

APPENDIX 1

ECONOMIC ANALYSIS OF NEW INDUSTRIAL PROJECTS

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1. TRUCKING PROJECT

Products: Transportation Services

Initial Investment	Shs. 895,250
Machines/Equipment	" 770,000
Building/Office	" 125,250
Number of Workers	11
Investment per Worker	Shs. 81,386
Annual Revenue (Sales)	
Production at full Capacity 192,000km/y x 1/2 = 96,000 x 6	" 576,000
Production at 70% Capacity 96,000km/y x 70% = 67,200 x 6	" 403,200
Annual Total Costs:	" 386,257
Labour Costs	" 56,040
Raw/Subsidiary Costs	" 54,150
Depreciation Costs	" 160,263
- Machines/Equipment (5 years)	(" 154,000)
- Building/Office (20 years)	(" 6,263)
Maintenance Costs	" 38,500
Interest Costs (8% of Initial Investment)	" 71,620
Other Costs	" 5,604
Annual Net Profits:	
At full Capacity	" 189,743
At 70% Capacity	" 16,943
Economic Rate of Return (to Initial Investment):	
At full Capacity	21.2 %
At 70% Capacity	1.9 %

1. TRUCKING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	576,000	
Fixed Capital Costs	899,250	
Building/Sheds Factory	125,250	Shs. $835/m^2 \times 30m^2 =$ Shs.75,150 Rural 3 " $\times 60m^2 =$ Shs.50,100 Moshi 1
Machine/Equipment	770,000	8 Trucks 8 Trucks x @Shs.96,250 = Shs.770,000
Office Equipment	4,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.4,000
Operation Costs	148,690	
Raw & Sub-Materials	54,150	Fuel: 8 Trucks x 100 km/day x 1/5 ℓ /km x Shs.1.35/ ℓ x 20 days/M x 12M = Shs.51,840 Oil: Shs.2,304
Salaries/Wages	56,040	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 9 Persons x 12M = Shs. 41,040/Year
Maintenance Costs	38,500	(Machine & Equipment) Shs.770,000 x 0.05 (5%) = 38,500 * Some particular method of calculation is employed in the above Table
Utilities Costs	-	
Other Costs	5,604	(Salaries/Wages) Shs.56,040 x 10% = Shs.5,604/Year

1. TRUCKING PROJECT (Estimation in early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	125,250				
Machines & Equipment	770,000	770,000			192,500
Office Equipment	4,000				
Infrastructure					
Other					
Subtotal	899,250	770,000			192,500
Working Capital Required					
Raw/Sub Materials	54,150	54,150	56,860	56,860	59,700
Salaries & Wages	56,040	56,040	58,840	58,840	61,300
Maintenance Costs	11,200	39,200	11,200	67,200	11,200
Utility Service Costs					
Other Costs	(5,600)	(5,600)	(5,880)	(5,880)	(6,180)
Subtotal	146,400	149,390	126,900	182,900	132,700
Grand Total	1,045,650	770,000	149,390	182,900	192,500

2. FOUNDRY PROJECT

Products: Wheel, Pully and etc.

Initial Investment:	Shs. 175,066
Machines/Equipment	" 31,666
Building/Office	" 143,400
Number of Workers:	9
Investment per Worker:	Shs. 19,452
Annual Revenue (Sales):	
Production at full Capacity 94,000kg x 2/20 per kg =	" 206,800
Production at 70% Capacity 65,800kg x 2/20 per kg =	" 147,760
Annual Total Costs:	" 136,000
Labour Costs	" 44,880
Raw/Subsidiary Costs	" 57,600
- /40 per kg x 300kg x 4 hours/day x 10 days/month x 12 ms =	
Depreciation Costs	
- Machines/Equipment (10 years)	" 3,167
- Building/Office (20 years)	" 7,170
Maintenance Costs	" 3,100
Interest Costs (8% of Initial Investment)	" 14,006
Other Costs	" 6,176
Annual Net Profits:	
At full Capacity	" 70,800
At 70% Capacity	" 11,760
Economic Rate of Return (to Initial Investment):	
At full Capacity	40.5 %
At 70% Capacity	6.7 %

2. FOUNDRY PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	206,800	94,000kg x 2/20 per kg
Fixed Capital Costs	175,066	
Building/Sheds Factory	142,400	Shs.890/m ² x 160m ² = Shs.142,400
Machine/Equipment	31,666	A cupolar(0.3t/hour), a air blower, a cutting machine, a grinder, etc. Shs.31,666
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	120,068	
Raw & Sub-Materials	70,400	Scrap-Metal: 0.3t x 4 hours/day x 10 days/M x 12M x Shs.389/t = Shs.56,000/Year
Main Materials		Fuel/Oil: Shs.14,400/Year
Salaries/Wages	44,880	
Manager	8,400	@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled	-	@Shs.550/M x Person x 12M - Shs. /Year
Non-Skilled	36,480	@Shs.380/M x 7 Persons x 12M = Shs.36,480/Year
Maintenance Costs	3,100	(Machine & Equipment) Shs.31,666 x 10% = Shs.3,100
Utilities Costs	1,688	Shs.1,688
Other Costs	4,488	(Salaries/Wages) Shs.44,800 x 10% = Shs.4,488/Year

2. FOUNDRY PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.
Fixed Capital Required					
Building & Shed	142,400				
Machines & Equipment	31,700	31,700			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	175,100	31,700			
Working Capital Required					
Raw/Sub Materials	70,400	70,400	73,950	73,950	77,650
Salaries & Wages	44,880	44,880	47,150	47,150	49,550
Maintenance Costs	3,120	3,120	3,120	3,120	3,120
Utility Service Costs	1,700	1,700	1,800	1,800	1,800
Other Costs	(4,490)	(4,490)	(4,800)	(4,800)	(4,960)
Subtotal	120,100	120,100	126,020	126,020	132,120
Grand Total	295,200	31,700	126,020	126,020	132,120

3. FORGING PROJECT

Products: Gear, Lever, Tools and Agricultural Implement

Initial Investment:	Shs. 192,700
Machines/Equipment	" 76,000
Building/Office	" 116,700
Number of Workers:	11
Investment per Worker:	Shs. 17,518
Annual Revenue (Sales):	
Production at full Capacity	
300 kg x 20 days/m x 12 months x 3/20 =	" 230,400
Production at 70% Capacity	
(a) x 70 % =	" 161,280
Annual Total Costs:	" 138,195
Labour Costs	" 62,160
Raw/Subsidiary Costs	" 31,680
330 kg x 20 days x 12 months x -/40 per kg	
Depreciation Costs	" 13,435
- Machines/Equipment (10 years)	(" 7,600)
- Building/Office (20 years)	(" 5,835)
Maintenance Costs	" 7,600
Interest Costs	" 15,416
(8% of Initial Investment)	
Other Costs	" 7,904
Annual Net Profits:	
At full Capacity	" 92,205
At 70% Capacity	" 23,085
Economic Rate of Return (to Initial Investment):	
At full Capacity	47.9 %
At 70% Capacity	12.0 %

3. FORGING PROJECT : Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	230,400	300kg x 20 days/month x 12 months x 3/20
Fixed Capital Costs	192,700	
Building/Sheds Factory	115,700	Shs.890/m ² x 130 m ² x Shs.115,700
Machine/Equipment	76,000	A local-made kiln, a forging machine, an air compressor, etc. Shs.76,000
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	920,070	
Raw & Sub-Materials	20,622	
Main Materials		Scrap Metal: 16t/Year x Shs.389/t = Shs.6,222/Year Fuel: 120kg/day x Shs.1 x 10 days x 12M = Shs.14,400/Year
Salaries/Wages	62,160	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 4 Persons x 12M = Shs.26,400/Year
Non-Skilled		@Shs.380/M x 6 Persons x 12M = Shs.27,360/Year
Maintenance Costs	7,600	(Machine & Equipment) Shs.76,000 x 10% = Shs.7,600
Utilities Costs	1,688	Shs.1,688
Other Costs	6,216	(Salaries/Wages) Shs.62,160 x 10% = Shs.6,216/Year

3. FORGING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P.	F.C.P.	F.C.P.	F.C.P.	F.C.P.
Fixed Capital Required					
Building & Shed	115,700				
Machines & Equipment	76,000	52,000			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	192,700	52,000			
Working Capital Required					
Raw/Sub Materials	20,650	20,650	21,700	21,700	22,800
Salaries & Wages	62,160	62,160	65,300	65,300	68,600
Maintenance Costs	7,600	7,600	7,600	7,600	7,600
Utility Service Costs	1,690	1,690	1,800	1,800	1,900
Other Costs	(6,220)	(6,220)	(6,530)	(6,530)	(6,860)
Subtotal	92,100	92,100	96,400	96,400	100,900
Grand Total	284,800	52,000	96,400	96,400	100,900

4. OIL EXTRACTION PROJECT

Products: Vegetable Cooking Oil

Initial Investment:	Shs. 78,266
Machines/Equipment	" 41,666
Building/Office	" 36,600
Number of Workers:	8
Investment per Worker:	Shs. 9,783
Annual Revenue (Sales):	
Production at full Capacity 20 kg x 20 days x 12 months x 36	" 172,800
Production at 70% Capacity (a) x 70 %	" 120,960
Annual Total Costs:	" 119,456
Labour Costs	" 44,400
Raw/Subsidiary Costs 1/- per kg x 200 kg x 20 days x 12 months	" 48,000
Depreciation Costs	" 5,997
- Machines/Equipment (10 years)	" 4,167
- Building/Office (20 years)	" 1,830
Maintenance Costs	" 4,166
Interest Costs (8% of Initial Investment)	" 6,262
Other Costs	" 10,631
Annual Net Profits:	
At full Capacity	" 53,344
At 70% Capacity	" 1,504
Economic Rate of Return (to Initial Investment):	
At full Capacity	68.2 %
At 70% Capacity.	1.9 %

Note: Oil cake as by-product would be sold to the livestock feeds factory or to be used as manure.

4. OIL EXTRACTION PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	172,800	20kg x 20 days x 12 months x 36
Fixed Capital Costs	78,266	
Building/Sheds Factory	35,600	Shs.890/m ² x 40m ² = Shs.35,600
Machine/Equipment	41,666	An oil extracting machine, a filter, etc. Shs.41,666
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	74,591	
Raw & Sub-Materials	26,025	Seed: Shs.1.00/kg x 100kg x 20 day/M x 12M = Shs.24,000
Main Materials		Fuel: Shs.1.35/ℓ x 1.25 ℓ/hour x 5 hours/ day x 20 days/M x 12M = Shs.2,025
Salaries/Wages	44,400	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 2 Persons x 12M = Shs.13,200/Year
Non-Skilled		@Shs.380/M x 5 Persons x 12M = Shs.22,800/Year
Maintenance Costs	4,166	(Machine & Equipment) Shs.41,666 x 10% = Shs.4,166
Utilities Costs		-
Other Costs	4,440	(Salaries/Wages) Shs.44,400 x 10% = Shs.4,440/Year

4. OIL EXTRACTION PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	35,600				
Machines & Equipment	41,400	41,400			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	78,000	41,400			
Working Capital Required					
Raw/Sub Materials	26,030	26,030	27,350	27,350	28,750
Salaries & Wages	44,400	44,400	47,650	47,650	50,350
Maintenance Costs	4,170	4,170	4,170	4,170	4,170
Utility Service Costs					
Other Costs	(4,440)	(4,440)	(4,800)	(4,800)	(5,040)
Subtotal	74,600	74,600	79,170	79,170	83,270
Grand Total	152,600	41,400	79,170	79,170	83,270

5. TOMATO PUREY PROJECT

Products: Tomato Purey

Initial Investment:	Shs. 53,827
Machines/Equipment	" 27,777
Building/Office	" 26,050

Number of Workers: 8

Investment per Worker: Shs. 6,728

Annual Revenue (Sales):

Production at full Capacity 300 kg/day x 20 days x 12 months x 2/75	" 198,000
Production at 70% Capacity (a) x 70 % =	" 138,600

Annual Total Costs: " 134,986

Labour Costs	" 43,360
Raw/Subsidiary Costs 1/- per kg x 300 kg x 20 days x 12 months	" 74,000
Depreciation Costs	" 4,081
- Machines/Equipment (10 years)	" 2,778
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 2,777
Interest Costs (8% of Initial Investment)	" 4,307
Other Costs	" 6,361

Annual Net Profits:

At full Capacity	" 63,114
At 70% Capacity	" 3,714

Economic Rate of Return (to Initial Investment):

At full Capacity	117.3 %
At 70% Capacity.	6.9 %

5. TOMATO PUREY PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	198,000	300 kg/day x 20 days x 12 months x 2/75
Fixed Capital Costs	53,827	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	27,777	A squasher, a filtering machine, etc. Shs.27,777
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	120,167	
Raw & Sub-Materials	74,030	Tomato: 300kg/day x Shs.1.00/kg x 20 days/M x 12M = Shs.72,000
Main Materials		Fuel: Shs.1.35/ℓ x 6.25 ℓ/day x 20 days/M x 12M = Shs.2,025
Salaries/Wages	43,360	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 6 Persons x 12M = Shs.27,360/Year
Maintenance Costs	2,777	(Machine & Equipment) Shs.27,777 x 10% = Shs.2,777
Utilities Costs	-	
Other Costs	4,336	(Salaries/Wages) Shs.43,360 x 10% = Shs.4,336/Year

5. TOMATO PUREY PROJECT (Estimation in Early 1977): Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,050				
Machines & Equipment	27,900	27,900			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	53,950	27,800			
Working Capital Required					
Raw/Sub Materials	74,030	74,030	77,750	77,750	81,650
Salaries & Wages	43,360	43,360	45,550	45,550	47,850
Maintenance Costs	28,760	78,760	28,760	28,760	28,760
Utility Service Costs					
Other Costs	(4,340)	(4,340)	(4,560)	(4,560)	(4,800)
Subtotal	146,150	146,150	152,060	152,060	158,260
Grand Total	200,000	27,800	146,150	152,060	158,260

6. JAM AND MARMALADE PROJECT

Products: Jam and Marmalade

Initial Investment:	Shs. 39,938
Machines/Equipment	" 13,888
Building/Office	" 26,050
Number of Workers:	16
Investment per Worker:	Shs. 2,496
Annual Revenue (Sales):	
Production at full Capacity 100 kg/day x 20 days x 12 months x 6/50	" 156,000
Production at 70% Capacity (a) x 70 % =	" 109,200
Annual Total Costs:	" 103,756
Labour Costs	" 76,800
Raw/Subsidiary Costs	" 12,000
Depreciation Costs	" 2,692
- Machines/Equipment (10 years)	" 1,389
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 1,388
Interest Costs (8% of Initial Investment)	" 3,196
Other Costs	" 7,680
Annual Net Profits:	
At full Capacity	" 46,000
At 70% Capacity	" 5,444
Economic Rate of Return (to Initial Investment):	
At full Capacity	117.2 %
At 70% Capacity.	13.7 %

6. JAM & MARMALADE PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	156,000	100 kg/day x 20 days x 12 months x 6/50
Fixed Capital Costs	39,938	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	13,888	A pan, A filter (local-made), etc. Shs.13,888
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	90,189	
Raw & Sub-Materials	12,000	Orange: 100 kg/day x Shs.0.50/kg x Main Materials 20 days/M x 12M = Shs.12,000
Salaries/Wages	76,800	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 15 Persons x 12M = Shs.68,400/Year
Maintenance Costs	1,389	(Machine & Equipment) Shs.13,888 x 10% = Shs.1,389
Utilities Costs	-	-
Other Costs	7,680	(Salaries/Wages) Shs.76,800 x 10% = Shs.7,680/Year

6. JAM & MARMALADE PROJECT (Estimation in Early 1977) : Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,050				
Machines & Equipment	13,900	13,900			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	39,950	13,900			
Working Capital Required					
Raw/Sub Materials	12,000	12,000	12,600	12,600	13,250
Salaries & Wages	76,800	76,800	80,650	80,650	84,700
Maintenance Costs	1,450	1,450	1,450	1,450	1,450
Utility Service Costs					
Other Costs	(7,680)	(7,680)	(8,070)	(8,070)	(8,470)
Subtotal	90,250	90,250	94,700	94,700	99,410
Grand Total	130,200	13,900	94,700	94,700	99,410

7. ANIMAL FEEDS PROJECT

Products: Animal Feeds

Initial Investment:	Shs. 45,450
Machines/Equipment	" 19,400
Building/Office	" 26,050

Number of Workers: 7

Investment per Worker: Shs. 6,493

Annual Revenue (Sales):

Production at full Capacity	" 102,000
250 kg/day x 20 days x 12 months x 1/70 per kg	
Production at 70% Capacity	" 71,400
(a) x 70 % =	

Annual Total Costs: " 70,369

Labour Costs " 37,800

Raw/Subsidiary Costs " 18,000

250 kg/day x 20 days x 12 months x-/30

Depreciation Costs " 3,243

- Machines/Equipment (10 years) " 1,940

- Building/Office (20 years) " 1,303

Maintenance Costs " 1,940

Interest Costs " 3,636

(8% of Initial Investment)

Other Costs " 5,805

Annual Net Profits:

At full Capacity " 31,631

At 70% Capacity " 1,031

Economic Rate of Return (to Initial Investment):

At full Capacity 69.6 %

At 70% Capacity. 2.3 %

7. ANIMAL FEEDS PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	102,000	250 kg/day x 20 days x 12 months x 1/70 per
Fixed Capital Costs	45,450	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	19,400	A crusher, a mixer, etc. Shs.19,400
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	59,770	
Raw & Sub-Materials	20,030	
Main Materials		250 kg/day x Shs.0.30/kg x 20 days/M x 12M = Shs.18,000
		Fuel: 6.25 l/day x 20 days/M x 12M x Shs.1.35/l = Shs.2,025
Salaries/Wages	37,800	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 5 Persons x 12M = Shs.22,800/Year
Maintenance Costs	1,940	(Machine & Equipment) Shs.19,400 x 10% = Shs.1,940
Utilities Costs		-
Other Costs	3,780	(Salaries/Wages) Shs.37,800 x 10% = Shs.3,780/Year

7. ANIMAL FEEDS PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1		Y2		Y3		Y4		Y5	
	Cost Est.	F.C.P. Est.	Cost Est.	F.C.P. Est.	Cost Est.	F.C.P. Est.	Cost Est.	F.C.P. Est.	Cost Est.	F.C.P. Est.
Fixed Capital Required										
Building & Shed	25,050									
Machines & Equipment	19,400	19,400								
Office Equipment	1,000									
Infrastructure										
Other										
Subtotal	45,450	19,400								
Working Capital Required										
Raw/Sub Materials	20,100		20,100		21,150		21,150		22,250	
Salaries & Wages	37,800		37,800		39,700		39,700		41,700	
Maintenance Costs	1,950		1,950		1,950		1,950		1,950	
Utility Service Costs										
Other Costs	(3,780)		(3,780)		(3,970)		(3,970)		(4,170)	
Subtotal	59,850		59,850		62,800		62,800		65,900	
Grand Total	105,300	19,400	59,850		62,800		62,800		65,900	

8. POTATO AND OTHER STARCH PROJECT

Products: Starch

Initial Investment:	Shs. 86,600
Machines/Equipment	" 50,000
Building/Office	" 36,000
Number of Workers:	7
Investment per Worker:	Shs. 12,371
Annual Revenue (Sales):	
Production at full Capacity 180 kg/day x 20 days x 12 months x 3/50	" 151,200
Production at 70% Capacity (a) x 70 % =	" 105,840
Annual Total Costs:	" 96,928
Labour Costs	" 37,800
Raw/Subsidiary Costs	" 34,560
Depreciation Costs	" 6,830
- Machines/Equipment (10 years)	" 5,000
- Building/Office (20 years)	" 1,830
Maintenance Costs	" 5,000
Interest Costs (8% of Initial Investment)	" 6,928
Other Costs	" 5,805
Annual Net Profits:	
At full Capacity	" 54,272
At 70% Capacity	" 8,912
Economic Rate of Return (to Initial Investment):	
At full Capacity	62.7 %
At 70% Capacity.	10.3 %

8. POTATO AND OTHER STARCH PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	151,200	180 kg/day x 20 days x 12 months x 3/50 per kg
Fixed Capital Costs	86,600	
Building/Sheds Factory	35,600	Shs.835/m ² x 40m ² = Shs.35,600
Machine/Equipment	50,000	A grinder, etc. Shs.50,000
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	79,390	
Raw & Sub-Materials	36,590	
Main Materials		Shs.0.80/kg x 180 kg/day x 20 days/M x 12M = Shs.34,560 Fuel: Shs.2,025
Salaries/Wages	37,800	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 5 Persons x 12M = Shs.22,800/Year
Maintenance Costs	5,000	(Machine & Equipment) Shs.50,000 x 10% = Shs.5,000
Utilities Costs	-	
Other Costs	3,780	(Salaries/Wages) Shs.37,800 x 10% = Shs.3,780/Year

8. POTATO AND OTHER STARCH PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	35,600				
Machines & Equipment	50,000	39,500			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	86,600	39,500			
Working Capital Required					
Raw/Sub Materials	36,600	36,600	37,450	37,450	39,350
Salaries & Wages	37,800	37,800	39,700	39,700	41,700
Maintenance Costs	5,000	5,000	5,000	5,000	5,000
Utility Service Costs					
Other Costs	(3,780)	(3,780)	(3,970)	(3,970)	(4,170)
Subtotal	79,400	79,400	82,150	82,150	86,050
Grand Total	166,000	39,500	82,150	82,150	86,050

9. MEAT PROCESSING PROJECT

Products: Smoked Meat

Initial Investment:	Shs. 32,950
Machines/Equipment	" 6,900
Building/Office	" 26,050
Number of Workers:	3
Investment per Worker:	Shs. 10,983
Annual Revenue (Sales):	
Production at full Capacity	" 480,000
100 kg/day x 20 days x 12 months x 20 per kg	
Production at 70% Capacity	" 336,000
(a) x 70 % =	
Annual Total Costs:	" 323,279
Labour Costs	" 26,600
Raw/Subsidiary Costs	" 288,000
Depreciation Costs	" 2,683
- Machines/Equipment (5 years)	" 1,380
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 700
Interest Costs	" 2,636
(8 % of Initial Investment)	
Other Costs	" 2,660
Annual Net Profits:	
At full Capacity	" 156,721
At 70 % Capacity	" 12,721
Economic Rate of Return (to Initial Investment):	
At full Capacity	475.7 %
At 70% Capacity.	38.6 %

Note: Raw materials' costs are based on prevailing market prices.

9. MEAT PROCESSING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	480,000	100 kg/day x 20 days x 12 months x 20 per kg
Fixed Capital Costs	32,950	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	6,900	A local-made smoking unit, etc. Shs.6,900
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	315,340	
Raw & Sub-Materials	288,000	
Main Materials		Shs.12.00/kg x 100 kg/day x 20 days/M x 12M = Shs.288,000
Salaries/Wages	26,640	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 4 Persons x 12M = Shs.18,240/Year
Maintenance Costs	700	(Machine & Equipment) Shs.6,900 x 10% = Shs.700
Utilites Costs		-
Other Costs	2,664	(Salaries/Wages) Shs.26,640 x 10% = Shs.2,664/Year

9. MEAT PROCESSING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,100				
Machines & Equipment	6,900				
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	33,000				
Working Capital Required					
Raw/Sub Materials	288,000	288,000	302,400	302,400	317,520
Salaries & Wages	26,600	26,600	27,950	27,950	29,350
Maintenance Costs	700	700	700	700	700
Utility Service Costs					
Other Costs	(2,660)	(2,660)	(2,800)	(2,800)	(2,940)
Subtotal	315,300	315,300	331,050	331,050	347,570
Grand Total	348,300	315,300	331,050	331,050	347,570

10. BONE CRUSHING PROJECT

Products: Bone Powder

Initial Investment:	Shs. 51,050
Machines/Equipment	" 25,000
Building/Office	" 26,050
Number of Workers:	10
Investment per Worker:	Shs. 5,105
Annual Revenue (Sales):	
Production at full Capacity 150 kg/day x 20 days x 12 months x 3	" 108,000
Production at 70% Capacity (a) x 70 % =	" 75,600
Annual Total Costs:	" 72,196
Labour Costs	" 49,440
Raw/Subsidiary Costs 150 kg/day x 20 days x 12 months x -/15 per kg	" 5,400
Depreciation Costs	" 3,803
- Machines/Equipment (10 years)	" 2,500
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 2,500
Interest Costs (8 % of Initial Investment)	" 4,084
Other Costs	" 6,969
Annual Net Profits:	
At full Capacity	" 35,804
At 70% Capacity	" 3,404
Economic Rate of Return (to Initial Investment):	
At full Capacity	70 %
At 70% Capacity.	6.7 %

10. BONE CRUSHING PROJECT: Basic data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	108,000	150 kg/day x 20 days x 12 months x 3 per kg
Fixed Capital Costs	51,050	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	25,000	A crushing machine, etc. Shs.25,000
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	64,765	
Raw & Sub-Materials	12,825	
Main Materials		Bone: Shs.0.30/kg x 150 kg/day x 20 days/M x 12M = Shs.10,800 Fuel: Shs.2,025
Salaries/Wages	49,440	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 9 Persons x 12M = Shs.41,040/Year
Maintenance Costs	2,500	(Machine & Equipment) Shs.25,000 x 10% = Shs.2,500
Other Costs	4,944	(Salaries/Wages) Shs.49,440 x 10% = Shs.4,944/Year

10. BONE CRUSHING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P.	F.C.P.	F.C.P.	F.C.P.	F.C.P.
	Est.	Est.	Est.	Est.	Est.
Fixed Capital Required					
Building & Shed	25,100				
Machines & Equipment	25,000	25,000			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	51,100	25,000			
Working Capital Required					
Raw/Sub Materials	10,800	10,800	11,350	11,350	11,950
	2,050	2,050	2,050	2,050	2,050
Salaries & Wages	49,440	49,440	51,950	57,950	54,550
Maintenance Costs	2,510	2,510	2,510	2,510	2,510
Utility Service Costs					
Other Costs	(4,940)	(4,940)	(5,200)	(5,200)	(5,460)
Subtotal	64,800	64,800	67,500	67,500	71,060
Grand Total	115,900	25,000	67,500	67,500	71,060

11. ANIMAL COOKING OIL PROJECT

Products: Animal Cooking Oil

Initial Investment:	Shs. 28,827
Machines/Equipment	" 2,777
Building/Office	" 26,050
Number of Workers:	6
Investment per Worker:	Shs. 4,804
Annual Revenue (Sales):	
Production at full Capacity 100 kg/day x 20 days x 7 per k- x 12 months	" 168,000
Production at 70% Capacity (a) x 70 % =	" 117,600
Annual Total Costs:	" 110,508
Labour Costs	" 31,200
Raw/Subsidiary Costs	" 72,000
Depreciation Costs	" 1,581
- Machines/Equipment (10 years)	" 278
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 300
Interest Costs (8 % of Initial Investment)	" 2,307
Other Costs	" 3,120
Annual Net Profits:	
At full Capacity	" 57,492
At 70% Capacity	" 7,092
Economic Rate of Return (to Initial Investment):	
At full Capacity	199.5 %
At 70% Capacity	24.6 %

Note: Slaughtering skills have to be up-graded to separate fat from meat.

11. ANIMAL COOKING OIL PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	168,000	100 kg/day x 20 days x 7 per kg x 12 months
Fixed Capital Costs	28,827	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	2,777	Tools and pans Shs.2,777
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.1,000
Operation Costs	104,500	
Raw & Sub-Materials	72,000	Shs.3/kg x 100 kg/day x 20 days/M x 12M = Shs.72,000
Main Materials		
Salaries/Wages	31,200	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x - Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 5 Persons x 12M = Shs.22,800/Year
Maintenance Costs	300	(Machine & Equipment) Shs.2,777 x 10% = Shs.300
Utilities Costs	-	
Other Costs	3,120	(Salaries/Wages) Shs.31,200 x 10% = Shs.3,120/Year

11. ANIMAL COOKING OIL PROJECT (Estimation in Early 1977) : Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,100				
Machines & Equipment	2,700				
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	28,800				
Working Capital Required					
Raw/Sub Materials	72,000	72,000	75,600	75,600	79,400
Salaries & Wages	31,200	31,200	32,800	32,800	34,450
Maintenance Costs	300	300	300	300	300
Utility Service Costs					
Other Costs	(3,120)	(3,120)	(3,280)	(3,280)	(3,450)
Subtotal	103,500	103,500	108,700	108,700	114,150
Grand Total	132,300	103,500	108,700	108,700	114,150

12. CHARCOAL MAKING PROJECT

Products: Charcoal

Initial Investment:	Shs. 11,727
Machines/Equipment	" 2,777
Building/Office	" 8,950
Number of Workers:	5
Investment per Worker:	Shs. 2,345
Annual Revenue (Sales):	
Production at full Capacity 200 kg/day x 20 days x 12 months x 1/20 per kg	" 57,600
Production at 70% Capacity (a) x 70 % =	" 40,320
Annual Total Costs:	" 38,704
Labour Costs	" 26,640
Raw/Subsidiary Costs 200 kg/day x 20 days x 12 months x -/15 per kg	" 7,200
Depreciation Costs	" 1,004
- Machines/Equipment (5 years)	" 556
- Building/Office (20 years)	" 448
Maintenance Costs	" 260
Interest Costs (8 % of Initial Investment)	" 939
Other Costs	" 2,660
Annual Net Profits:	
At full Capacity	" 18,896
At 70% Capacity	" 1,616
Economic Rate of Return (to Initial Investment):	
At full Capacity	161.2 %
At 70% Capacity	13.8 %

12. CHARCOAL MAKING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	57,600	200 kg/day x 20 days x 12 months x 1/20 per kg
Fixed Capital Costs	11,727	
Building/Sheds Factory	8,350	Shs.835/m ² x 10m ² = Shs.8,350
Machine/Equipment	2,777	A kiln (local-made), tools, etc. Shs.2,777
Office Equipment	600	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.600
Operation Costs	32,317	
Raw & Sub-Materials	5,400	
Main Materials		Shs.0.30/kg x 75 kg/day x 20 days/M x 12M = Shs.5,400
Salaries/Wages	26,640	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 4 Persons x 12M = Shs.18,240/Year
Maintenance Costs	277	(Machine & Equipment) Shs.2,777 x 10% = Shs.277
Utilities Costs	-	-
Other Costs	2,660	(Salaries/Wages) Shs.26,640 x 10% = Shs.2,660/Year

12. CHARCOAL MAKING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.
Fixed Capital Required					
Building & Shed	8,300	-			
Machines & Equipment	2,800	-			
Office Equipment	600	-			
Infrastructure					
Other					
Subtotal	11,700	-			
Working Capital Required					
Raw/Sub Materials	5,400	5,400	5,700	5,700	6,000
Salaries & Wages	26,640	26,640	28,000	28,000	29,400
Maintenance Costs	260	260	260	260	260
Utility Service Costs					
Other Costs	(2,660)	(2,660)	(2,800)	(2,800)	(2,940)
Subtotal	32,300	32,300	33,960	33,960	35,660
Grand Total	44,000	32,300	33,960	33,960	35,660

13. WOODEN TOYS AND EDUCATIONAL MATERIALS PROJECT

Products: Wooden Toys and Educational Materials

Initial Investment:	Shs. 46,916
Machines/Equipment	" 4,166
Building/Office	" 42,750
Number of Workers:	8
Investment per Worker:	Sha. 5,865
Annual Revenue (Sales):	
Production at full Capacity	" 180,000
30 sets/day x 20 days x 12 months x 25 per set	
Production at 70% Capacity	" 126,000
(a) x 70 % =	
Annual Total Costs:	" 118,692
Labour Costs	52,560
Raw/Subsidiary Costs	" 50,400
30 sets x 20 days x 12 months x 7 per set	
Depreciation Costs	" 6,305
- Machines/Equipment (10 years)	" 4,167
- Building/Office (20 years)	" 2,138
Maintenance Costs	" 417
Interest Costs	" 3,754
(8 % of Initial Investment)	
Other Costs	" 5,256
Annual Net Profits:	
At full Capacity	" 61,308
At 70% Capacity	" 7,308
Economic Rate of Return (to Initial Investment):	
At full Capacity	130.7 %
At 70% Capacity.	15.6 %

13. WOODEN TOYS & EDUCATIONAL MATERIALS MAKING PROJECT: Basic Data for Estimation

	Total	Contents
Production Capacity	180,000	30 sets/day x 20 days x 12 months x 25 per set
Fixed Capital Costs	46,900	
Building/Sheds Factory	41,750	Shs.835/m ² x 50m ² = Shs.41,750
Machine/Equipment	4,150	5 Carpenter sets (Manuat)
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	77,000	
Raw & Sub-Materials	24,000	Shs.10/unit x 2 sets x 5 Persons x 20 days x 12 months = Shs.24,000
Salareis/Wages	52,560	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 6 Persons x 12M = Shs.39,600/Year
Non-Skilled		@Shs.380/M x 1 Person x 12M = Shs.4,560/Year
Maintenance Costs	440	(Machine & Equipment) Shs.4,150 x 11% = 456.50 ÷ 440
Utilities Costs	-	
Other Costs	(5,256)	(Salaries/Wages) Shs.52,560 x 10% = Shs.5,256/Year

13. WOODEN TOYS & EDUCATION MATERIALS (Estimation in Early 1977): Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	42,000				
Machines & Equipment	4,200	4,200			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	47,200	4,200			
Working Capital Required					
Raw/Sub Materials	24,000	24,000	25,200	25,200	26,500
Salaries & Wages	52,560	52,560	55,200	55,200	58,000
Maintenance Costs	440	440	440	440	440
Utility Service Costs					
Other Costs	(5,260)	(5,260)	(5,520)	(5,520)	(5,800)
Subtotal	77,000	77,000	80,840	80,840	84,940
Grand Total	129,460	4,200	80,840	80,840	84,940

14. WHEELBARROW PROJECT

Products: Wheelbarrow

Initial Investment:	Shs. 37,177
Machines/Equipment	" 2,777
Building/Office	" 34,400
Number of Workers:	5
Investment per Worker:	Shs. 7,435

Annual Revenue (Sales):

Production at full Capacity	" 192,000
5 Units/day x 20 days x 12 months x 160 per unit	
Production at 70% Capacity	" 134,400
(a) x 70 % =	

Annual Total Costs:	" 132,887
Labour Costs	" 39,360
Raw/Subsidiary Costs	" 84,000
5 units/day x 20 days x 12 months x 70 per unit	
Depreciation Costs	" 2,276
- Machines/Equipment (5 years)	" 556
- Building/Office (20 years)	" 1,720
Maintenance Costs	" 340
Interest Costs	" 2,975
(8 % of Initial Investment)	
Other Costs	" 3,936

Annual Net Profits:

At full Capacity	" 59,113
At 70% Capacity	" 1,513

Economic Rate of Return (to Initial Investment):

At full Capacity	159 %
At 70% Capacity.	4.1 %

14. WHEELBARROW PROJECT : Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	192,000	5 units/day x 20 days x 12 months x 160 per unit
Fixed Capital Costs	37,200	
Building/Sheds Factory	33,400	Shs.835/m ² x 40m ² = Shs.33,400
Machine/Equipment	2,800	3 sets wood working tools
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	106,900	
Raw & Sub-Materials	69,200	
Main Materials		Wood & Steel (wheel shaft and wheel) Shs.70/unit x 5 units x 20 days x 12M = Shs.67,200
Salaries/Wages	39,360	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 4 Persons x 12M = Shs.26,400/Year
Non-Skilled		@Shs.380/M x 1 Person x 12M = Shs.4,560/Year
Maintenance Costs	340	(Machine & Equipment) Shs.2,800 x 12% = Shs.336 ÷ 340
Utilities Costs	-	-
Other Costs	(3,936)	(Salaries/Wages) Shs.39,360 x 10% = Shs.3,936/Year

14. WHEELBARROW PROJECT (Estimation in Early 1977): Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	33,400				
Machines & Equipment	2,800	2,800			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	37,200	2,800			
Working Capital Required					
Raw/Sub Materials	67,200	67,200	70,600	70,600	74,150
Salaries & Wages	39,360	39,360	41,350	41,350	43,450
Maintenance Costs	340	340	340	340	340
Utility Service Costs					
Other Costs	(3,940)	(3,940)	(4,140)	(4,140)	(4,350)
Subtotal	106,900	106,900	112,290	112,290	117,940
Grand Total	144,100	2,800	112,290	112,290	117,940

15. ROOF TILE PROJECT

Products: Roof Tile, Brick, Clay Pipe

Initial Investment:	Shs. 36,727
Machines/Equipment	" 27,777
Building/Office	" 8,950
Number of Workers:	13
Investment per Worker:	Shs. 2,825
Annual Revenue (Sales):	
Production at full Capacity	" 115,200
600 pieces/day x 20 days x 12 months x -/80 per piece	
Production at 70% Capacity	" 80,640
(a) x 70 % =	
Annual Total Costs:	" 78,135
Labour Costs	" 47,040
Raw/Subsidiary Costs	" 14,688
6 kg/p x 600 pieces x 20 days x 12 months x 17 per ton	
Depreciation Costs	" 6,004
- Machines/Equipment (5 years)	" 5,556
- Building/Office (20 years)	" 448
Maintenance Costs	" 2,760
Interest Costs	" 2,939
(8 % of Initial Investment)	
Other Costs	" 4,704
Annual Net Profits:	
At full Capacity	" 37,065
At 70% Capacity	" 2,505
Economic Rate of Return (to Initial Investment):	
At full Capacity	100.9 %
At 70% Capacity.	6.8 %

Note: The roof tile is considered in this case.

15. ROOF TILE PROJECT : Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	115,200	600 pieces/day x 20 days x 12 months x 0.8 per piece
Fixed Capital Costs	36,700	
Building/Sheds Factory	8,350	Shs.835/m ² x 10m ² = Shs.8,350
Machine/Equipment	27,750	Kiln, agetator, molding sets, dryer
Office Equipment	600	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	49,800	
Raw & Sub-Materials		
Main Materials	-	Clay
Salareis/Wages	46,920	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 7 Persons x 12M = Shs.31,920/Year
Maintenance Costs	2,880	(Machine & Equipment) Shs.27,750 x 10.4% = 2,886 ÷ 2,880
Utilities Costs		-
Other Costs	(4,692)	(Salaries/Wages) Shs.46,920 x 10% = Shs.4,692/Year

15. ROOF TILE PROJECT (Estimation in Early 1977) : Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	8,400				
Machines & Equipment	27,800	22,300			
Office Equipment	500				
Infrastructure					
Other					
Subtotal	36,700	22,300			
Working Capital Required					
Raw/Sub Materials	-				
Salaries & Wages	47,040	47,040	49,400	49,400	51,900
Maintenance Costs	2,760	2,760	2,760	2,760	2,760
Utility Service Costs					
Other Costs	(4,710)	(4,710)	(4,940)	(4,940)	(5,190)
Subtotal	49,800	49,800	52,160	52,160	54,660
Grand Total	86,500	22,300	52,160	52,160	54,660

16. GEMSTONE POLISHING PROJECT

Products: Polished Gemstone

Initial Investment:	Shs. 68,100
Machines/Equipment	" 50,000
Building/Office	" 18,100
Number of Workers:	21
Investment per Worker:	Shs. 3,243
Annual Revenue (Sales):	
Production at full Capacity	" 211,880
Production at 70% Capacity (a) x 70 % =	" 148,316
Annual Total Costs:	" 134,832
Labour Costs	" 103,440
Raw/Subsidiary Costs	--
Depreciation Costs	" 5,905
- Machines/Equipment (10 years)	" 5,000
- Building/Office (20 years)	" 905
Maintenance Costs	" 5,000
Interest Costs (8 % of Initial Investment)	" 5,448
Other Costs	" 12,564
Annual Net Profits:	
At full Capacity	" 77,048
At 70% Capacity	" 13,484
Economic Rate of Return (to Initial Investment):	
At full Capacity	138.7 %
At 70% Capacity.	0.24 %

16. GEMSTONE POLISHING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	211,800	
Fixed Capital Costs	68,100	
Building/Sheds Factory	16,500	Shs.1,650/m ² x 10m ² = Shs.16,500
Machine/Equipment	50,000	Cutting machine, grinding machine, generator, compressor, rock drill
Office Equipment	1,600	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	112,685	
Raw & Sub-Materials		
Main Materials		
Salaries/Wages	103,440	
Manager		@Shs.700/M x 2 Persons x 12M = Shs.16,800/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 12 Persons x 12M = Shs.86,640/Year
Maintenance Costs	5,000	(Machine & Equipment) Shs.50,000 x 10% = Shs.5,000
Utilities Costs	4,245	Heavy Oil 2,025 Oil 0.25 x 1.5 x 5M x 20 days x 12M = Shs.22,201
Other Costs	(10,344)	(Salaries/Wages) Shs.103,440 x 10% = Shs.10,344/Year

16. GEMSTONE POLISHING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P.	F.C.P.	F.C.P.	F.C.P.	F.C.P.
Fixed Capital Required					
Building & Shed	16,500				
Machines & Equipment	50,000	50,000			
Office Equipment	1,600				
Infrastructure					
Other					
Subtotal	68,100	50,000			
Working Capital Required					
Raw/Sub Materials	2,050	2,050	2,050	2,050	2,050
Salaries & Wages	103,440	103,440	108,650	108,650	114,100
Maintenance Costs	5,000	5,000	5,000	5,000	5,000
Utility Service Costs	2,210	2,210	2,350	2,350	2,500
Other Costs	(10,350)	(10,350)	(10,870)	(10,870)	(11,450)
Subtotal	112,700	112,700	118,050	118,050	123,650
Grand Total	180,800	50,000	118,050	118,050	123,650

17. NATURAL STONE BRICK PROJECT
(EXPANSION PROJECT)

Products: Stone-Brick

Initial Investment:	Shs. 55,555
Machines/Equipment	" 55,555
Building/Office	--
Number of Workers:	2
Investment per Worker:	Shs. 27,778

Annual Revenue (Sales):

Production at full Capacity	" 198,000
165 pieces/day x 20 days x 12 months x 5 per piece	
Production at 70% Capacity	" 138,600
(a) x 70 % =	

Annual Total Costs:	" 120,901
Labour Costs	" 13,200
Raw/Subsidiary Costs	" 89,100
Depreciation Costs	" 5,556
- Machines/Equipment (10 years)	" 5,556
- Building/Office	
Maintenance Costs	" 5,555
Interest Costs	" 4,445
(8 % of Initial Investment)	
Other Costs	" 3,045

Annual Net Profits:

At full Capacity	" 77,099
At 70% Capacity	" 17,699

Economic Rate of Return (to Initial Investment):

At full Capacity	138.8 %
At 70% Capacity.	31.9 %

18. SCRAP METAL TREATMENT PROJECT

Products:

Initial Investment:	Shs. 131,172
Machines/Equipment	" 122,222
Building/Office	" 8,950
Number of Workers:	7
Investment per Worker:	Shs. 18,739

Annual Revenue (Sales):

Production at full Capacity	" 276,000
1 ton/day x 20 days x 12 months x 1150 per ton	
Production at 70% Capacity	" 193,200
(a) x 70 % =	

Annual Total Costs:

Labour Costs	" 48,000
Raw/Subsidiary Costs	" 96,000
1 ton/day x 20 days x 12 months x 400 per ton	
Depreciation Costs	" 12,671
- Machines/Equipment	" 12,223
- Building/Office	" 448
Maintenance Costs	" 12,220
Interest Costs	" 10,494
(8 % of Initial Investment)	
Other Costs	" 11,760

Annual Net Profits:

At full Capacity	" 84,855
At 70% Capacity	" 2,055

Economic Rate of Return (to Initial Investment):

At full Capacity	64.7 %
At 70% Capacity.	1.6 %

Note: Price of scrap metal per ton has to be checked. There is a different information on the price of scrap metal, which is said to be Shs. 160 per ton.

18. SCRAP METAL TREATMENT PROJECT : Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	276,000	1 ton/day x 20 days x 12 months x 1,150 per ton
Fixed Capital Costs	131,172	
Building/Sheds Factory	8,350	Shs.835/m ² x 10m ² = Shs.8,350
Machine/Equipment	122,222	Welding machine, crane, chaine block, reccar
Office Equipment	600	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	157,400	
Raw & Sub-Materials	93,300	1 x 20 days x 12M x
Main Materials		
Salaries/Wages	48,000	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 6 Persons x 12M = Shs.39,600/Year
Maintenance Costs	12,220	(Machine & Equipment) Shs.122,222 x 10% ÷ 12,220
Utilities Costs	3,880	Fuel Oil
Other Costs	(4,800)	(Salaries/Wages) Shs.48,000 x 10% = Shs.4,800/Year

18. SCRAP METAL TREATMENT PROJECT (Estimation in Early 1977): Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P.	F.C.P.	F.C.P.	F.C.P.	F.C.P.
	Est.	Est.	Est.	Est.	Est.
Fixed Capital Required					
Building & Shed	8,350				
Machines & Equipment	122,250	122,500			
Office Equipment	600				
Infrastructure					
Other					
Subtotal	131,200	122,500			
Working Capital Required					
Raw/Sub Materials	93,350	93,350	98,000	98,000	102,000
	3,900	3,900	4,100	4,100	4,300
Salaries & Wages	48,000	48,000	50,400	50,400	52,900
Maintenance Costs	1,400	4,900	1,400	6,300	1,400
Utility Service Costs					
Other Costs	(4,800)	(4,800)	(5,040)	(5,040)	(5,290)
Subtotal	146,650	150,150	153,900	158,800	161,600
Grand Total	288,600	122,500	51,800	56,700	54,320

19. TAILORING PROJECT

Products: School Uniforms and other Uniforms

Initial Investment:	Shs. 103,116
Machines/Equipment	" 41,666
Building/Office	" 61,450
Number of Workers:	15
Investment per Worker:	Shs. 6,874
Annual Revenue (Sales):	
Production at full Capacity 60 units/day x 20 days x 12 months x 40 per unit	" 576,000
Production at 70% Capacity (a) x 70 % =	" 403,200
Annual Total Costs:	" 366,640
Labour Costs	" 70,440
Raw/Subsidiary Costs	" 262,500
Depreciation Costs	" 7,240
- Machines/Equipment (10 years)	" 4,167
- Building/Office (20 years)	" 3,073
Maintenance Costs	" 4,166
Interest Costs (8% of Initial Investment)	" 8,250
Other Costs	" 14,044
Annual Net Profits:	
At full Capacity	" 209,460
At 70% Capacity	" 36,560
Economic Rate of Return (to Initial Investment):	
At full Capacity	203.1 %
At 70% Capacity.	35.4 %

19. TAILORING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	576,000	60 units/day x 20 days x 12 months x 40 per unit
Fixed Capital Costs	103,100	
Building/Sheds Factory	58,450	Shs.835/m ² x 70m ² = Shs.58,450
Machine/Equipment	41,650	6 Sawing machines, 5 Electric Irons, 1 Cutting machine
Office Equipment	3,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	343,100	
Raw & Sub-Materials	262,500	15,000 units/year x Shs.25 x 70% = 262,500
Salaries/Wages	70,440	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 14 Persons x 12M = Shs.63,840/Year
Maintenance Costs	4,160	(Machine & Equipment) Shs.41,650 x 10% = 4,165 ÷ 41,601
Utilities Costs	6,000	Electrocity
Other Costs	(7,044)	(Salaries/Wages) Shs.70,440 x 10% = Shs.7,044/Year

19. TAILORING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	58,450				
Machines & Equipment	41,650	41,650			
Office Equipment	3,000				
Infrastructure					
Other					
Subtotal	103,100	41,650			
Working Capital Required					
Raw/Sub Materials	262,500	262,500	275,650	275,650	289,450
Salaries & Wages	70,440	70,440	74,000	74,000	77,700
Maintenance Costs	4,160	4,160	4,160	4,160	4,160
Utility Service Costs	6,000	6,000	6,300	6,300	6,650
Other Costs	(7,050)	(7,050)	(7,400)	(7,400)	(7,800)
Subtotal	343,100	343,100	360,110	360,110	377,960
Grand Total	446,200	41,650	343,100	360,110	377,960

20. KNITTING PROJECT

Products: Knitted Wear such as Pullover and Sweater

Initial Investment:	Shs. 86,950
Machines/Equipment	" 27,500
Building/Office	" 59,450

Number of Workers: 14

Investment per Worker: Shs. 6,211

Annual Revenue (Sales):

Production at full Capacity	" 486,000
9 units/day x 20 days x 12 months x 225 per unit	
Production at 70% Capacity	" 340,200
(a) x 70 % =	

Annual Total Costs:	" 338,209
Labour Costs	" 57,800
Raw/Subsidiary Costs	" 259,200
Depreciation Costs	" 5,723
- Machines/Equipment (10 years)	" 2,750
- Building/Office (20 years)	" 2,973
Maintenance Costs	" 2,750
Interest Costs (8 % of Initial Investment)	" 6,956
Other Costs	" 5,780

Annual Net Profits:

At full Capacity	" 145,800
At 70% Capacity	" 1,991

Economic Rate of Return (to Initial Investment):

At full Capacity	167.7 %
At 70% Capacity.	2.3 %

20. KNITTING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	486,000	9 units/day x 20 days x 12 months x 225 per unit
Fixed Capital Costs		
Building/Sheds Factory	58,450	Shs.835/m ² x 70m ² = Shs.58,450
Machine/Equipment	27,500	9 Manual knitting machines, 1 Sawing machine, Charcoal iron
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs		
Raw & Sub-Materials	259,200	Shs.120 x 180 units/M x 12M = 259,200
Main Materials		
Salaries/Wages	57,800	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Non-Skilled		@Shs.380/M x 13 Persons x 12M = Shs.49,400/Year
Maintenance Costs	2,750	(Machine & Equipment) Shs.27,500 x 10% = 2,750
Utilities Costs	-	
Other Costs	(5,780)	(Salaries/Wages) Shs.57,800 x 10% = Shs.5,780/Year

20. KNITTING PROJECT (Estimation in Early 1977): Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	58,450				
Machines & Equipment	27,550	27,550			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	87,000	27,550			
Working Capital Required					
Raw/Sub Materials	259,200	259,200	272,200	272,200	285,850
Salaries & Wages	57,800	57,800	60,700	60,700	63,750
Maintenance Costs	2,800	2,800	2,800	2,800	2,800
Utility Service Costs					
Other Costs	(5,780)	(5,780)	(6,070)	(6,070)	(6,380)
Subtotal	319,800	319,800	335,700	335,700	352,400
Grand Total	406,800	27,550	319,800	335,700	352,400

21. BICYCLE SADDLE PROJECT

Products: Bicycle Saddle

Initial Investment:	Shs. 90,172
Machines/Equipment	" 47,222
Building/Office	" 42,950
Number of Workers:	10
Investment per Worker:	Shs. 9,017
Annual Revenue (Sales):	
Production at full Capacity	" 582,000
100 pieces/day x 20 days x 12 months x 22 per piece	
Production at 70% Capacity	" 369,600
(a) x 70 % =	
Annual Total Costs:	" 362,216
Labour Costs	" 49,440
Raw/Subsidiary Costs	" 290,025
Depreciation Costs	" 6,871
- Machines/Equipment (10 years)	" 4,723
- Building/Office (20 years)	" 2,148
Maintenance Costs	" 4,722
Interest Costs	" 7,214
(8 % of Initial Investment)	
Other Costs	" 4,944
Annual Net Profits:	
At full Capacity	" 164,784
At 70% Capacity	" 6,384
Economic Rate of Return (to Initial Investment):	
At full Capacity	182.7 %
At 70% Capacity.	7.0 %

Note: It is quite possible to diversify products by just replacing various molds.

21. BICYCLE SADDLE PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	582,000	100 pieces/day x 20 days x 12 months x 22 per piece
Fixed Capital Costs	90,200	
Building/Sheds	41,950	Shs.835/m ² x 50m ² = Shs.41,950
Machine/Equipment	47,250	Pressing machine, cutting machine, tools
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	344,200	
Raw & Sub-Materials	288,000	
Main Materials		Shs. 12/unit x 24,000 units/year = Shs.288,000
Salaries/Wages	49,440	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x Person x 12M = Shs. /Year
Unskilled		@Shs.380/M x 9 Persons x 12M = Shs.41,040/Year
Maintenance Costs	4,735	(Machine & Equipment) Shs.47,250 x 10% = 4,725 ÷ 4,735
Utilities Costs	2,025	Heavy Oil
Other Costs	(4,944)	(Salaries/Wages) Shs.49,440 x 10% = Shs.4,944/Year

21. BICYCLE SADDLE PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	41,950				
Machines & Equipment	47,250	47,250			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	90,200	47,250			
Working Capital Required					
Raw/Sub Materials	288,000	288,000	302,400	302,400	317,500
Salaries & Wages	2,050	2,050			
Maintenance Costs	49,440	49,440	51,950	51,950	54,550
Utility Service Costs	4,710	4,710	4,710	4,710	4,710
Other Costs	(4,950)	(4,950)	(5,200)	(5,200)	(5,460)
Subtotal	344,200	344,200	359,060	359,060	376,810
Grand Total	434,400	47,280	359,060	359,060	376,810

22. OVAL BRIQUETTE PROJECT

Products: Briquette for Heating and Cooking

Initial Investment:	Shs. 25,616
Machines/Equipment	" 16,666
Building/Office	" 8,950
Number of Workers:	6
Investment per Worker:	Shs. 4,269
Annual Revenue (Sales):	
Production at full Capacity 1,500 pieces/day x 20 days x 12 months x 23 per piece	" 82,800
Production at 70% Capacity (a) x 70 % =	" 57,960
Annual Total Costs:	" 51,420
Labour Costs	" 33,240
Raw/Subsidiary Costs	" 9,025
Depreciation Costs	" 2,115
- Machines/Equipment (10 years)	" 1,667
- Building/Office (20 years)	" 448
Maintenance Costs	" 1,666
Interest Costs (8 % of Initial Investment)	" 2,050
Other Costs	" 3,324
Annual Net Profits:	
At full Capacity	" 31,380
At 70% Capacity	" 6,540
Economic Rate of Return (to Initial Investment):	
At full Capacity	122.5 %
At 70% Capacity.	25.5 %

Note: A storing and drying space is required additionally.
Sheds for the purpose are not necessarily strong.

22. OVAL BRIQUETTE PROJECT : Basic Data for Estimation

	Total	Contents	(unit:Tshs.)
Production Capacity	82,800	1,500 pieces/day x 20 days x 12 months x 23 per piece	
Fixed Capital Costs	25,600		
Building/Sheds Factory	8,350	Shs.835/m ² x 10m ² = Shs.8,350	
Machine/Equipment	16,650	Crusher, Generator	
Office Equipment	600	Desk/Desks, Chair/Chairs, Shelf/Shelves	
Operation Costs	43,900		
Raw & Sub-Materials	7,000	Coal powder Charcoal Saw dust	
Main Materials			
Salaries/Wages	33,240		
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year	
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year	
Non-Skilled		@Shs.380/M x 4 Persons x 12M = Shs.18,240/Year	
Maintenance Costs	1,635	(Machine & Equipment) Shs.16,650 x 10% = 1,635	
Utilities Cost	2,025	Heavy oil	
Other Costs	(3,324)	{Salaries/Wages} Shs.33,240 x 10% = Shs.3,324/Year	

22. OVAL BRIQUETTE PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Rshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	8,350				
Machines & Equipment	16,650	16,650			
Office Equipment	600				
Infrastructure					
Other					
Subtotal	25,600	16,650			
Working Capital Required					
Raw/Sub Materials	7,000	7,000	7,350	7,350	7,750
Salaries & Wages	2,050	2,050	2,050	2,050	2,050
Maintenance Costs	33,240	33,240	34,950	34,950	36,700
Utility Service Costs	1,610	1,610	1,610	1,610	1,610
Other Costs	(3,350)	(3,350)	(3,500)	(3,500)	(3,670)
Subtotal	43,900	43,900	46,960	46,960	48,110
Grand Total	69,500	16,650	46,960	46,960	48,110

23. OIL RE-VITALIZATION PROJECT

Products: Revitalized Industrial Oil

Initial Investment:	Shs. 103,821
Machines/Equipment	" 77,771
Building/Office	" 26,050
Number of Workers:	5
Investment per Worker:	Shs. 20,764
Annual Revenue (Sales):	
Production at full Capacity 40 l/hour x 20 days x 12 months x 2/50	" 120,000
Production at 70% Capacity (a) x 70 % =	" 84,000
Annual Total Costs:	" 79,784
Labour Costs	" 28,680
Raw/Subsidiary Costs 250 l/day x 20 days x 12 months x 20	" 12,000
Depreciation Costs	" 9,081
- Machines/Equipment (10 years)	" 7,778
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 7,779
Interest Costs (8 % of Initial Costs)	" 8,306
Other Costs	" 13,940
Annual Net Profits:	
At full Capacity	" 40,216
At 70% Capacity	" 4,216
Economic Rate of Return (to Initial Investment):	
At full Capacity	38.7 %
At 70% Capacity.	4.1 %

Note: To keep raw materials and products safely, it is recommended to have cemented floor even in the open air space. The necessary area is estimated to be 200 m. Remained dregs after processing would be burned in a drum stove.

23. OIL REVITALIZATION PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	120,000	40 ℓ/hour x 20 days x 12 months x 2/50 per ℓ
Fixed Capital Costs	62,200	
Building/Sheds Factory	25,050	Shs.835/m ² x 30m ² = Shs.25,050
Machine/Equipment	36,150	
Office Equipment	1,000	Desk/Desks, Chair/Chairs, Shelf/Shelves
Operation Costs	47,500	
Raw & Sub-Materials	10,080	Fuel (Petro): 80 km/day x 1/5 ℓ/km x Shs.350/ℓ x 15 days/M x 12M = Shs.10,080
Salaries/Wages	28,680	
Manager		@Shs.700/M x 1 Person x 12M = Shs.8,400/Year
Skilled		@Shs.550/M x 1 Person x 12M = Shs.6,600/Year
Non-Skilled		@Shs.380/M x 3 Persons x 12M = Shs.13,680/Year
Maintenance Costs	7,740	(Machine & Equipment) 36,150
Utilities Costs	1,000	
Other Costs	(2,868)	(Salaries/Wages) Shs.28,680 x 10% = Shs.2,868/Year

23. OIL REVITALIZATION PROJECT (Estimation in Early 1977) : Capital Requirement

(unit:Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est.	Cost Est.	Cost Est.	Cost Est.	Cost Est.
	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.	F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,050				
Machines & Equipment	36,150	36,150			
Office Equipment	1,000				
Infrastructure					
Other					
Subtotal	62,200	36,150			
Working Capital Required					
Raw/Sub Materials	10,080	10,080	10,600	10,600	11,150
Salaries & Wages	28,680	28,680	30,150	30,150	31,700
Maintenance Costs	7,740	7,740	7,740	7,740	7,740
Utility Service Costs	1,000	1,000	1,050	1,050	1,150
Other Costs	(2,870)	(2,870)	(3,050)	(3,050)	(3,170)
Subtotal	47,500	47,500	49,540	49,540	51,740
Grand Total	109,700	36,150	49,540	49,540	51,740

24. STONE CRUSHING PROJECT

Products: Crushed Stones for Buildings and Roads

Initial Investment:	Shs. 287,160
Machines/Equipment	" 261,110
Building/Office	" 26,050
Number of Workers:	21
Investment per Worker:	Shs. 22,089
Annual Revenue (Sales):	
Production at full Capacity 10 tons/day x 20 days x 12 months x 155	" 372,000
Production at 70% Capacity (a) x 70 % =	" 260,400
Annual Total Costs:	" 255,523
Labour Costs	" 156,960
Raw/Subsidiary Costs	" 6,480
Depreciation Costs	" 27,414
- Machines/Equipment (10 years)	" 26,111
- Building/Office (20 years)	" 1,303
Maintenance Costs	" 26,000
Interest Costs (8 % of Initial Investment)	" 22,973
Other Costs	" 15,696
Annual Net Profits:	
At full Capacity	" 116,477
At 70% Capacity	" 4,877
Economic Rate of Return (to Initial Investment):	
At full Capacity	40.6 %
At 70% Capacity.	1.7 %

24. STONE CRUSHING PROJECT: Basic Data for Estimation

(unit:Tshs.)

	Total	Contents
Production Capacity	372,000	10 tons/day x 20 days x 12 months x 155 per ton
Fixed Capital Costs	289,160	
Building/Sheds Factory	25,050	Shs.890/m ² x 30m ² = Shs.25,050
Machine/Equipment	261,110	A stone crusher, a small generator, a air compressor At the site Shs.38,888) = Shs.261,110 At Town Shs.222,222
Office Equipment	3,000	Desk/Desks, Chair/Chairs, Shelf/Shelves Shs.3,000
Operation Costs	189,440	
Raw & Sub-Materials	6,480	
Main Materials		Fuel: 20 l/day x 20 days/M x 12M x Shs.1/35/l = Shs.6,480
Salaries/Wages	156,960	
Manager	25,200	@Shs.700/M x 3 Persons x 12M = Shs.25,200/Year
Skilled	13,200	@Shs.550/M x 2 Persons x 12M = Shs.13,200/Year
Non-Skilled	118,560	@Shs.380/M x 26 Persons x 12M = Shs.118,560/Year
Maintenance Costs	26,000	(Machine & Equipment) Shs.261,110 x 10% = Shs.26,000/Year
Utilities Costs	-	-
Other Costs	15,700	(Salaries/Wages) Shs.156,960 x 10% = Shs.15,696/Year

24. STONE CRUSHING PROJECT (Estimation in Early 1977) : Capital Requirement

(unit: Tshs.)

	Y1	Y2	Y3	Y4	Y5
	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.	Cost Est. F.C.P. Est.
Fixed Capital Required					
Building & Shed	25,050				
Machines & Equipment	261,150	261,150			
Office Equipment	3,000				
Infrastructure					
Other					
Subtotal	289,200	261,150			
Working Capital Required					
Raw/Sub Materials	6,540	6,540	6,870	6,870	7,250
Salaries & Wages	156,960	156,960	164,810	164,810	173,050
Maintenance Costs	26,000	26,000	26,000	26,000	26,000
Utility Service Costs					
Other Costs	(15,600)	(15,600)	(1,650)	(1,650)	(1,730)
Subtotal	189,500	189,500	197,680	197,680	206,300
Grand Total	478,700	261,150	189,500	197,680	206,300

