.0	0.0	0.0
<u> </u>	-:	4.16	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	00	0.0	0.0	0.0	<u> </u>	0.0	0.0	0.0
Rogar 5	ly ha	\$0.00 29.75	0.0	0.0	, ,	125 0 73.1	0.0	0.0	00	0.0 0.0	0.0 0.0	0.0	0.0	0.0 0.0		0.0 0.0	! I	0.0 0.0
Machinery & Equipment	L	- 23.63					L	0.0			1 0.01			9.0	لـــــــنا	0.0	1 0.0	<u>U.U</u>
h	ha	50.00	0.0	0.0	0.0	00	0.0	00	0.0	¢ o	0.0	0.0	0.0	0.0		0.0	0.0	0.0
E		42 55	0.0	0.0	00	00	0.0	00	0.0	0.0	0.0	0.0	00	0.0		6.0		0.0
Cultivates F	hu .	10.43	0.0	0.0	00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	[0.0	0.0	0.0
E		8.8	0.0	0.0	00	0.0		30	0.0	0.0	0.0	0.0	00	0.0		0.0	0.0	0.0
1	h)	9.77	0.0	0.0	1 1	0.0	1	9.0	0.0	0.0	0.0	9.0	0.0	6.0	i	0.0		0.0
Rough F	ha .	6.59	1.0		! —	6.6	ŧ	0.0 6.6	0.6	6.6		Đ.O		80	} <u>-</u>	0.0		0.6
Bough F	·-	5.61	1.0	5.6	1.0		t I	5.6	, ,	5.6	• •	6.6 5.6	1.0	6 6 5.6		0.0	1 1	6 6 5.6
L	ha .	0.55	1.0	0.6				06	·	0 .6	10	0 6	10	06		0.0		
[t		0.47	1.6	0.5		Ł		0.5	1.0	0.5	1.0	0.5	1.0	0.5		0.0	1 I	0.5
Hice F	Na	0.33	1.0	0.3	1.0	03	10	03	1.0	0.3	1.0	03	1.0	0.3		0.0	1.0	6.3
		0 28	1.0	03	1.0	0.3		03	1.0	03	1.0	03	1.0	0.3	ļ	0.0	 +	0.3
Kropsuck F	ha .	12 65	1.0	127				12.7	19	127	1.0	12.7	1.0	12.7	[0.0		12.7
Sprayer E Tourk B E		57.14	1.0	37.1	1.0		_	10.8	10	10.8 57.1	1.0	10.8 57.1	1.0	10.8	ļ	0.0		10.8
Tractor E	Na	45 53	1.0	57.1 48.6	1.0					57.1 48.5	. ,	43.6	1.0	57.1 43.6		0.0		
tabor	l			-0.0		1	<u>ت ·</u>		1			73.0				U.V		
}	man ·	6.00	0.0	0.0	0.0	0.0	00	0.0	0.0	00	0.0	0.0	60.0	360.0	I 1	0.0	0.0	0.0
1 1 1	đay Tra	2.43	0.0	0.0	4			0.0		0.0	, ,	0.0		147.0		0.0		
1 1	ursa.	10.00	60.6	600.0	1 1	i			: t	600.0	ŧ i	490.0	E0.0	600.0		0.0	1 1	1500.0
· · · · · · · · · · · · · · · · · · ·	day/ha	4.59	60 0	245.4	140.0		g	~~~~~	·	245.4	40.0	1636	60.0	245.4	 	0.0	 	613.5
1 1 1	64	5 5 2	0.0	0.0		1	1 1		1 t	0.0	1 I	0.0		0.0		0.0	1 1	
	day he	2 26	0.0[0.0	0.0	00	0.0	0.0	0.0]	0.0	0.0	0.0	0.0	00	I!	0.0	[0.0]	0.0
Charge Planding F	te I	16.70	1.0	16.7	1.0	16.7	1.0	167	1.0	16.7	10	16.7	1.0	16.7	ı——	0.6	1.0	16.7
Charge E	-	13 63	10	136		i		i .	10	136		13.6	1.0	1		9.0	. 1	1
Amponding F	ha	350.00	1.0	350.0						350.D	1	3500	1.0			0.0	1	<u> </u>
Owge [[217.00	1.0	217.0		1		,		217.0		217.0				00	4 1	ı
hteest:								·	,		,						·	
Alcton f	tu	38.17	1.0	35.2	ı.	4				38 2		35 2	1.0	ı	1	40	1 1	0.0
Interest E		31.15	1,0	31.2			_		1.0	31.2	1.0	31.2	1.0		 -	0.0		0.0
Net Production	ZS Tha			2391.3 4233.5	1	7281.4 9567.1	1 1	3976.2 5968.5	j	1354.7 1736.4	j i	41.7 568.1		3076 8 3435.6	1	9.0 0.0		15914.9 14525.7

Table L-13-f Crop Budget (Improved Rainfed, Communal & Resettlement Farm)

					126	- •	TION	14	SEAT	9.5	AR BEAN	CRI	ENMALE		NO NUTS	91	FLOWER		raon T
Coop	il	Quantity Unit	Unit Cost		ı								Cost(25/he)			İ		1	1
tem			(23/Ng) N	1,300	.051(23/11a)	900	.051(2.576a)	QUARKY	COMICEMEN	Quartey	Coa(12 va)	COSTAN	T COSCITATION	550	(02)(5.F.IM)	500		QUARTY C	COMICS 181
1 Yield 2 Famgate	-	Eg/ha ZS/Kp		0.783		3.591		0.000		0.000		0.000		2.355		1.472		0.000	
ਨ raingale ਨੀke	Ę	24.79		0.937	1	3.804		0.000		0.000		6 000		2.0C4		1.253		0.000	
3 G.Froduction	F	ZS/ha		一	1025.7		3231.9		0.0		0.0		0.0		1318.8		736.0		e 0
Value	E			1	1216.1		3423.6		0.0		0.0		0.0		11222		626.5		0 0
4 Production	F	ZS. ha	1	- 1	1164.9		2476.1		0.0	i i	0.0		60		1242 3		729.7		0.0
Cost	E		Ll	1	689.9		1353.6		0.0		0.0	L	0.6		736.3		471.7		0.0
Seed Standard	Ē	kg/ha	n.t.	0.0	0.0	90	0.0		0.0		0.0		0.0	0.0	0.0	30 D	288.0	1	0.0
Surceu Valety	֡֞֞֞֞֞֜֞֞֞֜֞֞֜֞֞֜֞֞֜֞֞֓֓֓֡֞֜֞֓֓֡֓֡֡֡֡	*9''4	47.	0.0	0.0	0.0	0.6		0.0	(0.0		0.0	0.0	0.0	30.0			0.0
Now	6	ko/ha	n.r.	25 0	123.8	30.0	28.5		9.0		0.0		0.0	50 0	363 0	0.0	0.0		90
Vælety	E		n.r.	25.0	83.8	30 0	13.2	L	0.0		0.0	L	0.0	50.0	246.0	0.0	0.0		0.0
l'enliter	<u> </u>		r r													· —	,		
Compound D	ŧ	kg/ha	1 296 0.758	250.0 250.0	324.0 189.5	0.0 G.0	0.0 0.0		0.0		0.0 0.0		0.0	150.0 150.0	194.4 113.7	0.0	i	i i	0.0 0.0
Compound &		kg/ha	1.657	0.0	0.0	306.0	437.1		0.0		0.0		0.0	0.0	0.0				0.0
Contact. o c	E	-0//-	0.969	0.0	0.0	300.0	290.7		0.0		0.0		0.0	0.0	0.0	0.0	G O		0.0
Compound 5		kg/ha	1.773	0.0	00	0.0	0.0		0.0		0.0		0.0	\$0	0.0	50.0	89.0		0.0
	E		1.040	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	0.0				0.0
Ammunium	1	kg/ha	1.222	200.0	244.4	300.0	366.6		0.0	t l	0.0	i	0.0	100 0	122.2	0.0			0.0
Nitrate	F	502-5	0.715	200 0	143.0	300.0	214.5		0.0 G.0		6.0 0.0	-	0.0	100.0	71.5	0.0	0.0	ŧ —⊢	0.0
Maure	انا	8g/1:a	0.029	0.0	0.0	0.0	0.0		0.0	1	0.0	1	0.0	0.0	5.0			<u> </u>	0.0
Gyp-sum	ř	1g/ha	0310	0.0	0.0	0.0	0.0	ļ	0.0	~~~	0.0	1	0.0	0.0	0.0			11	0.0
L	E		0.181	6.0	0.0	0.0	6.0		00	ł	0.0	<u>. </u>	00	6.0	0.0	0.0	0.0	11	0.6
Cheminal								,								r	r	,	
Cartaryl		kyna	54.00	3.0	84.0	3.0	252.0	ĺ	0.0		0.0		00		0.0				0.0
Agrithrin	ξ 1	Uha	136.00	1.0 0.6	49.1 0.0	3.0 3.0	347.4 408.0	 	0.0		0.0		0.0	00	00	 -		 -	0.0
Agertivan		012	79.56	0.0	0.0	3.0	238.7		0.0		00	1	0.0		0.0	Į.	Į.	l I	0.0
Atrazine	ī	kg/ha	32.40	G.0	0.0	0.0	0.0		0.0	+	9.0	ļ	0.0	0.0	0.0	0.0	0.0		0.0
	٤		18.95	0.0	0.0	0.0	0.0		0.0		0.0		0.0	0.0	0.0	0.0	6.0		0.0
Endosulfun	F	kg/ha	81.00	0.0	0.0	0.0	0.0		0.0	1	0.0	1	0.0	0.0	0.0	i .		1 .	0.0
	Ę.		47.33	0.0		9.0	0.0	<u>-</u>	0.0		6.0	+	0.0	1	8.0 8.0				8.0
Onturie	₹	kg/ha	63.50 37.15	0.0	6.0 6.0	0.0 0.0	0.0 0.0	1	0.0 0.0		0 0	ı	0.0	3		i			0.0
Diram	17	to ha	\$4.00	0.0		0.0	9.0	!	9.0	1	0.0	{	0.0		54.0	+	+		0.0
	£	•	31.59	6.0	0.0	6.0	00		0.0	1	0.0	1	00	1.0	31.6	0.0	0.0		0.0
Marcozeb	F	ko ha	63.00	00	0.0	0.0	0.0		0.0		0.0		0.0	0.0	0.0			1	6.0
	Ţ.		36.86	0.0	0.0	0.0	0.0		0.0		0.0		00	+	0.0		}		0.0
Cogujer	F	ko ha	23.30	0.0	0.0	0.0	0.0	1	00	1	0.0	1	0.0	l	0.0			I i	0.0
Oxychoride Thiodan	E F	ig/ta	13.63 7.00	0.0	0.0	0.0	0.0		0.0	_	9.0		0.0						0.0
FEROGRE I	E	.,,	430	0.0	0.0	0.0	0.0	1	0.0		0.0	1	0.0	6.0	0.0	l .	1		6.0
Roger	F	Uha	50.00	0.0	0.0	2.5	125.0		0.0	<u>, </u>	0.0		0.0	0.0	0.0	0.0	0.0	·	0.0
	Ε	l	29.25	0.0	0.0	2.5	73.1	1	9.0	1	0.0	·	0.0	0.0	0.0	0.0	00	<u> </u>	6.0
Max himony & Eq.	÷			· · · · · · · · · · · · · · · · · · ·			, -					r		,	r	 .			
Scold: Cat	F	tu .	50.00 42.55	1.0	50.0 42.6	1.0 1.0	50.0 42.6	•	0.0	4	0.0	ŀ	0.0	ž		1			00
Cultivater	ı	ħa .	10.43	1.0	10.4	1.0	10.4		0.0	1	0.0	•	0.0	[-			+	}	60
1	E	'-	8.68	1.0	8.9	1.0	8.9		00	1	0.0	1	0.0	t		1	8.5	·	0.0
Wheelburrow	F	ħa .	9.77	1.0	9.8	1.0	9 8	1	0.0	1	0.0	1	0.0	1.0	9.8	1.0	9.8	4	0.0
	Ł	<u> </u>	5.31	3.0	8.3				0.0		0.0		0.0			1			0 0
Rough	ľ	†a	6.59					•	0.0		0.0	1	0.0	ſ					6.0 0.0
Schle	E F	 	5.61 0.55	1.0	5.6 0.6	1.0	5.6		0.0		3.0		0.0					1	0.0
~~	E		0.47	11	0.5		0.5	•	0.0		90	1	0.0	l	•		4		0.6
Hoe	F		0.33		0.3	1.0	0 3	-	0.0		0.0		0.0				0.3		6.0
	E	L	0.28	-	0.3		0.3	•	9.0		0.0	+	0.0	-			.		6.0
Krepsack	F	he	12.65	1.0	12.7	1.0	12.7		0.0	2	0.0		0.0	l	1	1	1		00
Sprayer	E	 -	10.77 57.14	0.0	10.8		10.8	£	0.0	•—	0.0 0.0		0.0	+					0.0
Tractor	f E	ha ha	43 63	I ≨	0.0 0.0			ż	0.0	5	9.0		0.0	1	Į.		1		60
Lator	1 <u>*</u>	L	1	11		1	· · · · · · · · · · · · · · · · · · ·	i	·			· · · · · ·	J			1	1		— 1
Farily Labor	F	mari •	6.00	30 0	150.0	110.0	660.0		0.0)	0.0		0.0	50.0	300.0	10.0	69.0)	00
	E	day/ha	2.45	+—-+	73.5		769.5		0.0		00		0.0	ļ		·			0.0
Unskilled Labor	F	m-art.	6.00	l I	0.0		0.0		0.0		0.0	.	0.0	ı	L				0.0
L	E	day tu	2.45		9.0		9.0 110.4		0.0		0.0		0.0					+	0 0
Draft Arimal	F	ox∙ day/ha	\$.52 2.26	F 1	\$\$.2 22.6	20.0 20.0	l .		0.0		0.0	•	0.0	1			1	1	0.0
Durge	1.	J Caly 12	1		E4.0	1	L	Ь	I	1	1 5.0	1			L	1	·	L	۲
Randing	F	he	16.70	1.0	167	1.0	16.7	}	0.0	}	0.0	· · · ·	0.0	1.0	16.7	1.0	16.3	1	00
Chage	ŧ	l	13.63	1.0	136	3.0	13.6	ł .	0.0		0.0	ł	0.0	ŧ			+		0.0
JAFee	F	ha	8 33	1 1	•			•	0.0		0.0		0.0			1	1	1	0.0
I		1	680	1.0	68	1.0	6.8	¥	0.0	<u> </u>	0.0	<u>'L</u>	00	1.0	6.6	1	6.1	?i	0.0
	٤	L																	
Meet:		L					24.	T	1	<u>.</u>	1	.I	1 00		20	1	3.0		- an
AFC Loan .	f	1 10	35.17						0.0	1	0.0		0.0		1		1		9.0
	f	L				3.0		<u>'L</u>		<u> </u>		<u> </u>		1.0	1	1.0		2	

Table L-14 Benefit from Road Improvement

				Saving	Length of	Average	Annnal
	District /	Saving of	Saving of	ţo	Road to	Daily	Saving of
F'	Type of Improvement	Fixed Cost	Varieble Cost	VOC	be improved	Trafic (Unit/day)	Total VOC (2\$)
		0.05	0.10		35	100	191,625
	Graver (Corrected)		0.05	0.075	76	100	265,538
K ^g	ומכל + כומילים דסלם	n.f.	יים	n.r.	132	חיזים	457,163
1	Gravei-Narrow Tarred	0.02	0.04	90.0	0	05	0
okwe okwe		0.0	0.02	0.03	54	90	29,565
 0 1		חיני	n,f.	n.r.	54	יט'ני	29,565
:	Gravel→Narrow Tarred	0.02	0.0	90.0	0	50	0
South Sokwe		0.01	0.02	0.03	ω σ	50	53,655
S 		J. C	7.7.	n.r.	80	n.r.	53,655
) ၁	Gravel→Narrow Tarred	0.02	0.04	90.0	0	50	0
лекм	Track→Gravel	0.01	0.02	0.03	O ®	50	16,425
K'	Total	n.r.	7.4	n.f.	30	n.r.	16,425
	Gravel→Narrow Tarred	0.02	0.04	90.0	70	100	153,300
emob oMsw.		0.01	0.02	0.03	0	100	0
		D.f.	ח.ר.	n.r.	70	n.r.	153,300
	Grand Total	n.r.	טיני	טיגי	384	n.r.	710,108

Table L-15 Social Benefit Index from Shadow Income Weight

				S	Social Benefit Index	ndex		
Type of Household	Adjusted Average Household Income	Shadow Income Weight	Scenario A	4 0	Scenario B-1	. B-1	Scenario B-2	.8-2
			Share (%)	Index	Share (%)	Index	Share (%)	Index
Average index	3816	n.r.	100	1.26	100	1.51	100	1.51
Large-scale Commercial Employees	4407	0.87	19.3	0.17	0	0	0	0
Small-scale Commercial Farmers	4027	0.95	23.2	0.22	0	0	0	0
Communal & Resettlement Farmers	2527	1.51	57.5	0.87	100	1.51	100	1.51

Table L-16-a Social Internal Rate of Return (SIRR)

Scenario: A

occuai								(Unit: 2\$	1,000)
Project		roject Cos		Project	Net		resent Wor		
Vnor		D&M Cost	Totai	n. (*)	D 614	D. R. =	0.10	<u>D, R, =</u>	0.11
Year	3, 535	Replacem't	3, 535	Benefit O	Benefit -3,535		'i Benefit	Pj CostP 3, 185	<u>i Benefit</u>
2	3, 535		3, 535		-3, 535 -3, 535		7	2, 869	ä
3	24, 901		24, 901		-24, 901		ñ	18, 21 q	ŏ
4	37, 292		37, 292		-36, 627		454	24, 565	438
5	95, 107	1,774	96, 881	5,514	-91, 367	60, 155	3, 424	57, 494	3, 272
6	283, 757	1,774	285, 531		-274, 515	161, 175	6, 218	152, 657	5, 890
7	271, 332	2, 574	273, 906		-262, 48 3	140, 557	5, 862	131, 929	5, 502
8	323, 396		325, 970		-311, 528	152,067	6, 737	141, 447	6, 267
9 10	397, 896 326, 565		401, 406 337, 316		-368, 632		13, 899	156, 920	12, 812
11	74, 501	14, 438	88, 939		<u>-264, 024</u> 42, 575		28, 257 46, 095	118, 797 28, 219	25, 812 41, 727
12	43, 728		60, 930		125, 221	19, 414	59, 313	17, 416	53, 210
13	49, 287		68, 650		150,008	19, 885	63, 337	17, 678	56, 308
14	49, 287		70, 810		172, 929		64, 184	16, 428	56, 546
15	43, 661	24, 003	67, 664		195, 477	16, 198	62, 994	14, 142	54, 998
16	0	24, 003	24,003		258, 591	5, 224	61, 501	4, 520	53, 210
17	Q	24, 003	24, 003		272, 315		58, 625	4, 072	50, 265
18	0	24, 003	24,003		280, 307	4, 317	54, 733	3, 668	46, 505
19	Q	24, 003	24,003		285, 433		50, 595	3, 305	42,602
20 21	0	23, 203	23, 203		286, 247		<u>45, 998</u>	2,878	38, 382
22	U N	23, 203 23, 203	23, 203 23, 203	310, 957 312, 088	287, 754	3, 135	42, 020	2, 593	34, 747
23	o O	23, 203	23, 203 23, 203	312, 842	288, 885 289, 639	2, 850 2, 591	38, 339 34, 938	2, 336	31, 417
24	ď	23, 203	23, 203		290, 017	2, 356	31, 800	2, 104 1, 896	28, 372 25, 592
	ĺ	45, 882	45, 882		267, 338		28, 909	3, 377	23, 056
25 26	Ô	23, 203	23, 203		290, 017	1, 947	26, 281	1,539	20, 771
27	0	23, 203	23, 203		290, 017	1,770	23, 892	1, 386	18, 712
28	0	23, 203	23, 203		290, 017		21, 720	1, 249	16, 858
29	0	23, 203	23, 203		290, 017	1, 463	19, 745	1, 125	15, 187
30	0	23, 203	23, 203		290, 017	1,330	<u> 17, 950</u>	1,014	<u>13, 682</u>
31	0	23, 203	23, 203		290, 017	1, 209	16, 318	913	12, 320
32	U	23, 203	23, 203		290, 017		14, 835	823	11, 105
33 34	Ų	23, 203 23, 203	23, 203		290, 017	999	13, 486	741	10, 004
35	0	45, 882	23, 203 45, 882		290, 017		12, 260	668	9,013
36	V	23, 203	23, 203		267, 338 290, 017		11, 146	1, 189	8, 120
37	ŭ	23, 203	23, 203		290, 017		10, 132 9, 211	542 488	7, 315 6, 500
38	ď	23, 203	23, 203		290, 017		8, 374	440	6, 590 5, 937
39	Ŏ	23, 203	23, 203		290, 017		7, 613	396	5, 349
40	0	23, 203	<u>23, 203</u>	313, 220	_290, 017		6, 921	357	4, 819
41	0	23, 203	23, 203	313, 220	290, 017	466	6, 291	322	4, 341
42	0	23, 203	23, 203		290, 017	424	5, 719	290	3, 911
43	g	23, 203	23, 203	313, 220	290, 017	385	5, 200	261	3, 523
44	ğ	23, 203	23, 203	313, 220	290, 017	350	4,727	233	3, 174
<u>45</u> 46	l	45, 882 23, 203	45, 882	313, 220	<u>267, 338</u>	620	4,297	4 <u>19</u> .	2,860
47	l y	23, 203	23, 203 23, 203	313, 220	290, 017	289	3,906	191	2,576
48	l d	23, 203	23, 203 23, 203	313, 220 313, 220	290, 017 290, 017	263 239	3, 551	172	2, 321
49	ď	23, 203	23, 203		290, 017	233 217	3, 228 2, 935	15S 140	2, 091 1, 884
50	ď	23, 203	23, 203		290, 017	198	2, 555 2, 668	126	1, 884 1, 697
Total	2, 027, 783	1,002,828	<u>3, 030, 611</u>	2, 087, 264	9, <u>ŏšč, čs3</u>	1,027,262	1.070.670	947, 883	891, 093 891, 093
1, -							S. I. R. R. =	10.4%	
NOTE:	rroject Ye.	ar 1 = 1996.	1) K	THISCOUNT N	210				

Note: Project Year 1 = 1996. D.R. : Discount Rate

Table L-16-b Social Internal Rate of Return (SIRR)

Scenario: B-1

(Unit: 2\$1,000) Net Present Worth Value Project Cost Project roject nvestmentD & M Cost D. R. = Total 0.09D. R. = 0.10Pi CostPi Benefit Pi CostPi Benefit CostReplacen t Benef it Benefit Year -I, 23 1, 231 1.129 I.TI91, 231 1, 231 -1.2311, 017 1,036 2 37, 683 28, 312 $\bar{3}$ **-37, 683** 37,683 29,098 34, 378 29, 365 17, 768 33, 145 4 48, 165 363 48, 528 -48, 530 -44, 764 -26, 678 45, 182 272 28,054 2, 499 418 260 5 42,683 1, 761 3, 120 1.860 16,820 26, 688 3, 110 29, 798 6 15, 632 -24, 385 3.3257 26, 744 3,719 30, 463 6,07816,664 3, 119 17, 028 15, 740 12, 539 4, 331 36, 502 -26, 850 18, 319 4.841 8 32, 171 9, 646 4, 500 6, 321 7, 743 37, 113 -23, 384 17,088 9 32, 172 4,941 13, 729 5, 822 18, 330 22, 846 27, 464 32, 522 22, 458 <u>5, 8</u>34 -14, 192 13, 739 10 26,688 7,06716,015 388 8,703 8,854 7,871 8,007 11 **6, 443** 16,015 6,805 22, 820 4,644 8, 113 9,764 7, 271 8, 751 12 23, 183 32, 183 13 16,015 7, 168 9,000 7, 562 10, 497 6,715 9, 322 10, 973 11, 236 16,015 23, 545 36, 669 13, 124 7,040 9.650 14 7,530 6, 200 7, 890 5, 723 9, 797 23, 908 40, 920 17, 018 15 16, 015 6, 564 **7,** 89, 45, 362 52, 010 1, 988 1,718 7, 893 37, 460 11, 425 9,87 16 1,824 10, 290 7, 893 7, 893 44, 117 12,018 1,562 17 7, 893 55, 355 11,735 7,890 47, 462 1,673 1,420 9,950 18 7, 893 7, 893 58, 272 50, 379 1,530 11, 333 1, 291 9,528 19 **60,** 904 10, 867 **7,8**90 7, 893 53,011 1,408 1, 173 20 9,053 64, 731 56, 838 10, 590 21 7, 89 7, 893 1, 292 8, 747 1,06 1, 185 22 7,890 7, 893 65, 311 57, 418 9,809 970 8,02 7,893 1,088 7, 492 23 7, 890 67, 085 59, 192 9, 243 881 24 7, 893 68, 572 60, 679 8,668 801 7,893 998 6, 962 28, 747 68, 572 28, 747 39, 825 3, 33/ 7, 952 2,653 6, 329 25 68, 572 26 7, 890 7, 893 60, 679 840 7, 290 663 5, 751 6,693 5, 23 7, 893 7, 893 68, 572 60, 679 602 27 770 7, 893 7, 893 68, 572 547 28 60, 679 707 6, 141 4,755 29 7, 893 7,893 68, 572 4, 32 60, 679 648 5, 634 4987,893 **7,** 893 68, 572 <u>5, 168</u> 3, 930 30 60,679 599 452 31 32 7, 893 68, 572 4, 742 7, 89 60.679540 411 3, 57, 7, 893 68, 572 501 374 7, 893 60, 679 4,350 3, 248 33 34 68, 572 7,893 3, 991 340 2,952 7, 893 60,679 459 68, 572 2,684 300 7, 893 60,679 421 7, 893 3, 661 28, 747 7, 893 7, 893 68, 572 39, 825 023 2, 44(2, 218 3<u>5</u> 36 28, 747 7, 893 3, 359 3, 082 408 68, 572 25 60, 679 32£ 232 2, 017 7, 893 2,827 60, 679 37 68,5727, 893 2, 594 $\begin{array}{c} 38 \\ 39 \end{array}$ 60, 679 299 211 7,893 68,5721,833 68, 572 2, 380 274 7, 893 60,679 192 7,890 1,667 68, 572 68, 572 251 231 2, 183 2, 003 7, 893 7, 893 **7, 8**93 <u>60, 679</u> 174 1,515 40 **7.** 893 41 60, 679 159 1,377 7, 893 212 1,838 68.57242 7,893 60, 679 144 1, 252 7, 893 68, 572 194 1,686 1, 138 43 **7,89**3 60, 679 131 68.572 1,547 7, 893 7, 893 60, 679 44 178 1191,03 68, 572 68, 572 39, 825 60, 679 28, 747 7, 893 28, 747 7, 893 599 150 45 46 1, 419 391 941 85 98 1,302 60, 679 1, 194 80 7,893 7, 893 68, 572 137 47 777 68, 572 81 48 7, 893 **7,** 893 60, 679 120 1,096 707 68, 572 49 7, 893 7, 893 60, 679 110 1,005 74 643 **7.89**3 68, 572 50 7. 893 60, 679 100 927 67 <u>754, 984] 2, 531, 881[1, </u> 257, 442 213, 311 355, <u>399, 45</u>; 776, 897 221211, 762 Tota

Note: Project Year 1 = 1996. D.R. : Discount Rate

S. I. R. R. =

9.50

Table L-16-c Social Internal Rate of Return (SIRR)

Scenario: B-2

(Unit: Z\$1,000) roject Project Cost Project Present Worth Value Net nvestmentD & M Cost Total D. R. = 0. 10 D.R. =0.11 CostReplacem't Pi CostPi Benefit Year Benef i t Benefi Pi CostPi Benefit 1,068 -1, 068 971 1,068 1,068 -1.068 883 2 867 3 38, 538 38, 538 -38, 538 28, 954 28, 179 ď 381 25, 637 20, 971 4 38, 538 38, 919 -38, 923 26, 582 <u>5</u> 32, 803 2, 535 -34, 88 281 35, 338 21, 942 2, 916 19, 724 16, 808 -16, 867 2,857 11, 134 1,613 10, 545 1,527 7 16, 808 3, 296 20, 104 5, 371 2, 756 -14,73310, 317 9,683 2,587 8 16, 808 3,677 20, 485 8, 317 -12, 138 9,556 3, 894 8,889 3,622 9 16,808 4, 057 20,865 11,786 8,849 4,998 -9,079 8, 157 4,60 10 16,808 4, 438 21, 246 15, 684 -5, 562 8, 191 6,017 7, 483 5, 524 11 16, 808 4,818 21,626 19,870 -1, 750 7, 580 6, 961 6, 862 6, 304 12 16.808 7, 012 7, 750 5, 199 22,007 24, 343 2, 330 6, 290 6,958 16,808 13 5, 579 22, 387 6, 717 8, 430 29, 104 6, 485 5, 765 7, 490 16, 808 5, 960 14 22,768 33, 687 10, 919 5, 990 5, 282 8,871 7,815 5, 541 4, 838 1, 194 16,808 6, 340 23, 148 9, 119 15 38, 093 14, 945 7, 962 6, 340 6, 340 1, 380 1, 254 16 6, 310 36, 518 9, 327 42,858 8,070 17 6,340 9, 331 47, 162 40,822 1,075 8,000 6,340 6,340 18 51,005 9, 174 44, 665 1, 140 969 7, 790 6, 340 6, 340 54, 384 57, 303 48, 044 50, 963 6,340 8,892 19 1.037 873 7, 487 6, 340 6, 340 6, 340 20 8, 518 942 7807, 108 21 22 6, 340 6, 340 8, 099 7, 744 59, 935 53, 590 857 708 6,697 63, 035 56, 695 779 638 6,340 6, 340 6, 340 22, 859 61, 341 65, 209 65, 209 23 6, 340 58,001 708 7, 185 575 5,839 6, 340 22, 859 24 58, 869 42, 350 644 6, 620 518 5, 328 25 2, 110 4,800 6, 019 683 6, 340 6, 340 6, 340 6, 340 26 65, 200 58, 869 532 5, 471 420 4, 324 $\overline{27}$ 65, 200 58, 869 181 4, 974 379 3,890 6, 340 6, 340 6, 340 6, 340 6, 340 6, 340 6, 340 65, 200 28 58, 869 440 4, 522 341 3,510 $\tilde{29}$ 65, 209 65, 209 58, 869 400 4, 111 307 3, 162 30 6, 340 58, 869 363 <u>3, 737</u> 277 2,849 31 6, 340 6, 340 65, 200 58, 860 330 3, 397 250 2,560 32 65, 200 58, 869 300 3, 088 225 2,312 33 6, 340 6, 340 65, 200 58, 869 273 2,808 203 2,083 $\tilde{34}$ 6, 340 6, 340 65, 209 58, 869 248 2,552 182 1,870 22, 859 6, 340 6, 340 2, 320 2, 103 35 36 65, 200 22, 850 42, 350 813 593 1,690 6, 340 6, 340 65, 209 65, 209 58, 860 200 148 1.52 37 58, 869 1,918 180 1,372 133 38 6,340 6, 340 65, 200 58, 869 169 1,743 120 1, 236 $\tilde{39}$ 6, 340 6, 340 65, 209 58, 860 154 1,585 108 1. 114 <u>6, 340</u> 6, 340 6, 340 6, 340 65, 200 65, 200 40 1,441 98 88 58, 869 140 1,003 0 58, 869 41 127 1, 310 90'65, 209 42 6,340 6, 340 58, 869 116 1, 191 79 814 43 6,340 65, 209 6, 340 58, 869 1,082 10571 734 65, 209 44 6, 340 6, 340 58, 869 96 984 64 661 65, <u>209</u> 65, 209 22, 859 6, 340 **22,** 859 6, 340 45 42, 350 895 314 209**59**5 46 **58, 86**9 79813 52 536 47 6, 340 6, 340 65, 209 58, 869 72 73947 483 65, 209 48 6,340 6, 340 58, 869 65 672 42 430 65, 209 49 6,340 6, 340 58, 869 59 611 38 392 6, 340 65, 209 58, 869 600, 748 2, 390, 257 1, 789, 509 50 340 555 353 162, 557 280, 095 320, 650 Total 176, 969 196, 267 163. 93^c

Note: Project Year 1 = 1996, D.R. : Discount Rate

S. 1. R. R. =

10.9%

Table L-17-a Financial Analysis on Communal & Resettlement Model Farmer (Without: Rainfed, With: Irrigated)

No.	Cost Item	Unit	Without Project	With Project
	Farming Area	ha	4.00	1.00
1	Dry	ha	4.00	0.00
	Irrigated	ha	0.00	1.00
	Number of Family	person	8	8
2	Farming Adult	person	2	2
	Non-farming Adult	person	1	1
	Children	person	5	5
	Gross Production Value of Agricultural Output	z\$	6579.6	9574.9
	Cotton	z\$	5041.8	2423.9
	Maize	z\$	1270.1	2130.3
3	Sunflower	z\$	89.2	0.0
	Ground Nuts	z\$	178.5	662.4
	Wheat	z\$	0.0	1527.8
	Sugar Bean	z \$	0.0	378.0
	Green Maize	z\$	0.0	202.5
	Onion	z\$	0.0	2250.0
	Food Retention	z\$	780.0	1364.7
4	Maize	z\$	762.1	1278.2
	Ground Nuts	z\$	17.9	66.2
	Green Maize	z\$	0.0	20.3
5	Marketed Gross Production Value of	z\$		
	Agricultural Output		5799.6	8210.2
	Agricultural Cost	z\$	4139.0	3430.0
	Seed	z\$	269.6	468.6
	Fertilizer	z\$	2025.7	1624.7
6	Chemical	z\$	830.0	563.0
	Machinery & Equipment	z\$	336.1	336.1
	Hired Labor	z\$	300.0	60.0
	Charges	z\$	100.0	100.0
	Interest	z\$	277.6	277.6
7	Marketed Net Production Value of	z\$		
	Agricultural Output		1660.6	4780.2
8	Sales of Livestock	z\$	523.2	523.2
9	Off-farm Income	z\$	343.2	0.0
10	Total Income	z\$	2527.0	5303.4

Table L-17-b Financial Analysis on Communal & Resettlement Model Farmer (Without: Rainfed, With: Rainfed)

No.	Cost Item	Unit	Without Project	With Project
	Farming Area	ha	4.00	4.00
1	Dry	ha	4.00	4.00
	Irrigated	ha	0.00	0.00
•	Number of Family	person	8	8
2	Farming Adult	person	2	2
	Non-farming Adult	person	1	1
	Children	person	5	5
	Gross Production Value of Agricultural Output	z\$	6579.6	8515.9
	Cotton	z\$	5041.8	6463.8
	Maize	z\$	1270.1	1641.1
3	Sunflower	z\$	89.2	147.2
	Ground Nuts	z\$	178.5	263.8
	Wheat	z\$	0.0	0.0
	Sugar Bean	z\$	0.0	0.0
	Green Maize	z\$	0.0	0.0
L	Onion	z\$	0.0	0.0
	Food Retention	z\$	780.0	780.0
4	Maize	z\$	762.1	762.1
	Ground Nuts	z\$	17.9	17.9
l	Green Maize	z\$	0.0	0.0
5	Marketed Gross Production Value of	z\$		
	Agricultural Output	<u> </u>	5799.6	7735.9
	Agricultural Cost	z\$	4139.0	5524.4
1	Seed	z\$	269.6	385.3
	Fertilizer	z\$	2025.7	2917.9
6	Chemical	z\$	830.0	1482.0
	Machinery & Equipment	z\$	336.1	361.6
	Hired Labor	z\$	300.0	0.0
	Charges	z\$	100.0	100.0
	Interest	z\$	277.6	277.6
7	Marketed Net Production Value of	z\$		
	Agricultural Output		1660.6	2211.5
8	Sales of Livestock	z\$	523.2	523.2
9	Off-farm Income	z\$	343.2	343.2
10	Total Income	z\$	2527.0	3077.9

APPENDIX M

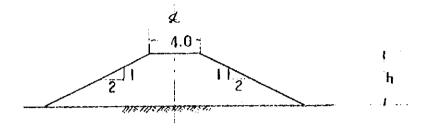
COST ESTIMATE

APPENDIX M.	COST ESTIMATE	PAGE
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Figure M-1	ESTIMATION OF THE CONSTRUCTION COST OF MEDIUM SIZE DAMS	M-15

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M,1Estimation of dam embankment for Medium Size Dams

Except for the Mtange and Sanyati-2 dams, the cross section of the embankment is fixed as shown in the figure below.



It could not be measured on site, the longitudinal section along the dam axis is anticipated as v-shaped giving the volume as:

$$V=Lxhx(h+2)$$

where L is the length and h is the height of the dams.

Dam No.	Dam Height (h m)	Dam Length (L m)	Embankment Volume (cu.m)
D 1	8.6	300	27,348
D 2	10.2	200	24,888
D 3	11.8	120	19,540
D 4	9.2	125	12,880
D 5	22.0	133	72,300*
D6	13.1	500	98,905
D 7	15.9	400	113,844
D 8	16.0	432	140,000**
D 9	7.0	400	25,200

sourced by the Mtange Dam Design Report DWD March 1994 sourced by the Design Report Sanyati-2 Dam MEWRD July 1991

Table M-I PROJECT COMPONENTS FOR REGIONAL FARMING TECHNOLOGY CENTER IN EACH SCENARIO

Component		Scenario B-2	Scenario B-1	Scenario A
1. Research and improvement of rainfed	agriculture technology	,		
Intrduction of drought resistible crop	sorghum ,millet	0	0	0
Intrduction of drought resistible variety	~	O	Ŏ	Õ
Intrduction of feed crops and trees	man e, conon	· -	-	Ŏ
Promotion of Livestock		_	_	0
Promotion of Livestock				O
2. Reinforcement of extension				
Reinforcement of extension worker			Δ	0
Procurement of Facilities & machinery		-	Δ	0
Retraining of extention worker		^	Δ	0
Training og farmers		۸	Δ	0
3. Regional Farming Technology Cente	ſ			
3.1 Building				
Site		2 ha	3 ha	4 ha
Administration office		400m²	800m²	1200 m²
Guest house for lectures		80m²	120 m²	200 m²
Dormitory for traince		120m²	180m²	240 m²
Storage	seed,fetilizer,chemical		120 m²	160m²
Garage		100 m²	200 m²	300 m²
Warehouse for machinery & repairshop		250m²	500m²	1000m²
Total		1030m²	1920m²	3100m²
3.2 Pilot farm		10	20	30
Rainfed farm (ha)	-	10	6	6
Fallow (ha)		0	6	8
Sprinkler (ha)		0	4	8
Driρ (ha)		0	4	8
3.3 Machinery	_		•	•
Bulldozer 6t	4	2	2 4	3 8
Tractor-trailer 35ps		2	4	8
Disk plough		2	4	8
Disk harrow Pick-uo truck 10t		3	4	8
Microbus		0	i	1
3.4 Other				
Laboratory equipment	-	l Lot	i Lot	1 Lot
Audio-Visual Equipment		1 Lot	1 Lot	l Lot
Agri-machine & workshop equipment		•	1 Lot	i Lot
Meteorological observation equipment		1 Lot	Lot	l Lot

Table M-2 COST ESTIMATION FOR REGIONAL FARMING TECHNOLOGY CENTER

0		340,000			243,000		3.562.600			000'06	160,000	280,000	280,000	810,000	5,400,000		2,800,000	000,096	300,000	9,460,000		1,000,000	1.000.000	200,000	2,500,000	16,332,600	1,633,260
Scenario A	4 ha	788 788 788 788	240	160	300	1000	3100m²		30	v	∞	8	00		m	,	∞	∞				1 Lot	1 Lot				
Cost	'n	1,120,000	270,000	97,200	162,000	405,000	2,258,200			000'06	120,000	140,000	140,000	490,000	3,600,000		1,400,000	480,000	300,000	5,780,000		750,000	800,000	500,000	2,050,000	10,578,200	1,057,820
Scenario B-1	3 ha	8 S	180	120	200	200	1920m²		20	9	9	4	4		2	ì	4	4	-			Lot	1 Lot	1 7 ot			
Cost	S	560,000	180,000	64,800	81,000	202,500	1,224,300			150,000				150,000	1.800.000		700,000	360,000	0	2,860,000		200.000	400,000	200,000	1,400,000	5,634,300	563,430
Scenario B-2	2 ha	Q &	120	80	100	250	1030m²		10	10	Ö	0	0		b erre	•	71	ıκı	0			1,01		1 Lot			
9	တ	1400	1500	810	810	810				15,000	20,000	35,000	35,000		1 800 000		350,000	120,000	300,000	•							
Unit		84-m	S -58	-08	. S	m-ps	•			pa	ha	ha	ha														
Component	1. Building	Administration building	Domitory for trainee	Storage	Garage	Warehouse for machinery & repairshop	sub-total	2. Pilot farm	Site(ha)	Rainfed farm (ha)	Fallow (ha)	Sprinkler (ha)	Drip (ha)	sub-total	5. Macninery Rulldozer 6r	Tractor	Tractor implement	Pick-no track 1t	Microbus	sub-total	4 Orber	I aboratory conjument	Andio-Visual Fourpment	Meteorological observation equipment	sub-total	Total	Miscellaneous Total x 10 %

Table M-3	NFRASTRUCTURE DI	EVELOPMI	ENT COST		
		Unit	Unit Price	Quantity	Cost
1. Road			\$		\$
r. Rodu					
1.1 Rehabilitation					
Gravel road, B=3m		km	58,000	279	16,182,000
Narrow tarred road, B	t=3m	km	300,000	70	21,000,000
1.2 Construction					
Gravel road		km	73,000	35	2,555,000
Bridge(Munyati Rive	r), B=5m	m	80,000	60	4,800,000
Sub-total				200	44,537,000
Total	incering Services Fee			20%	8,907,400 53,444,400
Total					33,444,400
2. Expantion of the C	ollection & Deposit Point				
2.1 Construction of C	allection Points				
Grain Marketing Boa		Nos.	421,000	5	2,105,000
-	Zimbabwe(COTTCO)	Nos.	421,000	6	2,526,000
	,		,	-	-1
2.2 Construction of D	eposit Point	Nos.	2,090,000	1	2,090,000
Sub-total					6,721,000
Contingency and Eng	incering Services Fee			20%	1,344,200
Total					8,065,200
3. Boreholes					
3.1 Rehabilitation of	boreholes	Nos.	6,000	60	360,000
3.2 Drilling of boreho		Nos.	25,000	43	1,075,000
Sub-total			,		1,435,000
Contingency and Eng	gineering Services Fee			20%	287,000
Total					1,722,000
40			162.000		453.000
4. Construction of Co	-	Nos.	162,000	6	972,000
Contingency and For	200 sq-m, \$810/sq-m gineering Services Fee			20%	194,400
Total	Sweeting Services Fee			20%	1,166,400
					1,100,100
Total Project Cost			•		64,398,000
,				say	64,400,000
Table M-4 LAND R	ECLAMATION AND SO	IL CONSER	VATION		
1. Scenario 8-2	Classia -		3200	25501	124064000
	Clearing Earth Work		3500 3519	35504 35504	124,264,000
	Afforestation		3319 40	35504 35504	124,938,576 1,420,160
	Sub-Total		₩0	J.J.V9	250,622,736
	Miscellancous and Cont	ingency		20%	50,124,547
	Total	o <i>)</i>		· · ·	300,747,283

, Scenario B-1				
Clearing		3500	33834	118,419,000
Earth Work		3519	33834	119,061,846
Afforestation	ı ,	40	33834	1,353,360
Sub-Total				238,834,200
	us and Contingency		20%	47,766,841
Total				286,601,047
Table M-5 COST BREAKDO	WN OF INFRASTRU	CTURE		
	Unit	Unit Price	Quantity	Cos
		\$:
1. Construction of Collection Poir	(GMB & CMB)			
Crearing	ha	3,500	1	1,750
Concrete Yard t=20 cm Area=2500	sq-m q-m	600	500	300,000
Office	sq-m	810	100	81,00
sub-total				382,75
Miscellaneous	10%			38,27
Total .				421,02
			say	421,00
2. Construction of Deposit Point				
Crearing	ha	3,500	4	14,00
Concrete Yard t=20 cm	sq-m	600	2,880	1,728,00
Area=14,40	0 sq-m			
Office	sq-m	810	200	162,00
sub-total				1,904,00
Miscellaneous	10%			190,40
Fotal				2,094,40
		-	say	2,090,00
3. Construction of Community Ce	der			
Office including miscellaneous	sq-m	810	200	162,00
4. Soil Conservation per ha			•	
4.1 Clearing	ha	3500		3,50
4.2 Earth Work	cu.m .0m, h+0.3m, L=200m/h	17 a)	207	3,51
Contour Band (Earth Road B=				
Contour Band (Earth Road B=. 4.3 Afforestation i line/ 10 m	Nos.	2	20	4

Table M-6 SUMMARY OF THE PROJECT COST IN KUDU DAM

1.1 PROJECT COST

Description			Amount (z\$)
1. Excavation			28,836,150
2. Embankment			94,350,000
3. Grouting			1,312,500
4. Concrete			10,614,500
5. Steel Work			335,500
Sub Total			135,448,650
6. Miscellaneous		5%	6,772,433
7. Preliminry and General		20%	28,444,217
8. Extra P & G-Foreign Contractors		30%	51,199,590
9. Contingencies		15%	33,279,733
Contract Price			255,144,622
	say		255,145,000
Departmental			
10. Access & Rerouted Road			100,000
11. Temporary Housing			1,200,000
12. Permanent Building	Water Bailiff Etc.		500,000
13. Land Compensation			750,000
14. Samabwa School			500,000
Replace Flooded Bridge			400,000
16. Guaging Weirs			150,000
17. Departmental Expenses			2,000,000
18. Contingencies on 10 to 16		15%	660,000
Sub Total	-		6,260,000
19. Engineering Services on 1 to 9			
Review of Detail Design & Super-	vision	10%	25514500
Total Project Cost at Nov. 1992			286,919,500
	say		287,000,000
Total Project Cost at Jan. 1995			
	Inflation Rate 50 %		430,500,000

1.2 Unit Cost of Water

Costing has been determined using a 40 year redemption period with 9.75 % interest rate:

		Amount (z\$)
Total Project Cost		430,500,000
Interest and Redemption at 9.75 %		
over 40 years		41,973,750
Amount Connection and Maintenance	1.50%	4 457 500
Annual Operation and Maintenance	1.5%	6,457,500
Total Annual Cost		48,431,250
An and Dan Wishi		200 14014
Annual Dam Yield		380 MCM
Cost of Water 1,000 cu.m/\$		127

Cost per Icu.m embankment

Embankment

 Core Material
 2,500,000

 Fill Material
 5,000,000

 Total
 7,500,000

Total Project Cost / Embankment \$/ cu.m

57

Source:

Design Report February 1993
Department of Water Development

Ministry of Agriculture and Water Development

Table M-7 SUMMARY OF THE PROJECT COST IN MTANGE DAM

Description			Amount(z\$)
1. Preliminary and General	·		2,560,000
2. Excavations			998,010
3. Embankment			1,796,850
4. Grouting			279,046
5. Concrete, Formwork and Masonry V	Vork		7,701,750
6. Miscellaneous and Outlet Works			480,000
7. Drainage Holes and Reinforcing Ba	rs		59,920
Sub Total	•		13,875,576
8. Extra Cost for Foreign Contractor	<i>′</i>	30%	4,162,673
Contract Cost			18,038,249
9. Inhouse Works & Compensation			5,050,000
Sub Total			23,088,249
Engineering Service Fee	!	10%	2,308,825
11. Contingencies		10%	2,308,825
Total Project Cost at March 1994			27,705,899
Total Project Cost at January 1995			
Inflation Rate 15	%		31,861,783
Embankment			
Impervious core			26,000
Place & Compac	t rolled Fill		46,300
Total			72,300
Total Project Cost	/ Embankment (\$/cu.m)		441
Source:	Mtange Dam Design Rep Midlands Province Department of Water Dev		4

Table M-8 SUMMARY OF THE PROJECT COST IN SANYATI-2 DAM

Description	···	Amount(z\$)		
1. Preliminary and General		32,600		
2. Excavations		1,954,000		
3. Embankment		1,810,500		
4. Grouting		300,000		
5. Concrete, Formwork and Masonry Work	5. Concrete, Formwork and Masonry Work			
6. Miscellaneous and Outlet Works		876,000		
Sub Total		5,135,600		
7. Extra cost for Foreign Contractor 30 %		1,540,680		
Contract Cost		6,676,280		
8. Inhouse Works & Compensation		500,000		
Sub Total		7,176,280		
9. Engineering Service Fee	10%	717,628		
10. Contingencies	10%	717,628		

Total Project Cost at July 1991

8,611,536

Total Project Cost at January 1995

Inflation Rate 100 %

17,223,072

Embankment

cu.m

140,000

Total Project Cost / Embankment

\$ / cu.m

123

Source:

Design Report July 1991

Operation Branch MEWRD ZIMBABWE

Table M-9 SUMMARY OF THE PROJECT COST IN ZHOVHE DAM

Total Project Cost at November 1993

69,227,269

Total Project Cost at January 1995

Inflation Rate 15 %

79,611,359

Embankment Volume

Core Material

660,000 cu.m

Fill Material

838,000 cu.m

Total

1,498,000 cu.m

Total Project Cost / Embankment

\$ / cu.m

53

Source: Contract for the Main Civil Engineering Works

ZHOVHE DAM SFT / TBR 2021 Department of Water Development

November 1993

Table M-10 COST ESTIMATION OF MEDIUM SIZE DAMS

[——]		Т		—-Т			Т		*		<u>]</u>	
Remarks						31,860,000 Mtange Dam*			17,220,000 Sanyati-2 Dam(Reg. Reservoir-2)**	3,150,000 Reg.Reservoir-1		
Estimated Cost	S	3,418,500	3,111,000	2,442,600	1,610,000	31,860,000	12,363,125	14,230,500	17,220,000	3,150,000	89,405,725	7
imbankment Cost	S/m³	125	125	125	125		125	125		125		W. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.
EmbankmentEmbankment Volume Cost	m³	27,348	24,888	19,541	12,880	72,300	98,905	113,844	140,000	25,200		
Dam Storage 1	1000 m³	480	750	099	170	4100	1590	1090	3,870	2,130		4
Dam Length	E	300	200	120	125	133	200	400	432	400		* · · · · ·
Dam Height	Æ	8.6	10.2	11.8	9.2	22.0	13.1	15.9	16.0	7.0		
Grid Ref.		Ganyungu QL 251064	QL 276015	QK 266977	QK 317998	QK 365853	Gwanyika QK 361797	QK 450714	QL 604131	QL 610520		
River Name		Ganyungu	Nyarupakwe QL 276015	Nyarupakwe QK 266977	Nyamachene QK 317998	Mtanke	Gwanyika	Njerere	Seki	Mudzongwe QL 610520	Total	
Hydrologic Zone		CUN 1	CUN 1	CUN 1	CUN 1	CUN 1	CUN 1	CUN 1	CON 1	CUN 1	Total	
Š.		D1	D2	D3	D4	DS	26	70	D8	23		

* Estimated by the Design Report prepared by DWD in March 1994

** Estimated by the Design Report prepared by MEWRD in July 1991

Table M- 11 (1) SUMMARY OF THE KUDU IRRIGATION PROJECT

Kati	ESIT	QUANTITY	RATE (Z\$)	AMOUNT (10002\$)	NOTE
I . CANAL		[[
1. EARTH WORK		[
(1) Clear and Grub	ha	324.5	3,500.0	1,136	
(2) Excavation	m3	1,280,441.0	14.0	17,926	soft
(3) Back Filling	m3	536,316.0	17.0	9,117	
(4) Embankment	m3	1,080,121.0	17.0	18,362	
SUB-TOTAL				46,541	
2. CONCRETE WORK	ъ3	831,774.0	980.0	815,139	
3. STPHON					
(1) Menyati Siphon	L.Sum	1.0		17,269	
(2) Others	NO.	21.0	1,030.1	21,631	
SUB-TOTAL			,	38,900	
4. MISCELLANEOUS					
(1) Division Work	L.Sum			9,308	Σ1 x 20%
(2) Drainage Culvert	£.Sum			4,654	Σ1 x 10%
(3) Access Road	L.Sum			37,962	
SUB-TOTAL				51,924	
TOTAL				952,505	
II. REGULATING RESERVOIR	L.Sum			3,150	
III. NICHT STORAGE RESERVOIR	No.	147.0	127,890.0	18,800	
EV. FIELD CONSOLIDATION WORKS	ha	14,700.0	22,500.0	330,750	, -
V. ENGINEERING & ADMINISTRATION COST	<u> </u>	1			
1. ADMINISTRATION COST	 			39,156	ΣI~IIX 3%
2. CONSELTING SERVICE				130,520	ΣI~II x 10%
3. INVESTIGATION FOR DETAILED DESIGN		[13,052	ΣI~iii x i%
TOTAL				182,729	<u> </u>
AT. CONTIGENCIES				223,190	Σ I ~IV x 15%
PROJECT COST			-	1,707,973	
(say)				1,708,000	

TableM-11 (2) CONSTRUCTION COST OF MUNYATI SIPHON

ITEX	UNIT	QUANTITY	RATE (Z\$)	AMOUNT (10002\$)	NOTE
I. SECTION A (L=150m)				· 	
1. EARTH WORK				_	
(1) Clear and Grub	ha	0.1	3,500.0	0	
(2) Excavation	m3	2,493.0	14.0	35	
(3) Back Filling SUB-TOTAL	<u>⊪</u> 3	921.0	17.0	16 51	
2. CONCRETE WORK	■3	1,230.0	980.0	1,205	
3. STEEL PIPE (Ø1600)		300.0	7,200.0	2,160	
4. Miscellaneous	L.Sun			171	Σ1~3 x 5%
S&B-TOTAL				3,536	
TOTAL			j	3,587	
H. SECTION B (L=875m)					
1. EARTH WORK			2 500 0	2	
(1) Clear and Grub	ha	0.6	3,500.0		
(2) Excavation	m3	13,530.0	14.0	189	
(3) Back Filling	₽3	10,185.0	17.0	173	
(4) Sand Bed	₽ 3	840.0	80.0	67	
SUB-TOTAL				431	
2. STEEL PIPE (Ø1600)	1 1	1,750.0	7,200.0	12,600	D1 9 - 5#
3. Miscellaneous	L.Sum			652	Σi~2 x 5%
SUB-TOTAL				13,252	
TOTAL			,	13,683	
CONSTRUCTION COST				17,269	

Table M- 11 (3) UNIT COST OF OTHER SYPRON

Kati	UNIT	QUANTITY	RATE (2\$)	AMOENT (1000Z\$)	NOTE
1. SECTION A (L= 30m)					
1. EARTH WORK	1	i	ĺ		
(1) Clear and Grub	ha	0.0	3,500.0	0	
(2) Excavation	m3	483.5	14.0	7	
(3) Back Filling	₽ 3	184.2	17.0	3	
SUB-TOTAL				10	
2. CONCRETE WORK	m3	246.0	980.0	241	
3. STEEL PIPE (Ø1600)	8	60.0	7,200.0	432	
4. Miscellaneous	L .Տ ⊍ա	. !		34	Σ1~3 x 5%
SUB-TOTAL		.		707	
TOTAL				717	
I. SECTION B (L= 20m)		<u> </u>			
I. EARTH WORK	ļ	1		1	i
(1) Clear and Grub	ha	0.0	3,500.0	0	
(2) Excavation	ш3	307.2	14.0	4	
(3) Back Filling	m3	232.8	17.0		į
(4) Sand Bed	m3	19.2	80.0	2	
SUB-TOTAL		1		01	, ,
2. STEEL PIPE (\$1600)		40.0	7,200.0		
3. Miscellaneous	L.Sun	1.0		15	Σ1~2 x 5%
SUB-TOTAL				303	
TOTAL				313	
UNIT COST (NO.)				1,030	

TableM-11 (4) UNIT COST OF NIGHT STORAGE RESERVOIR

Kati	ENIT	QUANTITY	RATE (7\$)	AMOUNT (1000Z\$)	NOTE
1. DAY (1) Clear and Grub (2) Excavation (3) Back Filling (4) Embankment (5) Rip Rap 200mm SUB-TOTAL 2. OUTLET & INLET FACILITY 3. Miscellaneous SUB-TOTAL	ha m3 m3 m3 L.Sum L.Sum	0.9 912.4 912.4 4,830.0 18.0	3,500.0 14.0 17.0 17.0 118.5	3 13 16 82 2 116 6 6	Σ1 x 5% Σ1~2 x 5%
TOTAL (NO.)				128	

Table M-11 (5) UNIT COST OF FIELD CONSOLIDATION WORKS

HEM	UNIT	QUANTITY	RATE (2\$)	AMOUNT (1000Z\$)	NOTE
1. LAND GRADING WORKS					<u> </u>
(1) Clear and Grub	ha	1.0	3,500.0	4	
(2) Excavation	an 3	0.0	14.0	0	
(3) Embankment	m3	0.0	17.0	0	
SUB-TOTAL		1		4	
2. DISTRIBUTION CANAL					
(1) Excavation	m3	18.0	14.0	0	
(2) Concrete	m3	6.3	980.0	6	
SUB-TOTAL		1		6	
3. DRAINAGE CANAL	n3	27.3	17.0	0	
4. FARN ROAD				1	
4-1. Trunk Road					
(1) Excavation	m3	101.3	14.0	1	
(2) Gravel Pavement	m2	180.0	21.5	4	
4-2. Lateral Road	1			ŀ	
(1) Excavation	m3	140.0	14.0	2	
(2) Gravel Pavement	m2	240	21.5	5	
SUB-TOTAL				12	
5. Miscellaneous	L.Sum			1	Σ1~4 x 5%
TOTAL				23	

Table M- 11 (6) CONSTRUCTION COST OF LARGE SCALE IRRIGATION PROJECT

ITEX	UNIT	QCANTITY	RATE (Z\$)	AMOUNT (1000Z\$)	ЭТОЙ
1. EARTH WORK (1) Clear and Grub (2) Excavation (3) Back Filling (4) Sand Bod SUB-TOTAL 2. PUMP FACILITY (\$\phi\$200 X 2 UNITS) 3. STEEL PIFE (\$\phi\$400) 4. PUMP HOUSE 5. Miscellaneous SUB-TOTAL	ha m3 m3 m3 L.Sum L.Sum L.Sum L.Sum	0.3 2,709.3 2,314.0 319.8 1.0 1.0 1.0	3,500.0 14.0 17.0 80.0	1 38 39 26 104 1,400 1,800 700 200 4,100	Σ1~4 x 5%
TOTAL				4,204	
PROJECT COST (Say)	ha	4,400	4,204.2	184,985 185,000	

TableM-11 (7) CONSTRUCTION COST OF SMALL SCALE IRRIGATION PROJECT

1TEM	UNIT	QUANTITY	RATE (Z\$)	AMOUNT (1000Z\$)	NOTE
PROJECT COST	ha.	5,900	20,000.0	118,000	

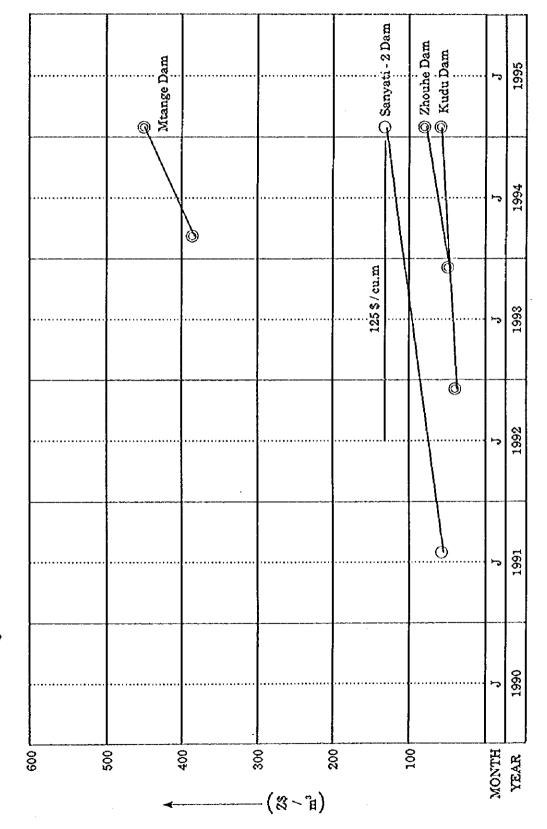
Table M-12 CONSTRUCTION COST OF MEDIUM SIZE DAMS FOR SCENARIO B-1

ITEM	UNIT	QUANTITY	RATE (Z\$)	AMOUNT (10002\$)	NOTÉ
1. Land Consolidation 2. Night Storage	ha No.	331.0 8.0	22,500.0 127,890.0	7,448 1,023	
TOTAL				8,471	
(say)				8,500	

Table M-13 CONSTRUCTION COST OF MEDIUM SIZE DAMS FOR SCENARIO A

ITEX	UNIT	QUANTITY	RATE (Z\$)	ANOUNT (10002\$)	NOTE
1. Land Consolidation 2. Night Storage	ha No.	160.0 0.0	22,500.0 127,890.0	3,600 0	
TOTAL				3,600	
(say)		1		3,600	

Figure 1/1-1 Estimation of the Construction Cost of Medium Size Dams



□ Large Size Dam ○ Medium Size Dam





