

Table 6: Source of Fund (000 Br)

No	Source	% Share	Amount (Br)
1	Promoter's equity contribution	30	24,450
2	Bank Loan	70	57,050
Total		100	81,500

Table 7: Loan Disbursement and payment schedule (000 Br)

Years	Disbursement	Principal Repayment	Year ending balance	Interest payment
0	57,050		57,050	
1		8,150	48,900	5,705
2		8,150	40,750	4,890
3		8,150	32,600	4,075
4		8,150	24,450	3,260
5		8,150	16,300	2,445
6		8,150	8,150	1,630
7		8,150		815

- Total Loan..... Br. 57,050,000
- Interest rate/annum..... 10%
- Loan repayment period----- 7 years



Table 20: Financial Analysis of the Project discounted at 10% after tax
('000Br.)

Year	Benefit /income after tax (Cash inflow)	discounted factor at 10	Present Value
0	(81,500)	1	(81,500)
1	17,529	0.9091	15,936
2	21,248	0.8264	17,559
3	24,467	0.7513	18,382
4	25,782	0.6830	17,609
5	26,597	0.6209	16,514
6	19,772	0.5645	11,161
7	20,302	0.5132	10,419
8	20,831	0.4665	9,718
9	20,831	0.4241	8,834
10	20,831	0.3855	8,030
PV			134,162
NPV			52,662
FIRR			45%
B/C			1.65



Table 13: Fuel, oil and lubricant cost

No	Description	Annual Travel (km/hrs)	Fuel consumption per unit	Total Fuel Consumed (lit)	Unit cost (Br)	Total Cost ('000 Br.)
1	Truck (2)	20,000 km	0.3	6,000	20	120
2	Pick up (4WD) (2)	40,000 km	0.2	8000	20	160
4	Service Bus (3)	30,000 km	0.3	9000	20	180
5	Motor cycle (2)	20,000 km	0.1	2000	20	40
6	Generator (2)	2000 hrs.	5	10,000	20	200
	Total Fuel cost					700
	Oil and lubricant 10% of fuel cost					70
	Total fuel, oil and lubricant Cost					770



Table 14: Assumptions for some operating costs (000 Br)

No	Description	Annual Cost (000 Br)	Assumptions Used
1	Property insurance	746	1 % of fixed investment Cost
2	Repairer and Maintenance	746	1 % of fixed investment Cost
3	Annual land lease payment	422	
4	Working clothes (protective wears)	662	10% of annual salary
5	Travel expenses (perdiem)	331	5% of annual salary
6	Employees Benefits (Bonus, medical expense, etc)	662	10% of annual salary
7	Telephone, Postage and Fax	120	10,000 Br/month
8	Stationery and office supplies	36	3000 Br/month
9	Marketing and distribution cost	1,750	1,250,000 Br/year
10	Audit, legal and license fee	50	50000 Br/year
11	Other unforeseen (miscellaneous expense)	120	10,000 Br/month
	Total	5,645	



Table 18: Profit and /loss statement of the project ('000 Br)

Description	PROJECT YEAR									
	1	2	3	4	5	6	7	8	9	10
Project	93,840	105,570	117,300	117,300	117,300	117,300	117,300	117,300	117,300	117,300
Revenue										
Less: Operating Cost	70,606	79,432	88,258	88,258	88,258	88,258	88,258	88,258	88,258	88,258
Operating profit	23,234	26,138	29,042	29,042	29,042	29,042	29,042	29,042	29,042	29,042
Less Depreciation	5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583
Less Bank interest	5,705	4,890	4,075	3,260	2,445	1,630	815			
Gross Profit	11,946	15,665	19,384	20,199	21,014	21,829	22,644	23,459	23,459	23,459
Less: income tax 35%	-	-	-	-	-	7,640	7,925	8,211	8,211	8,211
Net Profit	11,946	15,665	19,384	20,199	21,014	14,189	14,719	15,248	15,248	15,248



Table 17: Revenue Estimate of the project ('000Br)

No	Description Capacity	Unit selling price(Br/Ton)	Project Year		
			1	2	3-10
1	Window	42,000	40,320	45,360	50,400
2	Door	42,000	40,320	45,360	50,400
3	Stair	25,000	6,000	6,750	7,500
4	Partition	25,000	6,000	6,750	7,500
5	Others	10,000	1,200	1,350	1,500
	Total		93,840	105,570	117,300



Table 19: Cash flow statement of the project (000 Birr)

No	Description	0	1	2	3	4	5	6	7	8	9	10
1	Cash inflow											
	promoter's contribution	24,450										
	Bank Loan	57,050										
	Net profit		11,946	15,665	19,384	20,199	21,014	14,189	14,719	15,248	15,248	15,248
	Depreciation		5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583	5,583
	Total inflow	81,500	17,529	21,248	24,967	25,782	26,597	19,772	20,302	20,831	20,831	20,831
2	Cash out flow											
	Fixed investment	76,458										
	Working capital	5,042										
	Increase in W.C		631	630	630	630	630	630	630	630	630	630
	Loan Repayment		8,150	8,150	8,150	8,150	8,150	8,150	8,150			
	Total out flow	81,500	8,781	8,780	8,780	8,780	8,780	8,780	8,780	630	630	630
	Net inflow		8,748	12,468	16,187	17,002	17,817	9,992	11,522	20,201	20,201	20,201
	Cumulative Balance			21,216	37,403	54,405	72,222	82,214	93,736	113,937	134,138	154,339

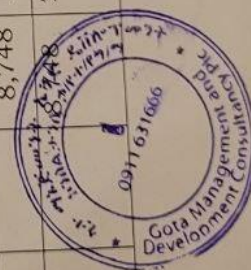


Table 21: Payback Period Calculation ('000Br.)

Operation year	Amount paid back			Balance of initial investment at year end
	Net profit	Depreciation	Total	
0 year				81,500
Year 1	11,946	5,583	17,529	(63,971)
Year 2	15,665	5,583	21,248	(42,723)
Year 3	19,384	5,583	24,467	(18,256)
Year 4	20,199	5,583	25,782	(7,526)
Year 5	21,014	5,583	26,597	19,071
Year 6	14,189	5,583	19,772	
Year 7	14,719	5,583	20,302	
Year 8	15,248	5,583	20,831	
Year 9	15,248	5,583	20,831	
Year 10	15,248	5,583	20,831	
The payback period of the project is 4.5 years				



	Total Cost # 4				21,695
5	Vehicles				
5.1	Courier Truck	No	2	850,000	1,700
5.2	Pick-up (4WD)	"	2	750,000	1500
5.3	Service bus	"	3	750,000	2250
5.4	Motor bicycle	"	2	50,000	100
	Spare parts (15%)			5550	833
	Total of # 5	"	-	6728	6,383
6	Office furniture	Set	-		1,500
	G. Total (1-6 above)				76,458



4.7	Pressing Machine		4	350,000	1,400
4.8	Straightening	"	2	220,000	440
4.9	Bending machine	"	2	200,000	400
4.10	Vice	"	10	10,000	100
4.11	Assembly Table	"	6	50,000	300
4.12	Lathe machine		4	200,000	800
4.13	Coloring equipments	set	L.S	L.S	500
4.14	Measuring & hand tools	Set	L.S	L.S	150
4.15	Fork lift machine	No	2	650,000	1,300
4.16	Staff Cafeteria Equipments	set	-	-	250
4.17	Staff Clinic equipments	"	-	-	50
4.18	Generator	No	2	1,250,000	2500
4.19	Pump	"	2	150,000	300
4.20	Compressor	"	1	250,000	250
4.21	Fuel Tanker	"	1	20,000	20
4.22	Water Tanker/Reservoirs	"	1	40,000	40
4.23	Work shop equipments and tools	set	-	-	300
4.24	Other equipments (store, display room etc)	"			500
	S.Total (#4)			18,460	17,150
	Contingency (10%)				1,715
	Spare parts (15% of) above				2,830



Table 8: Fixed Investment of the project (000 Br)

No	Description	Unit	Qty	Unit cost	Total Cost (000Br)
1	Pre- Production expenses	-	-	-	1,500
2	Land cost	-	-	-	1,875
3	Building and civil works				
3.1	Administration Offices	m ²	300	5000	1,500
3.2	Tools and Equipments Store	"	200	4000	800
3.3	Input/ raw materials store	"	1600	3000	4,800
3.4	Output store	"	750	5,000	3,750
3.5	Factory hall	"	3000	5000	15,000
3.6	Workshop	"	200	3000	600
3.7	Machinery and Vehicles shedding		800	3000	2,400
3.8	Toilet and wash room/shower	"	250	4000	1,000
3.9	Show room/Display room	"	150	4000	600
3.10	Staff Cafeteria	"	250	4000	1,000
3.11	Staff clinic	"	50	4000	120
3.12	Generator Room	"	20	3000	60



3.13	Guard house	"	30	4000	120
3.14	Water connection from existing supply	-	-	-	250
3.15	Electricity installation	-	-	-	500
3.16	Telephone installation	"	-	-	50
3.17	Parking area, Internal road, Garbage quarter and Fencing	-	3,400	-	5,500
3.18	Water Well drilling and connections	-	1500	-	1,500
	Sub Total			32,750	39,550
	Contingency (10%)				3,955
	Sub Total (#3)				43,505
4.	Machinery and Equipments				
4.1	Shearing/Cutting Machines	No	4	500,000	2,000
4.2	Drilling machine,	"	4	250,000	1,000
4.3	Welding Machine	"	4	250,000	1,000
4.4	Cleaning/polishing Machine	"	2	350,000	700
4.5	Assembling Machine	"	3	450,000	1,350
4.6	Casting Machine		2	750,000	1,500



Table 15: Depreciation schedule (000Br)

No	Description	Original Value	%	Depreciation per year
1	Building and civil works	43,505	5	2,175
2	Machinery and equipments	21,695	10	2,170
3	Vehicles	6,383	10	638
4	Office and plant furniture's	1,500	20	300
5	Pre-Production expenses	1,500	20	300
Total		74,583		5,583

Table 16: Production plan of the Project

No	Description	Unit	Project Years		
Capacity		%	1	2	3-10
			80	90	100
1	Window Profile	Ton	960	1,080	1,200
2	Door Profile	"	960	1,080	1,200
3	Stair	"	240	270	300
4	Partition	"	240	270	300
5	Others	"	120	135	150
	• Tubes				
	• Bars				
	• Etc				



Table 9: Operating costs of the project (000 Br)

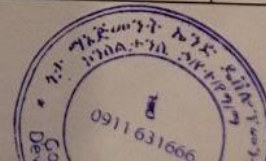
No	Description	Year		
		1	2	3-10
		59,080	66,465	73,850
1	Raw Materials and inputs	1,100	1,238	1,375
2	Utilities	5,294	5,955	6,618
3	Salary and wage	616	693	770
4	Fuel, oil and lubricant	4,516	5,081	5,645
5	Other operating cost(table 8)	70,606	79,432	88,258
	Total			

Table 10: Working capital determination (000 Br)

No	Description	Duration In month	Years		
			1	2	3-10
1	Raw Materials and Inputs	0.5	2,462	2,769	3,077
2	Utilities	4	388	436	485
3	Salary and wage	3	1,324	1,490	1,655
4	Fuel, oil and lubricant	3	154	174	193
5	Other operating cost (Table 13)	2	714	804	893
	Total		5,042	5,673	6,303



11	General Service head	1	BA Management	6	6000	72
12	Public relation worker	1	Dip/pup relation	2	3000	36
13	Accountants	2	Dip/Acct	2	3000	72
14	Cashiers	2	"	2	3000	72
15	Drivers	4	10 th grade & 3 rd driving license	2	2000	96
16	Ass. Driver	3	8 th grade 2 nd driving license	1	1500	54
17	Nurse/First Aid worker	2	Dip/Nursing	2	3000	72
18	Gardener/Generator operator	2	Basic		1500	36
19	Office Boy/Girl	2	"		1500	36
20	Secretary/Receptionist	2	Dip/Secretarial Sc.	2	3000	72
21	Personnel	1	BA/Management	4	5,000	60
22	Mechanic	4	Dip/Auto mechanic	3	4,000	192
23	Electrician	4	Dip/Electricity	3	4,000	192
24	Welder	4	Dip/Metal Technology	3	4,000	192
25	Painter	4	Dip/Metal Technology	3	4,000	192
26	Property administration workers	4	Dip/property adm.	3	3,000	144
27	Cleaner	10	Basic		1500	180
28	Purchaser	2	Dip/Purchasing & pro Adm.	2	1500	36
29	Guards	10	Basic		1500	180
	Sub Total of permanent	153	-		-	5,118
30	Other laborers	150			-	1,500
	Sub total	303				6,618



9.3. MANPOWER REQUIREMENT

The project will create new job opportunity for **303** employees (150 Female & 153 Male while operating at full capacity; employees are local employees off which **153** (93 skilled & 60 Unskilled) permanent and **150** temporary (15 skilled & 135 unskilled) local employees. The list of employees required for the plant listed in accordance with their positions and their corresponding salary in the manning table 4 below

TABLE 4: MAN POWER REQUIREMENTS AND THEIR ANNUAL SALARY BILL.

No	Position	Qty	Qualification	Service Year	Monthly salary	Annual Salary ('000 Br)
1	General manager	1	BA/Mgt	10	15,000	180
2	Production Head	1	BSC/Eng	8	12,000	144
3	Personnel Administration & Finance Head	1	BA Accounting	8	12,000	144
4	Store workers	2	Dip/ in Purchasing	2	3000	72
5	Production workers	75	Basic		2,000	1,800
6	Marketing Head	1	BA/Marketing	8	12,000	144
7	Marketing Experts	2	BA/ Marketing	3	4,000	144
8	Sales workers	2	Dip/ Marketing	2	3000	72
9	Shift Leaders	2	BSC/Manufacturing	6	10,000	240
10	Quality Control experts	2	BSC/Chemistry, industrial Engineering	5	8,000	192



The project under study viewed taking 10% increase in the operating cost and 10% decrease in the selling price/service charge.

At 10% increment of operating cost and 10% decrease in selling price/revenue; the FIRR after tax has turned to 42% and 39% respectively. This implies the project is more sensitive to change/decrease in price than to change/increment in operating cost. Therefore, the promoter should give attention to factors that contribute to change/down turn of price (such as service quality, sustainability of supply/loyalty, promotion efficiency, etc)

Table 5: Summary of Investment cost ('000'Br.)

No	Description	Local cost (Br)	Foreign cost (Br.)	Total cost (Br)
I	Land cost	1,875		1,875
1	Building and civil cost	43,505		43,505
2	Machinery and Equipments	0	21,695	21,695
3	Vehicles	0	6,383	6,383
4	Office furniture	1,500		1,500
5	Pre-production expenses	1,500		1,500
6	Total Fixed investment cost	48,380	28,078	76,458
	Initial working capital	3,000	2,042	5,042
	Total initial investment cost	51,380	30,120	81,500

