Pre-Feasibility Study

HOUSING CONSTRUCTION COMPANY



Small and Medium Enterprises Development Authority Ministry of Industries & Production

Government of Pakistan www.smeda.org.pk

HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road,
Lahore
Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7
helpdesk@smeda.org.pk

REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE
PUNJAB	SINDH	KHYBER PAKTUNKHWA	BALOCHISTAN
3 rd Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore. Tel: (042) 111 111 456, Fax: (042) 36304926-7 helpdesk.punjab@smeda.org.pk	5TH Floor, Bahria Complex II, M.T. Khan Road, Karachi. Tel: (021) 111-111-456 Fax: (021) 35610572 helpdesk-khi@smeda.org.pk	Ground Floor State Life Building The Mall, Peshawar. Tel: (091)111 111 456,9213046- 7 Fax: (091) 5286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A Chamn Housing Scheme Airport Road, Quetta. Tel: (081) 2831623, 2831702 Fax: (081) 2831922 helpdesk-qta@smeda.org.pk

June 2018

TABLE OF CONTENTS

1	DIS	SCLAIMER	3
2	EX	ECUTIVE SUMMARY	4
3	INT	RODUCTION TO SMEDA	4
4	ΡU	RPOSE OF THE DOCUMENT	5
5	BR	IEF DESCRIPTION OF PROJECT & PRODUCT	5
į	5.1	Production Process Flow	6
į	5.2	Installed and Operational Capacities	7
6	CR	ITICAL FACTORS	8
7	GE	OGRAPHICAL POTENTIAL FOR INVESTMENT	8
8	РО	TENTIAL TARGET CUSTOMERS / MARKETS	9
9	PR	OJECT COST SUMMARY	9
Ş	9.1	Project Economics	9
Ś	9.2	Project Financing	10
Ś	9.3	Project Cost	10
Ś	9.4	Space Requirement	10
Ś	9.5	Machinery and Office Equipment Requirement	11
Ś	9.6	Furniture and Fixture Requirement	11
Ś	9.7	Raw Material Requirement	12
Ş	9.8	Human Resource Requirement	12
Ś	9.9	Revenue Generation	13
10	CO	NTACT DETAILS	13
•	10.1	Technical Experts / Support Institutions	13
11	US	EFUL WEB LINKS	14
12	ΑN	NEXURES	16
•	12.1	Income Statement	16
•	12.2	Balance Sheet	17
•	12.3	Cash Flow Statement	18
_		Y ASSUMPTION	_
		Operating Cost Assumptions	
•	13.2	Revenue Assumptions	19
•	13.3	Financial Assumptions	19
•	13.4	Production Cost Assumptions	19



1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. 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 taken 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. SMEDA, 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 qualified consultant / technical expert before taking any decision to act upon the information.

For more information on services offered by SMEDA, please contact our website: www.smeda.org.pk

DOCUMENT CONTROL

Document No.	PREF-80
Revision	4
Prepared by	SMEDA-Punjab
Revision Date	June 2018
For Information	Provincial Chief Punjab janjua@smeda.org.pk



2 EXECUTIVE SUMMARY

Housing construction not only improves the living standards of the public but also contributes towards the overall economic growth. The construction sector is linked with more than 40 industries and thus has multiple effects on the economy. Moreover, given the situation of Pakistan, a continuous growth in population and a huge housing shortage faced by most cities, the demand for houses is highly unlikely to slow down.

This pre-feasibility study provides the general information for initiating the 'Housing Construction' business mainly involving construction of residential houses in the key areas of major big cities in Pakistan. The company will built 20 houses and sell the completed units to customers. The starting operational capacity of the company will be 30% (i.e. 7 houses), which will be subsequently increased at 10% growth rate up to maximum capacity of 100% (i.e. 20 houses) in 8th year of operations.

The total project cost is estimated at Rs. 37.20 million, which includes a capital investment of Rs. 1.86 million and working capital of Rs. 35.34 million. The proposed project is financed through 50% debt and 50% equity. The Project's NPV is around Rs. 78.08 million, with an IRR of 41% and Payback Period of 4.26 years. The legal business status of this project is proposed as 'Sole Proprietorship'. Selection of a good location and purchase of land at competitive price will be the key success factor in timely selling of houses and maximizing profit of the construction company.

3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectorial research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.



4 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, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Housing Construction Company** business by providing them a general understanding of the business with 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 and 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 shall form the basis of any investment decision.

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Housing is the basic and fundamental human need, yet millions are caught in the struggle to have a roof over their head. Pakistan is faced with a chronic shortage of housing against a backdrop of a rapidly rising population. The need of the hour is to exploit the hidden potentials of the housing and construction sector, which is very well recognized to generate maximum employment opportunities for less skilled labor force, reducing poverty and raising the standards of public living.

Moreover, housing and construction is closely linked with more than 40 other industries and contributes to the overall economic revival and growth. Its multiple effects on the economy have the robust potential to generate industrial activities, develop small and medium enterprises (SMEs) self-employment opportunities, business, commerce and trade activities and at the same time encouraging utilization of indigenous natural and man-made resources. Therefore, it is imperative to develop this industry to utilize the real estate and housing industry potential for the economic development of the country and certainly it has the necessary potential to become the engine of change and progress for the economy of Pakistan.



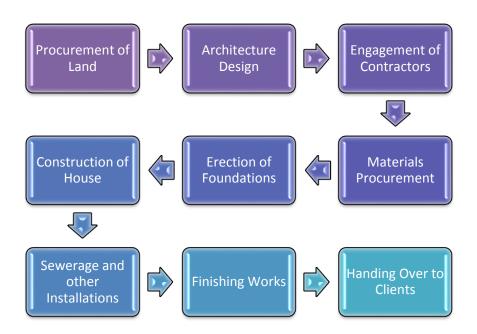
The proposed Housing Construction Company will focus on modern design and superior quality material used for constructing houses. This pre-feasibility study proposes construction of houses covering an area of 5 Marla (1,125 sq. ft.), 7 Marla (1,575 sq. ft.) and 10 Marla (2,250 sq. ft.) in developed and developing housing societies of major cities in Pakistan. To start with, 3 units of 5 Marla house, 2 units of 7 Marla house and 2 units of 10 Marla houses in the first year of operation and will increase the number of units in the upcoming years

The proposed company will provide the direct employment opportunity to 7 individuals including the owner / manager, whereas the contractors will engage a large number of temporary labors for the construction of houses. Company office will be established in rented premises of newly established housing societies of any major city.

The legal business status of this project is proposed as 'Sole Proprietorship'.

5.1 Production Process Flow

The business process flow of proposed Housing and Construction Company includes the following steps:





5.2 Installed and Operational Capacities

The proposed company has a maximum capacity of constructing 20 houses in a year. It is assumed that during first year of operation, the proposed company will be able to construct and sell 7 houses at 30% capacity utilization, which will be gradually increased at a rate of 10% to the maximum capacity of constructing 20 houses in the 8th year of operation. Category wise installed and operational capacities of the proposed project are provided the table below:

Description Annual Capacity Operational Capacity year 1 @ 30% No. of Units No. of Units 5 Marla House 10 3 2 7 Marla House 5 10 Marla House 2 5 7 **Total** 20

Table 1: Installed and Operational Capacities

The recommended layout for different category houses are described in the following table:

Table 2: Layout of the Houses

Description	Ground Floor	First Floor	Doors & Windows
5 Marla House Front 25 feet X length 45 feet	 2 Bedrooms (11X12 ft.) + attached Bathrooms (5X6 ft.) 1 Kitchen (6X10 ft.) A car porch (16X10 ft.) 1 TV Lounge (13X10 ft.) 1 Drawing Room (11X13 ft.) Vacant Space (5 ft. on front and 5 ft. at back) 	 2 Bedrooms (11X12 ft.) + attached Bathrooms (5X6 ft.) 1 Store (6X8 ft.) Stair Room (10X10 ft.) 1 TV Lounge (14X12 ft.) 1 Living Room (7X10 ft.) Terrace (5 Feet) 	 Windows 7 (5X6 ft.) Windows 4 (2.5X2 ft.) Front Door 1 (7X4 ft.) Room Doors 13 (7X3 ft.) Bathroom Doors 4 (7X2.25 ft.)
7 Marla House Front 28 feet X length 50 feet	 2 Bedrooms (14X12 ft.) + attached Bathrooms (7X7 ft.) 1 Kitchen (15X6 ft.) 1 Store (10X8) Car Porch (16X10 ft.) 1 TV Lounge (15X10) 1 Drawing Room (15X13 ft.) Vacant Space (7 ft. on front and 7 ft. at back) 	 2 Bedrooms (14X12 ft.) + attached Bathrooms (7X7 ft.) Store (10X8 ft.) 1 Kitchen (15X7 ft.) Stair Room (10X10 ft.) 1 TV Lounge (15X12 ft.) 1 Living Room (10X14 ft.) Terrace (5 Feet) 	 Windows 7 (5X6 ft.) Windows 4 (2.5X3 ft.) Front Door 1 (7X4 ft.) Room Doors 13 (7X3 ft.) Bathroom Doors 4 (7X2.25 ft.)



10 Marla House

Front 35 feet X length 65 feet

- 2 Bedrooms (14X14 ft.)
 + attached Bathrooms (7X8 ft.)
- 1 Kitchen (12X10 ft.)
- 1 store (10X10 ft.)
- Car Porch (16X10 ft.)
- 1 TV Lounge (14X16 ft.)
- 1 Drawing Room (14X16 ft.)
- Vacant Space (10 ft. on front and 7 ft. at back and 5 ft. Galley)

- 2 Bedrooms (14X14 ft.) + attached Bathrooms (7X8 ft.)
- Store (10X10 ft.)
- 1 Kitchen (12X10 ft.)
- Stair Room (10X10 ft.)
- 1 TV Lounge (14X14 ft.)
- 1 Living Room (12X12 ft.)
- Terrace (5 Feet)

- Windows 13 (6X6 ft.)
- Windows 4 (2.5X3 ft.)
- Front Door 1 (7X4 ft.)
- Room Doors 15 (7X3 ft.)
- Bathroom Doors 4 (7X2.25 ft.)

6 CRITICAL FACTORS

Following critical factors are to be taken care of, for a successful Housing Construction Company business.

- > Entrepreneur's knowledge, background and relevant experience in the field of housing and construction
- Careful selection of good location and purchase of land at a competitive price
- Modern and aesthetic architecture designs and use of superior quality material
- Efficient utilization of material and resources to manage quality as well as service delivery within specified financial resources and timeframe
- Investment in good construction material and efficient use of skilled and semiskilled labor force
- Location considerations; proximity of office to develop and newly developing housing schemes

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Developed or newly developing housing societies in urban centers such as Karachi, Lahore, Peshawar, Quetta, Rawalpindi, Islamabad, Multan, Sialkot, Faisalabad, Hyderabad, etc., would be an ideal choice for starting the proposed business due to greater demand of houses. Requisite materials, infrastructure facilities, etc. would also be easily available in such areas. However, it is recommended that the company office should be located in an easily approachable location, in line with the selected target market.



8 POTENTIAL TARGET CUSTOMERS / MARKETS

The potential target market for the proposed business venture is the general public of upper-middle income group who have migrated to urban centers for better livelihood of their families. Particularly, working class of urban centers would be the major potential target customers.

Considering to that, major cities for instance Karachi, Lahore, Peshawar, Quetta, Rawalpindi, Islamabad, Multan, Sialkot, Faisalabad, Hyderabad, etc., with large urban base would be the potential target markets for the proposed business.

9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyse the commercial viability of Housing Construction Company. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are also attached as annexures.

9.1 Project Economics

All the assumptions in this financial model are based upon a total capacity of constructing 20 houses. Whereas, during first year of operation it is assumed that company would be able to construct and sold 7 houses at 30% capacity utilization. The financial analysis of the proposed project is based on the stated number of constructed and sold houses.

The following table shows Internal Rate of Return, Payback Period and Net Present Value:

Table 3: Project Economics

Description	Details
IRR	41%
Net Present Value (NPV)	Rs. 78,076,811
Pay Back Period (years)	4.26

Returns on the project and its profitability are highly dependent on careful selection of a good location and purchase of land at competitive prices along with effective utilization of material resources to minimize construction costs.



9.2 Project Financing

Following table provides the details of required equity and variables related to project financing:

Table 4: Project Financing

Description	Details
Total Equity	50%
Total Debt	50%
Interest Rate	12%
Debt Tenure	5

9.3 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business:

Table 5: Project Cost

Description	Amount (Rs.)
Capital Investment	
Machinery & Equipment	500,000
Furniture & Fixtures	580,000
Office Vehicles	270,400
Office Equipment	249,000
Pre-operating Costs	260,000
Total Capital Costs	1,859,400
Working Capital	
Raw Material Inventory	31,370,820
Upfront Building Rental	900,000
Upfront Insurance Payment	13,520
Cash	3,059,793
Total Working Capital	35,344,133
Total Investment	37,203,533

9.4 Space Requirement

The space requirement for the proposed Housing and Construction Company mainly requires an office space of around 500 sq. ft. covered area. For this purpose it is



recommended that office space may be acquired on rental basis in the vicinity of developed or newly developing housing societies in major cities. The monthly rent of the office space is estimated as Rs. 75,000 per month.

9.5 Machinery and Office Equipment Requirement

All the required machinery such as, Mixer, Lifts, Shuttering material, etc. are easily and widely available on rental basis. Construction Company will engage contractors and it will be the contractor's responsibility to acquire the required machinery to be used in the construction of houses. The main role of Construction Company will be to oversee and manage all the operational activities from procurement of land and material to construction and finishing of houses. For this purpose, the proposed venture will establish a well-equipped office for smooth functioning, customer handling and timely completion and handing over of houses to customers.

Following tables provides the list of office equipment and important tools required for an average size Construction Company.

Quantity Cost / Unit Amount (Rs.) **Description** Computers 3 40,000 120,000 Computer printer (s) 2 15,000 30,000 1 Scanner 15,000 15,000 1 **UPS (1500 Watts)** 54,000 54,000 2 Telephones 2,500 5,000 Water Dispenser & Others 25,000 25,000 500,000 Tools & Plants (Misc.) **Total Machinery and Office Equipment** 749,000

Table 6: Machinery and Office Equipment Requirement

9.6 Furniture and Fixture Requirement

Details of required furniture and fixture, for setting-up the office of proposed Housing and Construction Company, are provided in the following table:

Table 7: Furniture and Fixture Requirement

Description	Quantity / Area	Cost / Unit	Amount (Rs.)
Furniture	1	200,000	200,000
Renovation of the Office	500	400	200,000
Electric Wiring & Lighting			40,000
Air Conditioners (1.5 ton split)	2	70,000	140,000
Total Furniture and Fixture			580,000

9.7 Raw Material Requirement

The major raw material for the Housing and Construction Company will be procurement of land in the developed or newly developing societies. Whereas, large number of construction material will be required for construction of houses, which will be procured by the contractors / company according to the requirements. List of items required is provided below:

Table 8: Raw Material Requirement

Bricks	Steel Doors and Grills
Sand	Wood
Crush	Win board
Steel	Chipboard
Mud	Glass
Cement	Varnish
Floor Tiles	Paints
Bath Room Fittings	Hardware
Cupboards	Wires
Lighting Accessories	Misc. Electrification Equipment
Sewerage and Water Supply Pipes	PPRC and UPVC Pipes

9.8 Human Resource Requirement

Following table provides details of human resource required for the project along with monthly salaries:

Table 9: Human Resource Requirement

Description	Number of Employees	Salary per Employee per Month Rs.
Owner / Manager	1	100,000
Diploma Holder Engineer	2	50,000
Accounts Officer	1	30,000
Office Boy	1	15,000
Purchase Officer	1	30,000
Construction Supervisor	1	40,000
Total	7	

It is assumed that the owner would have prior experience or knowledge about the housing and construction business. Salaries of all employees are estimated to increase at 10% annually.

9.9 Revenue Generation

Following table provides revenue and cost assumptions of the proposed Business venture during first year of operations:

No. of Units Built Sales Price Sales Revenue **Description** and Sold (Rs. / Unit) Year 1 (Rs.) 5 Marla House 3 10,036,192 30,108,576 7 Marla House 2 13,321,198 26,642,396 10 Marla House 2 19,203,591 38,407,182 Total 95,158,154

Table 10: Revenue Generation in First Year

10 CONTACT DETAILS

In order to facilitate potential investors, contact details of private sector service providers relevant to the proposed project are given below:

10.1 Technical Experts / Support Institutions

Name of Expert / Organization	Address	Contact
Constructors Association Of Pakistan (CAP)	2 nd Floor, Classic Complex, 35-M, Model Town Extension Lahore – 54700	Tel: +92-42-35178421, Fax: +92-42-35178422 cappk2011@gmail.com, info@cappk.org www.cappk.org
Association Of Builders And Developers Of Pakistan (ABAD)	ABAD House, ST- 1/D, Block-16, Gulistan-e-Jauhar Karachi-75290.	Tel: +92-21-34613649, 346151-52 UAN: +92-111-112-223 info@abad.com.pk, abadsecretariat@yahoo.com www.abad.com.pk
Association Of Consulting Engineers Pakistan - ACEP	Registered Office 4th Floor, IEP Building, 177/2, Liaquat Barracks, Karachi, Pakistan ACEP Secretariat:	Tel.: +92-21-34980871 Fax: +92-21-34985907 info@acep.org.pk acep.secretariat@yahoo.com www.acep.org.pk



	C-84, Block 8, Gulshan-e-Iqbal, University Road, Karachi- Pakistan	
PHA Foundation	Ministry of Housing & Works Shaheed-e-Milat Secretariat, Ground Floor Blue Area Islamabad	Tel: +92-51-9205987 www.pha.gov.pk

11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.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
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk
Government of Balochistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jamu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Securities and Exchange Commission of Pakistan (SECP)	www.secp.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
State Bank of Pakistan (SBP)	www.sbp.org.pk
Punjab Small Industries Corporation	www.psic.gop.pk
Sindh Small Industries Corporation	www.ssic.gos.pk
Punjab Industrial Estates (PIE)	www.pie.com.pk
Constructors Association of Pakistan (CAP)	www.cappk.org
Association Of Builders And Developers Of Pakistan (ABAD)	www.abad.org.pk
Association Of Consulting Engineers Pakistan (ACEP)	www.acep.org.pk
PHA Foundation, Ministry Of Housing & Works	www.pha.gov.pk



The Pakistan Council of Architects and Town Planners	www.pcatp.org.pk
Pakistan Institute of Interior Designers (PIID)	www.piid.com.pk
Lahore Development Authority	www.lda.gop.pk
Capital Development Authority	www.cda.gov.pk
Karachi Development Authority	www.kda.gos.pk

12 ANNEXURES

12.1 Income Statement

Calculations										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
5 Marla House	30,108,576	44,159,245	60,718,962	80,149,030	102,857,922	129,307,102	160,017,538	195,576,991	215,134,690	236,648,159
7 Marla House	26,642,396	29,306,636	48,355,949	53,191,544	78,014,265	85,815,691	117,996,576	129,796,233	142,775,856	157,053,442
10 Marla House	38,407,182	42,247,901	69,709,036	76,679,940	112,463,912	123,710,303	170,101,666	187,111,833	205,823,016	226,405,318
Revenue	95,158,155	115,713,782	178,783,947	210,020,514	293,336,098	338,833,096	448,115,780	512,485,057	563,733,563	620,106,919
Cost of sales										
Land and designing cost	42,430,000	51,447,000	79,636,150	93,376,305	130,597,720	150,647,105	199,451,195	227,853,747	250,639,122	275,703,034
Material cost	24,315,081	29,659,001	45,733,698	53,831,087	75,075,841	86,847,488	114,724,826	131,356,825	144,492,508	158,941,759
Labour cost	5,753,500	7,046,600	10,837,365	12,789,579	17,802,724	20,633,854	27,215,606	31,208,704	34,329,575	37,762,532
Utilities connection	210,000	240,000	330,000	360,000	450,000	480,000	570,000	600,000	600,000	600,000
Electricity Chg.	490,000	594,000	836,000	891,000	1,133,000	1,188,000	1,430,000	1,485,000	1,485,000	1,485,000
Total cost of sales	73,198,581	88,986,601	137,373,213	161,247,971	225,059,284	259,796,447	343,391,627	392,504,277	431,546,204	474,492,325
Gross Profit	21,959,574	26,727,180	41,410,734	48,772,542	68,276,814	79,036,648	104,724,153	119,980,781	132,187,359	145,614,595
	, ,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, , .	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , , , , , , , , , , , , ,	, ,	,,	-,-,-
General administration & selling expenses										
Administrative Salaries	3,780,000	4,158,000	4,573,800	6,149,220	6,764,142	7,440,556	8,184,612	9,003,073	9,903,380	10,893,718
Printing & Stationary	50,000	55,000	60,500	66,550	73,205	80,526	88,578	97,436	107,179	117,897
Entertainment	60.000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Office Rent	900,000	990,000	1,089,000	1,197,900	1,317,690	1,449,459	1,594,405	1,753,845	1,929,230	2,122,153
Telephone	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Internet	24,000	26,400	29,040	31,944	35,138	38,652	42,517	46,769	51,446	56,591
Insurance expense	13,520	10,816	8,112	5,408	2,704	21,774	17,419	13,064	8,710	4,355
Professional fees (legal, audit, consultants, etc.)	475,791	578,569	893,920	1,050,103	1,466,680	1,694,165	2,240,579	2,562,425	2,818,668	3,100,535
Depreciation expense	245.080	245,080	245.080	258,163	258,163	291.179	306.324	306,324	306,324	323,857
Commission on Sale of House	951,582	1,157,138	1,787,839	2,100,205	2,933,361	3,388,331	4,481,158	5,124,851	5,637,336	6,201,069
Amortization of pre-operating costs	52,000	52,000	52,000	52,000	52,000	5,500,551	., .01,150	5,121,051	-	0,201,007
Subtotal	6,611,972	7,405,003	8,884,491	11,071,213	13,078,776	14,597,904	17,168,180	19,141,634	21,019,504	23,103,128
Operating Income	15,347,602	19,322,178	32,526,243	37,701,330	55,198,038	64,438,745	87,555,973	100.839.147	111,167,855	122,511,466
Operating income	13,347,002	17,322,176	32,320,243	37,701,330	33,170,030	04,430,743	61,333,713	100,032,147	111,107,033	122,311,400
Gain / (loss) on sale of machinery & equipment										50,000
Gain / (loss) on sale of office equipment	-	-	149,400	-	-	247,649	-	-	324,035	309,025
Gain / (loss) on sale of office vehicles			142,400		108,160	247,047			324,033	201,233
Earnings Before Interest & Taxes	15,347,602	19.322.178	32,675,643	37,701,330	55,306,198	64,686,394	87,555,973	100,839,147	111,491,890	123,071,724
Earnings before interest & Taxes	13,347,002	19,322,176	32,073,043	37,701,330	33,300,196	04,000,334	61,333,713	100,033,147	111,491,090	123,071,724
Interest expense on long term debt (Project Loan)	103,795	85,484	64,852	41,603	15,405					_
Interest expense on long term debt (Project Loan) Interest expense on long term debt (Working Capital Loan)	2,309,917	1,917,975	1,467,500	949,749	354,677	-	-	-	-	-
Subtotal	2,413,712	2,003,460	1,532,352	949,749	370,082	<u> </u>	<u>-</u>	<u> </u>	<u> </u>	
	12,933,890		31,143,291	36,709,978						
Earnings Before Tax	12,955,890	17,318,718	51,145,291	36,/09,9/8	54,936,116	64,686,394	87,555,973	100,839,147	111,491,890	123,071,724
Toy	3,749,361	5,284,051	10,122,651	12.070.991	19 450 140	21,862,737	29,867,090	24 516 201	38,244,661	42,297,603
Tax NET PROFIT/(LOSS) AFTER TAX	9,184,529	12,034,667	21,020,640	24,638,986	18,450,140 36,485,976	42,823,657	57,688,883	34,516,201 66,322,946	73,247,229	42,297,603 80,774,121

SMED

12.2 Balance Sheet

Calculations											SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Assets											
Current assets											
Cash & Bank	3,059,793	8,093,534	2,264,640	16,255,695	15,293,631	26,226,312	39,490,476	87,301,494	137,783,272	195,167,271	429,639,13
Accounts receivable		7,821,218	8,665,970	12,102,646	15,978,266	20,685,888	25,979,556	32,340,365	39,476,747	44,228,162	48,650,97
Raw material inventory	31,370,820	33,369,976	49,953,896	53,749,324	75,019,761	97,423,668	126,512,705	137,376,497	151,041,171	166,072,314	-
Pre-paid building rent	900,000	990,000	1,089,000	1,197,900	1,317,690	1,449,459	1,594,405	1,753,845	1,929,230	2,122,153	-
Pre-paid insurance	13,520	10,816	8,112	5,408	2,704	21,774	17,419	13,064	8,710	4,355	-
Total Current Assets	35,344,133	50,285,544	61,981,618	83,310,973	107,612,052	145,807,101	193,594,560	258,785,266	330,239,130	407,594,254	478,290,11
Fixed assets											
Machinery & equipment	500,000	450,000	400,000	350,000	300,000	250,000	200,000	150,000	100,000	50,000	_
Furniture & fixtures	580,000	522,000	464,000	406,000	348,000	290,000	232,000	174,000	116,000	58,000	
Office vehicles	270,400	216,320	162,240	108,160	54,080	435,482	348,386	261,289	174,193	87,096	
Office equipment	249,000	166,000	83,000	288,249	192,166	96,083	333,684	222,456	111,228	386,281	257,52
Total Fixed Assets	1,599,400	1,354,320	1,109,240	1,152,409	894,246	1,071,565	1,114,069	807,745	501,421	581,377	257,52
Intangible assets	2 40 000	***	45.000	404.000	#8 000						
Pre-operation costs	260,000	208,000	156,000	104,000	52,000	-	-	-	-	-	-
Total Intangible Assets	260,000	208,000	156,000	104,000	52,000	-	-	-	-	-	-
TOTAL ASSETS	37,203,533	51,847,864	63,246,858	84,567,382	108,558,297	146,878,666	194,708,630	259,593,011	330,740,550	408,175,632	478,547,63
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		8,228,635	10,772,046	14,722,124	18,265,246	24,912,101	29,918,408	37,113,906	41,938,499	46,126,351	35,724,23
Total Current Liabilities	-	8,228,635	10,772,046	14,722,124	18,265,246	24,912,101	29,918,408	37,113,906	41,938,499	46,126,351	35,724,23
Other liabilities											
Long term debt (Project Loan)	929,700	785,327	622,643	439,327	232,762	-	-	-	-	-	-
Long term debt (Working Capital Loan)	17,672,067	15,047,607	12,031,205	8,564,328	4,579,700	_	_	-	_	_	_
Total Long Term Liabilities	18,601,767	15,832,934	12,653,848	9,003,655	4,812,463	-	-	-	-	-	-
Shareholders' equity											
Paid-up capital	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,767	18,601,76
Retained earnings	10,001,707	9,184,529	21,219,197	42,239,836	66,878,823	103,364,799	146,188,455	203,877,338	270,200,284	343,447,514	424,221,63
Total Equity	18,601,767	27,786,296	39,820,963	60,841,603	85,480,589	121,966,565	164,790,222	203,877,338	288,802,051	362,049,280	442,823,40
TOTAL CAPITAL AND LIABILITIES	10,001,707	21,100,290	33,020,303	00,041,003	05,400,509	121,700,303	104,770,222	444,417,103	200,002,001	302,042,200	41 2,023,40



12.3 Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	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		9,184,529	12,034,667	21,020,640	24,638,986	36,485,976	42,823,657	57,688,883	66,322,946	73,247,229	80,774,121
Add: depreciation expense		245,080	245,080	245,080	258,163	258,163	291,179	306,324	306,324	306,324	323,857
amortization of pre-operating costs		52,000	52,000	52,000	52,000	52,000	-	-	-	-	-
Accounts receivable		(7,821,218)	(844,752)	(3,436,676)	(3,875,619)	(4,707,623)	(5,293,668)	(6,360,809)	(7,136,382)	(4,751,416)	(4,422,816
Raw material inventory	(31,370,820)	(1,999,155)	(16,583,920)	(3,795,428)	(21,270,438)	(22,403,906)	(29,089,037)	(10,863,792)	(13,664,675)	(15,031,142)	166,072,314
Pre-paid building rent	(900,000)	(90,000)	(99,000)	(108,900)	(119,790)	(131,769)	(144,946)	(159,440)	(175,385)	(192,923)	2,122,153
Advance insurance premium	(13,520)	2,704	2,704	2,704	2,704	(19,070)	4,355	4,355	4,355	4,355	4,355
Accounts payable		8,228,635	2,543,412	3,950,077	3,543,122	6,646,855	5,006,307	7,195,498	4,824,594	4,187,852	(10,402,122
Cash provided by operations	(32,284,340)	7,802,575	(2,649,809)	17,929,497	3,229,128	16,180,626	13,597,847	47,811,019	50,481,778	57,770,279	234,471,861
Financing activities											
Project Loan - principal repayment		(144,373)	(162,683)	(183,316)	(206,565)	(232,762)		_		_	
Working Capital Loan - principal repayment		(2,624,460)	(3,016,402)	(3,466,877)	(3,984,628)	(4,579,700)	_	_	_	_	_
Additions to Project Loan	929,700	(2,024,400)	(3,010,402)	(3,400,877)	(3,964,026)	(4,579,700)	-	-	-	-	_
Additions to Working Capital Loan	17,672,067	-	-	-	-	-	-	-	-	-	_
Issuance of shares	18.601.767	-	-	-	-	-		-	-	-	
Cash provided by / (used for) financing activities	37,203,533	(2,768,833)	(3,179,085)	(3,650,193)	(4,191,193)	(4,812,463)	-	-	-	-	
						·					· · · · · · · · · · · · · · · · · · ·
Investing activities	(1.050.400)			(200.240)		(405.400)	(222.60.0			(206.264)	
Capital expenditure	(1,859,400)	-	-	(288,249)	-	(435,482)	(333,684)	-	-	(386,281)	-
Cash (used for) / provided by investing activities	(1,859,400)	-	-	(288,249)	-	(435,482)	(333,684)	-	-	(386,281)	
NET CASH	3,059,793	5,033,742	(5,828,894)	13,991,055	(962,065)	10,932,682	13,264,163	47,811,019	50,481,778	57,383,999	234,471,861



13 KEY ASSUMPTION

13.1 Operating Cost Assumptions

Description	Detail
Salary Growth Rate	10%
Operating Cost Growth Rate	10%
Broker Commission (On Sale Price)	1%
Professional Fee (On Revenue)	0.5%
Office Expenses (Year 1)	Rs. 110,000

13.2 Revenue Assumptions

Description	Detail
No of Projects (Houses Built & Sold) in a Year	20
Starting Capacity Utilization	30% (7 Houses)
Maximum Capacity Utilization	100% (20 Houses)
Annual Growth in Capacity Utilization	10%
Days Operational Per Year	330
Profit Margin (% of Total Cost Incurred)	30%

13.3 Financial Assumptions

Description	Detail
Debt	50%
Equity	50%
Debt Tenure	5 Years
Mark-up on Long Term Loan	12%

13.4 Production Cost Assumptions

Description	5 Marla House (Rs.)	7 Marla House (Rs.)	10 Marla House (Rs.)
Land	4,250,000	5,950,000	8,500,000
Designing Cost	50,000	75,000	100,000
Fee	40,000	40,000	40,000
Bricks	376,250	451,500	645,000
Sand	52,500	73,500	105,000
Crush	78,000	91,000	156,000
Brick Ballast	50,000	65,000	75,000
Steel	229,500	263,500	340,000
Cement	377,000	435,000	565,500

Mud	17,500	24,500	35,000
Water Proofing & Heat Insulation	71,000	103,900	141,600
Tiles on Roof	23,625	28,350	40,500
Graphy Paint on Front	50,000	70,000	100,000
Flooring	308,739	463,228	860,428
Sanitary & Pipe Fitting	70,000	84,000	120,000
Electric Wires	61,184	87,498	113,415
Electric Fittings	35,000	50,000	75,000
Grills	84,000	96,000	199,200
Stair & Balcony Railing	65,000	80,000	110,000
Aluminum Windows	94,500	108,000	224,100
Gate	31,500	31,500	42,000
Glass	15,750	18,000	37,350
Paint	150,000	210,000	300,000
Doors	54,600	54,600	60,900
Room Cupboards	90,000	90,000	125,000
Kitchen Cabinets	32,000	80,000	96,000
Hardware fittings	30,000	40,000	70,000
Bath room fittings	200,000	200,000	250,000
Labor	652,500	783,000	1,115,000
Connection	30,000	30,000	30,000
Electricity Charges (During Construction)	50,000	70,000	100,000
Total Cost per House	7,720,148	10,247,076	14,771,993

