



**Pre-feasibility Study** 

# WHEELCHAIR MANUFACTURING UNIT

December 2021

The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, andrevenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA's website and consult financial experts to stay current with market conditions.

Small and Medium Enterprises Development Authority
Ministry of Industries and Production
Government of Pakistan

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#### 1 DISCLAIMER

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#### **Document Control**

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#### 2 EXECUTIVE SUMMARY

A wheelchair is used when walking is difficult or impossible due to illness, injury, problems related to old age, or disability. These can include spinal cord injuries, cerebral palsy, brain injury, and multiple different injuries. An appropriate wheelchair helps the user to move freely and easily in the environment and opens opportunities for users to study, work, engage in social activities and access healthcare services.

Wheelchairs are manually or battery operated chairs designed primarily for the convenience of the user. Battery operated wheel chairs are expensive and only few people can afford to buy. This particular pre-feasibility study is for setting up a manual wheelchair manufacturing unit equipped with semi-automatic machinery. The produced wheelchairs are proposed to be sold to wholesalers. Target end-users will be hospitals, pharmacies and nursing homes.

The proposed unit can produce 6,600 wheelchairs in a year based on 330 working days with 8 hours operational per day. However, starting operational capacity is assumed at 70%, and with an annual increase of 5%, it will attain a maximum capacity of 95% in year 6. This production capacity is estimated to be economically viable and justifies the capital as well as operational cost of the project. However, entrepreneur's knowledge of the industry, competitive pricing, and strong linkage with wholesalers, nursing homes and pharmacies are key factors for the success of this business.

The total cost of the proposed Wheelchair Manufacturing Unit is estimated at Rs. 5.65 million out of which Rs. 3.96 million is the capital cost and Rs.1.69 million is for working capital. The project is to be financed through 100% equity. The project NPV is around Rs. 2.65 million, with an IRR of 33% and a Payback Period of 4.35 years. The project will provide employment opportunities to 12 individuals including the owner. The legal business status of this project is proposed as 'Sole Proprietorship'.

#### 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 the development of Small and Medium Enterprises (SMEs).

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

Preparation and dissemination of pre-feasibility studies in key investment areas have 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 SMEs by SMEDA. These services include the 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, production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in the **Wheelchair Manufacturing Unit** business by providing them with 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 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 form the basis of an informed Investment Decision.

#### 5 BRIEF DESCRIPTION OF PROJECT AND PRODUCT

A wheelchair is a manually or power-driven operated chair designed primarily for the use of an individual with a disability or difficulty in moving both indoor and outdoor locations. Typically, a wheelchair consists of four wheels: two large wheels in the rear, which are used for propelling the wheelchair, and two small wheels in the front, which swivel and are called casters. The large wheels support the majority of the individual's weight and provide the primary means of propulsion whereas the casters facilitate maneuverability.

A manual wheelchair is powered either by the individual using the wheelchair or by an assistant, while, power-driven wheelchairs consist of motors, where propulsion is provided by batteries and electric motors. The most commonly recognized manual wheelchairs are seen at hospitals and nursing homes.

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The propose unit will be making manual wheelchairs through machinery such as: bending, verma, welding plant, Lathe machine, power press machine, drill, screw driver machines and die casting machine to make different parts of wheelchairs. For welding purpose electric welding and CO<sub>2</sub> welding machines will be used. The unit may be setup in an industrial cluster where Raw Material, skilled labor and utilities especially electricity and other infrastructure are conveniently available.

#### 5.1 Production Process Flow

The production process flow of making a wheelchair is given below;

Pipe Cutting

Bending

Drilling

Assembling of Wheels

Paint or Powder Coating

Welding Process

Assembling of other Parts

Figure1: Production Process Flow Diagram

## **Pipe Cutting**

MS mild steel pipe will be used for the manufacturing of the wheelchair of 7/8 size and 18 gage and 24 ft. pipe will be used in one wheelchair. The other pipe of 1 inch 16 gages, 4 ft. will also be used in the manufacturing of one wheelchair. The pipe will be cut through the ruler cutter according required sizes.

#### **Bending**

Bending of pipe will be done through bending machine according to shape of the wheelchair. This machine is used to bend pipes in the shape which is required and the Power press machine is used to punch pipe to make hand break for the wheelchair.

#### Drilling

Drilling of different size of holes will be done through drill machine according to required size holes and it must be done accurately.

#### **Welding process**

Temporary spots with electric welder will be marked in this process.

## **Welding with CO2 Welding Plant**

In this process the temporary welding spots will be permanently weld with the help of CO2 welding plant and the whole structure of wheelchair will be made. It is also called cold welding because CO2 gas is used in this welding plant. From a 25 kg cylinder of CO2 gas 200 whole wheelchairs can be weld.

#### **Paint**

Chrome coating and powder coating will be applied on the wheelchair according to the buyer's demand.

#### **Assembling of wheels**

In this process assembling of rim will be done in which 28 spokes (wires) will be installed in each wheel and then also rubber tires will be fit. To make propeller, ring maker machine will be used and lathe machine is used to thread excel to fix nuts.

## **Assembling of all parts**

All parts such as Rexene seat, back seat, arm rest, foot rest, safeguard, propeller, break, excel will be assembled in which 250 nut bolts will be used.

## 5.2 Installed and Operational Capacity

The proposed unit will have the capacity to manufacture 6,600 standard size wheelchairs in a year. However, the initial operating capacity of the project will be 70% with an annual increase of 5% and it will achieve a maximum operational capacity of 95% in 6<sup>th</sup> year.

**Table 1: Installed and Operational Capacity** 

Description	Total Installed Capacity	Operational Capacity 70 % (Year 1)	Maximum Capacity 95% (Year 6)	
Wheelchair (Standard Size)	6,600	4,620	6,270	

The unit may also capable of manufacture different sizes of wheelchairs.

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### **6 CRITICAL SUCCESS FACTORS**

Following are critical success factors associated with this business:

- ⇒ Technical know-how, expertise and experience of the entrepreneur in the relevant field.
- ⇒ Selection of high-quality raw materials and strong linkages with raw material suppliers for sourcing of material on time at economical prices.
- ⇒ Selection of appropriate location with easy accessibility of raw materials, skilled labour force and required infrastructure.
- ⇒ The entrepreneur should be aware of the supply and demand conditions of the market.
- ⇒ Induction of trained human resource for the handling of business operations, especially in production and sales.
- ⇒ Stringent supervision of the production process at every level.
- ⇒ Sales and marketing management is very critical for the success of the business.
- ⇒ Higher return on investment and steady growth of the business is closely associated with regular training and capacity building of the entrepreneur and employees.

#### 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Location selection is critical to the success of the project. It is important to find a location preferably in an industrial cluster where utilities especially electricity and other infrastructure are conveniently available. Presently, Karachi, Lahore, Faisalabad, Multan, and Peshawar can be considered as these cities have adequate availability of skilled labor, raw material, and infrastructure.

#### 8 POTENTIAL TARGET CUSTOMERS / MARKETS

Wheelchairs are mostly used in the hospitals so, our potential customers will be:

- ⇒ Hospitals, Pharmacies
- ⇒ Nursing Homes
- ⇒ Traders, Suppliers, and Exporters of Wheelchairs



#### 9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of the Wheelchair Manufacturing Unit. Various cost and revenue related assumptions, along with the results of the analysis, are outlined in this section.

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

#### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 35,334,000 in the year one. The capacity utilization during year one is worked out at 70%.

The following table shows internal rate of return, payback period and net present value of the proposed venture

**Table 2: Project Economics (Equity Financed)** 

Description	Details
Internal Rate of Return (IRR)	33%
Payback Period (Yrs.)	4.35
Net Present Value (Rs.)	2,653,766

Calculation of break-even analysis is as follows:

Table 3: Breakeven (100% Equity-Based)

Break-Even Analysis	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Break-Even Revenue (Rs. Mn.)	32.3	35.4	38.6	42.2	46.2	51.2	56.0	61.2	67.0	73.3
Break-Even Units	4,136	4,125	4,095	4,068	4,044	4,073	4,049	4,026	4,006	3,987
Margin of Safety	9%	17%	22%	27%	32%	35%	35%	36%	36%	36%

However, for further explanation, the Project Economics based on Debt:Equity (i.e. 50:50) Model has also been computed. Based on the Debt:Equity model, the Internal Rate of Return, Payback Period and Net Present Value of the proposed project are provided in the table below:



Table 4: Project Economics Based on Debt 50%: Equity 50%

Description	Details
Internal Rate of Return (IRR)	29%
Payback Period (Yrs.)	5.31
Net Present Value (Rs.)	3,881,221

The financial assumptions for Debt: Equity as follows:

**Table 5.1: Financial Assumptions for Debt: Equity Model** 

Description	Details
Debt	Rs. 2,822,938
Equity	Rs. 2,822,938
Interest Rate on Debt	15%
Debt Tenure (Years)	5
Debt Payment / Year	1

The projected Income Statement, Balance Sheet and Cash Flow Statement enclosed as annexures are based on a 100% Equity-Based Business Model.

## 9.2 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 Cost	
Machinery and Equipment	1,286,000
Office Vehicles	1,700,000
Furniture and Fixture	201,250
Office Equipment	175,000

Pre-operating costs	370,000
Building Security	225,000
Total Capital Cost	3,957,250
Cash	500,000
Upfront Insurance Payment	75,000
Raw Material Inventory	1,107,019
Equipment Spare Part Inventory	6606
Total Working Capital	1,688,625
Total Project Cost	5,645,875

## 9.3 Land and Building Requirement

Approximately 1.5 kanal of area will be required for the proposed unit. The land will be acquired on rental basis.

The infrastructural requirements of the project mainly comprise the construction of various facilities including management office, production, storage, open space, etc. The proposed building will be taken on rent at Rs. 75,000 per month.

**Table 7: Space Requirement** 

Description	Estimated Area (Sq. ft.)
Management Building	500
Production Hall	4,000
Store	500
Kitchen	250
Open Area	1,500
Total	6,750

## 9.4 Machinery and Equipment Requirement

Machinery and equipment for the proposed project are stated below:

**Table 6: Machinery and Equipment** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Pipe Cutter	1	50,000	50,000
Grinder Machine	1	15,000	15,000
Electric Welding Plant	1	45,000	45,000
CO <sub>2</sub> Welding Plant	1	300,000	300,000
Lathe Machine	1	400,000	400,000
Ring Maker Machine	1	80,000	80,000
Drill Machine	1	18,000	18,000
Screw Driver Machine	3	6,000	18,000
Bending Machine	1	35,000	35,000
Power Press Machine (15 ton)	1	250,000	250,000
Berma Machine	1	25000	25000
Tools (Hammers, Spanners)	1	50,000	50,000
Total			1,286,000

Die Casting machine is also required but due to its high cost this process will be outsourced.

## 9.5 Furniture and Fixtures Requirement

Details of the furniture and fixture required for the project are given below:

**Table 7: Furniture and Fixture** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Renovation of the Building	6,750	15	101,250
Air Conditioner	1	100,000	100,000

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Total		201,250
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## 9.6 Office Equipment Requirement

Following office equipment will be required for Wheelchair Manufacturing Unit:

**Table 8: Office Equipment** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computer	3	50,000	150,000
Computer Printers	1	20,000	20,000
Telephones	2	2,500	5,000
Total			175,000

## 9.7 Vehicles Requirement

Vehicle is required for transportation and smooth movement of raw material and finished goods. Details of the vehicles required for the project are given below.

**Table 9: Vehicle Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Mazda Truck (Used)	1	1,700,000	1,700,000
Total			1,700,000

## 9.8 Raw Material Requirement

The raw material required by the unit for first year of operations is provided in the following.

**Table 10: Raw Material Requirement** 

Description	Quantity	Total Cost (Rs.)
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Pipe	24 ft.	1,200
2 <sup>nd</sup> Pipe	4 ft.	200
Propeller (Wheel Ring)	1	200
Grip	2	25
Rim	2	700
Spokes	1	100
Hub	2	70
Tire (PVC Rubber)	2	500
Arm Rest	2	80
Safeguard	2	80
Foot Rest Aluminum	2	300
Excel	2	60
Wheel Iron Clump	2	300
Break	2	300
Rexene Seat	1	300
Rexene Back Seat	1	300
Paint		300
Chrome		550
End bush		50
Misc.(Screws, Washers, Nut bolts)		250
Total		5,865

## 9.9 Human Resource Requirement

In order to run the operations smoothly, details of human resources required along with a number of employees and monthly salary are recommended as under:

**Table 11: Human Resource Requirement** 

Description	No. of Employees	Monthly Salary per Person (Rs.)
Owner Manager	1	70,000
Accountant	1	35,000
Manager Sales	1	60,000
Welder	2	20,000
Production/Assembling staff	6	20,000
Driver	1	22,000
Total	12	

#### 9.10 Utilities and Other Cost

An essential cost to be borne by the project is the cost of electricity. The electricity expenses are estimated to be around Rs. 26,590 per month. Furthermore, promotional expense being essential for marketing of this unit is estimated as 1.0% of revenue.

#### 9.11 Revenue Generation

Based on the assumed capacity utilization of the unit, sales revenue during the first year of operations is estimated as under:

**Table 12: Revenue Generation (Year 1)** 

Description	Quantity Produced	Finished Goods Inventory	Quantity Available for Sale	Sale Price / Unit (Rs.)	Sales Revenue (Rs.)
Wheelchair	4,620	90	4,530	7,800	35,334,000

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## **10 CONTACT DETAILS**

The Machinery and Raw Material for the proposed Pre-feasibility study are easy available in local markets. In Lahore, the Machinery and Raw Material can be purchased from the following markets.

**Table 13: Suppliers Inforamtion** 

Description	Area
Machinery, Equipment and Tools	Brandreth Road
Raw Material	Brandreth Road McLeod Road Naulakha Bazaar

Similarly, Raw Material and Machinery is available in local markets of almost every major city of Pakistan.

## 11 USEFUL WEB LINKS

Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries and Production	www.moip.gov.pk
Ministry of Education, Training and Standards in Higher Education	www.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 Azad Jammu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Security 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 Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	www.fiedmc.com.pk
Punjab Industrial Estate Development and Management Company (PIEDMC)	www.pie.com.pk
Punjab Small Industries Corporation	www.psic.gop.pk
Sundar Industrial Estate	www.sie.com.pk
Quaid-e-Azam Industrial Estate	www.qie.com.pk
Pakistan Council of Scientific and Industrial Research (PCSIR)	www.pcsir-lhr.gov.pk
Pakistan Medical Commission	www.pmc.gov.pk
World Health Organization	www.who.int
University of Health Sciences	www.uhs.edu.pk
Wheelchair Foundation	www.wheelchairfoundation.org



## 12 ANNEXURES

## 12.1 Income Statement

Calculations										<b>SMEDA</b>
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Revenue	35,334,000	42,419,520	49,766,574	58,179,607	67,754,741	78,688,230	86,639,962	95,303,958	104,834,354	115,317,79
Cost of sales	,,	, .,.	.,,.	, ,	, , .	, ,	,,-	, ,	, , , , , , , , , , , , , , , , , , , ,	-,,
Raw Material Cost	26,568,450	31,896,216	37,420,635	43,746,589	50,946,354	59,167,496	65,146,587	71,661,246	78,827,370	86,710,10
Operation costs 1 (direct labor)	1,882,597	2,109,440	2,320,120	2,552,787	2,807,759	3,089,220	3,401,397	3,741,537	4,115,691	4,527,260
Operating costs 2 (machinery maintenance)	158,550	190,344	223,312	261,062	304,028	353,088	388,769	427,646	470,411	517,452
Operating costs 3 (direct electricity)	247,091	296,640	348,018	406,850	473,809	550,267	605,874	666,461	733,107	806,418
Operating costs 5 (direct CO2 gas)	113,250	135,960	159,508	186,473	217,163	252,206	277,692	305,461	336,008	369,608
Total cost of sales	28,969,938	34,628,600	40,471,593	47,153,762	54,749,113	63,412,278	69,820,319	76,802,351	84,482,586	92,930,845
Gross Profit	6,364,062	7,790,920	9,294,981	11,025,845	13,005,629	15,275,952	16,819,643	18,501,607	20,351,768	22,386,945
General administration & selling expenses Administration expense	2,244,000	2,468,400	2,715,240	2,986,764	3,285,440	3,613,984	3,975,383	4,372,921	4,810,213	5,291,235
•	, ,		407,286		492,816	542,098				793,685
Administration benefits expense	336,600 900.000	370,260		448,015		,	596,307	655,938	721,532	,
Building rental expense	,	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
Electricity expense	72,000	79,200	87,120	95,832	105,415	115,957	127,552	140,308	154,338	169,772
Travelling expense	112,200	123,420	135,762	149,338	164,272	180,699	198,769	218,646	240,511	264,562
Communications expense (phone, fax, mail, internet, etc.)	112,200	123,420	135,762	149,338	164,272	180,699	198,769	218,646	240,511	264,562
Office vehicles running expense	425,000	467,500	514,250	565,675	622,243	684,467	752,913	828,205	911,025	1,002,128
Office expenses (stationary, entertainment, janitorial services, etc.	22,440	24,684	27,152	29,868	32,854	36,140	39,754	43,729	48,102	52,912
Promotional expense	353,340	424,195	497,666	581,796	677,547	786,882	866,400	953,040	1,048,344	1,153,178
Professional fees (legal, audit, consultants, etc.)	176,670	212,098	248,833	290,898	338,774	393,441	433,200	476,520	524,172	576,589
Depreciation expense	506,225	506,225	506,225	506,225	506,225	713,798	713,798	713,798	713,798	713,798
Amortization of pre-operating costs	74,000	74,000	74,000	74,000	74,000		-	-	-	
Bad debt / Product Return / Claim expense	530,010	636,293	746,499	872,694	1,016,321	1,180,323	1,299,599	1,429,559	1,572,515	1,729,767
Subtotal	5,864,685	6,499,695	7,184,795	7,948,343	8,797,870	9,877,948	10,796,850	11,805,156	12,914,291	14,134,341
Operating Income	499,377	1,291,225	2,110,186	3,077,502	4,207,759	5,398,004	6,022,793	6,696,452	7,437,477	8,252,604
Gain / (loss) on sale of office vehicles	_	_	-	_	680,000	-	-	_	-	
Earnings Before Interest & Taxes	499,377	1,291,225	2,110,186	3,077,502	4,887,759	5,398,004	6,022,793	6,696,452	7,437,477	8,252,604
Earnings Before Tax	499,377	1,291,225	2,110,186	3,077,502	4,887,759	5,398,004	6,022,793	6,696,452	7,437,477	8,252,604
Tax	4,969	83,684	206,528	389,376	886,328	1,039,401	1,227,977	1,463,758	1,723,117	2,008,41
NET PROFIT/(LOSS) AFTER TAX	494,408	1,207,542	1,903,658	2,688,127	4,001,431	4,358,603	4,794,815	5,232,694	5,714,360	6,244,193



## 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 10
Assets											
Current assets											
Cash & Bank	500,000	341,667	1,689,897	3,458,824	5,871,773	6,649,065	10,656,499	14,915,878	19,464,378	24,227,357	39,313,501
Accounts receivable		1,452,082	1,597,675	1,894,235	2,218,072	2,587,692	3,009,102	3,397,155	3,738,574	4,112,431	4,523,674
Finished goods inventory		575,562	672,400	790,551	917,159	1,070,436	1,235,041	1,358,545	1,494,400	1,643,840	1,808,224
Equipment spare part inventory	6,606	8,328	10,258	12,592	15,398	18,777	21,708	25,073	28,959	33,447	-
Raw material inventory	1,107,019	1,461,910	1,886,624	2,426,113	3,107,940	3,970,410	4,808,798	5,818,646	7,040,561	8,519,079	-
Pre-paid building rent	75,000	82,500	90,750	99,825	109,808	120,788	132,867	146,154	160,769	176,846	-
Total Current Assets	1,688,625	3,922,048	5,947,604	8,682,140	12,240,149	14,417,168	19,864,015	25,661,450	31,927,641	38,713,001	45,645,399
Fixed assets											
Machinery & equipment	1,286,000	1,157,400	1,028,800	900,200	771,600	643,000	514,400	385,800	257,200	128,600	-
Furniture & fixtures	201,250	181,125	161,000	140,875	120,750	100,625	80,500	60,375	40,250	20,125	-
Office vehicles	1,700,000	1,360,000	1,020,000	680,000	340,000	2,737,867	2,190,294	1,642,720	1,095,147	547,573	-
Building Security	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000
Office equipment	175,000	157,500	140,000	122,500	105,000	87,500	70,000	52,500	35,000	17,500	-
Total Fixed Assets	3,587,250	3,081,025	2,574,800	2,068,575	1,562,350	3,793,992	3,080,194	2,366,395	1,652,597	938,798	225,000
Intangible assets											
Pre-operation costs	370,000	296,000	222,000	148,000	74,000	-	_	-	-	-	-
Total Intangible Assets	370,000	296,000	222,000	148,000	74,000	_	_	_	_	_	_
TOTAL ASSETS	5,645,875	7,299,073	8,744,404	10,898,715	13,876,499	18,211,160	22,944,209	28,027,846	33,580,238	39,651,799	45,870,399
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		1,158,791	1,396,580	1,647,232	1,936,890	2,270,119	2,644,565	2,933,387	3,253,085	3,610,287	3,584,694
Total Current Liabilities	-	1,158,791	1,396,580	1,647,232	1,936,890	2,270,119	2,644,565	2,933,387	3,253,085	3,610,287	3,584,694
Other liabilities											
Total Long Term Liabilities	-	-	-	-	-	-	-	-	-	-	-
Shareholders' equity											
Paid-up capital	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875	5,645,875
Retained earnings	2,0.2,073	494,408	1,701,949	3,605,608	6,293,734	10,295,166	14,653,769	19,448,584	24,681,278	30,395,637	36,639,830
Total Equity	5,645,875	6,140,283	7,347,824	9,251,483	11,939,609	15,941,041	20,299,644	25,094,459	30,327,153	36,041,512	42,285,705
TOTAL CAPITAL AND LIABILITIES	5,645,875	7,299,073	8,744,404	10,898,715	13,876,499	18,211,160	22,944,209	28,027,846	33,580,238	39,651,799	45,870,399



## 12.3 Cash Flow Statement

Calculations											<b>SMEDA</b>
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		494,408	1,207,542	1,903,658	2,688,127	4,001,431	4,358,603	4,794,815	5,232,694	5,714,360	6,244,19
Add: depreciation expense		506,225	506,225	506,225	506,225	506,225	713,798	713,798	713,798	713,798	713,79
amortization of pre-operating costs		74,000	74,000	74,000	74,000	74,000	-	-	-	-	-
Accounts receivable		(1,452,082)	(145,593)	(296,560)	(323,837)	(369,620)	(421,410)	(388,052)	(341,419)	(373,857)	(411,24
Finished goods inventory		(575,562)	(96,838)	(118,151)	(126,608)	(153,277)	(164,605)	(123,504)	(135,855)	(149,440)	(164,384
Equipment inventory	(6,606)	(1,721)	(1,931)	(2,334)	(2,806)	(3,379)	(2,931)	(3,365)	(3,886)	(4,489)	33,44
Raw material inventory	(1,107,019)	(354,891)	(424,714)	(539,489)	(681,827)	(862,470)	(838,388)	(1,009,848)	(1,221,916)	(1,478,518)	8,519,079
Pre-paid building rent	(75,000)	(7,500)	(8,250)	(9,075)	(9,983)	(10,981)	(12,079)	(13,287)	(14,615)	(16,077)	176,846
Accounts payable		1,158,791	237,789	250,652	289,658	333,229	374,446	288,821	319,699	357,201	(25,592
Cash provided by operations	(1,188,625)	(158,333)	1,348,230	1,768,927	2,412,949	3,515,159	4,007,434	4,259,379	4,548,500	4,762,979	15,086,14
Financing activities											
Issuance of shares	5,645,875	-	_	-	-	_	-	_	-	-	_
Cash provided by / (used for) financing activities	5,645,875	-	-	-	-	-	-	-	-	-	-
Investing activities											
Capital expenditure	(3,957,250)	-	_	_	-	(2,737,867)	-	-	-	-	-
Acquisitions						.,,,,					
Cash (used for) / provided by investing activities	(3,957,250)	-	-	-	-	(2,737,867)	-	-	-	-	
NET CASH	500,000	(158,333)	1,348,230	1,768,927	2,412,949	777,292	4,007,434	4,259,379	4,548,500	4,762,979	15,086,144

## **13 KEY ASSUMPTIONS**

## 13.1 Operating Cost Assumptions

Description	Details
Travelling expense	5% of Administration expenses
Promotional Expenses	1.0% of Revenue
Depreciation Method	Straight Line
Depreciation Rate	<ul><li>10% on Machinery</li><li>10% on Office Equipment</li><li>10% on Furniture &amp; Fixture</li><li>20% on Vehicle</li></ul>
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

## **13.2 Production Cost Assumptions**

Description	Details
Raw Material Cost Growth Rate	10%
Raw Material Cost Per Wheel Chair	Rs. 5,865
Building Rent Growth Rate	10%

## 13.3 Revenue Assumptions

December 2021

Description	Details
Days Operational / Year	330 days
Production Capacity Utilization year 1	70%
Growth in Production Capacity	5%

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Maximum Capacity Utilization	95%		
Wheelchair Sale Price	Rs. 7,800		
Sale Price Growth Rate	10%		

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