(Onyx Products Manufacturing Unit)



Pakistan Stone Development Company Ministry of Industries & Production Government of Pakistan <u>www.pasdec.com.pk</u> 051-9263465-7, Info@pasdec.com.pk

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1. DISCLAIMER

This information memorandum is to introduce the subject matter 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 basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been exercised to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. PASDEC, its 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 gualified consultant / technical expert before taking any decision to act upon the information.

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2. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Onyx Handicraft Manufacturing Unit** by providing them a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial & error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and it's successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form basis of any Investment Decision.

3. INTRODUCTION TO PASDEC

The Pakistan Stone Development Company (PASDEC) was established in

June 2006 for development of marble and granite sector of Pakistan. The mandate

of PASDEC is to establish model project for development of value chain to

introduce new technology, practices and to meet skill development needs of

the sector. PASDEC has established fifteen Mechanized Quarries, two machinery

pools, two warehouses and work is in progress on three marble cities, four common

facility training centers. Besides this PASDEC has trained more than 1400 trainees

on different traits of marble and granite value chain.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by PASDEC. These services include general information, specific information, support in development of prefeasibility studies, establishment of marble business and identification of

skilled work force and capacity building programs of different types in addition to business guidance through help desk services.

5. EXECUTIVE SUMMARY

Marble & Onyx Products Manufacturing Unit is proposed to be located at Peshawar, Mangopir, Hub, Karachi, Gujranwala, Islamabad, Lahore, Lasbela, and Risalpur.

Product(s) include Marble & onyx Flower Vases, Jar, Chess Boards, Animal Shapes, Cigarette Ash Trays and Photo Frames.

Installed capacity of the project is to process12,060 sq.ft of Marble with initial utilization of 6,030 sq.ft in year 1., at 50% capacity utilization.

Total cost estimate is Rs. 1.98 million with fixed investment of Rs.1.40 million and working capital of Rs. 0.59 million.

Given the cost assumptions, the Internal Rate of Return and Payback period are 51% and 02 years respectively.

6. BRIEF DESCRIPTION OF PROJECT & PRODUCT

• **Technology:** The proposed unit will comprise processing machines including 12 & 18 inch cutters and 5 ft Lathe machine to produce different types of marble handicrafts.

• Location: The Unit would be located Karachi, Hub, Gaddani, Hyderabad or nearby Karachi or Gaddani areas as huge raw material of onyx is available in this area.

- **Product:** Handicrafts including Flower Vases, Cigarette Ashtray, Chess Boards, Photo Frames and Eggs/Oval Shapes etc.
- **Target Market:** Main buyers would be domestic consumers, corporate customers, foreign visitors and companies / individuals dealing in local and export orders.
- **Employment Generation:** The proposed project will provide direct employment to 10 (ten) people.
- **Profitability:** The Financial Analysis shows that the unit will be profitable from the very first year.

7. CRITICAL FACTORS

Following are the critical factors for the business:

- Proximity to variety of supply sources and markets
- Efficient and cost effective procurement of raw material
- Availability and retention of skilled labour force
- Know how about the trends in the market
- Availability of electricity and water supply
- Effective Marketing

8. INSTALLED & OPERATIONAL CAPACITIES

The installed capacity of the project will be 12,060 sq. ft. per year, with initial operational capacity in year 1 estimated at 6,030 (50%) sq. ft. / year. A total of 56 tons of raw marble & onyx will be required to produce 6,030 sq. ft. of finished handicraft in one year.

9. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Marble and Granite industry in Pakistan has total estimated reserves of around 160.1 million tons, The marble and onyx mines of Pakistan are mainly located in Balochistan (Chaghi, Lasblea, Loralai, Mastong, and Naal), Khyber Pakhtunkhwa / Federally Administered Tribal Areas (Bunair, Mardan, Mohamand, Swat,

Chitral), and Sindh (Dadu, Johi range). Major marble processing clusters are concentrated in Gujranwala, Islamabad / Rawalpindi, Karachi, Hub, Mangopir, Lasbela, Lahore, Peshawar and Nowshehra / Risalpur. As the production of Handicraft is dependent upon the easy availability of optimum variety of marble and onyx therefore the project should be established in or around the aforementioned cities.

10. POTENTIAL TARGET MARKETS / CITIES

The marble & onyx products are famous worldwide for their uniqueness and are used as decorative and gift items. Major export markets for these marble & onyx handicrafts are Central Asian Republics, United States of America and Australia. The domestic market also carries a great untapped potential for these handicrafts, catering to tourists, handicraft shops, antiques shops and hotel industry.

11. PRODUCTION PROCESS FLOW

Cutting	Shape	Grinding and	Polishing	Packaging
(Pieces)	Cutting	Shaping	/ finishing	

The production process includes stone cutting, shape cutting, grinding / rubbing, polishing and packaging. Cutters, Lathe Machine(s), Grinders and Polishing Machines are used for this purpose.

Stone Cutting: The procured raw stone is brought to the unit where it is cut to desired pieces depending upon the product to be made. The stone-cutting process consists of fixing the raw stone on a trolley set on four steel columns to cut the stone.

Shape Cutting: Craftsman fixes the cut piece into the lathe machine and cuts the corners to give it the basic shape of the product.

Grinding and Rubbing: Hand and bench grinders are used to give final shape, to the product.

Polishing and Finishing: Polishing and finishing machines are then used to bring shine.

Packaging: Finished products are packed as per the requirement of the buyer. Corrugated carton boxes with packing are normally used to keep the product safe during transportation. Product specifications and quantity tags should be used as a standard practice.

12. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Marble and Onyx Product Manufacturing Unit 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.

Onyx Handicraft Manufacturing Unit

12.1 Project Economics

All the figures in this financial model have been calculated for installed capacity of 12,060 sq. ft. per year, with initial operational capacity in year 1 estimated at 6,030 (50%) sq. ft. / year.

The following table shows Internal Rates of Return, Payback Period and NPV

Table 1: Project Economics

Description	Details
Internal Rate of Return (IRR)	51%
Payback Period (Years)	02
Net Present Value (NPV)	(Rs.) 12,867,349

12.2 Project Financing

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

Description	Details (Rs.)
Total Equity (10%)	198,393
Bank Loan (90%)	1,785,537
Markup to the Borrower (%age/annum)	8%
Tenure of the Loan (Years)	08
Grace Period (Year)	01

12.3 Project Cost

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

Table 3: Project Cost

Capital Investment	Amount (Rs.)
Building Security	100,000
Office Equipment / Furniture	182,600
Machinery & Equipment	1,115,000
Total Capital Costs	1,397,600
Initial Working Capital	586,330
Total Project Cost	1,983,930

12.4 Space Requirement

The business will be operated in rented premises measuring 5,440 sq. ft. having monthly rent estimated at Rs. 30,000/- per month. The area has been calculated on the basis of space requirement for production area, management office, scrap yard, stores and pavement/driveway. No set pattern is followed by the units

operating in the industry. Following table shows calculations for project space requirement.

Table 4: Space Requirement

Space Requirement	Size (Sq.ft)
Management Office	625
Production Area	2,000
Scrap Yard	490
Store	625
Pavement/driveway	700
Grounds	1,000
Total Area	5,440

12.5 Machinery and Equipment

Following table provides list of machinery and equipment required for an average Onyx Handicraft Manufacturing Unit. .

Table 5: Machinery and Equipment

		Cost Rs/unit	Total Rs.
Description	Quantity	175,000	350,000
Cutter (12 &18")	2	250,000	250,000
Lathe Machine (5ft to 6ft)	1	20,000	100,000
Grinders (Hand)	5	100,000	200,000
Polisher	2	130,000	130,000
Pumps and motors Consumables	As per	20,000	20,000
(Adhesives, Sealants, acids & detergents etc)	requirements	15,000	15,000
Tools	As per requirements	50,000	50,000
Tri pod Chain Crane	1		1,115,000
Total			

Local machinery can be used to manufacture marble and onyx products / handicrafts. On the other hand, the option of second hand machinery can also be availed with 40% less cost than the new machinery. Skill set of workers determines the quality of final product, therefore, using second machinery is a viable option.

12.6 Office Equipment

Provision of Rs. 182,600/- has been made for procurement of computer with accessories, table, desk, chairs, and an air conditioner. The breakup of office equipments is as follows:

Table 6: Office Equipment Cost

Description	Quantity	Cost	Amount (Rs)
Computers	1	35,000	35,000
UPS	1	8,000	8,000
Computer printer	1	5,000	5,000
Telephones	2	800	1,600
Furniture	As per	85,000	85,000
	requirements		
Air conditioners	1	48,000	48,000
Total			182,600

12.7 Raw Material Requirements

Based on our assumptions, it would be necessary to stock four (04) ton of raw material in order to cover any unforeseen demand. It is also expected that since green onyx products are demanded more, therefore, more inventory of raw green onyx is to be maintained.

Table 7: Cost of Material/month

	Unit	Rate	Qty	Total Amount (Rs.)
Onyx (Green)	Ton	60,000	28	1,680,000
Marble (Ziarat White)	Ton	50,000	14	700,000
Onyx (White)	Ton	50,000	14	700,000
Total			56	3,080,000

12.8 Initial Working Capital

Table 8: Working Capital (Two months)

S. No	Description	Monthly Amount (Rs.)	Initial two Months Amount (Rs.)
1	First Two Month Salaries	106,000	212,000
2	First Two Months Advance Building Rent	30,000	60,000
3	First Two Months Utilities Charges	35,000	70,000
4	First Two Months Misc. Expenses	7,500	15,000
5	Office Stationary (2 Months)	8,000	16,000
6	Raw Material	106,666	213,330
	Total	293,166	586,330

12.9 Human Resource Requirement

Marble and Onyx industry is a highly specialized industry that requires skilled labor. A total of 10 persons will be required to handle the production processes of Onyx Handicraft Manufacturing Unit. The Unit will work on shift basis (8 hours daily). Technical staff with relevant experience will be required for operating machines. Salaries of all employees are estimated to increase at 10% annually. Human resource detail is given in the table below:

Table 9: Human Resource Requirement

Description	No. of Employees	Salary per month (Rs)
General Administrative Staff		
Office Assistant	1	13,000
Production Staff		
Cutting Machine Operator	1	11,500
Lathe Machine Operator	1	11,500
Grinder Operators	3	30,000
Factory Worker	2	20,000
Support Staff/ Guard	2	20,000
Total Staff	10	106,000

12.10 Product Mix and Revenue Generation

For the purpose of this pre-feasibility, only Marble and Onyx handicrafts will be produced and waste will be sold in the market. Details of the product mix, prices and revenue are given in the table below:

Table 10. I Toddet Mix With Annual production							
Product	Unit	First Year Production (Pieces)	Sales Price (Rs./Unit)	First Year Sales Revenue (Rs)			
Flower Vase	No.	128	7,000	896,000			
Chess Board	No.	391	1,500	586,500			
Jar	No.	231	5,000	1,155,000			
Animal Shapes	No.	1,205	300	361,500			
Cigarette Ash Tray	No.	901	300	270,300			
Photo Frame	No.	194	300	58,200			
Onyx & Marble (Waste 469 tons)	Ton		5,000	2,345,000			
Total Sales Revenue		3,050		5,672,500			

Table 10: Product Mix with Annual production

13. CONTACTS

Table 11: List of Contacts-Suppliers, Experts, Consultants and Development Institutions

S.No	Contact	Organization	Address	Service	
1	Mr. Farooq Maqsi	Indus Dimension Stone	Shop No. 195 F.L 7 Marina aviation Block-2 Clifton Karachi 0301-3719957	Stone Supplier/ Trader	
2	Mr. Zafar Zehri	M/s Zafar Zehri Marble Industries (Pvt) Ltd.	F-7 S.I.T.E, Mauripur Road Karachi. 021-5863787 Plot No. 100-10,	Mine /Quarry Owner	
3	Mr. Ilyas	M/s N-Traders	Sector B, Street No. 2, Marble City, Gadani, Lasbela, Balochistan 0346-2332552	Marble MachineryMarble Stone	
4	Mr. Toufique Ahmad,	Pakistan Stone Development Company, Islamabad	Islamabad Chamber of Commerce & Industry Building, Islamabad Toufeeque2@gmail.co	Consultant/ Sector Development company	
5	Mr. Mehtab Afridi	Dimension Stone Center, PCSIR Labs	University Road, Peshawar 0345-9112690	Consultant/ Development Institute	
6	Mr. Zahoor	ZAK Marble Factory	Kili Gul Mohammad, Airport Road, Quetta Email: zakakar@yahoo.com 0300-9383853	Onyx Hand Picks Suppliers	

14. ANNEXURES

14.1 Income Statement

Projected Income Statement

r rojecteu nicome statement	YEAR-1	YEAR- 2	YEAR-3	YEAR-4	YEAR- 5	YEAR- 6	YEAR-7	YEAR-8	YEAR-9	YEAR-10
ALES										
Flower Vase (12"x12") &										
(8"x12")	896,000	985,600	1,084,160	1,192,576	1,311,834	1,443,017	1,587,319	1,746,051	1,920,656	2,112,721
Chess Board										
(13.58"x13.58")	586,500	645,150	709,665	780,632	858,695	944,564	1,039,021	1,142,923	1,257,215	1,382,936
Jar (8x12)	1,155,000	1,270,500	1,397,550	1,537,305	1,691,036	1,860,139	2,046,153	2,250,768	2,475,845	2,723,430
Animal Shapes	361,500	397,650	437,415	481,157	529,272	582,199	640,419	704,461	774,907	852,398
Ash Tray (4"x4")	270,300	297,330	327,063	359,769	395,746	435,321	478,853	526,738	579,412	637,353
Photo Frame	58,200	64,020	70,422	77,464	85,211	93,732	103,105	113,415	124,757	137,233
Revenues from Wastage	2,345,000	- 2,579,500	- 2,837,450	- 3,121,195	- 3,433,315	- 3,776,646	- 4,154,311	- 4,569,742	- 5,026,716	- 5,529,388
	5,672,500	6,239,750	6,863,725	7,550,098	8,305,108	9,135,618	10,049,180	11,054,098	12,159,508	13,375,459
OST OF SALES										
Flower Vase (12"x12") &										
(8"x12") Chess Board	90,087	93,690	97,438	101,335	105,389	109,604	113,989	118,548	123,290	128,222
(13.58"x13.58")	275,187	286,194	297,642	309,548	321,930	334,807	348,199	362,127	376,612	391,677
Jar (8x12)	162,579	169,082	175,845	182,879	190,194	197,802	205,714	213,942	222,500	231,400
Animal Shapes	848,083	882,006	917,286	953,978	992,137	1,031,822	1,073,095	1,116,019	1,160,660	1,207,086
Ash Tray (4"x4")	634,127	659,492	685,871	713,306	741,838	771,512	802,372	834,467	867,846	902,560
Photo Frame	136,538	141,999	147,679	153,586	159,730	166,119	172,764	179,674	186,861	194,336
1.1001.10.100	100000	111,000	11,075	100,000	10,,,00	100,119	1,2,701	179,071	100,001	17 1,000
OST OF GOODS SOLD	2,146,599	2,232,463	2,321,762	2,414,632	2,511,218	2,611,666	2,716,133	2,824,778	2,937,770	3,055,280
lectricity Expanse	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	707,384
ayroll Expanses	1,272,000	1,272,001	1,272,002	1,272,003	1,272,004	1,272,006	1,272,007	1,272,008	1,272,009	1,272,010
eprecition Expanse	64,880	61,636	58,554	55,626	52,845	50,203	47,693	45,308	43,043	40,891
lachine Maintenance Expanse	55,904	49,309	46,843	44,501	42,276	40,162	38,154	36,246	34,434	32,712
ent Expanse	50,000	52,500	55,125	57,881	60,775	63,814	67,005	70,355	73,873	77,566
elephone Charges	24,000	25,200	26,460	27,783	29,172	30,631	32,162	33,770	35,459	37,232
⁷ ater Charges	36,000	37,800	39,690	41,675	43,758	45,946	48,243	50,656	53,188	55,848
as Charges	60,000	63,000	66,150	69,458	72,930	76,577	80,406	84,426	88,647	93,080
mortization of Preliminary Expanses	-	-				-	-	-	-	-
OTAL OPERATING EXPANSES	1,862,784	1,891,446	1,927,825	1,968,227	2,012,992	2,062,492	2,117,138	2,177,385	2,243,730	2,316,723
ARNINGS BEFORE INTEREST & TAXES	1,663,117	2,115,841	2,614,139	3,167,238	3,780,898	4,461,460	5,215,909	6,051,935	6,978,009	8,003,456
INANCIAL EXPENSES										
nancial Charges on Long term loan	142,843	131,416	116,687	100,781	83,602	65,049	45,012	23,372	-	-
OTAL FINANCIAL EXPENSES	142,843	131,416	116,687	100,781	83,602	65,049	45,012	23,372	-	-
ROFIT BEFORE TAX	1,520,274	1,984,425	2,497,451	3,066,457	3,697,296	4,396,411	5,170,897	6,028,564	6,978,009	8,003,456
NCOME TAX	180,123	270,668	376,035	514,310	667,725	860,938	1,087,273	1,340,677	1,664,803	2,023,709
ROFIT AFTER TAX	1,340,150	1,713,757	2,121,416	2,552,147	3,029,571	3,535,473	4,083,624	4,687,886	5,313,206	5,979,746
etained Earnings at the beginning of year	-	1,340,150	2,383,832	3,648,370	5,139,810	6,893,307	8,913,994	11,229,882	13,875,957	16,845,219
ividend		670,075	856,879	1,060,708	1,276,074	1,514,786	1,767,736	2,041,812	2,343,943	2,656,603
etained Earnings at the end of year	1,340,150	2,383,832	3,648,370	5,139,810	6,893,307	8,913,994	11,229,882	13,875,957	16,845,219	20,168,362

14.2 Statement of Cash Flow

Projected Cash Flow Statement						VEAD 5					NT + D 10
PERATING ACTIVITIES	YEAR-0	YEAR-1	YEAR-2	YEAR-3	YEAR-4	YEAR-5	YEAR-6	YEAR-7	YEAR-8	YEAR-9	YEAR-10
et Profit		1,520,274	1,984,425	2,497,451	3,066,457	3,697,296	4,396,411	5,170,897	6,028,564	6,978,009	8,003,456
dd:	-	1,520,274	1,904,425	2,497,451	3,000,437	3,097,290	4,390,411	5,170,697	0,020,504	0,978,009	0,000,400
epreciation	_	64,880	61,636	58,554	55,626	52,845	50,203	47,693	45,308	43,043	40,891
et profit before working capital changes	-	1,585,154	2,046,061	2,556,005	3,122,084	3,750,141	4,446,614	5,218,590	6,073,872	7,021,051	40,891 8,044,346
Vorking Capital changes	-	1,000,104	2,040,001	2,000,000	3,122,004	3,730,141	4,440,014	5,210,570	0,073,072	7,021,051	0,011,010
aw materials stock	(213,330)	1,619	(8,468)	(8,807)	(9,159)	(9,526)	(9,907)	(10,303)	(10,715)	(11,144)	(11,590)
/I.P	(215,550)	(7,034)	(281)	(293)	(304)	(317)	(329)	(342)	(356)	(370)	(385)
inished goods stock	-	(48,161)	(1,926)	(2,003)	(2,084)	(2,167)	(2,254)	(2,344)	(2,438)	(2,535)	(2,636)
.ccounts payable	-	178,883	7.155	7.442	7,739	8.049	8,371	8,706	9,054	9,416	9.793
.ccounts receivable	-	(472,708)	(47,271)	(51,998)	(57,198)	(62,917)	(69,209)	(76,130)	(83,743)	(92,117)	(101,329)
Vorking capital changes	(213,330)	(347,401)	(50,792)	(55,660)	(61,006)	(66,878)	(73,328)	(80,414)	(88,198)	(96,751)	(106,148)
	-	(180,123)	(270,668)	(376,035)	(514,310)	(667,725)	(860,938)	(1,087,273)	(1,340,677)	(1,664,803)	(2,023,709)
'ash provided by/ used in operations	(213,330)	1,057,629	1,724,601	2,124,311	2,546,768	3,015,538	3,512,348	4,050,903	4,644,996	5,259,498	5,914,489
INANCING ACTIVITIES											
ong term loan	1,785,537	-	-	-	-	-	-	-	-	-	-
wner equity	198,393										
ividend paid	-		(670,075)	(856,879)	(1,060,708)	(1,276,074)	(1,514,786)	(1,767,736)	(2,041,812)	(2,343,943)	(2,656,603)
'ash provided by/ used in Financing activities NVESTING ACTIVITIES	1,983,930	-	(670,075)	(856,879)	(1,060,708)	(1,276,074)	(1,514,786)	(1,767,736)	(2,041,812)	(2,343,943)	(2,656,603)
apital Expenditure	(1,397,600)		-	-	-	-	-	-	-	-	-
ash provided by/ used in Investing activities	(1,397,600)					-			-		-
et Cash Flow	373,000	1,057,629	1,054,526	1,267,432	1,486,060	1,739,465	1,997,562	2,283,167	2,603,184	2,915,554	3,257,886
ash balance B/F	-	373,000	1,430,629	2,485,155	3,752,588	5,238,647	6,978,112	8,975,674	11,258,841	13,862,025	16,777,579
'ash balance C/ F	373,000	1,430,629	2,485,155	3,752,588	5,238,647	6,978,112	8,975,674	11,258,841	13,862,025	16,777,579	20,035,465

14.3 Balance Sheet

Projected Balance Sheet	YEAR-0	YEAR - 1	YEAR - 2	YEAR - 3	YEAR - 4	YEAR - 5	YEAR - 6	YEAR - 7	YEAR - 8	YEAR - 9	YEAR - 10
Current Assets Cash & Bank Balance	373,000	1,530,629	2,652,568	3,684,393	4,972,897	6,499,001	8,266,133	10,300,436	12,176,488	15,092,042	18,349,928
Raw materials stock	213,330	211,711	220,179	228,987	238,146	247,672	257,579	267,882	278,597	289,741	301,331
W.LP	-	7,034	7,316	7,609	7,913	8,229	8,559	8,901	9,257	9,627	10,012
Finished goods stock	-	48,161	50,087	52,091	54,174	56,341	58,595	60,939	63,376	65,911	68,548
Receivables	-	472,708	519,979	571,977	629,175	692,092	761,302	837,432	921,175	1,013,292	1,114,622
TOTAL CURRENT ASSETS	586,330	2,270,244	3,450,130	4,545,056	5,902,306	7,503,336	9,352,167	11,475,590	13,448,893	16,470,615	19,844,441
Fixed Assets At Cost less: Acc. Depreciation	1,397,600	1,232,720	1,171,084	1,112,530	1,056,903	1,004,058	953,855	906,162	860,854	817,812	776,921
TOTAL ASSETS LIABILITIES AND EQUITY	1,983,930	3,502,964	4,621,214	- 5,657,586	- 6,959,209	8,507,394	10,306,022	12,381,752	14,309,748	17,288,426	20,621,362
Current Liabilities Current maturity of long term loan			198,829	214,735	231,914	250,467	270,504	292,145	-	-	-
Accounts Payable	-	178,883	186,039	193,480	201,219	209,268	217,639	226,344	235,398	244,814	254,607
TOTAL CURRENT LIABILITIES Non current Liabilities	-	178,883	384,867	408,215	433,133	459,735	488,143	518,489	235,398	244,814	254,607
Long term Loan	1,785,537	1,785,537	1,654,121	1,402,608	1,187,873	955,959	705,492	434,988	-	-	-
Paid up Capital	198,393	198,393	198,393	198,393	198,393	198,393	198,393	198,393	198,393	198,393	198,393
Retained Earnings	-	1,340,150	2,383,832	3,648,370	5,139,810	6,893,307	8,913,994	11,229,882	13,875,957	16,845,219	20,168,362
Total Equity	198,393	1,538,543	2,582,225	3,846,763	5,338,203	7,091,700	9,112,387	11,428,275	14,074,350	17,043,612	20,366,755
TOTAL LIABILITIES & EQUITY	1,983,930	3,502,964	4,621,214	5,657,586	6,959,209	8,507,394	10,306,022	12,381,752	14,309,748	17,288,426	20,621,362

14.4 Useful Project Management Tips Technology

- List of Machinery & Equipment
- · Required spare parts & consumables: Suppliers credit agreements and availability as per schedule of maintenance be ensured before start of operations.
- Energy Requirement: Should not be overestimated or installed in excess and alternate source of energy for critical operations be arranged in advance
- Machinery Suppliers: Should be asked for training and after sales services under the contract with the machinery suppliers. They must be communicated about the timely availability with clear mutual understanding of the required time period.
- Quality Assurance Equipment & Standards: Products quality standards need to be defined on the packaging

Marketing

- Product Development & Packaging: product / service and packaging design & development
- Sales & Distribution Network: civil works contractors focusing upon house construction for middle class people and owners of retail shops.
- Price Bulk Discounts, Cost plus Introductory Discounts: Price during introductory phase may be lower and used as promotional tool. Product cost estimates should be carefully documented before price setting.

Human Resources

- List of Human Resource: (As per Section 12.9)
- · Adequacy & Competencies: Skilled and experienced staff should be considered an investment even to the extent of offering share in business profit.
- Performance Based Remuneration: Attempt to manage human resource cost should be focused through performance measurement and performance based compensation.
- Training & Skill Development: Encouraging training and skill of self & employees through experts and exposure of best practices is route to success.

Onyx Handicraft Manufacturing Unit

(As per Section 12.5)

Expert help may be engaged for

Strong contacts to be established with

with compensation benefits and awards

14.5 Useful Links

Prime Minister's Office www.pmo.gov.pk Government of Pakistan www.pakistan.gov.pk **Ministry of Industries & Production** www.moip.gov.pk Ministry of Education, Training & Standards in Higher Education http://moptt.gov.pk Pakistan stone development Company www.PASDEC.com.pk State Bank of Pakistan (SBP) www.sbp.org.pk National Bank of Pakistan (NBP) www.nbp.com.pk First Women Bank Limited (FWBL) www.fwbl.com.pk Trade Development Authority of Pakistan (TDAP) www.tdap.gov.pk Security Commission of Pakistan (SECP) www.secp.gov.pk Federation of Pakistan Chambers of Commerce and Industry (FPCCI) www.fpcci.com.pk

Onyx Handicraft Manufacturing Unit

Least cost options for Training and Skill Development (T&SD) may be linked

15. KEY ASSUMPTIONS

Machinery Assumptions

Maximum Capacity Utilization Total Production of the unit per day (Sq.I Total Production of the unit per month (Se Total Production of the unit per year (100

Operating Assumptions

Annual Production capacity (50%) Days operational per month Days operational per year

Economy Related Assumptions

Electricity growth rate Wage growth rate Sales growth rate

Cash Flow Assumptions

Accounts Receivable cycle (in days) Accounts payable cycle (in days)

Onyx Handicraft Manufacturing Unit

Ft) Sq.Ft) 0%)	100% 19 502 12,060
	6,030 26 312
	10% 10% 10%
	30