

Pre-Feasibility Study Bead Making Unit



Pakistan Gems and Jewellery Development Company
A subsidiary of Pakistan Industrial Development Corporation
Ministry of Industries & Production, Government of Pakistan
A Company setup under section 42 of Companies' Ordinance 1984



Karachi

Gems & Jewellery Training and Manufacturing Centre
Plot No. 15, Street No. SB-5,
Opp Bliss Shopping Centre,
Zaib-un-Nisa Street, Saddar,
Karachi.
Phone No. 021-35220294-5
E-mail: gjtmc-khi@pgjdc.org

Lahore

Gems & Jewellery Training and Manufacturing Centre
3rd Floor, Rana Centre, 18
Jamaluddin Afghani Road,
Maclagan Road,
Lahore
Tel: 042-37248515-16
E-mail: gjtmc-lhr@pgjdc.org

Peshawar

Gems & Jewellery Training and Manufacturing Centre
Opposite Imperial Store,
Saddar, Cantt Bazaar,
Peshawar
Phone No: 091-5286115-6
E-mail: gjtmc-pwr@pgjdc.org

Quetta

Gems & Jewellery Training and Manufacturing Centre
Malik Plaza 1st Floor, Main M.A
Jinnah Road,
Quetta
Phone No: 081-2824221-23
E-mail: gjtmc-qta@pgjdc.org

Gilgit

Gems & Jewellery Training and Manufacturing Centre
Zakir Complex, Shahrah-e-
Quaid-e-Azam,
Opp. New Secretariat, Gilgit
Baltistan 15100, Jotial Gilgit
Tel: 05811-920537-9
E-mail: gjtmc-glt@pgjdc.org

Sargodha

Gems & Jewellery Training and Manufacturing Centre
98-A, Bahadur Shah Zafar Road,
Opp. Jamia Girls School,
Sargodha.
Phone No.: 048-3724451-2

Muzaffarabad, AJK

Gems & Jewellery Training and Manufacturing Centre
Khawaja Plaza near Darbar
Shah Inayat,
Muzaffarabad, AJK
Phone No.: 058-22923166

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1. DISCLAIMER

This document is made to introduce Bead Making and provide a general idea and information on the subject. Although, the material included in this document is based on data/ information gathered from various reliable sources; however, it is based upon certain assumptions which may differ from case to case the information has been provided on as is where is bases without any warranties or assertions as to the correctness of or soundness thereof. Although due care and diligence has been taken to compile this document, the content information may vary due to any change in any of the concerned factors. Actual results may differ substantially from the presented information. SMEDA & PGJDC, their employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

2. PURPOSE OF THE DOCUMENT

The objective of this proposed Pre-feasibility study is mainly to facilitate potential Entrepreneurs with the investment information and provide an overview about setting up a "**Bead Making Unit**" The proposed prefeasibility may be used for investment decision and in order to serve this objective, the document covers various aspects of bead making. The financial aspects related to forecast /projections for the future periods are expected to differ from actual results due to the events and circumstances that don't occur frequently as expected.

While making the decision, one must consider that Gems and Jewelry is an emerging sector of Pakistan with an immense export potential. The current level of export has exceeded \$1.21 billion in 2012-2013. The other critical aspect given in next pages should also be considered important for investment decision

3. INTRODUCTION OF PGJDC

Pakistan Gems and Jewellery Development Company (PGJDC) was established in 2006 as a subsidiary of Pakistan Industrial Development Corporation, working under the Ministry of Industries & Production, Government of Pakistan. The charter of the Company is to enhance the value chain productivity of gems and jewellery industry of Pakistan from Mine to Market. The Company aims to enhance exports through facilitation, technology up-gradation, skill development and marketing/branding initiatives. Its aim is to establish Pakistan as a high value added, internationally competitive, world class hub for precious stone cutting and jewellery manufacturing by means of supporting the value chain and ancillary trades.

PGJDC has designed this pre-feasibility study to facilitate the entrepreneurs related to Gems & Jewellery sector of Pakistan by providing technical advice to them for establishing Gems & Jewellery related businesses.

4. THE PRIME MINISTER'S YOUTH LOAN SCHEME

Prime Minister Youth loan's Scheme for young entrepreneurs, with an allocated budget of Rs. 5.0 Billion for the year 2013-14, is designed to provide subsidized financing at 8 % mark-up per annum for one hundred thousand (100,000) beneficiaries, which is to be designated from financial institutions, initially through National Bank of Pakistan (NBP) and First Women Bank Ltd. (FWBL).

Loans from Rs. 0.1 million to Rs. 2.0 million with tenure up to 8 years inclusive of 1 year grace period, and a debt: equity of 90:10 will be disbursed to SME beneficiaries across Pakistan, covering Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, Gilgit-Baltistan, Azad Jammu & Kashmir and Federally Administered Tribal Areas (FATA).

5. EXECUTIVE SUMMARY

Gemstones bead making units are proposed to be located near mining areas and in trading clusters, like Karachi, Lahore, Peshawar, Rawalpindi, Islamabad, Skardu, Quetta, Gilgit, Chitral, Muzaffarabad and Mingora. The proposed bead making unit, is assumed to initially process ornamental stones like Serpentine, Onyx due to low cost availability of raw material and easy marketability of the finished product. The unit will, however, have the capacity of making beads of all gemstones such as Lapis Lazuli, Aquamarine, and Quartz, etc. The unit is to have per annum installed capacity to process 700 kg (average 1 gm weight per bead). In the first year of operation, the unit is expected to run on 60% of the total production capacity, processing 420 kg. The business will require raw material for one year production of bead. Further, it has been assumed that at a later stage, the unit will not only process its own raw material for bead making but also provide services to other customers.

Total cost of the project is Rs. 2.22 million, with capital cost of Rs. 1.094 million and operations cost of Rs. 1.125 million. Given the cost assumptions, IRR and payback are 30.54.10 % and two (2) years respectively, thus making the project a profitable venture. The most critical considerations or factors for success of the project are;

1. Awareness about current market trends i.e. the type of stone & shape preferred by customers
2. Availability of skilled labor.

6. BRIEF DESCRIPTION OF PROJECT AND PRODUCT

Pakistan is bestowed with large variety of gemstones and ornamental stones including Tourmalines, Aquamarine, Quartz, Turquoise, Lapis Lazuli, Jasper and Serpentine etc. These gemstones are normally used in bead making. Abundant availability of raw material for bead making in the country makes it more suitable for setting up a bead manufacturing unit.

Presently, in Pakistan, imported beads are mostly being used and there is a need to setup bead making units at appropriate locations in Pakistan. Karachi has a scarcity of bead making production units while small scale production is being done in Peshawar, therefore making a bead manufacturing unit, a business with great potential and scope.

- **Technology:** The technology will include machines for trimming, edge grinding, lapping/bead making, polishing and drilling to produce bead of precious and semi precious stones.
- **Location:** This unit will be located in or near gemstones mining or trading clusters
- **Product:** The unit will process ornamental stones such as Serpentine and Onyx in bulk quantities whereas production from other gemstones can also be done as per requirements.
- **Target Market:** An enormous export market for Pakistani Beads exists in Europe, USA, Middle East, Hong Kong and Taiwan. The demand for rosary beads (tasbeeh) also prevails in Saudi Arabia and Middle East countries especially during Islamic rituals of Umrah and Hajj..
- **Employment:** The unit is expected to generate direct employment of 09 people through its operations.
- **Profitability:** Financial analyses indicate the unit to be profitable from the very first year of operations.

7. KEY SUCCESS FACTORS

Some of the key factors for successful operations of a bead making unit include the following:

Capacity for Bulk Production:

Profit generation in Bead Making is directly linked with its ability for bulk production. Proper use of modern technology will ensure higher yields. Entrepreneurs are advised to focus on producing sufficient quantities (economies of scale) to sell in both local and international markets

QUALITY OF THE PRODUCT:

Quality of the finished product is rapidly becoming an area of important competitive advantage. Customers usually prefer good quality and well polished beads and entrepreneurs are strongly advised to ensure production of quality beads as per market requirements.

ASSORTED SHAPES AND SIZES:

There is an inherent wide scope of producing beads of varying sizes and shapes through the proposed machinery and equipment, therefore making it essential for the entrepreneurs to focus on the same and utilizing this flexibility to respond to market requirements well in time.

EXPERTISE:

India is famous for exporting fine quality and small size beads in extensive varieties; likewise, in order to compete effectively, attention should be paid to the same. Although, minimal production of beads is being done in Peshawar, but it is noteworthy to mention that these beads do not meet market requirements. Thus, acquiring expertise in bead making is sure to boost business and ensure success through professional expertise in the field.

FINISHING AND POLISHING:

Adequately finished and polished beads are not only long lasting but also carry a higher visual appeal for consumers. Finishing is the last process of bead making therefore special care should be taken in producing quality finished beads. Customers mostly prefer bead items which are smooth to touch and glossy in appearance.

MARKET LINKAGES:

Market linkages are crucial in determining sales volumes and profit earnings. The business is expected to yield considerable profits, upon placement of continuous orders through effective market linkages.

Other Success Factors

Some other factors critical to the success of this proposed project include;

- Strict quality control procedures.
- Good internal control system to avoid theft/losses.
- Responsiveness to customers' demands and requirements.
- Timely completion of orders

- Ongoing product innovation

8. INSTALLED AND OPERATIONAL CAPACITY

The subject enterprise of this pre-feasibility study is an integrated business bead manufacturing and wholesaling business.

Installed capacity of the workshop shall be 420 kg or 420,000 pieces for the first year of operations. The project will function at approximately 60% capacity in first year. The production yield is expected to reach 100% capacity utilization i.e. 700 kg or 700,000 pieces per year, provided proper management techniques and expertise employed.

9. GEOGRAPHICAL POTENTIAL FOR INVESTMENT /SUITABLE

LOCATION

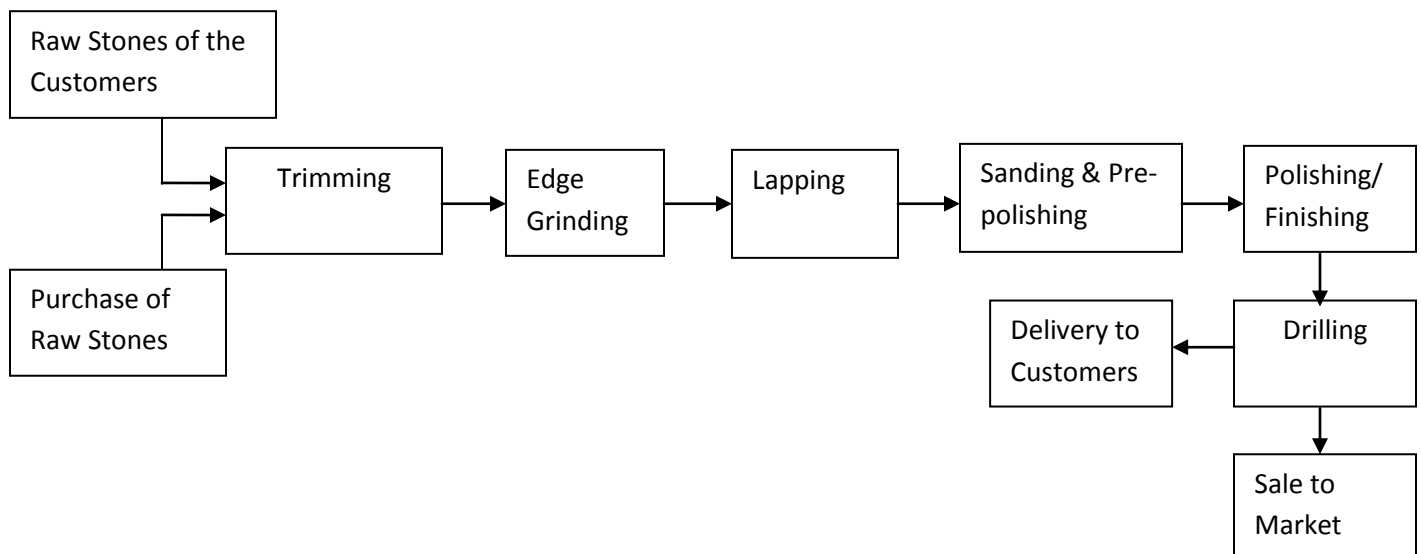
The most appropriate location for setting up a gemstone bead making unit would be Peshawar, Skardu, Quetta, Gilgit, Chitral, Muzaffarabad and Mingora. Similarly, Karachi, Lahore Rawalpindi and Islamabad with their large gold and gem studded jewellery making industry are other suitable locations. The above mentioned areas have abundant availability of potential craftsmen and availability of required raw material.

10. POTENTIAL TARGET MARKET CITIES

Gemstones beads are prominently used in jewellery making. The jewellery demand is increasing so is the requirements of beads in different shapes to support the styling and value addition of the jewellery. The string of bead alone is also very popular among women folks. Another use of beads is in formation of tasbeeh. The demand of tasbeeh increases with Hajj and in Umrah. Use of Ruby, Turquoise, Lapiz Lazuli and Quartz is common for making of Tasbeah.

Initially the product, mainly semi-precious gemstones will be processed by focusing on demand of the jewellery manufactures of Karachi, Lahore, Peshawar, Rawalpindi and Islamabad. After having reasonable domestic customers base, export markets of U.A.E, United Kingdom, Thailand, Canada, Italy, China, Netherlands, Saudi Arabia, USA Hong Kong and Germany can be explored.

11. PRODUCTION PROCESS FLOW



The step by step process for gemstone making is defined as under

Trimming & Cube Making:

In the first stage of bead making cubes are cut from the stones using multiple trim saw. The cut on multi trim saw machine will take 3 to 5 minutes in one operation. The gemstone cube will be produced from this process.

Edge Grinding:

Edge grinding is a second stage process which removes rough edges of gemstone cubes using either a dual grinder or edge grinder machines.

Lapping:

This is the most important stage of production, where formation of beads takes place and round beads are produced. Lapping usually depends upon the capacity of master lap which takes an average of 20 minutes.

Sanding & Pre-polishing:

Sanding/pre-polishing is similar to grinding; however the process incorporates use of finer abrasives. The purpose of this process is to remove deep scratches left by coarser abrasives during grinding. Duration of this process depends upon stone hardness, combination of abrasive and size.

Polishing:

Finishing and polishing is a process which ensures error free final look and feel of the beads. In this process the beads are polished for shine, smoothness and over all uniformity in quality of the end product.

Drilling:

Drilling of beads is done to allow the end user to string beads as per requirement. A small rotating rod or tube with a diamond tip with slurry of silicon carbide and coolant is used to drill through the stone and the process requires three (3) minutes per bead..

12. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of bead making unit with natural gemstone under the Prime Minister's Youth Business Loan Scheme. Various cost and revenue related assumptions along with results of the analysis are outlined in this section.

12.1 PROJECT ECONOMICS

A financial model has been developed for forecasted production to analyze commercial viability of a bead making unit with the capacity of 700 kg or 700,000 pieces whereby expected production of beads in the first year of operations will be 420 kg or 420,000 pieces at 60 % production capacity utilization.

The following table shows internal rates of return and payback period.

Table 1- Project Economics

Description	Details
Internal Rate of Return (IRR)	30.54%
Payback Period (Years)	2
Net Present Value (NPV)	Rs.6.996 Million

Some of the critical factors influencing commercial viability of the unit are regular orders from customers and supply of rough gems from mines, apart from awareness about current market trends i.e. the type of stone available and shape and size of beads required by the customers, proximity to cluster and availability of craftsmen.

12.2 PROJECT FINANCING

Following table provides details of the equity required and variables related to bank loan;

Table 2- Project Financing

Description	Details
Total Equity (10%)	Rs. 222,000
Bank Loan (90 %)	Rs. 1,998,000
Markup to the Borrower (%age/annum)	8%
Tenure of the Loan (Years)	8
Grace Period (Year)	1

12.3 PROJECT COST

Following requirements have been identified for operations of the proposed business.

Table 3: Capital Investment for the project

Cost Description	Total Cost(Rs.)
Plant and Machinery	952,000
Furniture /Fixture	92,400
Pre-operational Expenses	50,000
Total Fixed Cost	1,094,400
Bead Making Consumable Inventory	454,800
Raw material inventory	268,800
Upfront Building Rent (12 Months)	252,000
Working Capital	150,000
Total Project Cost	2,220,000

12.4 SPACE REQUIREMENT

The project is proposed to be set-up in a rented building to reduce initial capital cost of the project. The area has been calculated on the basis of space requirement for processing area and office. Manufacturing units operating in the industry do not follow any set pattern. Following table represents project space requirements:

Table 4: Space Requirement

Space Requirement (in ft)	Sq.ft.
Bead Making Room	500
Office and Strong Room	200
Total Area	700

12.5 MACHINERY REQUIREMENT

Following combination of machinery is required for making beads of approximately 700 kg or 700,000 pieces, (average weight of 1 gram per bead) per year; which is maximum capacity for production. The list is given as under;

Table 5: List of Machinery and Equipments

S. No	Machine Description	Qty	Per Unit Price	Total Cost
1	Multi Trim Saw Standard Size	1	108,000	108,000
2	Trim Saw , 6 to 8"	1	58,500	58,500
3	Trim Saw , 10"	1	58,500	58,500
4	Edge Grinding Machine	1	62,200	62,200
5	Dual Grinder	2	70,000	140,000
6	Round Bead Lapping Machine	2	59,400	118,800
7	Ultrasonic Drilling Machine	2	78,000	156,000
9	Machine for Polishing	2	125,000	250,000
	Total			952,000

12.6 RAW MATERIAL REQUIREMENT

Details of consumables and rough (uncut and unpolished) gemstones used for the project are given below:

12.6.1 ROUGH GEMSTONE

Table 6-Raw Material (Rough Gemstones)

Raw Material		For Finished/prepared beads Wt (Kg)	Required Raw Material Wt (Kg)	Rate /Kg	Total Cost
Category A	Serpentine/Onyx	285	1428	100	142,800
Category B	Turquoise/Lapis	50	252	500	126,000
	Total	335	1,680		268,800

The above calculation shows the raw material requirement of gemstones for first year of production. According to industry sources, the production of 1 kg of finished product requires 5 kg of raw material (stones); i.e. rough gemstones of 1,680 kg will yield 335 kg of finished beads; 420,000 pieces (1 bead= 1 gm) for the first year of production.

12.6.2 LAPIDARY CONSUMABLE

Following is the list of raw material for first year;

Table 7-Raw Material for Bead Making

S. No	Raw Materials	Unit	Quantity	Price	Cost
1	Continuous blade, China	Pcs	10	1,000	10,000
2	For Trim Saw 8", blade, Local made	Pcs	20	500	10,000
3	For Trim Saw 10"blade, Local made	Pcs	30	1,000	30,000
4	Grinding wheel, China made	Pcs	3	40,000	120,000
5	Grinding wheel diamond coated local made,	Pcs	5	5,000	25,000
6	Master lap	Pcs	8	10,000	80,000
7	Spacer, 2.3, 3.2, 4.5, 6.0, 9.0 Tmm	Pcs	15	2,800	42,000
8	Rubber lap (Upper)	Pcs	10	500	5,000
9	Master laps (Upper)	Pcs	10	2,000	20,000
10	Sanding Paper No. 180,320,400,600 & 1000	Pcs	10	2,500	25,000
11	Abbrasive 120, 180, 320, 400, 600 & 1000	Pcs	102	150	15,300
12	Solid Copper wire	set	1	15,000	15,000
13	Media for Grinding and polishing	Kg	40	500	20,000
14	Chrome oxid	Kg	5	2,500	12,500
15	Silicon carbide(Carborundum) #600	Kg	5	2,500	12,500
16	Aluminum oxide(Aloxite) #1000	Kg	5	2,500	12,500
	Total				454,800

12.7 FURNITURE & FIXTURES

Table 8-List of Furniture & Fixture

S. No	Description of Items	Quantity	Per unit cost	Total
1	Table	1	5,000	5000
2	Stools	7	1,200	8400
3	Visitor Chairs	2	3,500	7000
4	Almirah	2	15,000	30000
5	Exhaust Fans	3	2,000	6000
6	Table for Machine	3	12,000	36000
	Total			92,400

12.8 HUMAN RESOURCE REQUIREMENT

Table 9-Human Resource Requirement

S. No	Description	No. of employees	Salary per person	Per Month Salary Rupees	Annual Salary Rupees
1	Supervisor	1	20000	20000	240,000
2	Machine Operators	7	12000	84000	1,008,000
3	Maintenance person	1	10000	10000	120,000
					1,128,000

12.9 REVENUE GENERATION

Below table shows the revenue generation in the first year of operation;

Table10- Revenue

Product	Sales price (Kg)	First Year Production (Kg)	First Year Sales Revenue (Rs.)
Category A: Serpentine/Onyx	8,000	285	2,280,000
Category B: Turquoise/Lapis Lazuli	25,000	50	1,250,000
Total Sales Revenue		335	3,530,000

12.10 OTHER COST

Monthly rent is estimated up to Rs. 21,000 / month (@ Rs. 30 per sq.ft.) and utility charges are estimated at Rs. 18,000 per month, which are projected to increase at the rate of 10% per year. In year 1, the total rent cost amounts to Rs. 252,000.

13. KEY ASSUMPTIONS

PRODUCTION ASSUMPTIONS

Maximum Capacity Utilization	100%
Maximum Capacity Utilization (Year-1)	60%

Name of the Product: Bead Making

Category A- Serpentine (kg)	1st year capacity	595
Category B-Turquoise/ Lapis Lazuli (kg)	1st year capacity	105
Category A- Serpentine (kg)	(60%)	285
Category B-Turquoise/ Lapis Lazuli (kg)	(60%)	50
Production in (kg) per day		1.40kg/ day

OPERATING ASSUMPTIONS

Annual Capacity	100%
Total Capacity (Year 1)	60%
Growth Rate in Production (3%)	OR (times) 1.3
Hours operational per day	8
Days operational per month	25
Days operational per year	300

ECONOMY-RELATED ASSUMPTIONS

Electricity growth rate (10%)	OR (times) 1.1
Pay roll growth (10%) OR (times)	1.1

CASH FLOW ASSUMPTIONS

Accounts receivable cycle (in days)	30
Accounts payable cycle (in days)	30
WIP (Days)	01
Finished Goods (Days)	07
Raw Materials Inventory (Days)	30
Cash in Hand	150,000

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Bead Making*

REVENUE ASSUMPTIONS

Category A- Serpentine (kg)/ Unit	(1 st year)	8,000
Category B-Turquoise/ Lapis Lazuli (kg)/ Unit	(1 st year)	25,000
Sale price growth rate (15.5%)	OR (times)	1.155

EXPENSES ASSUMPTIONS

Electricity Expenses Per/Year (Rs)		216,000
Equipments/ Machine maintenance Cost /year (% of total machinery cost)		2.%
Growth in maintenance cost (3 %)	OR (times)	1.03
Pre-paid rent (12 months)		252,000
Raw material		268,800
Consumables cost		454,800
Rent growth rate		5%

COST OF GOODS SOLD ASSUMPTIONS

COGS Growth Rate (21%)	OR (times)	1.21
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Financial Assumptions

Project Life (Years)	08
Debt	90%
Equity	10%
Interest Rate on Long term debt	8%
Debt Tenure (Years)	8
Debt payments per years	12
Grace Period (Year)	1

14.1 Projected Income Statement

Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
SALES										
Lapis Lazuli	1,250,000	3,298,680	3,809,975	4,400,522	5,082,602	5,870,406	6,780,319	7,831,268	9,045,115	10,447,107
Serpentine/Onyx	2,280,000	1,819,125	2,101,089	2,426,758	2,802,906	3,237,356	3,739,146	4,318,714	4,988,115	5,761,272
Total Sales	3,530,000	5,117,805	5,911,065	6,827,280	7,885,508	9,107,762	10,519,465	12,149,982	14,033,229	16,208,380
COST OF SALES										
Bead Making Consumables	454,800	550,308	665,873	805,706	974,904	1,179,634	1,427,357	1,727,102	2,089,794	2,528,650
Raw material inventory	268,800	325,248	393,550	476,196	576,197	697,198	843,610	1,020,768	1,235,129	1,494,506
Cost of Good Sold	723,600	875,556	1,059,423	1,281,902	1,551,101	1,876,832	2,270,967	2,747,870	3,324,922	4,023,156
Admin & General Expenses										
Electricity Expenses	216,000	237,600	261,360	287,496	316,246	347,870	382,657	420,923	463,015	509,317
Repair & Maintenance Charges	19,040	19,611	20,200	20,806	21,430	22,073	22,735	23,417	24,119	24,843
Payroll Expense (All staff)	1,128,000	1,240,800	1,364,880	1,501,368	1,651,505	1,816,655	1,998,321	2,198,153	2,417,968	2,659,765
Depreciation Expense	52,220	49,609	47,129	44,772	42,534	40,407	38,386	36,467	34,644	32,912
Rent Expense	252,000	264,600	277,830	291,722	306,308	321,623	337,704	354,589	372,319	390,935
Other Operating Expenses	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Amortization of Preliminary Expenses	10,000	10,000	10,000	10,000	10,000	-	-	-	-	-
Total Operating Expenses	1,737,260	1,888,220	2,053,998	2,236,023	2,435,867	2,645,258	2,886,097	3,150,472	3,440,681	3,759,248
Earnings Before Interest & Taxes	1,069,140	2,354,029	2,797,644	3,309,355	3,898,540	4,585,671	5,362,401	6,251,640	7,267,626	8,425,976
Financial Charges on Long Term Loan	159,840	144,813	128,583	111,055	92,125	71,681	49,601	25,754	-	-
Profit Before Tax	909,300	2,209,216	2,669,061	3,198,300	3,806,415	4,513,991	5,312,801	6,225,886	7,267,626	8,425,976
Income Tax	108,618	176,737	266,906	383,796	532,898	722,239	956,304	1,245,177	1,598,878	2,022,234
Profit After Tax	800,682	2,032,479	2,402,155	2,814,504	3,273,517	3,791,752	4,356,497	4,980,709	5,668,749	6,403,742
Retained Earning at the beginning of year	-	1,701,682	2,982,144	4,471,480	6,188,327	8,152,437	10,389,571	12,916,339	15,755,343	18,929,842
Dividend (15-20)	-	752,017	912,819	1,097,656	1,309,407	1,554,618	1,829,729	2,141,705	2,494,249	2,881,684
Retained Earning at the end of year	800,682	2,982,144	4,471,480	6,188,327	8,152,437	10,389,571	12,916,339	15,755,343	18,929,842	22,451,900

14.2 Projected Cash Flow Statement

Description	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Operating Activities											
Net Profit		1,810,300	2,209,216	2,669,061	3,198,300	3,806,415	4,513,991	5,312,801	6,225,886	7,267,626	8,425,976
Add:											
Depreciation		52,220	49,609	47,129	44,772	42,534	40,407	38,386	36,467	34,644	32,912
Amortization (Pre Operational Costs)	(50,000)	10,000	10,000	10,000	10,000	10,000	-	-	-	-	-
Net Profit Before Working Capital Changes	(50,000)	1,872,520	2,268,825	2,726,189	3,253,072	3,858,948	4,554,398	5,351,187	6,262,353	7,302,270	8,458,888
Working Capital Changes											
Upfront Building Rent	(252,000)	(12,600)	(13,230)	(13,892)	(14,586)	(15,315)	(16,081)	(16,885)	(17,729)	(18,616)	(19,547)
Bead Making Inventory	(723,600)	651,240	(15,196)	(18,387)	(22,248)	(26,920)	(32,573)	(39,413)	(47,690)	(57,705)	(69,823)
W.I.P		(2,412)	(507)	(613)	(742)	(897)	(1,086)	(1,314)	(1,590)	(1,924)	(2,327)
Finished Goods Stock		(16,884)	(3,546)	(4,290)	(5,191)	(6,281)	(7,600)	(9,196)	(11,128)	(13,465)	(16,292)
Accounts Payable		60,300	12,663	15,322	18,540	22,433	27,144	32,845	39,742	48,088	58,186
Accounts Recievable		(369,250)	(57,234)	(66,105)	(76,351)	(88,186)	(101,854)	(117,642)	(135,876)	(156,937)	(181,263)
Income Tax Paid		(108,618)	(176,737)	(266,906)	(383,796)	(532,898)	(722,239)	(956,304)	(1,245,177)	(1,598,878)	(2,022,234)
Working Capital Changes	(975,600)	201,776	(253,786)	(354,870)	(484,374)	(648,064)	(854,289)	(1,107,910)	(1,419,449)	(1,799,437)	(2,253,300)
Cash provided by/used in operation	(1,025,600)	2,074,296	2,015,039	2,371,319	2,768,698	3,210,884	3,700,108	4,243,277	4,842,904	5,502,834	6,205,587
FINANCING ACTIVITIES											
Long term Loan Repayment (Debt Facility)	1,998,000	-	(187,841)	(202,869)	(219,098)	(236,626)	(255,556)	(276,001)	(298,081)	(321,927)	(0)
Owner's Equity	222,000	-	-	-	-	-	-	-	-	-	-
Dividend Paid	-	-	(752,017)	(912,819)	(1,097,656)	(1,309,407)	(1,554,618)	(1,829,729)	(2,141,705)	(2,494,249)	(2,881,684)
Cash provided by/used in financing activities	2,220,000	-	(939,859)	(1,115,688)	(1,316,755)	(1,546,033)	(1,810,175)	(2,105,729)	(2,439,786)	(2,816,177)	(2,881,684)
INVESTING ACTIVITIES											
Capital Expenditure	(1,044,400)	-	-	-	-	-	-	-	-	-	-
Cash provided by/used in investing activities	(1,044,400)										
Net Cash Flow	150,000	2,074,296	1,075,181	1,255,632	1,451,943	1,664,851	1,889,934	2,137,547	2,403,119	2,686,657	3,323,904
Cash balance B/F	-	150,000	2,224,296	3,299,477	4,555,108	6,007,051	7,671,902	9,561,836	11,699,384	14,102,502	16,789,159
Cash Balance C/F	150,000	2,224,296	3,299,477	4,555,108	6,007,051	7,671,902	9,561,836	11,699,384	14,102,502	16,789,159	20,113,063

14. 3 Projected Balance Sheet

Description	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
ASSETS											
Current Assets											
Cash & Bank Balance	150,000	2,224,296	3,299,477	4,555,108	6,007,051	7,671,902	9,561,836	11,699,384	14,102,502	16,789,159	20,113,063
Bead Making Inventory	723,600	72,360	87,556	105,942	128,190	155,110	187,683	227,097	274,787	332,492	402,316
W.I.P		2,412	2,919	3,531	4,273	5,170	6,256	7,570	9,160	11,083	13,411
Finished Good Stock		16,884	20,430	24,720	29,911	36,192	43,793	52,989	64,117	77,582	93,874
Recievables		369,250	426,484	492,589	568,940	657,126	758,980	876,622	1,012,499	1,169,436	1,350,698
Upfront Building Rent	252,000	264,600	277,830	291,722	306,308	321,623	337,704	354,589	372,319	390,935	410,481
Total	1,125,600	2,949,802	4,114,694	5,473,612	7,044,673	8,847,124	10,896,252	13,218,251	15,835,383	18,770,686	22,383,842
TOTAL CURRENT ASSETS											
Fixed Asset											
AT Cost less: Depreciation	1,044,400	992,180	942,571	895,442	850,670	808,137	767,730	729,343	692,876	658,232	625,321
Intangible Assets											
Pre-operational Expenses Worth	50,000	40,000	30,000	20,000	10,000	-					
TOTAL ASSETS	2,220,000	3,981,982	5,087,265	6,389,054	7,905,343	9,655,261	11,663,982	13,947,594	16,528,259	19,428,919	23,009,163
LIABILITIES AND EQUITY											
Current Laibilities											
Accounts Payable		60,300	72,963	88,285	106,825	129,258	156,403	189,247	228,989	277,077	335,263
TOTAL CURRENT LIABILITIES		60,300	72,963	88,285	106,825	129,258	156,403	189,247	228,989	277,077	335,263
Non Current Liabilities											
Long term Loan (Debt Facility)	1,998,000	1,998,000	1,810,159	1,607,290	1,388,191	1,151,565	896,009	620,008	321,927	0	
EQUITY											
Paid Up Capital	222,000	222,000	222,000	222,000	222,000	222,000	222,000	222,000	222,000	222,000	222,000
Retained Earnings		1,701,682	2,982,144	4,471,480	6,188,327	8,152,437	10,389,571	12,916,339	15,755,343	18,929,842	22,451,900
Total Equity	222,000	1,923,682	3,204,144	4,693,480	6,410,327	8,374,437	10,611,571	13,138,339	15,977,343	19,151,842	22,673,900
TOTAL LIABILITIES AND EQUITY	2,220,000	3,981,982	5,087,265	6,389,054	7,905,343	9,655,261	11,663,982	13,947,594	16,528,259	19,428,919	23,009,163