



## Pre-feasibility Study

# PAPER BAG MAKING UNIT

June 2020

*“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, and revenues 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

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.

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### ***Document Control***

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## **2 EXECUTIVE SUMMARY**

**Paper bag making unit** is proposed to be located at Quetta, Lahore, Karachi and other major cities of Pakistan.

Product include customized Paper bag as per need of customers.

Capacity; Installed capacity 2500 units per hour and initial utilization 75%.

Total Cost Estimates is Rs. 31.20 million with fixed investment Rs. 29.24 million and working capital Rs. 1.95 million.

Given the cost assumptions IRR and payback are 31% and 5.09 years respectively.

The most critical considerations or factors for success of the project are:

- Location
- Availability of raw material
- Customer awareness
- Product quality

### 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 'sectoral 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 **Paper Bag Making Unit** 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 its successful management.

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

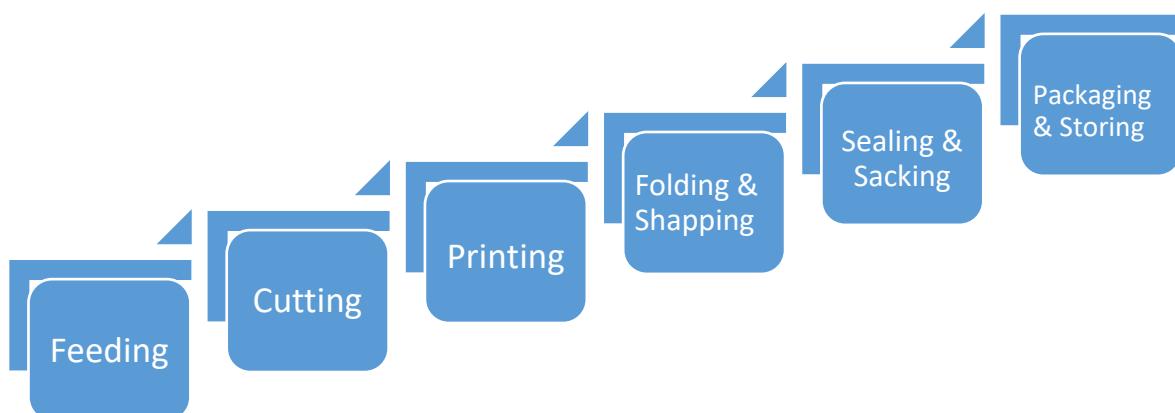
## 5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Following key parameters must be addressed as per pre-feasibility study under preparation

- **Technology:** This proposed unit with modern processing machines including Paper Bag Making line and generator etc.
- **Location:** The unit would be located in major cities with availability of malls and market for shopping purposes as Lahore, Quetta, Karachi and Peshawar etc.
- **Product:** The main product of the proposed intervention would be customized shopping paper bags.
- **Target Market:** The primary customers of the produce would be grocers, bakery, cosmetics, textile & cloth merchants etc.
- **Employment Generation:** The proposed project will provide direct employment to 13 people.

### 5.1 Production Process Flow

The production of paper bags is simple process that can be customizes as per need, however basic functions of the process under an automatic line remain same. The process is brief as follows:



## 5.2 Installed and Operational Capacities

The project operational capacity is around 2500 units/hour that reaches to around 6,600,000 units per year on working days of 330 with 08 hour/day operational length. The plant will operate at 75% capacity and will increase at 5%.

## 6 CRITICAL FACTORS

- Awareness in the clientage for using Paper bag as a cheap & good marketing tool.
- Selection of raw material i.e. Paper is vital for project success.
- Use of the customized paper bag for versatile target market.
- Emphasizing on excellent quality standards & quality.
- Assurance of timely order fulfillment.
- Increasing awareness among the masses on the environment friendly effects of paper bags as it is bio degradable as compare to plastic.
- Availability of paper bag in different sizes, shapes and colors.
- Adapt to the rapid, social, economic and technological changes.
- Well-trained/experienced staff adding in the efficiency of the facility.

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The project location is vital for project success. The project could be located near the major cities as Lahore, Karachi, Quetta, Rawalpindi and Peshawar etc. with large availability of malls, markets and shopping locations.

## 8 POTENTIAL TARGET CUSTOMERS / MARKETS

The project primarily targets will be stores using customized paper bags for Garments, Cloths, Toys, Stationery, Jewelry, Food, Beverages, Drugs, Appliances & Electrical gadgetry etc.

## 9 PROJECT COST SUMMARY

### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 147.2 million in the year one. The capacity utilization during year one is worked out at 75% with 5% increase in subsequent years up to the maximum capacity utilization of 95%.

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

**Table 1: Project Economics**

| Description                   | Details    |
|-------------------------------|------------|
| Internal Rate of Return (IRR) | 31%        |
| Payback Period (yrs.)         | 5.09       |
| Net Present Value (Rs.)       | 47,182,720 |

### 9.2 Project Financing

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

**Table 2: Project Financing**

| Description                           | Details        |
|---------------------------------------|----------------|
| Total Equity (50%)                    | Rs. 15,603,997 |
| Bank Loan (50%)                       | Rs. 15,603,997 |
| Markup to the Borrower (%age / annum) | 16%            |
| Tenure of the Loan (Years)            | 5              |



### 9.3 Project Cost

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

**Table 3: Project Cost**

| Description                  | Amount Rs.        |
|------------------------------|-------------------|
| <b>Capital Cost</b>          |                   |
| Land                         | 3,000,000         |
| Building                     | 10,000,000        |
| Plant and Machinery          | 8,200,000         |
| Furniture & Fixture          | 1,170,000         |
| Office Equipment             | 432,500           |
| Motor Vehicles               | 3,811,000         |
| Pre-operating Cost           | 2,634,913         |
| <b>Total Capital Cost</b>    | <b>29,248,413</b> |
| <b>Working Capital</b>       |                   |
| Raw Material Inventory       | 859,031           |
| Up-front Insurance           | 600,550           |
| Cash                         | 500,000           |
| <b>Total Working Capital</b> | <b>1,959,581</b>  |
|                              |                   |
| <b>Total Project Cost</b>    | <b>31,207,995</b> |

### 9.4 Space Requirement

The space requirement for the proposed Paper Bag Making Unit is estimated considering various facilities including management office, production hall, storage, open space, etc. Details of space requirement and cost related to land & building is given below;

**Table 4: Space Requirement**

| Description                           | Estimated Area (Sqft) | Unit Cost (Rs.) | Total Cost (Rs.)  |
|---------------------------------------|-----------------------|-----------------|-------------------|
| Management Office                     | 1000                  | 1500            | 1,500,000         |
| Production Hall                       | 5000                  | 1,000           | 5,000,000         |
| Store – Finished Goods & Raw Material | 3000                  | 1,000           | 3,000,000         |
| Walls etc.                            |                       | 200,000         | 200,000           |
| Pavements / Driveway                  | 1000                  | 200             | 200,000           |
| Open Space / Ground                   | 5000                  | 20              | 100,000           |
| <b>Total</b>                          |                       |                 | <b>10,000,000</b> |

## 9.5 Machinery & Equipment Requirement

Plant, machinery and equipment for the proposed project are stated below.

**Table 5: Machinery & Equipment**

| Description           | Quantity | Unit Cost (Rs.) | Total Cost (Rs.) |
|-----------------------|----------|-----------------|------------------|
| Paper Bag Making Line | 01       | 7,000,000       | 7,000,000        |
| Generator             | 01       | 1,200,000       | 1,200,000        |
| <b>Total</b>          |          |                 | <b>8,200,000</b> |

## 9.6 Furniture & Fixtures Requirement

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

**Table 6: Furniture & Fixture**

| Description                       | Quantity | Unit Cost (Rs.) | Total Cost (Rs.) |
|-----------------------------------|----------|-----------------|------------------|
| Table                             | 6        | 25,000          | 150,000          |
| Chair                             | 20       | 10,000          | 200,000          |
| Rolling Chairs                    | 5        | 30,000          | 150,000          |
| Carpeting                         | 1000     | 75              | 75,000           |
| Electric Wiring & Lightening etc. | 1        | 400,000         | 400,000          |
| Air Conditioners (1 tons)         | 3        | 65,000          | 195,000          |

|              |  |  |                  |
|--------------|--|--|------------------|
| <b>Total</b> |  |  | <b>1,170,000</b> |
|--------------|--|--|------------------|

## 9.7 Office Equipment Requirement

Following office equipment will be required for Paper Bag Making Unit.

**Table 7: Office Equipment**

| <b>Description</b> | <b>Quantity</b> | <b>Unit Cost (Rs.)</b> | <b>Total Cost (Rs.)</b> |
|--------------------|-----------------|------------------------|-------------------------|
| Laptop             | 02              | 75,000                 | 150,000                 |
| Printer ( 3 in 1 ) | 02              | 25,000                 | 50,000                  |
| Networking etc.    | 01              | 100,000                | 100,000                 |
| Photo Copier       | 01              | 100,000                | 100,000                 |
| Fax                | 01              | 20,000                 | 20,000                  |
| Telephone Sets     | 05              | 2,500                  | 12,500                  |
| <b>Total</b>       |                 |                        | <b>432,000</b>          |

## 9.8 Human Resource Requirement

In order to run operations of Paper Bag Making Unit smoothly, details of human resources required along with number of employees and monthly salary are recommended as under;

**Table 8: Human Resource Requirement**

| <b>Description</b>         | <b>No. of Employees</b> | <b>Monthly Salary per person (Rs.)</b> |
|----------------------------|-------------------------|--|
| Owner                      | 01                      | 75,000                                 |
| Manager                    | 01                      | 60,000                                 |
| Marketing Officer          | 01                      | 45,000                                 |
| Admin and Accounts Officer | 01                      | 40,000                                 |
| Machine Operators          | 01                      | 35,000                                 |
| Skilled Labor              | 05                      | 20,000                                 |
| Supporting Staff           | 02                      | 17,500                                 |
| Security Guard             | 01                      | 17,500                                 |
| <b>Total</b>               | <b>13</b>               |  |

## 9.9 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and gas. The electricity expenses are estimated to be around Rs. 167,400 per month. Furthermore, promotional expense being essential for marketing of Paper Bag Making Unit is estimated as 500,000 in year.

## 9.10 Revenue Generation

Based on the capacity utilization of 75% for Customized Paper Bags, sales revenue during the first year of operations is estimated as under;

**Table 9: Revenue Generation – Year 1**

| Description | No. of Units Produced (No.) | Finished Goods Inventory (No.) | Units available for Sale (No.) | Sale Price / unit (Rs.) | Sales Revenue (Rs.) |
|-------------|-----------------------------|--------------------------------|--------------------------------|-------------------------|---------------------|
| Paper Bags  | 4,950,000                   | 41,250                         | 4908,750                       | 30                      | 147,262,500         |

## 10 CONTACT DETAILS

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project be given.

### 10.1 Machinery Suppliers

| Name of Supplier      | Address                                    | Phone        | Fax          | E-mail          | Website       |
|-----------------------|--|--------------|--------------|-----------------|---------------|
| K-Group of Industries | 245/2/F, PECHS, Block-6, Karachi-Pakistan. | 021-34398500 | 021-34549986 | k@kgroup.com.pk | kgroup.com.pk |

### 10.2 Raw Material Suppliers

| Name of Supplier | Address  | Phone         | Fax           | E-mail                   | Website             |
|------------------|--|---------------|---------------|--------------------------|---------------------|
| Century Papers   | Lakson Square Building No: 2, Sarwar Shaheed Road, Karachi | 021-3569 8000 | 021-3568 1163 | info@centurypaper.com.pk | centurypaper.com.pk |

|                            |   |               |   |                       |                    |
|----------------------------|---|---------------|---|-----------------------|--------------------|
| Flying Group of industries | 103 Fazal Road, St. John Park, Lahore           | 042 6674301-5 | - | info@flyingtissue.com | flyingpaper.com.pk |
| Premier Paper Mill Ltd     | Km. 8, Lahore Road, P.O. Kot Saleem, Sheikhpura | 042-588717-9  | - | ppml@wolnet.pk        | -                  |

### 10.3 Technical Experts / Consultants

| Name of Expert/Organization | Address | Phone        | Fax | E-mail | Website |
|-----------------------------|---------|--------------|-----|--------|---------|
| Imran Khan / Kgroup         | Karachi | 0300,8231252 | -   | -      | -       |

## 11 USEFUL WEB LINKS

|  |  |
|--|--|
| Small & Medium Enterprises Development Authority (SMEDA)         | <a href="http://www.smeda.org.pk">www.smeda.org.pk</a>                         |
| Government of Pakistan   | <a href="http://www.pakistan.gov.pk">www.pakistan.gov.pk</a>                   |
| Ministry of Industries & Production                              | <a href="http://www.moip.gov.pk">www.moip.gov.pk</a>                           |
| Government of Punjab   | <a href="http://www.punjab.gov.pk">www.punjab.gov.pk</a>                       |
| Government of Sindh  | <a href="http://www.sindh.gov.pk">www.sindh.gov.pk</a>                         |
| Government of Khyber Pakhtunkhwa                                 | <a href="http://www.khyberpakhtunkhwa.gov.pk">www.khyberpakhtunkhwa.gov.pk</a> |
| Government of Balochistan  | <a href="http://www.balochistan.gov.pk">www.balochistan.gov.pk</a>             |
| Government of Gilgit Baltistan                                   | <a href="http://www.gilgitbaltistan.gov.pk">www.gilgitbaltistan.gov.pk</a>     |
| Government of Azad Jamu Kashmir                                  | <a href="http://www.ajk.gov.pk">www.ajk.gov.pk</a>                             |
| Trade Development Authority of Pakistan (TDAP)                   | <a href="http://www.tdap.gov.pk">www.tdap.gov.pk</a>                           |
| Security Commission of Pakistan (SECP)                           | <a href="http://www.secp.gov.pk">www.secp.gov.pk</a>                           |
| Federation of Pakistan Chambers of Commerce and Industry (FPCCI) | <a href="http://www.fpcci.com.pk">www.fpcci.com.pk</a>                         |
| State Bank of Pakistan (SBP)                                     | <a href="http://www.sbp.org.pk">www.sbp.org.pk</a>                             |
| Punjab Small Industries Corporation                              | <a href="http://www.psic.gop.pk">www.psic.gop.pk</a>                           |
| Sindh Small Industries Corporation                               | <a href="http://www.ssic.gos.pk">www.ssic.gos.pk</a>                           |

## 12 ANNEXURES

### 12.1 Income Statement

| Statement Summaries                                  |                    |                |                  |                   |                   |                   |                   |                   |                   | SMEDA                     |
|--|--------------------|----------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|
| Income Statement                                     |                    |                |                  |                   |                   |                   |                   |                   |                   |                           |
|  | Year 1             | Year 2         | Year 3           | Year 4            | Year 5            | Year 6            | Year 7            | Year 8            | Year 9            | Rs. in actuals<br>Year 10 |
| Revenue  | 147,262,500        | 174,149,250    | 203,543,175      | 237,074,393       | 275,276,422       | 302,936,931       | 333,230,624       | 366,553,687       | 403,209,055       | 443,529,961               |
| Cost of goods sold                                   | 132,298,250        | 151,433,648    | 171,339,266      | 190,809,994       | 214,636,413       | 228,105,520       | 242,408,494       | 257,711,404       | 274,092,243       | 291,635,651               |
| Gross Profit   | 14,964,250         | 22,715,602     | 32,203,909       | 46,264,399        | 60,640,009        | 74,831,411        | 90,822,131        | 108,842,282       | 129,116,812       | 151,894,309               |
| <i>General administration &amp; selling expenses</i> |                    |                |                  |                   |                   |                   |                   |                   |                   |                           |
| Administration expense                               | 5,747,400          | 7,324,229      | 8,558,264        | 9,391,509         | 10,933,194        | 11,997,665        | 13,165,775        | 14,447,613        | 15,854,253        | 17,397,846                |
| Rental expense                                       | -                  | -              | -                | -                 | -                 | -                 | -                 | -                 | -                 | -                         |
| Utilities expense                                    | -                  | -              | -                | -                 | -                 | -                 | -                 | -                 | -                 | -                         |
| Travelling & Comm. expense (phone, fax, etc.)        | 111,600            | 142,218        | 166,180          | 182,359           | 212,295           | 232,964           | 255,646           | 280,536           | 307,850           | 337,822                   |
| Office vehicles running expense                      | 571,650            | 628,815        | 691,697          | 760,866           | 836,953           | 920,648           | 1,012,713         | 1,113,984         | 1,225,383         | 1,347,921                 |
| Office expenses (stationary, etc.)                   | 279,000            | 355,545        | 415,450          | 455,898           | 530,738           | 582,411           | 639,115           | 701,340           | 769,624           | 844,556                   |
| Promotional expense                                  | 736,313            | 870,746        | 1,017,716        | 1,185,372         | 1,376,382         | 1,514,685         | 1,666,153         | 1,832,768         | 2,016,045         | 2,217,650                 |
| Insurance expense                                    | 600,550            | 540,495        | 480,440          | 420,385           | 360,330           | 300,275           | 240,220           | 180,165           | 120,110           | 60,055                    |
| Professional fees (legal, audit, etc.)               | 736,313            | 870,746        | 1,017,716        | 1,185,372         | 1,376,382         | 1,514,685         | 1,666,153         | 1,832,768         | 2,016,045         | 2,217,650                 |
| Depreciation expense                                 | 1,861,350          | 1,861,350      | 1,861,350        | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350                 |
| Amortization expense                                 | 526,983            | 526,983        | 526,983          | 526,983           | 526,983           | -                 | -                 | -                 | -                 | -                         |
| Property tax expense                                 | -                  | -              | -                | -                 | -                 | -                 | -                 | -                 | -                 | -                         |
| Miscellaneous expense                                | 4,417,875          | 5,224,478      | 6,106,295        | 7,112,232         | 8,258,293         | 9,088,108         | 9,996,919         | 10,996,611        | 12,096,272        | 13,305,899                |
| Subtotal   | 15,589,033         | 18,345,605     | 20,842,090       | 23,082,326        | 26,272,899        | 28,012,791        | 30,504,044        | 33,247,136        | 36,266,931        | 39,590,748                |
| Operating Income                                     | (624,783)          | 4,369,997      | 11,361,819       | 23,182,072        | 34,367,110        | 46,818,621        | 60,318,087        | 75,595,146        | 92,849,881        | 112,303,562               |
| Other income   | 25,000             | -              | -                | 31,787            | 194,951           | 627,955           | 1,283,190         | 2,024,428         | 2,839,848         | 3,877,078                 |
| Gain / (loss) on sale of assets                      | -                  | -              | -                | -                 | -                 | -                 | -                 | -                 | -                 | -                         |
| Earnings Before Interest & Taxes                     | (599,783)          | 4,369,997      | 11,361,819       | 23,213,859        | 34,562,061        | 47,446,576        | 61,601,277        | 77,619,574        | 95,689,729        | 116,180,640               |
| Interest expense                                     | 3,181,152          | 3,459,333      | 2,445,690        | 1,282,467         | 616,051           | -                 | -                 | -                 | -                 | -                         |
| Earnings Before Tax                                  | (3,780,935)        | 910,665        | 8,916,129        | 21,931,392        | 33,946,010        | 47,446,576        | 61,601,277        | 77,619,574        | 95,689,729        | 116,180,640               |
| Tax  | -                  | -              | 2,478,802        | 8,991,871         | 13,917,864        | 19,453,096        | 25,256,523        | 31,824,025        | 39,232,789        | 47,634,062                |
| <b>NET PROFIT/(LOSS) AFTER TAX</b>                   | <b>(3,780,935)</b> | <b>910,665</b> | <b>6,437,327</b> | <b>12,939,521</b> | <b>20,028,146</b> | <b>27,993,480</b> | <b>36,344,753</b> | <b>45,795,549</b> | <b>56,456,940</b> | <b>68,546,578</b>         |
| Balance brought forward                              |                    | (3,780,935)    | (2,870,270)      | 3,567,057         | 8,253,289         | 14,140,718        | 21,067,099        | 28,705,926        | 37,250,737        | 46,853,839                |
| Total profit available for appropriation             | (3,780,935)        | (2,870,270)    | 3,567,057        | 16,506,578        | 28,281,435        | 42,134,197        | 57,411,852        | 74,501,475        | 93,707,678        | 115,400,416               |
| Dividend   | -                  | -              | -                | 8,253,289         | 14,140,718        | 21,067,099        | 28,705,926        | 37,250,737        | 46,853,839        | 57,700,208                |
| Balance carried forward                              | (3,780,935)        | (2,870,270)    | 3,567,057        | 8,253,289         | 14,140,718        | 21,067,099        | 28,705,926        | 37,250,737        | 46,853,839        | 57,700,208                |

## 12.2 Balance Sheet

| S MEDA  |            |             |             |            |            |            |            |            |            |            |                           |
|---|------------|-------------|-------------|------------|------------|------------|------------|------------|------------|------------|---------------------------|
| Balance Sheet   |            |             |             |            |            |            |            |            |            |            |                           |
|   | Year 0     | Year 1      | Year 2      | Year 3     | Year 4     | Year 5     | Year 6     | Year 7     | Year 8     | Year 9     | Rs. in actuals<br>Year 10 |
| <b>Assets</b>   |            |             |             |            |            |            |            |            |            |            |                           |
| <i>Current assets</i>   |            |             |             |            |            |            |            |            |            |            |                           |
| Cash & Bank   | 500,000    | -           | -           | -          | 635,739    | 3,263,280  | 9,295,828  | 16,367,970 | 24,120,586 | 32,676,379 | 44,865,186                |
| Accounts receivable   | -          | 12,103,767  | 13,208,702  | 15,521,607 | 18,107,571 | 21,055,513 | 23,762,193 | 26,143,872 | 28,758,259 | 31,634,085 | 34,797,494                |
| Finished goods inventory  | -          | 1,111,750   | 1,262,605   | 1,428,527  | 1,590,820  | 1,789,422  | 1,900,879  | 2,020,071  | 2,147,595  | 2,284,102  | 2,430,297                 |
| Equipment spare part inventory  | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Raw material inventory  | 859,031    | 1,018,179   | 1,192,738   | 1,392,384  | 1,620,427  | 1,787,305  | 1,970,503  | 2,172,480  | 2,395,159  | 2,640,663  | -                         |
| Pre-paid annual land lease  | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Pre-paid building rent  | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Pre-paid lease interest   | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Pre-paid insurance  | 600,550    | 540,495     | 480,440     | 420,385    | 360,330    | 300,275    | 240,220    | 180,165    | 120,110    | 60,055     | -                         |
| Total Current Assets  | 1,959,581  | 14,774,192  | 16,144,485  | 18,762,903 | 22,314,887 | 28,195,794 | 37,169,623 | 46,884,558 | 57,541,710 | 69,295,284 | 82,092,977                |
| <i>Fixed assets</i>   |            |             |             |            |            |            |            |            |            |            |                           |
| Land  | 3,000,000  | 3,000,000   | 3,000,000   | 3,000,000  | 3,000,000  | 3,000,000  | 3,000,000  | 3,000,000  | 3,000,000  | 3,000,000  | 3,000,000                 |
| Building/Infrastructure   | 10,000,000 | 9,500,000   | 9,000,000   | 8,500,000  | 8,000,000  | 7,500,000  | 7,000,000  | 6,500,000  | 6,000,000  | 5,500,000  | 5,000,000                 |
| Machinery & equipment   | 8,200,000  | 7,380,000   | 6,560,000   | 5,740,000  | 4,920,000  | 4,100,000  | 3,280,000  | 2,460,000  | 1,640,000  | 820,000    | -                         |
| Furniture & fixtures  | 1,170,000  | 1,053,000   | 936,000     | 819,000    | 702,000    | 585,000    | 468,000    | 351,000    | 234,000    | 117,000    | -                         |
| Office vehicles   | 3,811,000  | 3,429,900   | 3,048,800   | 2,667,700  | 2,286,600  | 1,905,500  | 1,524,400  | 1,143,300  | 762,200    | 381,100    | -                         |
| Office equipment  | 432,500    | 389,250     | 346,000     | 302,750    | 259,500    | 216,250    | 173,000    | 129,750    | 86,500     | 43,250     | -                         |
| Total Fixed Assets  | 26,613,500 | 24,752,150  | 22,890,800  | 21,029,450 | 19,168,100 | 17,306,750 | 15,445,400 | 13,584,050 | 11,722,700 | 9,861,350  | 8,000,000                 |
| <i>Intangible assets</i>  |            |             |             |            |            |            |            |            |            |            |                           |
| Pre-operation costs   | 2,634,913  | 2,107,931   | 1,580,948   | 1,053,965  | 526,983    | -          | -          | -          | -          | -          | -                         |
| Legal, licensing, & training costs  | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Total Intangible Assets   | 2,634,913  | 2,107,931   | 1,580,948   | 1,053,965  | 526,983    | -          | -          | -          | -          | -          | -                         |
| TOTAL ASSETS  | 31,207,995 | 41,634,272  | 40,616,233  | 40,846,319 | 42,009,970 | 45,502,544 | 52,615,023 | 60,468,608 | 69,264,410 | 79,156,634 | 90,092,977                |
| <b>Liabilities &amp; Shareholders' Equity</b>   |            |             |             |            |            |            |            |            |            |            |                           |
| <i>Current liabilities</i>  |            |             |             |            |            |            |            |            |            |            |                           |
| Accounts payable  | -          | 8,556,323   | 9,662,145   | 10,784,732 | 11,996,360 | 13,295,574 | 13,974,123 | 14,681,332 | 15,424,773 | 16,206,347 | 16,788,771                |
| Export re-finance facility  | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Short term debt   | -          | 8,757,177   | 8,189,387   | 1,571,220  | -          | -          | -          | -          | -          | -          | -                         |
| Other liabilities   | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Total Current Liabilities   | -          | 17,313,500  | 17,851,533  | 12,355,952 | 11,996,360 | 13,295,574 | 13,974,123 | 14,681,332 | 15,424,773 | 16,206,347 | 16,788,771                |
| <i>Other liabilities</i>  |            |             |             |            |            |            |            |            |            |            |                           |
| Lease payable   | -          | -           | -           | -          | -          | -          | -          | -          | -          | -          | -                         |
| Deferred tax  | -          | -           | -           | 2,149,753  | 2,306,004  | 2,462,255  | 1,969,804  | 1,477,353  | 984,902    | 492,451    | -                         |
| Long term debt  | 15,603,997 | 12,497,710  | 10,030,973  | 7,169,559  | 3,850,319  | -          | -          | -          | -          | -          | -                         |
| Total Long Term Liabilities   | 15,603,997 | 12,497,710  | 10,030,973  | 9,319,312  | 6,156,323  | 2,462,255  | 1,969,804  | 1,477,353  | 984,902    | 492,451    | -                         |
| <i>Shareholders' equity</i>   |            |             |             |            |            |            |            |            |            |            |                           |
| Paid-up capital   | 15,603,997 | 15,603,997  | 15,603,997  | 15,603,997 | 15,603,997 | 15,603,997 | 15,603,997 | 15,603,997 | 15,603,997 | 15,603,997 | 15,603,997                |
| Retained earnings   | -          | (3,780,935) | (2,870,270) | 3,567,057  | 8,253,289  | 14,140,718 | 21,067,099 | 28,705,926 | 37,250,737 | 46,853,839 | 57,700,208                |
| Total Equity  | 15,603,997 | 11,823,062  | 12,733,727  | 19,171,054 | 23,857,286 | 29,744,715 | 36,671,096 | 44,309,923 | 52,854,735 | 62,457,836 | 73,304,206                |
| TOTAL CAPITAL AND LIABILITY   | 31,207,995 | 41,634,272  | 40,616,233  | 40,846,319 | 42,009,970 | 45,502,544 | 52,615,023 | 60,468,608 | 69,264,410 | 79,156,634 | 90,092,977                |
| Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0 |            |             |             |            |            |            |            |            |            |            |                           |

## 12.3 Cash Flow Statement

| Statement Summaries                  |                |                  |             |             |                  |                   |                   |                   |                   |                   | SMEDA                     |
|--------------------------------------|----------------|------------------|-------------|-------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------------|
| Cash Flow Statement                  |                |                  |             |             |                  |                   |                   |                   |                   |                   |                           |
|                                      | Year 0         | Year 1           | Year 2      | Year 3      | Year 4           | Year 5            | Year 6            | Year 7            | Year 8            | Year 9            | Rs. in actuals<br>Year 10 |
| <i>Operating activities</i>          |                |                  |             |             |                  |                   |                   |                   |                   |                   |                           |
| Net profit                           | -              | (3,780,935)      | 910,665     | 6,437,327   | 12,939,521       | 20,028,146        | 27,993,480        | 36,344,753        | 45,795,549        | 56,456,940        | 68,546,578                |
| Add: depreciation expense            | -              | 1,861,350        | 1,861,350   | 1,861,350   | 1,861,350        | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350         | 1,861,350                 |
| amortization expense                 | -              | 526,983          | 526,983     | 526,983     | 526,983          | 526,983           | 526,983           | -                 | -                 | -                 | -                         |
| Deferred income tax                  | -              | -                | -           | 2,149,753   | 156,251          | 156,251           | (492,451)         | (492,451)         | (492,451)         | (492,451)         | (492,451)                 |
| Accounts receivable                  | -              | (12,103,767)     | (1,104,935) | (2,312,904) | (2,585,965)      | (2,947,942)       | (2,706,680)       | (2,381,680)       | (2,614,387)       | (2,875,826)       | (3,163,409)               |
| Finished good inventory              | -              | (1,111,750)      | (150,855)   | (165,923)   | (162,292)        | (198,602)         | (111,458)         | (119,191)         | (127,524)         | (136,507)         | (146,195)                 |
| Equipment inventory                  | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Raw material inventory               | (859,031)      | (159,148)        | (174,559)   | (199,646)   | (228,042)        | (166,878)         | (183,199)         | (201,977)         | (222,679)         | (245,504)         | 2,640,663                 |
| Pre-paid building rent               | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Pre-paid lease interest              | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Advance insurance premium            | (600,550)      | 60,055           | 60,055      | 60,055      | 60,055           | 60,055            | 60,055            | 60,055            | 60,055            | 60,055            | 60,055                    |
| Accounts payable                     | -              | 8,556,323        | 1,105,822   | 1,122,587   | 1,211,628        | 1,299,214         | 678,549           | 707,209           | 743,441           | 781,574           | 582,425                   |
| Other liabilities                    | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Cash provided by operations          | (1,459,581)    | (6,150,890)      | 3,034,526   | 9,479,581   | 13,779,489       | 20,618,577        | 27,099,647        | 35,778,069        | 45,003,353        | 55,409,632        | 69,889,015                |
| <i>Financing activities</i>          |                |                  |             |             |                  |                   |                   |                   |                   |                   |                           |
| Change in long term debt             | 15,603,997     | (3,106,287)      | (2,466,736) | (2,861,414) | (3,319,240)      | (3,850,319)       | -                 | -                 | -                 | -                 | -                         |
| Change in short term debt            | -              | 8,757,177        | (567,790)   | (6,618,167) | (1,571,220)      | -                 | -                 | -                 | -                 | -                 | -                         |
| Change in export re-finance facility | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Add: land lease expense              | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Land lease payment                   | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Change in lease financing            | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Issuance of shares                   | 15,603,997     | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Purchase of (treasury) shares        | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Cash provided by / (used for) financ | 31,207,995     | 5,650,890        | (3,034,526) | (9,479,581) | (4,890,461)      | (3,850,319)       | -                 | -                 | -                 | -                 | -                         |
| <i>Investing activities</i>          |                |                  |             |             |                  |                   |                   |                   |                   |                   |                           |
| Capital expenditure                  | (29,248,413)   | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Acquisitions                         | -              | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| Cash (used for) / provided by invest | (29,248,413)   | -                | -           | -           | -                | -                 | -                 | -                 | -                 | -                 | -                         |
| <b>NET CASH</b>                      | <b>500,000</b> | <b>(500,000)</b> | <b>-</b>    | <b>-</b>    | <b>8,889,028</b> | <b>16,768,258</b> | <b>27,099,647</b> | <b>35,778,069</b> | <b>45,003,353</b> | <b>55,409,632</b> | <b>69,889,015</b>         |
| Cash balance brought forward         |                | 500,000          | -           | -           | -                | 635,739           | 3,263,280         | 9,295,828         | 16,367,970        | 24,120,586        | 32,676,379                |
| Cash available for appropriation     | 500,000        | -                | -           | -           | 8,889,028        | 17,403,997        | 30,362,926        | 45,073,896        | 61,371,323        | 79,530,218        | 102,565,394               |
| Dividend                             | -              | -                | -           | -           | 8,253,289        | 14,140,718        | 21,067,099        | 28,705,926        | 37,250,737        | 46,853,839        | 57,700,208                |
| Cash carried forward                 | 500,000        | -                | -           | -           | 635,739          | 3,263,280         | 9,295,828         | 16,367,970        | 24,120,586        | 32,676,379        | 44,865,186                |



## 13 KEY ASSUMPTIONS

### 13.1 Operating Cost Assumptions

| Description       | Details |
|-------------------|---------|
| Operational Day   | 330     |
| Operational hours | 08      |
| Shift per day     | 01      |

### 13.2 Production Cost Assumptions

| Description                        | Details |
|------------------------------------|---------|
| Production Capacity                | 75%     |
| Production Capacity growth rate    | 5%      |
| Production Capacity Maximum growth | 95%     |

### 13.3 Revenue Assumptions

| Description            | Details   |
|------------------------|-----------|
| Production Units       | 6,600,000 |
| Selling Price per Unit | Rs. 30    |
| COGs                   | Rs. 21    |

### 13.4 Financial Assumptions

| Description         | Details |
|---------------------|---------|
| Interest Rate       | 16%     |
| Debt : Equity Ratio | 50:50   |

# Small and Medium Enterprises Development Authority

## HEAD OFFICE

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|---|--|--|---|
| 3 <sup>rd</sup> Floor, Building No. 3,<br>Aiwan-e-Iqbal Complex,<br>Egerton Road Lahore,<br>Tel: (042) 111-111-456<br>Fax: (042) 36304926-7<br><a href="mailto:helpdesk.punjab@smeda.org.pk">helpdesk.punjab@smeda.org.pk</a> | 5 <sup>TH</sup> Floor, Bahria<br>Complex II, M.T. Khan Road,<br>Karachi.<br>Tel: (021) 111-111-456<br>Fax: (021) 5610572<br><a href="mailto:helpdesk-khi@smeda.org.pk">helpdesk-khi@smeda.org.pk</a> | Ground Floor<br>State Life Building<br>The Mall, Peshawar.<br>Tel: (091) 9213046-47<br>Fax: (091) 286908<br><a href="mailto:helpdesk-pew@smeda.org.pk">helpdesk-pew@smeda.org.pk</a> | Bungalow No. 15-A<br>Chaman Housing Scheme<br>Airport Road, Quetta.<br>Tel: (081) 831623, 831702<br>Fax: (081) 831922<br><a href="mailto:helpdesk-qta@smeda.org.pk">helpdesk-qta@smeda.org.pk</a> |