

Appendix 5.1 Financial Analysis

Table A5.1.1 Financial Analysis of Processing and Marketing Facilities

1) Financial analysis of slaughter slab

Conditions

a. Number of animals handled handling charges :

Cattle	1,800 head/year	2,000 USHS/head
Goats/sheep	120 head/year	500 USHS/head

b. Total recurrent cost: 2,436,000 USHS/year.

c. Operation to start by third year at 50%.

d. Operation rate to reach 100% in 4th year.

e. Exchange rate : 1,185 USHS/US\$.

year	Investment		Income		Cost		Balance
	Construction	Engineering	Cattle	Goats/sheep	Recurrent	Income cost	
			3,038	51	2,056		
1	7,963	1,194					-9,157
2	7,963	1,194					-9,157
3			1,519	25	2,056	-511	-511
4			3,038	51	2,056	1,033	1,033
5			3,038	51	2,056	1,033	1,033
6			3,038	51	2,056	1,033	1,033
7			3,038	51	2,056	1,033	1,033
8			3,038	51	2,056	1,033	1,033
9			3,038	51	2,056	1,033	1,033
10			3,038	51	2,056	1,033	1,033
11			3,038	51	2,056	1,033	1,033
12			3,038	51	2,056	1,033	1,033
13			3,038	51	2,056	1,033	1,033
14			3,038	51	2,056	1,033	1,033
15			3,038	51	2,056	1,033	1,033
16			3,038	51	2,056	1,033	1,033
17			3,038	51	2,056	1,033	1,033
18			3,038	51	2,056	1,033	1,033
19			3,038	51	2,056	1,033	1,033
20			3,038	51	2,056	1,033	1,033
21			3,038	51	2,056	1,033	1,033
22			3,038	51	2,056	1,033	1,033
23			3,038	51	2,056	1,033	1,033
24			3,038	51	2,056	1,033	1,033
25			3,038	51	2,056	1,033	1,033
26			3,038	51	2,056	1,033	1,033
27			3,038	51	2,056	1,033	1,033
28			3,038	51	2,056	1,033	1,033
29			3,038	51	2,056	1,033	1,033
30			3,038	51	2,056	1,033	1,033
							FIRR
							2.7%

2) Financial analysis of slaughter house

Conditions

a. Number of animals handled and handling charges:

Cattle	26,000 head/year	2,000 USHS/head
Goats/sheep	14,040 head/year	500 USHS/head

b. Total recurrent cost: 35,400,000 USHS/year.

c. As for case No.1, operation to start in third year at 50% and to reach 100% in 4th year.

d. As for case No.2, operation to start in third year at 40% and to reach 80% rate in 4th year.

e. Exchange rate: 1,185 USHS/US\$.

year	Investment		Income		Cost		US\$	
	Construction	Engineering service	Cattle	Goats/sheep	Recurrent	Income cost	Balance	Balance
							Case No.1	Case No.2
1	31,818	4,773	43,882	5,924	29,873		-36,591	-36,591
2	31,818	4,773					-36,591	-36,591
3			21,941	2,962	29,873	-4,970	-4,970	-9,951
4			43,882	5,924	29,873	19,932	19,932	9,971
5			43,882	5,924	29,873	19,932	19,932	9,971
6			43,882	5,924	29,873	19,932	19,932	9,971
7			43,882	5,924	29,873	19,932	19,932	9,971
8			43,882	5,924	29,873	19,932	19,932	9,971
9			43,882	5,924	29,873	19,932	19,932	9,971
10			43,882	5,924	29,873	19,932	19,932	9,971
11			43,882	5,924	29,873	19,932	19,932	9,971
12			43,882	5,924	29,873	19,932	19,932	9,971
13			43,882	5,924	29,873	19,932	19,932	9,971
14			43,882	5,924	29,873	19,932	19,932	9,971
15			43,882	5,924	29,873	19,932	19,932	9,971
16			43,882	5,924	29,873	19,932	19,932	9,971
17			43,882	5,924	29,873	19,932	19,932	9,971
18			43,882	5,924	29,873	19,932	19,932	9,971
19			43,882	5,924	29,873	19,932	19,932	9,971
20			43,882	5,924	29,873	19,932	19,932	9,971
21			43,882	5,924	29,873	19,932	19,932	9,971
22			43,882	5,924	29,873	19,932	19,932	9,971
23			43,882	5,924	29,873	19,932	19,932	9,971
24			43,882	5,924	29,873	19,932	19,932	9,971
25			43,882	5,924	29,873	19,932	19,932	9,971
26			43,882	5,924	29,873	19,932	19,932	9,971
27			43,882	5,924	29,873	19,932	19,932	9,971
28			43,882	5,924	29,873	19,932	19,932	9,971
29			43,882	5,924	29,873	19,932	19,932	9,971
30			43,882	5,924	29,873	19,932	19,932	9,971
							FIRR	FIRR
							19.6%	9.7%

3) Financial analysis of livestock market

Conditions

a. Number of animals handled and handling charges:

Cattle	4,800 heads/year	2,700 USHS/head
Goats/sheep	300 heads/year	700 USHS/head

b. Total recurrent costs: 4,742,000 USHS/year.

c. Operation to start in third year at 50% and to reach 100% in 4th year.

d. Exchange rate: 1,185 USHS/US\$.

year	Investment		Income		Cost		US\$	
	Construction	Engineering service	Cattle	Goats/sheep	Recurrent	Income cost	Balance	
			10,937	177				4,002
1	40,083	6,012						-46,095
2	40,083	6,012						-46,095
3			5,468	89	4,002	1,555		1,555
4			10,937	177	4,002	7,112		7,112
5			10,937	177	4,002	7,112		7,112
6			10,937	177	4,002	7,112		7,112
7			10,937	177	4,002	7,112		7,112
8			10,937	177	4,002	7,112		7,112
9			10,937	177	4,002	7,112		7,112
10			10,937	177	4,002	7,112		7,112
11			10,937	177	4,002	7,112		7,112
12			10,937	177	4,002	7,112		7,112
13			10,937	177	4,002	7,112		7,112
14			10,937	177	4,002	7,112		7,112
15			10,937	177	4,002	7,112		7,112
16			10,937	177	4,002	7,112		7,112
17			10,937	177	4,002	7,112		7,112
18			10,937	177	4,002	7,112		7,112
19			10,937	177	4,002	7,112		7,112
20			10,937	177	4,002	7,112		7,112
21			10,937	177	4,002	7,112		7,112
22			10,937	177	4,002	7,112		7,112
23			10,937	177	4,002	7,112		7,112
24			10,937	177	4,002	7,112		7,112
25			10,937	177	4,002	7,112		7,112
26			10,937	177	4,002	7,112		7,112
27			10,937	177	4,002	7,112		7,112
28			10,937	177	4,002	7,112		7,112
29			10,937	177	4,002	7,112		7,112
30			10,937	177	4,002	7,112		7,112
								FIRR
								5.5%

4) Financial analysis of milk collection centre

Conditions

- a. Total volume of milk sold per year: 608,333l.(5,000l*1/3*365days)
- b. Buying price 300 USHS/l ; selling price 400 USHS/l.
- c. Operation cost per litre: 48 USHS.
- d. As for case No.1, operation to start in third year at 50% and to reach 100% rate in 4th year.
- e. As for case No.2, operation to start in third year at 40% and to reach 80% in 4th year.
- f. Exchange rate: 1,185 USHS/US\$.

year	Investment		Income	Cost		Income cost	Balance	
	Construction	Engineering service	Sales	Material	Operation		case No.1	case No.2
			205,345	154,008	25,668			
1	34,609	5,191					-39,800	-39,800
2	34,609	5,191					-39,800	-39,800
3			102,672	77,004	25,668	0	0	-5,134
4			205,345	154,008	25,668	25,668	25,668	15,401
5			205,345	154,008	25,668	25,668	25,668	15,401
6			205,345	154,008	25,668	25,668	25,668	15,401
7			205,345	154,008	25,668	25,668	25,668	15,401
8			205,345	154,008	25,668	25,668	25,668	15,401
9			205,345	154,008	25,668	25,668	25,668	15,401
10			205,345	154,008	25,668	25,668	25,668	15,401
11			205,345	154,008	25,668	25,668	25,668	15,401
12			205,345	154,008	25,668	25,668	25,668	15,401
13			205,345	154,008	25,668	25,668	25,668	15,401
14			205,345	154,008	25,668	25,668	25,668	15,401
15			205,345	154,008	25,668	25,668	25,668	15,401
16			205,345	154,008	25,668	25,668	25,668	15,401
17			205,345	154,008	25,668	25,668	25,668	15,401
18			205,345	154,008	25,668	25,668	25,668	15,401
19			205,345	154,008	25,668	25,668	25,668	15,401
20			205,345	154,008	25,668	25,668	25,668	15,401
21			205,345	154,008	25,668	25,668	25,668	15,401
22			205,345	154,008	25,668	25,668	25,668	15,401
23			205,345	154,008	25,668	25,668	25,668	15,401
24			205,345	154,008	25,668	25,668	25,668	15,401
25			205,345	154,008	25,668	25,668	25,668	15,401
26			205,345	154,008	25,668	25,668	25,668	15,401
27			205,345	154,008	25,668	25,668	25,668	15,401
28			205,345	154,008	25,668	25,668	25,668	15,401
29			205,345	154,008	25,668	25,668	25,668	15,401
30			205,345	154,008	25,668	25,668	25,668	15,401
							FIRR	FIRR
							23.3%	14.6%

5) Financial analysis of rice processing facilities

Conditions

- a. Total volume of rice processed per year: 562 ton.
(2.45ton/season * 2seasons /year * 5,390ha/47units)
- b. Processing price: 30 USHS/kg.
- c. Operation cost: 22.5 USHS/kg.
- d. Operation to start in third year at 50% and to reach 100% in 4th year.
- e. Exchange rate: 1,185 USHS/US\$.

year	Investment		Income	Cost	US\$	
	Construction	Engineering service	Sales	Operation	Income cost	Balance
			14,228	10,671		
1	7,045	1,057				-8,101
2	7,045	1,057				-8,101
3			7,114	10,671	-3,557	-3,557
4			14,228	10,671	3,557	3,557
5			14,228	10,671	3,557	3,557
6			14,228	10,671	3,557	3,557
7			14,228	10,671	3,557	3,557
8			14,228	10,671	3,557	3,557
9			14,228	10,671	3,557	3,557
10			14,228	10,671	3,557	3,557
11			14,228	10,671	3,557	3,557
12			14,228	10,671	3,557	3,557
13			14,228	10,671	3,557	3,557
14			14,228	10,671	3,557	3,557
15			14,228	10,671	3,557	3,557
16			14,228	10,671	3,557	3,557
17			14,228	10,671	3,557	3,557
18			14,228	10,671	3,557	3,557
19			14,228	10,671	3,557	3,557
20			14,228	10,671	3,557	3,557
21			14,228	10,671	3,557	3,557
22			14,228	10,671	3,557	3,557
23			14,228	10,671	3,557	3,557
24			14,228	10,671	3,557	3,557
25			14,228	10,671	3,557	3,557
26			14,228	10,671	3,557	3,557
27			14,228	10,671	3,557	3,557
28			14,228	10,671	3,557	3,557
29			14,228	10,671	3,557	3,557
30			14,228	10,671	3,557	3,557
						FIRR
						14.8%

6) Financial analysis of cereal warehouse (coffee and grain)

Conditions

- a. The storage capacity: 60 ton.
- b. Total handling volume: 90 ton/year.
- c. Handling charge: 25 USHS/kg.
- d. Operation cost: 16 USHS/kg
- e. Operation to start in third year at 50% and to reach 100% in 4th year.
- f. Exchange rate: 1,185 USHS/US\$.

US\$

year	Investment		Income	Cost	Income cost	Balance
	Construction	Engineering service	Sales	Operation		
			1,899	1,215		
1	6,810	1,022				-7,832
2	6,810	1,022				-7,832
3			949	1,215	-266	-266
4			1,899	1,215	684	684
5			1,899	1,215	684	684
6			1,899	1,215	684	684
7			1,899	1,215	684	684
8			1,899	1,215	684	684
9			1,899	1,215	684	684
10			1,899	1,215	684	684
11			1,899	1,215	684	684
12			1,899	1,215	684	684
13			1,899	1,215	684	684
14			1,899	1,215	684	684
15			1,899	1,215	684	684
16			1,899	1,215	684	684
17			1,899	1,215	684	684
18			1,899	1,215	684	684
19			1,899	1,215	684	684
20			1,899	1,215	684	684
21			1,899	1,215	684	684
22			1,899	1,215	684	684
23			1,899	1,215	684	684
24			1,899	1,215	684	684
25			1,899	1,215	684	684
26			1,899	1,215	684	684
27			1,899	1,215	684	684
28			1,899	1,215	684	684
29			1,899	1,215	684	684
30			1,899	1,215	684	684
						FIRR 1.0%

7) Financial analysis of cereal warehouse (cotton)

Conditions

- a. The storage capacity: 60 ton.
- b. Total handling volume of cotton: 90 ton/year.
- c. Handling charge: 50 USHS/kg.
- d. Operation cost: 16 USHS/kg
- e. Operation to start in third year at 50% and to reach 100% in 4th year.
- f. Exchange rate: 1,185 USHS/US\$.

US\$

year	Investment		Income	Cost	Income cost	Balance
	Construction	Engineering service	Sales	Operation		
1	21,300	3,195	3,797	1,215		-24,495
2	21,300	3,195				-24,495
3			1,899	1,215	684	684
4			3,797	1,215	2,582	2,582
5			3,797	1,215	2,582	2,582
6			3,797	1,215	2,582	2,582
7			3,797	1,215	2,582	2,582
8			3,797	1,215	2,582	2,582
9			3,797	1,215	2,582	2,582
10			3,797	1,215	2,582	2,582
11			3,797	1,215	2,582	2,582
12			3,797	1,215	2,582	2,582
13			3,797	1,215	2,582	2,582
14			3,797	1,215	2,582	2,582
15			3,797	1,215	2,582	2,582
16			3,797	1,215	2,582	2,582
17			3,797	1,215	2,582	2,582
18			3,797	1,215	2,582	2,582
19			3,797	1,215	2,582	2,582
20			3,797	1,215	2,582	2,582
21			3,797	1,215	2,582	2,582
22			3,797	1,215	2,582	2,582
23			3,797	1,215	2,582	2,582
24			3,797	1,215	2,582	2,582
25			3,797	1,215	2,582	2,582
26			3,797	1,215	2,582	2,582
27			3,797	1,215	2,582	2,582
28			3,797	1,215	2,582	2,582
29			3,797	1,215	2,582	2,582
30			3,797	1,215	2,582	2,582
						FIRR 2.5%

8) Financial analysis of solar drying facility

Conditions

- a. The life of plastic greenhouse: one year.
- b. Gross benefit: 131.6 million USHS/year
- c. Operation cost: 76.3 million USHS/year,
of which facility cost :9.3 million USHS/year
- d. Operation to start in first year at 20% and to reach 100% in 5th year.
- e. Exchange rate: 1,185 USHS/US\$.

US\$

year	Investment		Income	Cost	Income cost	Balance
	Construction	Engincering service	Sales	Operation		
			3,797	1,215		
1	7,848	1,177	22,211	56,540	-34,329	-43,354
2	7,848	1,177	44,422	56,540	-12,118	-21,143
3	7,848	1,177	66,633	56,540	10,093	1,068
4	7,848	1,177	88,844	56,540	32,304	23,278
5	7,848	1,177	111,055	56,540	54,515	45,489
6	7,848	1,177	111,055	56,540	54,515	45,489
7	7,848	1,177	111,055	56,540	54,515	45,489
8	7,848	1,177	111,055	56,540	54,515	45,489
9	7,848	1,177	111,055	56,540	54,515	45,489
10	7,848	1,177	111,055	56,540	54,515	45,489
11	7,848	1,177	111,055	56,540	54,515	45,489
12	7,848	1,177	111,055	56,540	54,515	45,489
13	7,848	1,177	111,055	56,540	54,515	45,489
14	7,848	1,177	111,055	56,540	54,515	45,489
15	7,848	1,177	111,055	56,540	54,515	45,489
16	7,848	1,177	111,055	56,540	54,515	45,489
17	7,848	1,177	111,055	56,540	54,515	45,489
18	7,848	1,177	111,055	56,540	54,515	45,489
19	7,848	1,177	111,055	56,540	54,515	45,489
20	7,848	1,177	111,055	56,540	54,515	45,489
21	7,848	1,177	111,055	56,540	54,515	45,489
22	7,848	1,177	111,055	56,540	54,515	45,489
23	7,848	1,177	111,055	56,540	54,515	45,489
24	7,848	1,177	111,055	56,540	54,515	45,489
25	7,848	1,177	111,055	56,540	54,515	45,489
26	7,848	1,177	111,055	56,540	54,515	45,489
27	7,848	1,177	111,055	56,540	54,515	45,489
28	7,848	1,177	111,055	56,540	54,515	45,489
29	7,848	1,177	111,055	56,540	54,515	45,489
30	7,848	1,177	111,055	56,540	54,515	45,489
						FIRR 36.4%

9) Financial analysis of jaggary and drying factory

Conditions

- a. The life of facilities: ten year.
- b. Gross benefit: 5,622.9 million USHS/year
- c. Operation cost: 4,498.3 million USHS/year,
of which facility cost :2,991.3 million USHS/year*5year
- d. Operation to start in first year at 50% and to reach 100% in second year.
- e. Exchange rate: 1,185 USHS/US\$.

'000US\$

year	Investment		Income	Cost		Balance
	Construction	Engineering service	Sales	Operation	Income cost	
			3,797	1,215		
1	12,622	1,893	2,373	636	1,737	-12,778
2	0	0	4,745	1,272	3,473	3,473
3	0	0	4,745	1,272	3,473	3,473
4	0	0	4,745	1,272	3,473	3,473
5	0	0	4,745	1,272	3,473	3,473
6	0	0	4,745	1,272	3,473	3,473
7	0	0	4,745	1,272	3,473	3,473
8	0	0	4,745	1,272	3,473	3,473
9	0	0	4,745	1,272	3,473	3,473
10	0	0	4,745	1,272	3,473	3,473
11	12,622	1,893	2,373	636	1,737	-12,778
12	0	0	4,745	1,272	3,473	3,473
13	0	0	4,745	1,272	3,473	3,473
14	0	0	4,745	1,272	3,473	3,473
15	0	0	4,745	1,272	3,473	3,473
16	0	0	4,745	1,272	3,473	3,473
17	0	0	4,745	1,272	3,473	3,473
18	0	0	4,745	1,272	3,473	3,473
19	0	0	4,745	1,272	3,473	3,473
20	0	0	4,745	1,272	3,473	3,473
21	12,622	1,893	2,373	636	1,737	-12,778
22	0	0	4,745	1,272	3,473	3,473
23	0	0	4,745	1,272	3,473	3,473
24	0	0	4,745	1,272	3,473	3,473
25	0	0	4,745	1,272	3,473	3,473
26	0	0	4,745	1,272	3,473	3,473
27	0	0	4,745	1,272	3,473	3,473
28	0	0	4,745	1,272	3,473	3,473
29	0	0	4,745	1,272	3,473	3,473
30	0	0	4,745	1,272	3,473	3,473
						FIRR 22.9%

Table A5.1.2 Financial Analysis of Farm Economy

1) Financial analysis of type 1-1: Coffee

Conditions:

- a. All project costs will be loaned from the bank at 15% interest rate per year.
- b. The loan will be back over 10 years.
- c. Exchange rate is 1,185 USHS/US\$.

(Unit: US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	742	-236	506	-742
2	1,371	742	628	506	122
3	1,532	742	790	506	283
4	1,612	742	870	506	364
5	1,612	742	870	506	364
6	1,612	742	870	506	364
7	1,612	742	870	506	364
8	1,612	742	870	506	364
9	1,612	742	870	506	364
10	1,612	742	870	506	364
11	1,612	742	870	506	364
12	1,612	742	870	506	364
13	1,612	742	870	506	364
14	1,612	742	870	506	364
15	1,612	742	870	506	364
16	1,612	742	870	506	364
17	1,612	742	870	506	364
18	1,612	742	870	506	364
19	1,612	742	870	506	364
20	1,612	742	870	506	364

(Unit: US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	212	212	0	0	0	0	-742	-742
2	0	0	0	0	0	42	80	-662
3	0	0	0	0	0	42	241	-421
4	0	0	0	0	0	42	322	-100
5	0	0	0	0	0	42	322	222
6	0	0	0	0	0	42	322	544
7	0	0	0	0	0	42	322	865
8	0	0	0	0	0	42	322	1,187
9	0	0	0	0	0	42	322	1,508
10	0	0	0	0	0	42	322	1,830
11	0	0	0	0	0	42	322	2,152
12	0	0	0	0	0	0	364	2,516
13	0	0	0	0	0	0	364	2,880
14	0	0	0	0	0	0	364	3,244
15	0	0	0	0	0	0	364	3,608
16	0	0	0	0	0	0	364	3,972
17	0	0	0	0	0	0	364	4,336
18	0	0	0	0	0	0	364	4,699
19	0	0	0	0	0	0	364	5,063
20	0	0	0	0	0	0	364	5,427

FIRR= 33%

2) Financial analysis of type 1-2: Vanilla

Conditions:

- a. All project costs will be loaned from the bank at 15% interest rate per year.
- b. The loan will be back over 10 years.
- c. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	314	192	506	-314
2	1,451	314	1,137	506	630
3	1,622	314	1,307	506	801
4	1,707	314	1,393	506	886
5	1,707	314	1,393	506	886
6	1,707	314	1,393	506	886
7	1,707	314	1,393	506	886
8	1,707	314	1,393	506	886
9	1,707	314	1,393	506	886
10	1,707	314	1,393	506	886
11	1,707	314	1,393	506	886
12	1,707	314	1,393	506	886
13	1,707	314	1,393	506	886
14	1,707	314	1,393	506	886
15	1,707	314	1,393	506	886
16	1,707	314	1,393	506	886
17	1,707	314	1,393	506	886
18	1,707	314	1,393	506	886
19	1,707	314	1,393	506	886
20	1,707	314	1,393	506	886

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	125	125	0	0	0	0	-314	-314
2	0	0	0	0	0	0	25	291
3	0	0	0	0	0	0	25	1,067
4	0	0	0	0	0	0	25	1,929
5	0	0	0	0	0	0	25	2,790
6	0	0	0	0	0	0	25	3,652
7	0	0	0	0	0	0	25	4,514
8	0	0	0	0	0	0	25	5,375
9	0	0	0	0	0	0	25	6,237
10	0	0	0	0	0	0	25	7,098
11	0	0	0	0	0	0	25	7,960
12	0	0	0	0	0	0	0	8,846
13	0	0	0	0	0	0	0	9,732
14	0	0	0	0	0	0	0	10,619
15	0	0	0	0	0	0	0	11,505
16	0	0	0	0	0	0	0	12,392
17	0	0	0	0	0	0	0	13,278
18	0	0	0	0	0	0	0	14,164
19	0	0	0	0	0	0	0	15,051
20	0	0	0	0	0	0	0	15,937

FIRR= 213%

3) Financial analysis of type 2: Cocoa

Conditions:

- All project costs will be loaned from the bank at 15% interest rate per year.
- The loan will be back over 10 years.
- Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	1,072	-565	506	-1,072
2	1,853	1,072	781	506	275
3	2,071	1,072	999	506	493
4	2,180	1,072	1,108	506	602
5	2,180	1,072	1,108	506	602
6	2,180	1,072	1,108	506	602
7	2,180	1,072	1,108	506	602
8	2,180	1,072	1,108	506	602
9	2,180	1,072	1,108	506	602
10	2,180	1,072	1,108	506	602
11	2,180	1,072	1,108	506	602
12	2,180	1,072	1,108	506	602
13	2,180	1,072	1,108	506	602
14	2,180	1,072	1,108	506	602
15	2,180	1,072	1,108	506	602
16	2,180	1,072	1,108	506	602
17	2,180	1,072	1,108	506	602
18	2,180	1,072	1,108	506	602
19	2,180	1,072	1,108	506	602
20	2,180	1,072	1,108	506	602

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	312	312	0	0	0	0	-1,072	-1,072
2	0	0	0	0	0	62	213	-859
3	0	0	0	0	0	62	431	-428
4	0	0	0	0	0	62	540	111
5	0	0	0	0	0	62	540	651
6	0	0	0	0	0	62	540	1,190
7	0	0	0	0	0	62	540	1,730
8	0	0	0	0	0	62	540	2,270
9	0	0	0	0	0	62	540	2,809
10	0	0	0	0	0	62	540	3,349
11	0	0	0	0	0	62	540	3,888
12	0	0	0	0	0	0	602	4,490
13	0	0	0	0	0	0	602	5,092
14	0	0	0	0	0	0	602	5,694
15	0	0	0	0	0	0	602	6,296
16	0	0	0	0	0	0	602	6,898
17	0	0	0	0	0	0	602	7,500
18	0	0	0	0	0	0	602	8,101
19	0	0	0	0	0	0	602	8,703
20	0	0	0	0	0	0	602	9,305

FIRR= 40%

4) Financial analysis of type 3-1: Sericulture

Conditions:

- a. All project costs will be loaned from the bank at 15% interest rate per year.
- b. The loan will be back over 10 years.
- c. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	763	-257	506	-763
2	1,565	763	802	506	296
3	1,749	763	986	506	480
4	1,841	763	1,078	506	572
5	1,841	763	1,078	506	572
6	1,841	763	1,078	506	572
7	1,841	763	1,078	506	572
8	1,841	763	1,078	506	572
9	1,841	763	1,078	506	572
10	1,841	763	1,078	506	572
11	1,841	763	1,078	506	572
12	1,841	763	1,078	506	572
13	1,841	763	1,078	506	572
14	1,841	763	1,078	506	572
15	1,841	763	1,078	506	572
16	1,841	763	1,078	506	572
17	1,841	763	1,078	506	572
18	1,841	763	1,078	506	572
19	1,841	763	1,078	506	572
20	1,841	763	1,078	506	572

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)	
	Middle-Long Term Fund						Redemption Funds F		Surplus Funds G=E-F
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project				
1	125	125	0	0	0	0	0	-763	-763
2	0	0	0	0	0	0	25	271	-492
3	0	0	0	0	0	0	25	455	-37
4	0	0	0	0	0	0	25	547	510
5	0	0	0	0	0	0	25	547	1,057
6	0	0	0	0	0	0	25	547	1,604
7	0	0	0	0	0	0	25	547	2,151
8	0	0	0	0	0	0	25	547	2,698
9	0	0	0	0	0	0	25	547	3,245
10	0	0	0	0	0	0	25	547	3,792
11	0	0	0	0	0	0	25	547	4,339
12	0	0	0	0	0	0	0	572	4,910
13	0	0	0	0	0	0	0	572	5,482
14	0	0	0	0	0	0	0	572	6,054
15	0	0	0	0	0	0	0	572	6,626
16	0	0	0	0	0	0	0	572	7,198
17	0	0	0	0	0	0	0	572	7,770
18	0	0	0	0	0	0	0	572	8,342
19	0	0	0	0	0	0	0	572	8,914
20	0	0	0	0	0	0	0	572	9,486

FIRR= 56%

5) Financial analysis of type 3-2: Rice

Conditions:

- All project costs will be loaned from the bank at 15% interest rate per year.
- The loan will be back over 10 years.
- Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	453	54	506	-453
2	1,344	453	892	506	385
3	1,502	453	1,050	506	543
4	1,581	453	1,129	506	623
5	1,581	453	1,129	506	623
6	1,581	453	1,129	506	623
7	1,581	453	1,129	506	623
8	1,581	453	1,129	506	623
9	1,581	453	1,129	506	623
10	1,581	453	1,129	506	623
11	1,581	453	1,129	506	623
12	1,581	453	1,129	506	623
13	1,581	453	1,129	506	623
14	1,581	453	1,129	506	623
15	1,581	453	1,129	506	623
16	1,581	453	1,129	506	623
17	1,581	453	1,129	506	623
18	1,581	453	1,129	506	623
19	1,581	453	1,129	506	623
20	1,581	453	1,129	506	623

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	858	0	0	0	858	0	-453	-453
2	0	0	0	0	0	171	214	-238
3	0	0	0	0	0	171	373	134
4	0	0	0	0	0	171	452	586
5	0	0	0	0	0	171	452	1,038
6	0	0	0	0	0	171	452	1,489
7	0	0	0	0	0	171	452	1,941
8	0	0	0	0	0	171	452	2,393
9	0	0	0	0	0	171	452	2,844
10	0	0	0	0	0	171	452	3,296
11	0	0	0	0	0	171	452	3,747
12	0	0	0	0	0	0	623	4,370
13	0	0	0	0	0	0	623	4,992
14	0	0	0	0	0	0	623	5,615
15	0	0	0	0	0	0	623	6,238
16	0	0	0	0	0	0	623	6,860
17	0	0	0	0	0	0	623	7,483
18	0	0	0	0	0	0	623	8,105
19	0	0	0	0	0	0	623	8,728
20	0	0	0	0	0	0	623	9,350

FIRR= 73%

6) Financial analysis of type 4: Vegetable

Conditions:

- All project costs will be loaned from the bank at 15% interest rate per year.
- The loan will be back over 10 years.
- Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	559	-52	506	-559
2	1,495	559	937	506	430
3	1,671	559	1,113	506	606
4	1,759	559	1,201	506	694
5	1,759	559	1,201	506	694
6	1,759	559	1,201	506	694
7	1,759	559	1,201	506	694
8	1,759	559	1,201	506	694
9	1,759	559	1,201	506	694
10	1,759	559	1,201	506	694
11	1,759	559	1,201	506	694
12	1,759	559	1,201	506	694
13	1,759	559	1,201	506	694
14	1,759	559	1,201	506	694
15	1,759	559	1,201	506	694
16	1,759	559	1,201	506	694
17	1,759	559	1,201	506	694
18	1,759	559	1,201	506	694
19	1,759	559	1,201	506	694
20	1,759	559	1,201	506	694

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project				
1	235	83	152	0	0	0	-559	-559
2	0	0	0	0	0	47	384	-175
3	0	0	0	0	0	47	559	384
4	0	0	0	0	0	47	647	1,032
5	0	0	0	0	0	47	647	1,679
6	0	0	0	0	0	47	647	2,327
7	0	0	0	0	0	47	647	2,974
8	0	0	0	0	0	47	647	3,622
9	0	0	0	0	0	47	647	4,269
10	0	0	0	0	0	47	647	4,917
11	0	0	0	0	0	47	647	5,564
12	0	0	0	0	0	0	694	6,258
13	0	0	0	0	0	0	694	6,953
14	0	0	0	0	0	0	694	7,647
15	0	0	0	0	0	0	694	8,342
16	0	0	0	0	0	0	694	9,036
17	0	0	0	0	0	0	694	9,730
18	0	0	0	0	0	0	694	10,425
19	0	0	0	0	0	0	694	11,119
20	0	0	0	0	0	0	694	11,813

FIRR= 90%

7) Financial analysis of type 5: Fruit

Conditions:

- All project costs will be loaned from the bank at 15% interest rate per year.
- The loan will be back over 10 years.
- Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	300	206	506	-300
2	1,168	300	869	506	362
3	1,306	300	1,006	506	500
4	1,375	300	1,075	506	568
5	1,375	300	1,075	506	568
6	1,375	300	1,075	506	568
7	1,375	300	1,075	506	568
8	1,375	300	1,075	506	568
9	1,375	300	1,075	506	568
10	1,375	300	1,075	506	568
11	1,375	300	1,075	506	568
12	1,375	300	1,075	506	568
13	1,375	300	1,075	506	568
14	1,375	300	1,075	506	568
15	1,375	300	1,075	506	568
16	1,375	300	1,075	506	568
17	1,375	300	1,075	506	568
18	1,375	300	1,075	506	568
19	1,375	300	1,075	506	568
20	1,375	300	1,075	506	568

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)	
	Middle-Long Term Fund						Redemption Funds F		Surplus Funds G=E-F
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project				
1	282	100	182	0	0	0	-300	-300	
2	0	0	0	0	0	56	306	6	
3	0	0	0	0	0	56	443	449	
4	0	0	0	0	0	56	512	962	
5	0	0	0	0	0	56	512	1,474	
6	0	0	0	0	0	56	512	1,986	
7	0	0	0	0	0	56	512	2,498	
8	0	0	0	0	0	56	512	3,010	
9	0	0	0	0	0	56	512	3,522	
10	0	0	0	0	0	56	512	4,034	
11	0	0	0	0	0	56	512	4,546	
12	0	0	0	0	0	0	568	5,115	
13	0	0	0	0	0	0	568	5,683	
14	0	0	0	0	0	0	568	6,251	
15	0	0	0	0	0	0	568	6,820	
16	0	0	0	0	0	0	568	7,388	
17	0	0	0	0	0	0	568	7,956	
18	0	0	0	0	0	0	568	8,525	
19	0	0	0	0	0	0	568	9,093	
20	0	0	0	0	0	0	568	9,661	

FIRR= 127%

8) Financial analysis of type 6: Oil crops

Conditions:

a. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	960	-453	506	-960
2	1,471	960	511	506	5
3	1,644	960	685	506	178
4	1,731	960	771	506	265
5	1,731	960	771	506	265
6	1,731	960	771	506	265
7	1,731	960	771	506	265
8	1,731	960	771	506	265
9	1,731	960	771	506	265
10	1,731	960	771	506	265
11	1,731	960	771	506	265
12	1,731	960	771	506	265
13	1,731	960	771	506	265
14	1,731	960	771	506	265
15	1,731	960	771	506	265
16	1,731	960	771	506	265
17	1,731	960	771	506	265
18	1,731	960	771	506	265
19	1,731	960	771	506	265
20	1,731	960	771	506	265

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund						Total of Left Item SUM(G)	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project	Redemption Funds F		Surplus Funds G=E-F
1	0	0	0	0	0	0	-960	-960
2	0	0	0	0	0	0	5	-955
3	0	0	0	0	0	0	178	-776
4	0	0	0	0	0	0	265	-512
5	0	0	0	0	0	0	265	-247
6	0	0	0	0	0	0	265	18
7	0	0	0	0	0	0	265	283
8	0	0	0	0	0	0	265	547
9	0	0	0	0	0	0	265	812
10	0	0	0	0	0	0	265	1,077
11	0	0	0	0	0	0	265	1,341
12	0	0	0	0	0	0	265	1,606
13	0	0	0	0	0	0	265	1,871
14	0	0	0	0	0	0	265	2,136
15	0	0	0	0	0	0	265	2,400
16	0	0	0	0	0	0	265	2,665
17	0	0	0	0	0	0	265	2,930
18	0	0	0	0	0	0	265	3,195
19	0	0	0	0	0	0	265	3,459
20	0	0	0	0	0	0	265	3,724

FIRR= 21%

9) Financial analysis of type 7: Cotton

Conditions:

a. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	917	-411	506	-917
2	1,440	917	523	506	16
3	1,609	917	692	506	186
4	1,694	917	777	506	271
5	1,694	917	777	506	271
6	1,694	917	777	506	271
7	1,694	917	777	506	271
8	1,694	917	777	506	271
9	1,694	917	777	506	271
10	1,694	917	777	506	271
11	1,694	917	777	506	271
12	1,694	917	777	506	271
13	1,694	917	777	506	271
14	1,694	917	777	506	271
15	1,694	917	777	506	271
16	1,694	917	777	506	271
17	1,694	917	777	506	271
18	1,694	917	777	506	271
19	1,694	917	777	506	271
20	1,694	917	777	506	271

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	0	0	0	0	0	0	-917	-917
2	0	0	0	0	0	0	16	-901
3	0	0	0	0	0	0	186	-715
4	0	0	0	0	0	0	271	-444
5	0	0	0	0	0	0	271	-174
6	0	0	0	0	0	0	271	97
7	0	0	0	0	0	0	271	367
8	0	0	0	0	0	0	271	638
9	0	0	0	0	0	0	271	908
10	0	0	0	0	0	0	271	1,179
11	0	0	0	0	0	0	271	1,450
12	0	0	0	0	0	0	271	1,720
13	0	0	0	0	0	0	271	1,991
14	0	0	0	0	0	0	271	2,261
15	0	0	0	0	0	0	271	2,532
16	0	0	0	0	0	0	271	2,802
17	0	0	0	0	0	0	271	3,073
18	0	0	0	0	0	0	271	3,343
19	0	0	0	0	0	0	271	3,614
20	0	0	0	0	0	0	271	3,884

FIRR= 22%

10) Financial analysis of type 8-1: Dairy

Conditions:

a. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	2,538	-2,032	506	-2,538
2	3,154	2,538	616	506	109
3	3,525	2,538	987	506	480
4	3,711	2,538	1,172	506	666
5	3,711	2,538	1,172	506	666
6	3,711	2,538	1,172	506	666
7	3,711	2,538	1,172	506	666
8	3,711	2,538	1,172	506	666
9	3,711	2,538	1,172	506	666
10	3,711	2,538	1,172	506	666
11	3,711	2,538	1,172	506	666
12	3,711	2,538	1,172	506	666
13	3,711	2,538	1,172	506	666
14	3,711	2,538	1,172	506	666
15	3,711	2,538	1,172	506	666
16	3,711	2,538	1,172	506	666
17	3,711	2,538	1,172	506	666
18	3,711	2,538	1,172	506	666
19	3,711	2,538	1,172	506	666
20	3,711	2,538	1,172	506	666

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	0	0	0	0	0	0	-2,538	-2,538
2	0	0	0	0	0	0	109	-2,429
3	0	0	0	0	0	0	480	-1,948
4	0	0	0	0	0	0	666	-1,282
5	0	0	0	0	0	0	666	-616
6	0	0	0	0	0	0	666	50
7	0	0	0	0	0	0	666	716
8	0	0	0	0	0	0	666	1,382
9	0	0	0	0	0	0	666	2,047
10	0	0	0	0	0	0	666	2,713
11	0	0	0	0	0	0	666	3,379
12	0	0	0	0	0	0	666	4,045
13	0	0	0	0	0	0	666	4,711
14	0	0	0	0	0	0	666	5,377
15	0	0	0	0	0	0	666	6,043
16	0	0	0	0	0	0	666	6,709
17	0	0	0	0	0	0	666	7,375
18	0	0	0	0	0	0	666	8,041
19	0	0	0	0	0	0	666	8,707
20	0	0	0	0	0	0	666	9,373

FIRR= 21%

11) Financial analysis of type 8-2: Beef

Conditions:

- All project costs will be loaned from the bank at 15% interest rate per year.
- The loan will be back over 10 years.
- Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	1,242	-736	506	-1,242
2	2,110	1,242	868	506	362
3	2,358	1,242	1,116	506	610
4	2,482	1,242	1,240	506	734
5	2,482	1,242	1,240	506	734
6	2,482	1,242	1,240	506	734
7	2,482	1,242	1,240	506	734
8	2,482	1,242	1,240	506	734
9	2,482	1,242	1,240	506	734
10	2,482	1,242	1,240	506	734
11	2,482	1,242	1,240	506	734
12	2,482	1,242	1,240	506	734
13	2,482	1,242	1,240	506	734
14	2,482	1,242	1,240	506	734
15	2,482	1,242	1,240	506	734
16	2,482	1,242	1,240	506	734
17	2,482	1,242	1,240	506	734
18	2,482	1,242	1,240	506	734
19	2,482	1,242	1,240	506	734
20	2,482	1,242	1,240	506	734

(Unit:US\$)

Year	Fund Revenues and Expenditures							
	Middle-Long Term Fund							Total of Left Item SUM(G)
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project	Redemption Funds F	Surplus Funds G=E-F	
1	441	0	441	0	0	0	-1,242	-1,242
2	0	0	0	0	0	88	274	-968
3	0	0	0	0	0	88	522	-446
4	0	0	0	0	0	88	646	-200
5	0	0	0	0	0	88	646	847
6	0	0	0	0	0	88	646	1,493
7	0	0	0	0	0	88	646	2,139
8	0	0	0	0	0	88	646	2,786
9	0	0	0	0	0	88	646	3,432
10	0	0	0	0	0	88	646	4,078
11	0	0	0	0	0	88	646	4,724
12	0	0	0	0	0	0	734	5,458
13	0	0	0	0	0	0	734	6,193
14	0	0	0	0	0	0	734	6,927
15	0	0	0	0	0	0	734	7,661
16	0	0	0	0	0	0	734	8,395
17	0	0	0	0	0	0	734	9,129
18	0	0	0	0	0	0	734	9,863
19	0	0	0	0	0	0	734	10,597
20	0	0	0	0	0	0	734	11,331

FIRR= 41%

12) Financial analysis of type 8-3: Beef+Goat

Conditions:

- a. All project costs will be loaned from the bank at 15% interest rate per year.
- b. The loan will be back over 10 years.
- c. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	1,358	-852	506	-1,358
2	2,187	1,358	828	506	322
3	2,444	1,358	1,086	506	579
4	2,572	1,358	1,214	506	708
5	2,572	1,358	1,214	506	708
6	2,572	1,358	1,214	506	708
7	2,572	1,358	1,214	506	708
8	2,572	1,358	1,214	506	708
9	2,572	1,358	1,214	506	708
10	2,572	1,358	1,214	506	708
11	2,572	1,358	1,214	506	708
12	2,572	1,358	1,214	506	708
13	2,572	1,358	1,214	506	708
14	2,572	1,358	1,214	506	708
15	2,572	1,358	1,214	506	708
16	2,572	1,358	1,214	506	708
17	2,572	1,358	1,214	506	708
18	2,572	1,358	1,214	506	708
19	2,572	1,358	1,214	506	708
20	2,572	1,358	1,214	506	708

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
	Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project			
1	350	0	350	0	0	0	-1,358	-1,358
2	0	0	0	0	0	70	252	-1,106
3	0	0	0	0	0	70	510	-596
4	0	0	0	0	0	70	638	42
5	0	0	0	0	0	70	638	680
6	0	0	0	0	0	70	638	1,318
7	0	0	0	0	0	70	638	1,956
8	0	0	0	0	0	70	638	2,595
9	0	0	0	0	0	70	638	3,233
10	0	0	0	0	0	70	638	3,871
11	0	0	0	0	0	70	638	4,509
12	0	0	0	0	0	0	708	5,217
13	0	0	0	0	0	0	708	5,925
14	0	0	0	0	0	0	708	6,633
15	0	0	0	0	0	0	708	7,341
16	0	0	0	0	0	0	708	8,048
17	0	0	0	0	0	0	708	8,756
18	0	0	0	0	0	0	708	9,464
19	0	0	0	0	0	0	708	10,172
20	0	0	0	0	0	0	708	10,880

FIRR= 37%

13) Financial analysis of type 8-4: Poultry

Conditions:

- a. All project costs will be loaned from the bank at 15% interest rate per year.
- b. The loan will be back over 10 years.
- c. Exchange rate is 1,185 USHS/US\$.

(Unit:US\$)

Year	Gross Income A	Total of Running Costs B	Agri-cultural Income C=A-B	House-keeping Costs D	Disposable Income E=C-D
1	506	2,843	-2,336	506	-2,843
2	3,356	2,843	513	506	7
3	3,751	2,843	908	506	402
4	3,948	2,843	1,106	506	599
5	3,948	2,843	1,106	506	599
6	3,948	2,843	1,106	506	599
7	3,948	2,843	1,106	506	599
8	3,948	2,843	1,106	506	599
9	3,948	2,843	1,106	506	599
10	3,948	2,843	1,106	506	599
11	3,948	2,843	1,106	506	599
12	3,948	2,843	1,106	506	599
13	3,948	2,843	1,106	506	599
14	3,948	2,843	1,106	506	599
15	3,948	2,843	1,106	506	599
16	3,948	2,843	1,106	506	599
17	3,948	2,843	1,106	506	599
18	3,948	2,843	1,106	506	599
19	3,948	2,843	1,106	506	599
20	3,948	2,843	1,106	506	599

(Unit:US\$)

Year	Fund Revenues and Expenditures							Total of Left Item SUM(G)
	Middle-Long Term Fund					Redemption Funds F	Surplus Funds G=E-F	
Total of Project Cost	Farm Land Improvement Project	Land Reclamation Project	Irrigation Project	Paddy Field Reclamation Project				
1	172	0	172	0	0	0	-2,843	-2,843
2	0	0	0	0	0	34	-27	-2,870
3	0	0	0	0	0	34	368	-2,502
4	0	0	0	0	0	34	565	-1,937
5	0	0	0	0	0	34	565	-1,372
6	0	0	0	0	0	34	565	-806
7	0	0	0	0	0	34	565	-241
8	0	0	0	0	0	34	565	324
9	0	0	0	0	0	34	565	889
10	0	0	0	0	0	34	565	1,454
11	0	0	0	0	0	34	565	2,020
12	0	0	0	0	0	0	599	2,619
13	0	0	0	0	0	0	599	3,218
14	0	0	0	0	0	0	599	3,818
15	0	0	0	0	0	0	599	4,417
16	0	0	0	0	0	0	599	5,017
17	0	0	0	0	0	0	599	5,616
18	0	0	0	0	0	0	599	6,215
19	0	0	0	0	0	0	599	6,815
20	0	0	0	0	0	0	599	7,414

FIRR= 15%

Appendix 5.2 Economic Analysis
Table A5.2.1 Farm Gate Price of Crops in Economic Price

Exchange rate = 1.185 US\$/USS

Crop	Exp. price US\$	Off-farm costs				Out-turn ratio	Farmgate price (Market) US\$/kg	Farmgate price (Economic) US\$/kg	Remarks		
		Processing costs US\$/sh		Marketing costs US\$/sh						Collecting costs US\$/sh	
		Foreign	Local	Foreign	Local					Foreign	Local
Cash crops											
Coffee(Robata)	1.00	84.40	126.60	138.46	92.30	0.00	55.50	356.96 (ctonal)			
Sugar cane							22.00	146.26 (out-growers)			
Tea	1.24	354.74	354.74			66.32	44.22	871.83			
Cacao	1.00			172.79	115.19		40.00	328.22 (hand-hoe with spray)			
Cotton	1.20	46.37	108.20	78.73	183.70		46.01	4,504.48			
Vanilla	50.00	10,800.00	10,800.00	7,200.00	4,800.00	210.00	140.00				
Staple Food Crops											
Banana								90.00			
Cassava								92.00			
Sweet Potatoes								88.00			
Irish Potatoes								107.00			
Cereals											
Maize	0.18	11.33	16.99	9.08	9.08		32.19	140.19			
Finger Millet								242.00			
Sorghum								210.00			
Rice(gaddy)	0.35	25.00	25.00	9.08	9.08		20.00	331.75			
Pulses								280.90			
Beans	0.41	18.39	18.39	86.40	57.60		34.73				
Oil crops											
Groundnuts	0.50	13.80	20.70	84.81	56.54		53.85	375.31			
Soyabean	0.23	14.41	21.62	94.33	40.43		33.28	77.57			
Sunflowers/simsim	0.60	38.23	57.34	82.17	54.78		47.43	446.27			
Vegetable											
Tomatoes								130.00			
Onions								150.00			
Cabbages								150.00			
Fruit											
Pineapples								40.00			
Passionfruits								271.00			
Pawpaw								120.00			
Orange								85.00			
Mango								150.00			
Silk(cocoon)	6.50	1,284.00	856.00	933.80	400.20			1,439.85			

Source : Off-farm costs are quoted from Economic of Crop Production, Gross Margin and Comparative Advantage Analysis
Bank of Uganda, Agricultural Secretariat, November 1993

Other data are collected by study team.

Note : Standard conversion factor (S.C.F) = $(M+X)/(M+Tm)+(X-Tx+sx)$
= 0.9045977

M : Import 753 mil. US\$ 1992/93 price
X : Export 198.8 mil. US\$ 1992/93 price
Tm : Import tax 122839 mil. sh 1992/93 price
Tx : Export tax 0 mil. sh 1992/93 price
Sx : Export subsidy 0 mil. sh 1992/93 price
Exchange rate: 1250 sh/US\$ Average of 1992 July to 1993 May

Source: Background to the Budget 1993-1994

Note: Includes some estimation in 1992/93 prices.

1992/93 price used in light of abolition of export tax and no major changes predicted in near future.

Table A5.2.2 Economic Benefit of Agricultural Infrastructure Project

1) Economic benefit of Farm Land Improvement

Exchange rate = 1,185 USHS/US\$

	Crops	Area (ha)	Yield (ton/ha)	Farm-gate price (USHS)	On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Benefit (economic) '000US\$	Total benefit '000US\$
Present (without)	Cassava	43,000	5.32	46	38,100	25,500	6,661	6,661
Plan (with)	Coffee	29,574	1.75	357	262,000	5,900	8,920	21,336
	Pineapple	1,640	37.35	40	157,900	32,400	1,809	
	Passionfruit	334	11.41	271	252,000	54,000	787	
	Tomato	6,270	10.44	130	223,000	84,600	5,596	
	Onion	138	9.11	150	190,800	30,600	134	
	Cabbage	2,926	6.98	150	154,800	72,000	2,042	
	Green	2,115	9.11	150	190,800	30,600	2,049	
Benefit(with-without)								14,676

2) Economic benefit of Land Reclamation Project

Exchange rate = 1,185 USHS/US\$

	Crops	Area (ha)	Yield (ton/ha)	Farm-gate price (USHS)	On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Benefit (economic) '000US\$	Total benefit '000US\$
Present (without)							0	0
Plan (with)	Passionfruit	612	11.41	271	252,000	54,000	1,442	32,821
	Pineapple	5,246	37.35	40	157,900	32,400	5,785	
	Sugarcane	43,532	50.00	22	115,000	502,800	19,476	
	Tea	1,457	3.25	146	141,300	27,000	380	
	Cacao	3,781	0.78	872	160,000	54,000	1,504	
	Maize	28,227	1.87	140	133,000	16,200	2,719	
	Onion	70	9.11	150	190,800	30,600	68	
	Cabbage	2,075	6.98	150	154,800	72,000	1,448	
Benefit(with-without)								32,821

3) Economic benefit of Irrigation Project

Exchange rate = 1,185 USHS/US\$

	Crops	Area (ha)	Yield (ton/ha)	Farm-gate price (USHS)	On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Benefit (economic) '000US\$	Total benefit '000US\$
Present (without)	Cassava	2,500	5.32	46	38,100	25,500	387	387
Plan (with)	Passionfruit	1,375	13.12	271	252,000	54,000	3,777	4,974
	Tomato	1,125	12.01	130	223,000	84,600	1,197	
Benefit(with-without)								4,587

Note: It is estimated that yield increase rate by irrigation would be 15%.

4) Economic benefit of Paddy Field Reclamation Project

Exchange rate = 1,185 USHS/US\$

	Crops	Area (ha)	Yield (ton/ha)	Farm-gate price (USHS)	On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Benefit (economic) '000US\$	Total benefit '000US\$
Present (without)		0	4.90	332	77,000	23,600	0	0
Plan (with)	Rice	5,390	4.90	332	77,000	23,600	6,947	6,947
Benefit(with-without)								6,947

5) Economic benefit of New Ranch Plan

Exchange rate = 1,185 USHS/US\$

	Cattle	Head	Gross Income (USHS/head)		On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Net Income '000US\$	Total benefit '000US\$
Present (without)	Beef	0	177,700		58,700	42,900	0	0
	Goat	0	10,455		860	1,230	0	
Plan (with)	Beef	257,992	177,700		58,700	42,900	17,459	18,670
	Goat & Seep	169,200	10,455		860	1,230	1,211	
Benefit (with-without)								18,670

6) Economic benefit of Grassland Improvement Project

Exchange rate = 1,185 USHS/US\$

	Cattle	Head	Gross Income (USHS/head)		On-farm costs Foreign c. (USHS/ha)	Local c. (USHS/ha)	Net Income '000US\$	Total benefit '000US\$
Present (without)	Beef	655,058	177,700		58,700	42,900	44,330	47,502
	Goat	443,100	10,455		860	1,230	3,172	
Plan (with)	Beef	793,902	177,700		58,700	42,900	53,726	64,364
	Goat & Seep	1,486,124	10,455		860	1,230	10,638	
Benefit (with-without)								16,862

Table A5.2.3 Project Costs in Economic Price by Year

(1/2)

Item/Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	Total
I. Investment cost													
1. Agricultural infrastructure													
1) Farm land reclamation	8,384	8,384	8,384	8,384	8,384	8,384	8,384	8,384	8,384	8,384	0	0	83,845
2) Farm land improvement	3,541	3,541	3,541	3,541	3,541	3,541	3,541	3,541	3,541	3,541	0	0	35,413
3) Grass land development	668	668	668	668	668	668	668	668	668	668	0	0	6,678
4) Grass land improvement	961	961	961	961	961	961	961	961	961	961	0	0	9,608
5) Small scale irrigation	769	1,153	1,153	1,153	1,153	1,153	1,153	0	0	0	0	0	7,686
6) Paddy field development	1,800	2,700	2,700	2,700	2,700	2,700	2,700	0	0	0	0	0	17,999
7) Livestock facility	168	1,907	1,907	1,907	1,907	1,740	1,629	1,629	1,629	1,629	1,629	0	17,684
Sub-Total	16,291	19,315	19,315	19,315	19,315	19,147	19,037	15,184	15,184	15,184	1,629	0	178,914
2. Agricultural support													
1) Research													
(1) NARO Headquarters	1,512	1,512	0	0	0	0	0	0	0	0	0	0	3,024
(2) Kawanda agri. research institute	3,816	0	0	0	0	0	0	0	0	0	0	0	3,816
(3) Namulonge agricultural & animal production research institute	0	2,677	0	0	0	0	0	0	0	0	0	0	2,677
(4) Kifu forestry research institute	0	1,607	0	0	0	0	0	0	0	0	0	0	1,607
2) Extension													
(1) Bukalasa agri. college	3,138	0	0	0	0	0	0	0	0	0	0	0	3,138
(2) Establishment of DFI	0	0	1,699	1,699	0	0	0	0	0	0	0	0	3,398
(3) Rehabilitation of DFI	1,580	795	0	0	0	0	0	0	0	0	0	0	2,375
(4) Branch extension office	398	796	796	796	796	398	0	0	0	0	0	0	3,981
(5) Improvement of working condition	1,137	1,137	1,137	1,137	0	0	0	0	0	0	0	0	4,548
(6) Improvement for plant protection	25	25	25	25	0	0	0	0	0	0	0	0	98
(7) Fannary & foot wear training school	365	365	0	0	0	0	0	0	0	0	0	0	730
3) Animal improvement													
(1) Breed importation	1,241	1,241	1,241	1,241	1,241	0	0	0	0	0	0	0	6,207
(2) ABC (Artificial breeding centre)	98	98	0	0	0	0	0	0	0	0	0	0	196
(3) AI (Artificial insemination)	88	88	0	0	0	0	0	0	0	0	0	0	175
AISC (Artificial ins'tion sub-centre)	187	187	0	0	0	0	0	0	0	0	0	0	374
(4) Veterinary center (Rehabilitation)	67	67	0	0	0	0	0	0	0	0	0	0	135
Veterinary center (Construction)	167	167	0	0	0	0	0	0	0	0	0	0	333
(5) Vaccine production laboratory	122	122	0	0	0	0	0	0	0	0	0	0	244
4) Machinery service													
(1) AA (Agricultural association)	850	906	906	906	906	906	906	906	906	906	56	0	9,058
(2) IA (Irrigation association)	1,126	1,689	1,689	1,689	1,689	1,689	1,689	0	0	0	0	0	11,259
(3) LA (Livestock association)	1,467	1,467	1,467	1,467	1,467	1,467	1,467	1,467	1,467	1,467	0	0	14,670
Sub-Total	17,383	14,945	8,960	8,960	6,099	4,460	4,062	2,373	2,373	2,373	56	0	72,044

Item/Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	12 (000US\$)	Total
3. Processing and marketing														
1) Slaughter slab	54	107	107	107	107	54	0	0	0	0	0	0	0	536
2) Slaughter house	61	61	0	0	0	0	0	0	0	0	0	0	0	122
3) Milk collection centre	101	101	101	101	0	0	0	0	0	0	0	0	0	405
4) Livestock market(10,200sq.m)	75	150	150	150	150	75	0	0	0	0	0	0	0	748
5) Cereal warehouse(60t)	211	421	421	421	421	211	0	0	0	0	0	0	0	2,107
6) Rice processing facility	0	63	63	63	63	63	63	63	63	63	63	63	0	635
7) Agricultural product collection center	2,285	4,570	4,570	4,570	4,570	2,285	0	0	0	0	0	0	0	22,850
8) Rehabilitation of Masaka fruits factory	1,717	1,717	0	0	0	0	0	0	0	0	0	0	0	3,433
Sub-Total:	4,503	7,191	5,413	5,413	5,312	2,688	63	63	63	63	63	0	0	30,836
4. Rural & social infrastructure														
1) Bore hole	2,672	5,343	5,343	2,672	2,672	2,672	2,672	2,672	0	0	0	0	0	26,716
2) Spring	6,093	9,140	9,140	6,093	0	0	0	0	0	0	0	0	0	30,466
3) Primary school	162	162	162	162	162	162	162	162	162	162	162	162	0	1,822
4) Secondary school	67	67	67	67	67	67	67	67	67	67	67	67	0	670
5) Feeder road	2,120	3,306	3,306	2,120	2,120	1,186	1,186	1,186	0	0	0	0	0	16,530
6) Community centre	519	1,039	1,039	1,039	1,039	519	0	0	0	0	0	0	0	5,193
7) Electrification	3,957	3,957	3,957	3,957	3,957	3,957	3,957	3,957	3,957	3,957	3,957	3,957	0	39,574
Sub-Total	15,591	23,014	23,014	16,110	10,017	8,563	8,044	8,044	4,187	4,187	0	0	0	120,772
5. Integrated development center														
1) IDC	51	51	0	0	0	0	0	0	0	0	0	0	0	102
2) IDSC	82	82	0	0	0	0	0	0	0	0	0	0	0	165
3) DAO,DVO,DCO	213	213	0	0	0	0	0	0	0	0	0	0	0	427
Sub-Total	347	347	0	0	0	0	0	0	0	0	0	0	0	693
I. Investment cost total														
II. Administration cost	54,115	64,811	56,702	49,798	40,743	34,857	31,206	25,664	21,807	21,807	1,749	0	0	403,259
III. Physical contingency	1,623	1,944	1,701	1,494	1,222	1,046	936	770	654	654	52	0	0	12,098
IV. Engineering service	5,412	6,481	5,670	4,980	4,074	3,486	3,121	2,566	2,181	2,181	175	0	0	40,326
	8,117	9,722	8,505	7,470	6,111	5,229	4,681	3,850	3,271	3,271	262	0	0	60,489
7) Livestock facility														
Fence (A) 3-lines	0	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	1,629	0	16,294
Fence (B) 4-lines	0	200	200	200	200	200	200	200	200	200	200	200	0	2,002
Dipping & scale facility	0	127	127	127	127	127	127	127	127	127	127	127	0	1,271
Reservoir	0	92	92	92	92	92	92	92	92	92	92	92	0	920
Hay storage	0	165	165	165	165	165	165	165	165	165	165	165	0	1,647
House	0	247	247	247	247	247	247	247	247	247	247	247	0	2,470
	0	798	798	798	798	798	798	798	798	798	798	798	0	7,984

Table A5.2.4 Economic Analysis of Agricultural Infrastructure Project
1) Economic analysis of Farm land improvement project

Conditions

- a. Economic benefit of project: 14,676,000 US\$. (see Table A5.2.2 (1))
- b. Project life: 30 years.
- c. Benefit will accrue from the 3rd year and reach the target in the 12th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project Cost			Benefit	Balance
	Construc- tion	Engineer- ing service	Administ- ration	with- without	
1	3,541	531	106	0	-4,179
2	3,541	531	212	0	-4,285
3	3,541	531	319	1,468	-2,924
4	3,541	531	425	2,935	-1,562
5	3,541	531	531	4,403	-201
6	3,541	531	637	5,870	1,160
7	3,541	531	744	7,338	2,522
8	3,541	531	850	8,806	3,883
9	3,541	531	956	10,273	5,244
10	3,541	531	1,062	11,741	6,606
11			1,062	13,208	12,146
12			1,062	14,676	13,613
13			1,062	14,676	13,613
14			1,062	14,676	13,613
15			1,062	14,676	13,613
16			1,062	14,676	13,613
17			1,062	14,676	13,613
18			1,062	14,676	13,613
19			1,062	14,676	13,613
20			1,062	14,676	13,613
21			1,062	14,676	13,613
22			1,062	14,676	13,613
23			1,062	14,676	13,613
24			1,062	14,676	13,613
25			1,062	14,676	13,613
26			1,062	14,676	13,613
27			1,062	14,676	13,613
28			1,062	14,676	13,613
29			1,062	14,676	13,613
30			1,062	14,676	13,613
					EIRR 25.4%

2) Economic analysis of Land Reclamation Project

Conditions

- a. Economic benefit of project: 32,821,000 US\$. (see Table A5.2.2 (2))
- b. Project life: 30 years.
- c. Benefit will accrue from the 3rd year and reach the target in the 12th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project Cost			Benefit	Balance
	Construc- tion	Engineer- ing service	Administ- ration	with- without	
1	8,384	1,258	252	0	-9,894
2	8,384	1,258	503	0	-10,145
3	8,384	1,258	755	3,282	-7,115
4	8,384	1,258	1,006	6,564	-4,084
5	8,384	1,258	1,258	9,846	-1,054
6	8,384	1,258	1,509	13,128	1,977
7	8,384	1,258	1,761	16,411	5,008
8	8,384	1,258	2,012	19,693	8,038
9	8,384	1,258	2,264	22,975	11,069
10	8,384	1,258	2,515	26,257	14,099
11			2,515	29,539	27,024
12			2,515	32,821	30,306
13			2,515	32,821	30,306
14			2,515	32,821	30,306
15			2,515	32,821	30,306
16			2,515	32,821	30,306
17			2,515	32,821	30,306
18			2,515	32,821	30,306
19			2,515	32,821	30,306
20			2,515	32,821	30,306
21			2,515	32,821	30,306
22			2,515	32,821	30,306
23			2,515	32,821	30,306
24			2,515	32,821	30,306
25			2,515	32,821	30,306
26			2,515	32,821	30,306
27			2,515	32,821	30,306
28			2,515	32,821	30,306
29			2,515	32,821	30,306
30			2,515	32,821	30,306
					EIRR 24.1%

3) Economic analysis of Small Scale Irrigation Project

Conditions

- a. Economic benefit of project: 4,587,000 US\$. (see Table A5.2.2 (3))
- b. Project life: 30 years.
- c. Benefit will accrue from the 2nd year and reach the target in the 8th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project Cost				Benefit with- without	Balance
	Construc- tion	Irrig'n Associa'n	Engineer- ing service	Administ- ration		
1	769	912	252	50	0	-1,983
2	1,153	1,368	378	126	459	-2,566
3	1,153	1,368	378	202	1,147	-1,953
4	1,153	1,368	378	277	1,835	-1,341
5	1,153	1,368	378	353	2,523	-728
6	1,153	1,368	378	428	3,211	-116
7	1,153	1,368	378	504	3,899	496
8				504	4,587	4,083
9				504	4,587	4,083
10				504	4,587	4,083
11				504	4,587	4,083
12				504	4,587	4,083
13				504	4,587	4,083
14				504	4,587	4,083
15				504	4,587	4,083
16				504	4,587	4,083
17				504	4,587	4,083
18				504	4,587	4,083
19				504	4,587	4,083
20				504	4,587	4,083
21				504	4,587	4,083
22				504	4,587	4,083
23				504	4,587	4,083
24				504	4,587	4,083
25				504	4,587	4,083
26				504	4,587	4,083
27				504	4,587	4,083
28				504	4,587	4,083
29				504	4,587	4,083
30				504	4,587	4,083
						EIRR 20.4%

4) Economic analysis of Paddy Field Reclamation Project

Conditions

- a. Economic benefit of project: 6,947,000 US\$. (see Table A5.2.2 (4))
- b. Project life: 30 years.
- c. Benefit will accrue from the 3rd year and reach the target in the 9th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project Cost				Benefit	Balance
	Construc- tion	Irrig'n Associa'n	Engineer- ing service	Administ- ration	with- without	
1	1,800	214	302	60	0	-2,162
2	2,700	321	453	151	0	-2,609
3	2,700	321	453	232	695	-1,648
4	2,700	321	453	313	1,737	-687
5	2,700	321	453	394	2,779	274
6	2,700	321	453	475	3,821	1,235
7	2,700	321	453	556	4,863	2,196
8				556	5,905	6,391
9				556	6,947	6,391
10				556	6,947	6,391
11				556	6,947	6,391
12				556	6,947	6,391
13				556	6,947	6,391
14				556	6,947	6,391
15				556	6,947	6,391
16				556	6,947	6,391
17				556	6,947	6,391
18				556	6,947	6,391
19				556	6,947	6,391
20				556	6,947	6,391
21				556	6,947	6,391
22				556	6,947	6,391
23				556	6,947	6,391
24				556	6,947	6,391
25				556	6,947	6,391
26				556	6,947	6,391
27				556	6,947	6,391
28				556	6,947	6,391
29				556	6,947	6,391
30				556	6,947	6,391
						EIRR 29.5%

5) Economic analysis of New Ranch Plan

Conditions

- a. Economic benefit of project: 18,670,000 US\$. (see Table A5.2.2 (5))
- b. Project life: 30 years.
- c. Benefit will accrue from the 4th year and reach the target in the 13th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project cost					Benefit with- without	Balance
	Construction cost			Engineering Service	Administ- ration		
	Grass dev.	Live. Faci.	Live. Asso.				
1	668	0	1,113	267	53	0	-2,101
2	668	1,629	1,113	512	156	0	-4,077
3	668	1,629	1,113	512	258	0	-4,180
4	668	1,629	1,113	512	360	1,867	-2,415
5	668	1,629	1,113	512	463	3,734	-650
6	668	1,629	1,113	512	565	5,601	1,114
7	668	1,629	1,113	512	667	7,468	2,879
8	668	1,629	1,113	512	770	9,335	4,644
9	668	1,629	1,113	512	872	11,202	6,409
10	668	1,629	1,113	512	974	13,069	8,173
11		1,629		244	1,023	14,936	12,039
12					1,023	16,803	15,780
13					1,023	18,670	17,647
14					1,023	18,670	17,647
15					1,023	18,670	17,647
16					1,023	18,670	17,647
17					1,023	18,670	17,647
18					1,023	18,670	17,647
19					1,023	18,670	17,647
20					1,023	18,670	17,647
21					1,023	18,670	17,647
22					1,023	18,670	17,647
23					1,023	18,670	17,647
24					1,023	18,670	17,647
25					1,023	18,670	17,647
26					1,023	18,670	17,647
27					1,023	18,670	17,647
28					1,023	18,670	17,647
29					1,023	18,670	17,647
30					1,023	18,670	17,647
							EIRR 28.7%

6) Economic analysis of Grassland Improvement Project

Conditions

- a. Economic benefit of project: 16,862,000 US\$. (see Table A5.2.2 (6))
- b. Project life: 30 years.
- c. Benefit will accrue from the 4th year and reach the target in the 13th year.
- d. Economic project cost converted from market price using standard conversion factor (0.9046)
- e. Cost for engineering service = 15% of construction cost.
- f. Cost for administration = 3% of construction cost, accumulating annually in line with total project cost.

year	Project cost					Benefit with- without	Balance
	Construction cost			Engineering Service	Administ- ration		
	Grass dev.	Live. Faci.	Live. Asso.				
1	961	168	354	222	44	0	-1,750
2	961	278	354	239	92	0	-1,924
3	961	278	354	239	140	0	-1,972
4	961	278	354	239	188	1,686	-333
5	961	278	354	239	236	3,372	1,305
6	961	110	354	214	278	5,059	3,142
7	961	0	354	197	318	6,745	4,915
8	961	0	354	197	357	8,431	6,562
9	961	0	354	197	397	10,117	8,208
10	961	0	354	197	436	11,803	9,855
11					436	13,490	13,053
12					436	15,176	14,740
13					436	16,862	16,426
14					436	16,862	16,426
15					436	16,862	16,426
16					436	16,862	16,426
17					436	16,862	16,426
18					436	16,862	16,426
19					436	16,862	16,426
20					436	16,862	16,426
21					436	16,862	16,426
22					436	16,862	16,426
23					436	16,862	16,426
24					436	16,862	16,426
25					436	16,862	16,426
26					436	16,862	16,426
27					436	16,862	16,426
28					436	16,862	16,426
29					436	16,862	16,426
30					436	16,862	16,426
							EIRR 43.2%

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