



Pre-feasibility Study

PHARMACEUTICAL DISTRIBUTION AND MARKETING UNIT

December 2022

“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

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2. EXECUTIVE SUMMARY

A distribution channel is a chain of businesses or intermediaries through which goods or services pass until they reach the final buyer or the end consumer. Distribution channels include distributors, wholesalers and retailers.

A distribution channel may be direct or indirect. Direct distribution is a direct-to-consumer approach where the manufacturer manages all aspects of distribution and performs all the required activities by itself to deliver the products to the consumer. In contrast, the indirect distribution involves third parties, like warehouses, distributors and retailers for moving the products from the manufacturing facility to the consumer.

The process flow of pharmaceutical distribution and marketing unit includes procurement of pharmaceutical products, their holding in the warehouses, and supplying to the final consumers. The manufacturer produces pharmaceutical products which are then supplied to their authorized distributors, which in turn supply those products to the authorized retail pharmacy shops, government departments, hospitals and dispensaries, from where they are sold to the consumers. Pharmaceutical products are available in different forms, which include tablets, liquids & syrups, injections, capsules, tinctures, ointments, creams, etc.

The proposed business is established as distribution and marketing unit of pharmaceutical products. A pharmaceutical distributor needs to obtain a distribution license from Drug Regulatory Authority of Pakistan (DRAP) before acquiring the distribution permission from the manufacturer. Distributor purchases pharmaceutical products from the manufacturers on the basis of the license obtained from these pharmaceutical companies. License provides authority to the distributors to receive specific types of pharmaceutical products from their manufacturers and selling those to wholesalers and retailers, from where they are bought by the end consumers.

The potential target market for the proposed distribution and marketing unit comprises of retail pharmacy shops. Presently, Pakistan's pharma industry comprises of 759 registered manufacturers, spread all across the country. There are 440 units in Punjab, followed by 183 units in Sindh, 114 units in Khyber Pakhtunkhwa, 15 units in Balochistan and 7 units in Azad Jammu and Kashmir (AJK).¹

This "Pre-feasibility Document" provides details for setting up a Pharmaceutical Distribution and Marketing Unit. It may be established in larger cities such as Karachi, Lahore, Islamabad, Peshawar, Quetta, Faisalabad, Multan, Hyderabad, Rawalpindi, as well as medium cities like Sheikhpura, Sukkur, Gujranwala, Sialkot, Sargodha, Mardan, Bahawalpur, Muzaffarabad, etc.

In the proposed project, maximum annual capacity of sale of medicines is 35,360 cartons. This includes 13,260 cartons of tablets, 9,100 cartons of capsules, 9,360 cartons of syrup and 3,640 cartons of injectables. Cartons of tablets include 5,980 cartons of Paracetamol, 3,640 cartons of Cetirizine and 3,640 cartons of Mecobalamin.

¹ <https://journals.sagepub.com>

Cartons of capsules include 5,980 carton of Omeprazole and 3,120 cartons of Esomeprazole. Cartons of syrups include 3,120 carton of Ibuprofen and 6,240 cartons of Paracetamol. Cartons of injectables include 3,640 cartons of Diclofenac (Na).

During first year of operations, the proposed business is expected to attain 60% of its total annual sale capacity and sells 21,216 number of cartons. These include 7,956 cartons of tablets, 5,460 cartons of capsules, 5,616 cartons of syrups and 2,184 cartons of injectables. Cartons of tablets include 3,588 cartons of Paracetamol, 2,184 cartons of Cetirizine and 2,184 cartons of Mecobalamin. Cartons of capsules include 3,588 carton of Omeprazole and 1,872 cartons of Esomeprazole. Cartons of syrups include 1,872 carton of Ibuprofen and 3,744 cartons of Paracetamol. Cartons of injectables include 2,184 cartons of Diclofenac (Na).

The “Pharmaceutical Distribution and Marketing Unit” will be set up in a rented area of 4,166 square feet. The project requires a total investment of PKR 103.89 million. This includes capital investment of PKR 95.60 million and working capital of PKR 8.30 million. This project is financed through 100% equity. The Net Present Value (NPV) of project is PKR 476.42 million with an Internal Rate of Return (IRR) of 72% and a Payback period of 2.42 years. Further, this project is expected to generate Gross Annual Revenues of PKR 375.94 million during 1st year, with Gross Profit (GP) ratio ranging from 17% to 67% and Net Profit (NP) ratio ranging from 5% to 40% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 31% (11,090 cartons) with breakeven revenue of PKR 196.52 million.

The proposed project may also be established using leveraged financing. With 50% debt financing, at a cost of KIBOR+3%, the proposed distribution and marketing unit provides Net Present Value (NPV) of PKR 582.70 million, Internal Rate of Return (IRR) of 73% and Payback period of 2.34 years. Further, this project is expected to generate Net Profit (NP) ratio ranging from 3% to 40% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 42% (14,981 Cartons) with breakeven revenues of PKR 265.45 million.

The proposed project will provide employment opportunities to 42 people. High return on investment and steady growth of business is expected with the entrepreneur having some prior experience similar businesses. The legal business status of this project is proposed as “Sole Proprietorship”. Further, the proposed project may also be established as a “Partnership Concern”.

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.

National Business Development Program for SMEs (NBDP) is a project of SMEDA, funded through Public Sector Development Program of Government of Pakistan.

The NBDP envisages provision of handholding support / business development services to SMEs to promote business startup, improvement of efficiencies in existing SME value chains to make them globally competitive and provide conducive business environment through evidence-based policy-assistance to the Government of Pakistan. The Project is objectively designed to support SMEDA's capacity of providing an effective handholding to SMEs. The proposed program is aimed at facilitating around 314,000 SME beneficiaries over a period of five years.

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 provide information to the potential investors about "Pharmaceutical Distribution and Marketing Unit". The document provides a general understanding of the business to facilitate potential investors in crucial and effective 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 setup and its successful management.

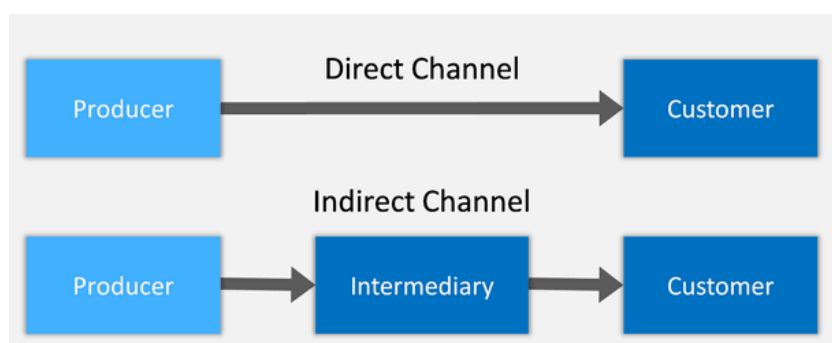
Apart from carefully studying the whole document one must consider critical aspects provided later on, which form the basis of any investment decision.

5. BRIEF DESCRIPTION OF PROJECT & SERVICES

Distribution means transporting products from one place to another, through the market, to make those products available for buying by the end consumers, as per the demand in different areas. A pharmaceutical distributor is an intermediary between a pharmaceutical manufacturer and the wholesalers, who supply pharmaceutical products in the local market.

A distribution channel represents the links between the manufacturer, wholesaler, and retailer and any other entity which may be involved in movement of goods from one place to another, with the overall purpose of making it available for sale to the final consumers. Distribution channels may be direct or indirect. In direct distribution, the manufacturer sells the product directly to the customer. In indirect distribution, there are intermediaries such as distributors, wholesalers, and retailers. Figure 1 shows the two types of distribution channels.

Figure 1: Distribution Channels



The prevalent marketing channels in pharmaceutical sector is selling through distributor network and Direct-To-Customer in which the manufacturers sell directly to customers. In selling through distributors, the company acquires distribution of any existing pharmaceutical product and sells its products in the wholesale market. Figure 2 shows the distribution network that is most commonly used in the pharmaceutical sector.

Figure 2: Sale of Products through Distributor Network

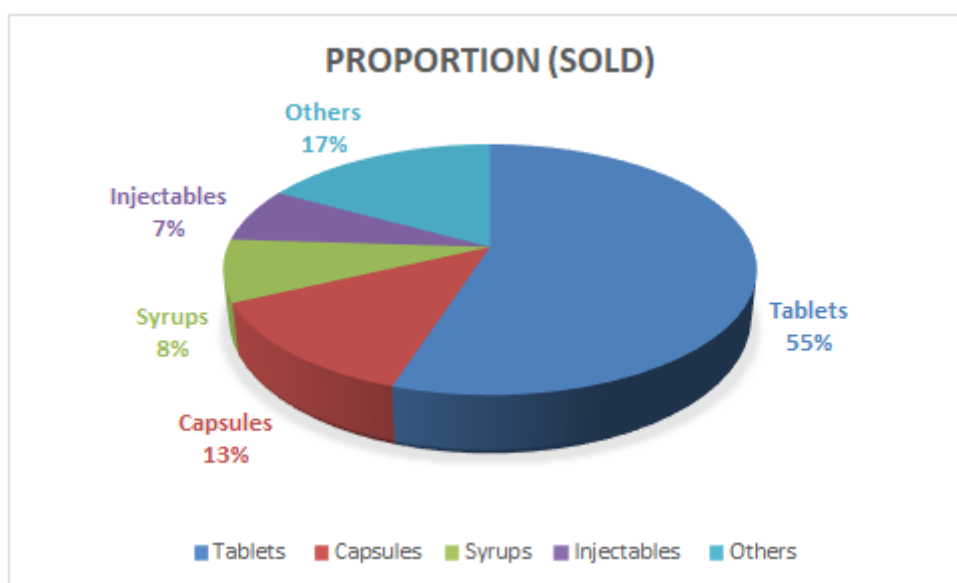


The proposed business of “Pharmaceutical Distribution and Marketing Unit” is established on the concept of an indirect distribution channel. The proposed distribution and marketing unit works as an exclusive dealer (meaning that distributor has a right to sell the product in specific area, it does not mean that a distributor can only sell the pharmaceutical product of only one company). The details of pharmaceutical products that are sold by the proposed distribution unit are described below:

Pharmaceutical Products

There are various types of pharmaceutical products i.e., tablets, syrups, capsules, injectables and other types of pharmaceutical products. According to the market survey, it is revealed that the major share of pharmaceutical products sold in the market are tablets which contribute 55% of the total sales volume of pharmaceutical products. The shares of capsules, syrups, injectables and other pharmaceutical products are 13%, 8%, 7% and 17% respectively. Other medicines include ointments, caplets, suppositories, disinfectants, drops, inhalers etc. A graph of market shares of these products is shown in Figure 3.

Figure 3: Market Shares of Pharmaceutical Products



The proposed business deals in the following types of pharmaceutical products:

Tablets

Brief descriptions of major types of tablets considered in this business model are provided below:

- **Paracetamol**

Paracetamol is a commonly used medicine that helps treat pain and reduces high body temperature. Paracetamol is also known as Acetaminophen.

- **Cetirizine**

Cetirizine is an antihistamine medicine that helps cure the symptoms of allergies. It is used to treat hay fever, conjunctivitis (red, itchy eye), reactions to insect bites and stings and food allergies.

- **Mecobalamin**

Mecobalamin is the activated form of Vitamin B12, and has been used to treat some nutritional diseases and other diseases, such as Alzheimer's disease and Rheumatoid Arthritis.

Capsules

Brief descriptions of major types of capsules considered in this business model are provided below:

- **Omeprazole**

Omeprazole is a type of medicine called a Proton Pump Inhibitor (PPI). Proton pumps are enzymes in the lining of human stomach that help it make acid to digest food. It is widely used to treat indigestion and heartburn, and acid reflux. It is also taken to prevent and treat stomach ulcers.

- **Esomeprazole**

Esomeprazole is used to treat symptoms of Gastroesophageal Reflux Disease (GERD) and other conditions involving excessive stomach acid such as Zollinger-Ellison syndrome. Esomeprazole is also used to promote healing of Erosive Esophagitis (damage to esophagus caused by stomach acid).

Syrups

Brief descriptions of major types of syrups considered in this business model are provided below:

- **Ibuprofen**

Ibuprofen syrup is used as an analgesic for relief of mild to moderate muscular pain, post-immunization pyrexia, symptomatic relief of headache, earache, dental pain and backache. It can also be used in minor injuries such as sprains and strains.

- **Paracetamol**

Paracetamol is a common painkiller for children. It is often used to treat headaches, stomachache, earache, and cold symptoms. It can also be used to bring down a high temperature (fever). Paracetamol for children is available in the form of syrup.

Injectables

Brief descriptions of major type of injectables considered in this business model are provided below:

- **Diclofenac Sodium**

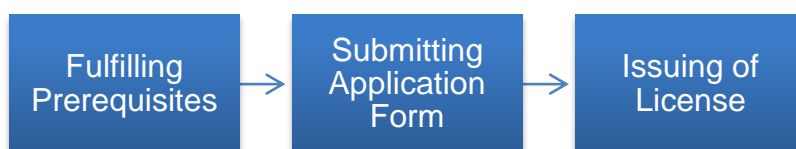
Diclofenac injection is a Nonsteroidal Anti-Inflammatory Drug (NSAID), used to treat adults with mild to moderate pain. It is used alone or given with other opioid (narcotic) pain medicines to treat adults with moderate to severe pain.

5.1 Process Flow

Obtaining license from Government

Before working as a pharmaceutical distributor, the entrepreneur must obtain the license from Drug Regulatory Authority of Pakistan (DRAP). Figure 4 shows the process flow for obtaining license.

Figure 4: Process Flow for Obtaining License from Government



A brief description of different steps of the process flow is given below:

Prerequisites of Government License

Obtaining license from “Drug Regulatory Authority of Pakistan” is the main requirement for starting a pharmaceutical distribution business in Pakistan.

- Minimum Education is Doctor of Pharmacy (Pharm. D) for a person who wants to operate a Pharmacy, Distribution or Wholesale setup.
- If the entrepreneur does have the above-mentioned qualification, he must appoint a qualified person, having a D Pharma degree for running the business.
- In the pharmaceutical distribution and marketing unit, there must be proper and adequate equipment for storing the drugs under recommended conditions (temperature, etc.)
- Pharmacy distribution must fulfill the requirements explained in Drugs Laws and Rules.²

² <https://na.gov.pk/uploads/documents/pdf>

Submission of Application Form

After fulfilling the prerequisites, application form is submitted. Obtaining license from Drug Regulatory Authority of Pakistan is a mandatory requirement for operating as distributor of pharmaceutical products. There should be at least one year of experience of the person dealing with the drugs. The entrepreneur has to provide complete information required in the application form. Application form to obtain license for distribution of pharmaceutical is shown in Figure 5.

Figure 5: Application Form for Drugs Distribution License

FORM NO. 8(C) {See rule 15 (1)} Application for the license to sell, store and exhibit for sale & distribute drugs by way of Distribution.	
1. I / We (Prop) _____ _____ of M/S (Premises Name with Address) _____ _____ hereby apply for License of Distributor;	
2. The sale of drugs will be under the personal supervision of (Qualified Person); (name, registration No, NIC No & address with qualification). 1. _____ 2. _____	
3. I / We am / are submitting herewith the following documents; A) Testimonials of the person (s), registered under section 24(1)(a) of the Pharmacy Act 1967, who has agreed to personally supervise the sale of drugs for license in Form 11 (Distributor)) and the proprietor (s) i) Three attested copies of registration certificate issued by a pharmacy council. ii) Four attested copies of National Identity Card & passport size photographs of the proprietor (s) and person (s) incharge who has agreed to personally supervise the sale of the drugs. iii) Affidavit of the person who will supervise the sale of drugs and the proprietor, duly verified, to the effect that they: - a) Shall comply with the provision of the Drugs Act, 1976 and rules framed there under; b) Have not been convicted of any offence from any Court of law. [See rule 19 (1) (c)]; c) Shall inform the Licensing Authority for any change in supervisory staff etc. d) Are not working in any government / semi government / autonomous organization. e) Shall not sell / stock any expired, spurious, substandard, unregistered misbranded, counterfeit or any drugs in violation to the drugs laws in force. B) Plan indicating the exact location and specification of the premises including covered area, dimensions, signboard, air conditioning and refrigeration facilities and addresses of go-down (if any). C) Treasury receipt / challan No & dated _____ amounting to Rs. _____ in the Head of Account CO- 2841-Health & Other receipts. Dated: _____	
Signature (QP): _____ Name, address and Permanent Home Address of the person (s) who will personally supervise the sale of drugs	Signature(Prop): _____ Name, address and Permanent Home Address of the Proprietor

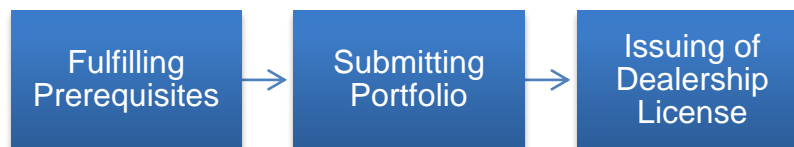
Issuing of License

After submission of application form and the required documents, the authority verifies all the documents. License is granted after inspecting the premises and issuance of a satisfactory inspection report.

Becoming an Authorized Dealer

After obtaining license from the government, the entrepreneur must obtain a distribution license from the pharmaceutical manufacturing company he has to work with. Figure 6 shows the process flow for obtaining license from companies.

Figure 6: Process Flow for Obtaining License from Pharmaceutical Companies



A brief description of the process flow is given below:

Prerequisites

Key prerequisites for an entrepreneur to obtain dealership for medicines is listed below:

- The entrepreneur must have a two to three years' experience of sales of pharmaceutical products.
- The entrepreneur should be a known and good-reputed person in the local pharmaceutical market.
- The entrepreneur should have an experience in the pharmaceutical distribution.
- The entrepreneur should be financially strong enough to be able to pay the security deposit and cost of initial purchase of pharmaceutical products.

Submitting Portfolio

The most creative part for obtaining dealership is the creation of a portfolio. The entrepreneur mentions in the portfolio the complete details of the above-mentioned prerequisites such as experience, education, reputation and his links and service-provision capability with reference to the pharmaceutical distribution.

Issuance of Dealership License

License of dealership authorizes the dealer to sell the medicine in a specific region. As the pharmaceutical manufacturer is satisfied with the all the requirements for a dealership, it may issue dealership certificate to the applicant, after which he becomes an authorized dealer. Depending upon the purchasing power of the distributor, a single

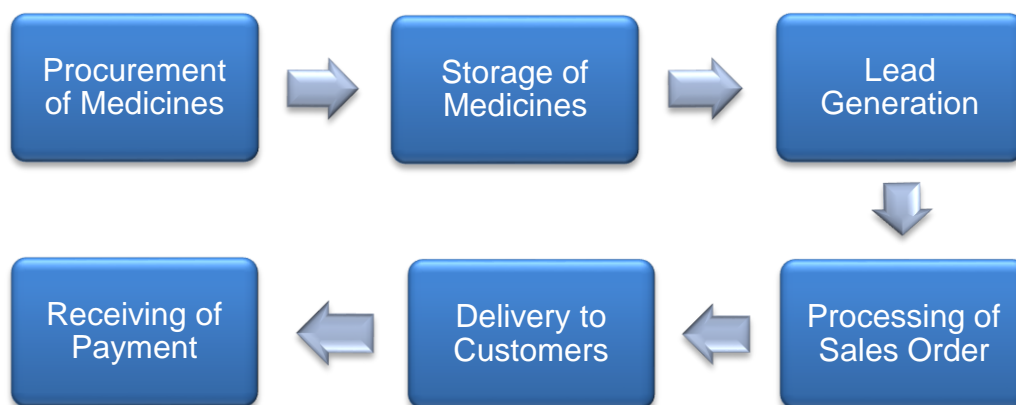
distributor can acquire dealership license of multiple pharmaceutical manufacturers, meaning a single distributor can sell pharmaceutical products for multiple companies at once. For this purpose, the distributor pays distribution security charges to each pharmaceutical manufacturer to obtain individual distribution licenses.

The distribution security charges can vary from company to company and from medicine to medicine. Based on number of products (type of medicines) sold by our proposed unit, an average of PKR 75 million as security charges have been taken. The cost of distribution security is a one-time refundable payment which is paid back to the distributor at the end of specified tenure as per the agreement. As per common market practice, once a distributor obtains dealership license from a manufacturer, the tenure of their agreement can, in most cases, last lifetime, as switching distributors for a manufacturer can cause the manufacturer to lose its specific market share that the previous distributor was dealing in. Therefore, competition for obtaining the dealership license in local market is very high due to which the security charges for obtaining these dealerships are also very high.

Process Flow of Distribution

The process flow for distribution channel of pharmaceutical products is shown in Figure 7.

Figure 7: Distribution Channel of Pharmaceutical Sector



The details of process flow for distribution of pharmaceutical business are discussed below:

Procurement of Medicines

In the procurement process, the procurement officer of the distribution company purchases medicines from the pharmaceutical manufacturers. Distribution companies are also required to pay 25% of the total cost of purchases in advance. According to the market demand, specific targets are given to the distributor to sell the required number of medicines. The purchase of medicine is also dependent upon the purchasing power of the distributor. A distributor can acquire as much product as he

can sell by paying 25% advance to the manufacturer. After receiving the advance payment, the pharmaceutical manufacturers deliver the medicines to the warehouse of pharmaceutical distribution unit.

To ensure the availability of medicines in the market, pharmaceutical companies ensure that their distributors, who are primary suppliers of products to chemists/pharmacies, maintain a certain minimum level of inventory of all the medicines at all the times.

The level of inventory, required to be carried by distributors, is based on the historical/forecast sales of the products and is measured in number of days/weeks of stock cover. The industry generally requires its distributors to carry one month of inventory, on an average, to ensure adequate supply of all the medicines to the consumers.

Storage of Medicines

When medicines arrive at the storage location, these are unloaded and stored in the warehouse. The medicines are stored in segregated areas which are marked and have access restricted to authorized personnel only. The warehouse is designed to ensure that the required storage conditions are maintained very carefully. Figure 8 shows the storage of pharmaceutical products in a large warehouse.

Figure 8: Storage units of pharmaceuticals



Lead Generation

Lead generation includes all activities aimed at acquiring new potential customers. The focus of lead generation is to obtain data through consent of target audience. It is the crucial part of sale process. The pharmaceutical distribution representative (medical rep personnel) makes visits to potential markets of medicines (pharmacies, doctors, pharmacists). A commission of 1% of total sales, other than basic salary, is paid to the medical sales representatives for every sale. Once a potential customer is acquired by medical sales representative, the future dealing with that customer is handed over to the sales team. The sales team of proposed business books and delivers orders to retailers.

Processing of Sales Order

Delivery

In the delivery process, the laborers load medicines into the carry vans to transport those from the distributor's warehouse to the customers. Distributors keep updated records of the dispatched goods. Figure 9 shows the delivery process.

Figure 9 : Delivery Process



Receiving of Payment

In the proposed project, a credit period of 2 weeks (14 days) has been allowed to customers. After the delivery of medicines, payment is received within specified credit days.

5.2 Installed and Operational Capacities

The proposed medicine sales capacity assumed in this proposed unit is based on market research. Ratio of sales of tablets, capsules, syrups and injectables is based on average ratio of the selected medicines sold by different distributors. For a medium distributor, per year average sales fall in the range of 12,000-14,000 cartons of tablets, 9,000-10,000 cartons of capsules, 9,000-10,000 cartons of syrups and 3,000-4,000 cartons of injectables. Based on the market averages, the proposed distribution and marketing unit will have maximum capacity of selling 35,360 cartons per year at 100% capacity. The total selling capacity of carton of medicines includes 13,260 cartons of tablets, 9,100 cartons of capsules, 9,360 cartons of syrups and 3,640 cartons of injectables. Tablets sales comprise of 5,980 cartons of Paracetamol, 3,640 cartons of Cetirizine and 3,640 cartons of Mecobalamin. Capsules sales comprise of include 5,980 cartons of Omeprazole and 3,120 cartons of Esomeprazole. Syrups sales comprise of 3,120 cartons of Ibuprofen and 6,240 cartons of Paracetamol. Injectables sales include 3,640 cartons of Diclofenac (Na).

During first year of operations, the proposed business will attain 60% of its initial capacity and will sell 21,216 cartons of all the target medicines which include 7,956 cartons of tablets, 5,460 cartons of capsules, 5,616 cartons of syrups and 2,184 cartons of injectables. Tablets sales comprise of 3,588 cartons of Paracetamol, 2,184 cartons of Cetirizine and 2,184 cartons of Mecobalamin. Capsules sales comprise of 3,588 cartons of Omeprazole and 1,872 cartons of Esomeprazole. Syrups sales comprise of 1,872 cartons of Ibuprofen and 3,744 cartons of Paracetamol. Injectables sales include 2,184 cartons of Diclofenac (Na). The operational capacity utilization is assumed to increase at the rate of 5% per annum to reach a 90% in year 7.

Table 1 shows details of sales plan and annual sales at maximum 100% capacity and at 60% capacity, utilized during first year of operations.

Table 1: Sales Plan and Capacity Pharmaceutical Distribution and Marketing Unit

Products	Sales Per Week (Cartons)	No of Weeks	No of Medicine Cartons @ 100% Capacity	No of Medicine Cartons @ 60% Capacity
Tablets		52		
Paracetamol	115		5,980	3,588
Cetirizine	70		3,640	2,184
Mecobalamin	70		3,640	2,184
Total Tablets	255		13,260	7,956
Capsules				
Omeprazole	115		5,980	3,588
Esomeprazole	60		3,120	1,872
Total Capsules	175		9,100	5,460
Syrups				
Ibuprofen	60		3,120	1,872
Paracetamol	120		6,240	3,744
Total Syrups	180		9,360	5,616
Injectables				
Diclofenac (Na)	70		3,640	2,184
Total Injectables	70		3,640	2,184
Total Sales			35,360	21,216

6. CRITICAL FACTORS

Following factors should be taken into account while making investment decision in pharmaceutical distribution and marketing unit:

- Engagement of highly skilled sales persons
- Maintenance of proper record of Inventory
- Courteous dealing with customers and ensuring customer satisfaction
- Ensuring that there is no outdated or expired product in the stock
- Working with reputable and trusted pharmaceutical manufacturers
- Dealing with local market competition by providing on-time and quality delivery services to wholesalers
- Storage of pharmaceutical drugs according to the recommended conditions
- Provision of indoor and outdoor security to avoid unauthorized access and theft

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed “Pharmaceutical Distribution and Marketing Unit” can be set up in major cities of Pakistan such as Karachi, Lahore, Islamabad, Peshawar, Quetta, Multan, Faisalabad, etc. as well as in medium cities like Sheikhupura, Gujranwala, Sukkur, Sialkot, Sargodha, Mardan, Bahawalpur, Muzaffarabad, Sahiwal, etc. These cities are preferred due to their large populations and presence of large number of hospitals, retail pharmacies, all of which lead to generating demand for medicines.

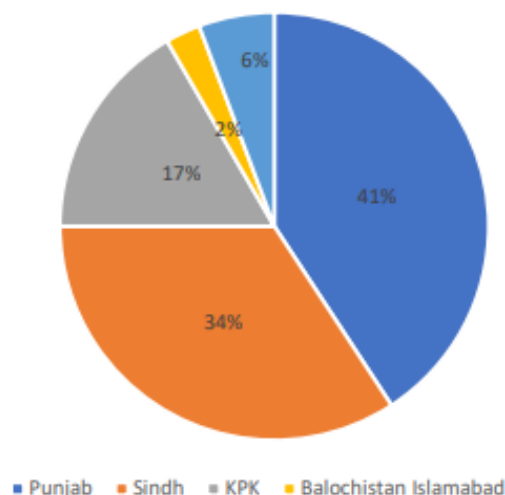
8. POTENTIAL TARGET MARKETS

Unhealthy environment and food have led to an increase in diseases, with a consequent increase in the demand for medicines. The potential target market for the proposed distribution and marketing unit comprises of retailers, government departments, hospitals and dispensaries. Most of the local pharmacies and hospitals purchase medicines from distributors existing in metropolitan and large cities.

At the time of independence, Pakistan did not have any pharmaceutical manufacturing unit. By 1960s, this number started to increase with the entry of multinational companies (MNCs) and some small local manufacturers. However, at that time, most pharmaceutical products consumed in Pakistan were imported. The local pharmaceutical products, currently produced in the country, include tablets, liquids & syrups, injections, capsules, tinctures, ointments, etc.

In 2022, Pakistan's pharma industry comprised of 759 registered manufacturers spread all across the country. There were 440 units in Punjab, followed by 183 units in Sindh, 114 units in Khyber Pakhtunkhwa, 15 units in Balochistan and 7 units in Azad Jammu & Kashmir (AJK). These manufacturing facilities provided an estimated 250,000 direct and indirect jobs. In monetary terms, it is an approximately USD 3.2 billion industry, claiming a 0.5 per cent share of the global pharmaceutical industry's value of approximately USD 1.2 trillion.³ The geographical spread of pharmaceutical units is shown in Figure 10.

Figure 10: Geographical Spread of Pharmaceutical Establishments



Distributors are required by pharmaceutical companies in major cities of Pakistan for selling their medicine to wholesalers. The need of distributors is generated by the companies who use indirect channel for sale of their medicine into the market.

According to the Pakistan Pharmaceutical Manufacturers Association, the top ten pharmaceutical companies had 46% share, the top fifty had 90% share and the top 100 had 97% share of the total local pharmaceutical market. The other 659 companies competed for a remaining small market share, worth PKR 10 billion. Among the top ten companies, six were national companies. Only twelve out of all 759 companies were listed on the Pakistan Stock Exchange.⁴

There are 161 authorized pharmaceutical distributors in different cities of Pakistan.⁵ Distributorship for pharmaceutical products is provided on exclusive basis, it means distributor has a right to sell specified products in specific areas. However, it does not mean that a distributor can only sell the pharmaceutical product of only one company.

³ <https://journals.sagepub.com>

⁴ <https://journals.sagepub.com>

⁵ <https://www.urdupoint.com/business/directory/164/pharmaceutical-distributors.html>

The global pharmaceutical wholesale and distribution market was valued at US\$511.80 billion in 2021 and is projected to grow at a CAGR of 7.84% during the forecast period 2022-2032.⁶

This growth factor is a great opportunity for investor to invest in the growing business and experience high returns.

9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Pharmaceutical Distribution and Marketing Unit. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cost of Goods Sold, Cash Flow Statement and Balance Sheet are attached as Annexure.

9.1 Project Economics

All the figures in this financial model have been calculated after carefully taking into account the relevant assumptions and target market.

9.2 Project Cost

Total cost of the project has been calculated to be PKR 103,891,808. The project will be financed through 100% Equity. Table 2 provides the details of the costs calculated for the proposed production unit.

Table 2: Project Cost

Description	Amount (PKR)	Reference
Land	-	9.2.1
Building / Infrastructure	2,398,090	9.2.2
Furniture & fixtures	999,000	9.2.3
Office vehicles	10,654,000	9.2.7
Warehouse equipment	804,000	9.2.4
Office equipment	2,954,000	9.2.5
IT Equipment	1,358,000	9.2.6
Pre-operating costs	75,000,000	9.2.8
Security Against Building	674,743	9.2.9
Distribution Security	749,880	
Legal, Licensing, and Training costs	5,000	
Total Capital Cost	95,596,713	

⁶ <https://www.globenewswire.com/en/news-relePharma-Wholesale-and-Distribution-market>.

Working capital		
Advance to supplier	6,045,135	
Upfront building rent	249,960	
Cash	2,000,000	
Total Working capital	8,295,095	
Total Project Cost (PKR)	103,891,808	

9.2.1 Land

The proposed Pharmaceutical Distribution and Marketing Unit will be established in a rented building to avoid the high cost. Suitable locations for setting up a facility like this can be easily found on rent. Therefore, no land cost has been added to the project cost. Total space requirement for the proposed unit has been estimated as 4,166 sq. ft. The executive office, refreshment area, washrooms and the boundary wall will be constructed upon this rented land. The breakup of the space requirement is provided in Table 3.

Table 3: Breakup of Space Requirement

Break-up of Land Area	Number	% Break-up	Area (Sq. Ft.)
Owner's Office	1	3%	120
Admin & HR Office	1	2%	80
Accountant's Office	1	2%	80
Procurement Officer's Office	1	1%	48
Sales and Marketing Team Office	1	5%	225
Warehouse Incharge Office	1	1%	48
Medicine Warehouse	1	60%	2,496
Workers Rest Area	1	2%	100
Washroom	6	7%	294
Parking Area (Open)	1	16%	675
Total Area		100%	4,166

9.2.2 Renovation Cost

There will be no construction cost of building since the unit will be started on a rented building. However, there will be a renovation cost, required to make the building usable for the business. The proposed project requires electricity load of around 26.38 KW for which an electricity connection under the General Supply Tariff-Commercial three

phases will be required. Building rent of PKR 249,960 per month has been included in the operating cost. Building construction and renovation cost is shown in Table 4.

Table 4: Renovation Cost

Cost Item	Unit	Area (Sq. Ft)	Rate/ Sq. Ft (PKR)	Total Cost (PKR)
Paint Cost	Ltr	87	800	69,600
Labour Cost	Sq. Feet	8,666	15	129,990
Wall Racks	Units	11	10,000	110,000
Warehouse Racks	Units	125	15,000	1,875,000
Labour Cost Racks Fitting	Units	136	100	13,600
Curtains	Units	7	6,000	42,000
Blinds	Units	7	7,000	49,000
Glass Door and Partition	Sq. Feet	198	550	108,900
Total (PKR)				2,398,090

9.2.3 Furniture & Fixtures

Table 5 provides details of the furniture and fixture requirement of the project.

Table 5: Furniture and Fixture

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Executive Chairs	1	30,000	30,000
Executive Tables	1	60,000	60,000
Office Tables	10	30,000	300,000
Office Chairs	10	15,000	150,000
Visitor Chairs	20	15,000	300,000
Sofa Sets	3	45,000	135,000
Plastic Chairs	12	2,000	24,000
Total			999,000

9.2.4 Warehouse Equipment

Table 6 shows warehouse equipment required for the proposed business.

Table 6: Warehouse Equipment

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Medicine Refregirator	4	150,000	600,000
Warehouse Mobile Ladder	3	45,000	135,000
Pallet Jacks	2	20,000	40,000
Hand Truck Trolley	3	3,000	9,000
Temperature Monitoring Equipment	4	5,000	20,000
Total			804,000

9.2.5 Office Equipment

Details of office equipment required for the project are provided in Table 7.

Table 7: Office Equipment

Cost Item	Units	Unit Cost(PKR)	Total Cost (PKR)
LED Display 32"	1	36,000	36,000
Telephone Sets	7	3,000	21,000
Air Conditioner (1.5 ton)	15	105,000	1,575,000
Ceiling Fan	29	8,000	232,000
Exhaust Fan	14	3,000	42,000
Water Dispenser	2	24,000	48,000
Back-up Generator (30 kVA)	1	1,000,000	1,000,000
Total			2,954,000

9.2.6 IT Equipment

Details of IT Equipment required for this project are provided in Table 8.

Table 8: IT Equipment

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Laptop	5	150,000	750,000
Desktop Computer	7	50,000	350,000
CCTV Cameras	24	2,500	60,000

DVR	2	15,000	30,000
WiFi	3	3,500	10,500
Laser Printer	3	52,500	157,500
Total Cost (PKR)			1,358,000

9.2.7 Office Vehicles

Details of office vehicle required for the project are provided in Table 9.

Table 9: Office Vehicles

Cost Item	Units	Unit Cost (PKR)	Total Registration Charges (PKR)	Total Cost (PKR)
Honda 70 Motorcycle	1	120,000	6,000	126,000
Hyundai H-100 with Reefer	2	3,950,000	158,000	8,058,000
1000 CC Car	1	2,400,000	70,000	2,470,000
Total				10,654,000

9.2.8 Pre-Operating Cost

Details of pre-operating cost for the project are provided in Table 10.

Table 10: Pre-Operating Cost

Cost Item	Number of Months	Total Cost (PKR)
Administration expense	1	500,000
Utilities expense	1	174,743
Total		674,743

9.2.9 Security against Building

Details of pre-operating cost for the project are provided in Table 11.

Table 11: Security Against Building

Cost Item	Months	Unit Cost / Month (PKR)	Total Cost (PKR)
Security against Building	3	249,960	749,880

9.3 Financial Feasibility Analysis

The financial feasibility analysis given in Table 12 provides the information regarding projected IRR, NPV and payback period of the study based on 100% equity.

Table 12: Financial Feasibility Analysis

Description	Project
IRR	72%
NPV (PKR)	476,419,297
Payback Period (years)	2.42
Projection Years	10
Discount Rate used for NPV	25%

9.4 Financial Feasibility Debt Financing

Table 13 provides the information regarding projected IRR, NPV and payback period of the study based on combination of equity (50%) and debt (50%) financing for the proposed project.

Table 13: Financial Feasibility Debt Financing

Description	Project
IRR	73%
NPV (PKR)	582,700,948
Payback Period (years)	2.34
Projection Years	10
Discount Rate used for NPV	22%

9.5 Breakeven Analysis

Breakeven analysis is provided in Table 14.

Table 14: Breakeven Analysis

Particulars	Amount First Year (PKR)	Ratio
Sales (PKR) – A	375,943,854	100%
Variable Cost (PKR) – B	322,118,993	86%
Contribution (PKR) (A-B) = C	53,824,861	14%
Fixed Cost (PKR) – D	28,136,056	7%
Break Even Revenue (PKR) (D/CM) =E	196,518,434	
Breakeven No. of booking	11,090	
Breakeven Capacity	31%	

9.6 Revenue Generation

Being a regulated industry, the market retail price for pharmaceutical drugs is set by Drug Regulatory authority of Pakistan (DRAP), therefore margins for both retail and distribution channels are calculated on the final Maximum Retail Price (MRP). An average of 20% margin for distribution channel has been taken based on market practices. Based on the 60% capacity utilization of the unit, sales revenues during the first year of operations is estimated in Table 15.

Table 15: Revenue Generation

Particulars	Available Machine cycles per Annum	No of Medicines (Cartons)	No of Medicine Cartons @ 60% Capacity (A)	Closing Inventory (Cartons) (B)	Units Sold for the Year (Cartons) (A-B)	Sales Price (PKR)	Sales Revenue (PKR)
Tablets	37.5%						
Paracetamol	45.1%	5,980	3,588	299	3,289	27,400	90,118,600
Cetirizine	27.5%	3,640	2,184	182	2,002	3,400	6,806,800
Mecobalamin	27.5%	3,640	2,184	182	2,002	61,200	122,522,400
Total Tablets	100%	13,260	7,956	663	7,293		219,447,800
Capsules	25.7%						
Omeprazole	65.7%	5,980	3,588	299	3,289	18,424	60,596,536
Esomeprazole	34.3%	3,120	1,872	156	1,716	20,398	35,002,968
Total Capsules	100%	9,100	5,460	455	5,005		95,599,504
Syrups	26.5%						

Ibuprofen	33.3%	3,120	1,872	156	1,716	8,500	14,586,000
Paracetamol	66.7%	6,240	3,744	312	3,432	6,800	23,337,600
Total Syrups	100%	9,360	5,616	468	5,148		37,923,600
Injectables	10.3%						
Diclofenac (Na)	100%	3,640	2,184	182	2,002	11,475	22,972,950
Total Injectables	100%	3,640	2,184	182	2,002		22,972,950
Total	100%	35,360	21,216	1,768	19,448		375,943,854

Based on 20% margin for distribution channel, the cost as 80% of sales price has been taken. Table 16 shows sales price and cost calculations

Table 16: Sales Price and Cost Calculation

Particulars	Sales Price Per Unit (PKR) (A)	Units in a Box (B)	Boxes in Carton (C)	Sales Price (PKR) (A*B*C)=D	Cost (PKR) (D*0.8)
Tablets	Per Tablet				
Paracetamol	1.37	200	100	27,400	21,920
Cetirizine	3.40	10	100	3,400	2,720
Mecobalamin	6.12	100	100	61,200	48,960
Capsules	Per Capsule				
Omeprazole	13.16	14	100	18,424	14,739

Esomeprazole	14.57	14	100	20,398	16,318
Syrup	Per Bottle				
Ibuprofen	85		100	8,500	6,800
Paracetamol	68		100	6,800	5,440
Injectables	Per Injection				
Diclofenac (Na)	22.95	5	100	11,475	9,180

Table 17 shows cost of sales.

Table 17: Cost of Sales

Particulars	No of Medicines (Cartons)	No of Medicine Cartons @ 60% Capacity (A)	Closing Inventory (Cartons) (B)	Units Sold for the Year (Cartons) (A-B)	Cost Per Unit (Carton)	Total Cost (PKR)
Tablets						
Paracetamol	5,980	3,588	299	3,289	21,920	72,094,880
Cetirizine	3,640	2,184	182	2,002	2,720	5,445,440
Mecobalamin	3,640	2,184	182	2,002	48,960	98,017,920
Total Tablets	13,260	7,956	663	7,293		175,558,240
Capsules						
Omeprazole	5,980	3,588	299	3,289	14,739	48,477,229

Esomeprazole	3,120	1,872	156	1,716	16,318	28,002,374
Total Capsules	9,100	5,460	455	5,005		76,479,603
Syrups						
Ibuprofen	3,120	1,872	156	1,716	6,800	11,668,800
Paracetamol	6,240	3,744	312	3,432	5,440	18,670,080
Total Syrups	9,360	5,616	468	5,148		30,338,880
Injectables						
Diclofenac (Na)	3,640	2,184	182	2,002	9,180	18,378,360
Total Injectables	3,640	2,184	182	2,002		18,378,360
Total	35,360	21,216	1,768	19,448		300,755,083

9.7 Variable Cost Estimate

Variable costs of the project have been provided in detail in Table 18.

Table 18: Variable Cost Estimate

Variable Cost	Cost (PKR)
Cost of sales	300,755,083
Commision on sales	3,759,439
Bad debt expense	1,879,719
Utilities	1,970,910
Travelling expense	1,209,600
Office vehicles running expense	1,317,042
Communications expense (phone, mail, internet, etc.)	907,200
Generator Fuel Cost	846,000
Office expenses (stationery, entertainment, janitorial services, etc.)	1,134,000
Direct Labour	8,340,000
Total Variable Cost (PKR)	322,118,993

9.8 Fixed Cost Estimate

Table 19 provides details of fixed cost for the project.

Table 19: Fixed Cost Estimate

Fixed Cost	Cost (PKR)
Staff Salaries	15,120,000
Administration benefits expense	410,550
Building rental expense	2,999,520
Promotional expense	5,639,158
Professional fees (legal, audit, consultants, etc.)	939,860
Depreciation expense	2,891,520
Amortization of pre-operating costs	135,449
Total Cost (PKR)	28,136,057

9.9 Human Resource Requirement

For the 1st year of operations, the distribution and marketing unit shall require the workforce at a salary cost as projected in Table 20.

Table 20: Human Resource Requirement

Designation	No of Persons	Average Monthly Salary (PKR)	Total Salary (PKR)
Owner			
Admin and HR Manager	1	100,000	1,200,000
Finance and Accounts Manager	1	100,000	1,200,000
Accounts Officer	2	70,000	1,680,000
Sales and Marketing Manager	1	120,000	1,440,000
Procurement Officer	1	70,000	840,000
Marketing Officer	4	60,000	2,880,000
Pharmacist	1	100,000	1,200,000
Store (Warehouse) Incharge	1	60,000	720,000
Dispatcher	2	40,000	960,000
Unskilled Loader	3	25,000	900,000
Medical Sales Representative	12	40,000	5,760,000
Sales Man	3	40,000	1,440,000
Driver	2	35,000	840,000
Office Boy	2	25,000	600,000
Security Guard	6	25,000	1,800,000
Total	42		23,460,000

10. CONTACT DETAILS

Table 21 provides list of some of the pharmaceutical manufacturers in Pakistan.

Table 21: Pharmaceutical Manufacturers

Name	Web Address	Email
Karachi		
Safe Pharmaceuticals (Pvt) Ltd	http://safepharmaceutical.com	info@safepharmaceutical.com
Pharmigo (PVT) Ltd		mabid@pharmigo.pk
Macter International Limited		info@macter.com
The Searle Company Ltd.		info@searlecompany.com
Helix Pharma (Pvt) Limited	https://helix-ph.com	helixpharma@hakimsonsgroup.com
Lahore		
Albert Pharmaceuticals (Pvt.) Ltd		contact@albertpharma.com
Pharmagen Limited		info@pharmagen.com.pk pblpk@brain.net.pk
Medlife Pharmaceuticals Lahore	http://medlifepharma.pk/contact-us/	info@medlifepharma.pk
Islamabad		
Scotmann Pharmaceuticals	https://www.scotmann.com/	contactus@scotmann.com.pk
Vision Pharmaceuticals (PVT) Limited	https://visionpharmapk.com/	drabidyagoob@hotmail.com
AMSON Vaccines and Pharma Pvt Ltd.	http://amson.org.pk/	info@amson.org.pk
Pearl Pharmaceutical	http://pearl.com.pk/#	info@pearl.com.pk
Glitz Pharma	http://www.glitzpharma.net/	info@glitzpharma.net

11. USEFUL LINKS

Table 22: Useful Links

Name of Organization	E-mail Address/Website
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of National Health Services Regulations and Coordination	www.nhsrsc.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	sindh.gov.pk/
Government of Balochistan	balochistan.gov.pk/
Government of KPK	kp.gov.pk/
Government of Gilgit Baltistan	gilgitbaltistan.gov.pk/
Government of Azad Jammu & Kashmir	ajk.gov.pk/
Trade Development Authority of Pakistan	www.tdap.gov.pk
Securities and Exchange Commission of Pakistan	www.secp.gov.pk
State Bank of Pakistan	www.sbp.gov.pk
Federal Board of Revenue	www.fbr.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
Drug Regulatory Authority of Pakistan	https://www.dra.gov.pk/
Pakistan Pharmaceutical Manufacturers' Association	https://ppma.org.pk/
Pakistan Pharmacists Association	https://ppapak.org.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
Revenue-Tablets	219,447,800	286,555,061	343,318,033	409,112,537	485,535,981	573,836,529	675,825,837	754,995,846	839,555,380	933,585,583
Revenue-Capsules	95,599,504	124,828,069	149,555,449	178,255,918	211,509,269	249,975,328	294,404,612	328,903,859	365,741,092	406,704,094
Revenue-Syrup	37,923,600	49,519,028	59,328,268	70,713,612	83,905,058	99,164,357	116,789,234	130,473,673	145,086,724	161,336,437
Revenue-Injectable	22,972,950	29,999,230	35,941,604	42,822,981	50,830,027	60,073,968	70,750,940	79,036,936	87,889,073	97,732,650
Revenue	375,943,854	490,901,388	588,143,354	700,905,048	831,780,334	983,050,182	1,157,770,623	1,293,410,314	1,438,272,270	1,599,358,764
<i>Cost of sales</i>										
Tablets	175,558,240	206,154,720	222,114,560	238,022,720	254,034,240	269,994,080	285,953,920	287,277,120	287,277,120	287,277,120
Capsule	76,479,603	89,804,366	96,757,058	103,709,749	110,662,440	117,615,131	124,567,822	125,148,442	125,148,442	125,148,442
Syrup	30,338,880	35,625,200	38,383,280	41,141,360	43,899,440	46,657,520	49,415,600	49,645,440	49,645,440	49,645,440
Injectable	18,378,360	21,582,180	23,252,940	24,914,520	26,594,460	28,265,220	29,935,980	30,073,680	30,073,680	30,073,680
Total Cost	300,755,083	353,166,466	380,507,838	407,788,349	435,190,580	462,531,951	489,873,322	492,144,682	492,144,682	492,144,682
Direct Labour	8,340,000	9,148,980	10,036,431	11,009,965	12,077,931	13,249,491	14,534,691	15,944,556	17,491,178	19,187,823
Direct Electricity	896,649	967,485	1,043,916	1,126,385	1,215,370	1,311,384	1,414,983	1,526,767	1,647,382	1,777,525
Commission on sales	3,759,439	4,909,014	5,881,434	7,009,050	8,317,803	9,830,502	11,577,706	12,934,103	14,382,723	15,993,588
Total cost of sales	313,751,171	368,191,945	397,469,618	426,933,750	456,801,685	486,923,328	517,400,703	522,550,108	525,665,964	529,103,617
Gross Profit	62,192,683	122,709,443	190,673,736	273,971,299	374,978,650	496,126,854	640,369,920	770,860,206	912,606,305	1,070,255,147
<i>General administration & selling expenses</i>										
Staff Salaries	15,120,000	16,586,640	18,195,544	19,960,512	21,896,682	24,020,660	26,350,664	28,906,678	31,710,626	34,786,556
Administration benefits expense	410,550	450,373	494,060	541,983	594,556	652,228	715,494	784,897	861,032	944,552
Land lease rental expense	-	-	-	-	-	-	-	-	-	-
Building rental expense	2,999,520	3,299,472	3,629,419	3,992,361	4,391,597	4,830,757	5,313,833	5,845,216	6,429,738	7,072,711
Indirect Electricity	1,074,261	1,159,127	1,250,698	1,349,504	1,456,114	1,571,147	1,695,268	1,829,194	1,973,700	2,129,623
Travelling expense	1,209,600	1,326,931	1,455,644	1,596,841	1,751,735	1,921,653	2,108,053	2,312,534	2,536,850	2,782,925
Communications expense (phone, mail, internet, etc.)	907,200	995,198	1,091,733	1,197,631	1,313,801	1,441,240	1,581,040	1,734,401	1,902,638	2,087,193
Annual license renewal charges	3,000	3,309	3,650	4,026	4,440	4,898	5,402	5,959	6,572	7,249
Office vehicles running and maintenance expense	1,317,042	1,452,697	1,602,325	1,767,364	1,949,403	2,150,191	2,371,661	2,615,942	2,885,384	3,182,579
Generator Fuel Cost	846,000	933,138	1,029,251	1,135,264	1,252,196	1,381,173	1,523,433	1,680,347	1,853,423	2,044,325
Office expenses (stationery, entertainment, janitorial services, etc.)	1,134,000	1,243,998	1,364,666	1,497,038	1,642,251	1,801,549	1,976,300	2,168,001	2,378,297	2,608,992
Promotional expense	5,639,158	7,363,521	8,822,150	10,513,576	12,476,705	14,745,753	17,366,559	19,401,155	21,574,084	23,990,381
Professional fees (legal, audit, consultants, etc.)	939,860	1,227,253	1,470,358	1,752,263	2,079,451	2,457,625	2,894,427	3,233,526	3,595,681	3,998,397
Depreciation expense	2,891,520	2,891,520	2,891,520	3,034,926	3,034,790	3,034,790	2,493,238	5,491,942	5,491,942	5,740,500
Amortization of pre-operating costs	135,449	135,449	135,449	135,449	135,449	500	500	500	500	500
Bad debt expense	1,879,719	2,454,507	2,940,717	3,504,525	4,158,902	4,915,251	5,788,853	6,467,052	7,191,361	7,996,794
Subtotal	36,506,878	41,523,134	46,377,183	51,983,262	58,138,071	64,929,414	72,184,724	82,477,342	90,391,827	99,373,277
Operating Income	25,685,805	81,186,309	144,296,553	221,988,037	316,840,579	431,197,440	568,185,196	688,382,864	822,214,479	970,881,870
Gain / (loss) on sale of office equipment	-	-	-	-	-	-	738,500	-	-	-
Gain / (loss) on sale of office vehicles	-	-	-	-	-	-	2,663,500	-	-	-
Earnings Before Interest & Taxes	25,685,805	81,186,309	144,296,553	221,988,037	316,840,579	431,197,440	571,587,196	688,382,864	822,214,479	970,881,870
Interest expense on long term debt (Project Loan)	-	-	-	-	-	-	-	-	-	-
Interest expense on long term debt (Working Capital Loan)	-	-	-	-	-	-	-	-	-	-
Subtotal	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	25,685,805	81,186,309	144,296,553	221,988,037	316,840,579	431,197,440	571,587,196	688,382,864	822,214,479	970,881,870
Tax	8,110,031	27,535,207	49,623,793	76,815,812	110,014,202	150,039,103	199,175,518	240,054,002	286,895,067	338,928,654
NET PROFIT/(LOSS) AFTER TAX	17,575,774	53,651,102	94,672,760	145,172,225	206,826,377	281,158,337	372,411,678	448,328,863	535,319,412	631,953,216

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	2,000,000	3,846,287	26,945,319	55,857,380	95,344,370	144,376,404	201,482,651	242,902,217	319,273,011	397,183,280	494,904,503
Accounts receivable		17,544,047	22,908,731	27,446,690	32,708,902	38,816,416	45,875,675	54,029,296	60,359,148	67,119,373	74,636,742
Finished goods inventory		24,180,541	26,186,898	28,193,255	30,263,764	32,270,121	34,276,478	36,282,834	36,282,834	36,282,834	36,282,834
Pre-paid building rent	249,960	274,956	302,452	332,697	365,966	402,563	442,819	487,101	535,811	589,393	-
Advance to supplier	6,045,135	6,546,724	7,048,314	7,565,941	8,067,530	8,569,119	9,070,709	9,070,709	9,070,709	9,070,709	-
Total Current Assets	8,295,095	52,392,555	83,391,713	119,395,962	166,750,533	224,434,623	291,148,332	342,772,158	425,521,514	510,245,588	605,824,080
Fixed assets											
Building/Infrastructure	2,398,090	2,158,281	1,918,472	1,678,663	1,438,854	1,199,045	959,236	719,427	479,618	239,809	-
Furniture & fixtures	999,000	849,150	699,300	549,450	399,600	249,750	99,900	1,897,752	1,613,089	1,328,426	1,043,763
Office vehicles	10,654,000	9,055,900	7,457,800	5,859,700	4,261,600	2,663,500	1,065,400	22,119,410	18,801,499	15,483,587	12,165,676
Warehouse equipment	804,000	795,960	787,920	779,880	771,840	763,800	755,760	2,275,040	2,251,726	2,228,413	2,205,100
Office equipment	2,954,000	2,510,900	2,067,800	1,624,700	1,181,600	738,500	295,400	5,611,570	4,769,834	3,928,099	3,086,363
IT equipment	1,358,000	905,379	452,757	1,787,987	1,191,961	596,070	2,353,944	1,569,255	784,745	3,099,044	2,065,976
Security against building	749,880	749,880	749,880	749,880	749,880	749,880	749,880	749,880	749,880	749,880	749,880
Distribution Security	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000	75,000,000
Total Fixed Assets	94,916,970	92,025,450	89,133,929	88,030,260	84,995,335	81,960,545	81,279,520	109,942,333	104,450,392	102,057,258	96,316,758
Intangible assets											
Pre-operation costs	674,743	539,794	404,846	269,897	134,949	-	-	-	-	-	-
Liscense	5,000	4,500	4,000	3,500	3,000	2,500	2,000	1,500	1,000	500	-
Total Intangible Assets	679,743	544,294	408,846	273,397	137,949	2,500	2,000	1,500	1,000	500	-
TOTAL ASSETS	103,891,808	144,962,298	172,934,488	207,699,620	251,883,816	306,397,668	372,429,851	452,715,991	529,972,905	612,303,347	702,140,838
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		32,282,604	37,823,186	40,861,685	43,932,832	47,063,084	50,237,487	53,468,066	54,238,608	54,830,588	55,481,946
Total Current Liabilities	-	32,282,604	37,823,186	40,861,685	43,932,832	47,063,084	50,237,487	53,468,066	54,238,608	54,830,588	55,481,946
Shareholders' equity											
Paid-up capital	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808	103,891,808
Retained earnings		8,787,887	31,219,494	62,946,127	104,059,176	155,442,777	218,300,557	295,356,117	371,842,490	453,580,951	542,767,083
Total Equity	103,891,808	112,679,695	135,111,302	166,837,935	207,950,984	259,334,584	322,192,364	399,247,925	475,734,298	557,472,759	646,658,891
TOTAL CAPITAL AND LIABILITIES	103,891,808	144,962,298	172,934,488	207,699,620	251,883,816	306,397,668	372,429,851	452,715,991	529,972,905	612,303,347	702,140,838

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		17,575,774	53,651,102	94,672,760	145,172,225	206,826,377	281,158,337	372,411,678	448,328,863	535,319,412	631,953,216
Add: depreciation expense		2,891,520	2,891,520	2,891,520	3,034,926	3,034,790	3,034,790	2,493,238	5,491,942	5,491,942	5,740,500
amortization of pre-operating costs		135,449	135,449	135,449	135,449	135,449	500	500	500	500	500
Accounts receivable		(17,544,047)	(5,364,685)	(4,537,958)	(5,262,212)	(6,107,513)	(7,059,260)	(8,153,621)	(6,329,852)	(6,760,225)	(7,517,370)
Finished goods inventory		(24,180,541)	(2,006,357)	(2,006,357)	(2,070,509)	(2,006,357)	(2,006,357)	(2,006,357)	-	-	-
Advance to Supplier	(6,045,135)	(501,589)	(501,589)	(517,627)	(501,589)	(501,589)	(501,589)	-	-	-	9,070,709
Pre-paid building rent	(249,960)	(24,996)	(27,496)	(30,245)	(33,270)	(36,597)	(40,256)	(44,282)	(48,710)	(53,581)	589,393
Accounts payable		32,282,604	5,540,582	3,038,499	3,071,147	3,130,252	3,174,403	3,230,579	770,542	591,980	651,358
Cash provided by operations	(6,295,095)	10,634,174	54,318,526	93,646,040	143,546,165	204,474,811	277,760,568	367,931,735	448,213,284	534,590,028	640,488,306
Financing activities											
Issuance of shares	103,891,808	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) Financing activities	103,891,808	-	-	-	-	-	-	-	-	-	-
Investing activities											
Capital expenditure	(95,596,713)	-	-	(1,787,851)	-	-	(2,353,765)	(31,156,051)	-	(3,098,809)	-
Acquisitions											
Cash (used for) / provided by Investing activities	(95,596,713)	-	-	(1,787,851)	-	-	(2,353,765)	(31,156,051)	-	(3,098,809)	-
NET CASH	2,000,000	10,634,174	54,318,526	91,858,189	143,546,165	204,474,811	275,406,803	336,775,684	448,213,284	531,491,220	640,488,306

13. KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Table 23: Operating Cost Assumptions

Description	Details
Building rent growth rate	10%
Furniture and fixture depreciation	15%
Vehicle depreciation	15%
Office equipment depreciation	15%
Inflation rate	10.3%
Wage growth rate	9.7%
Electricity price growth rate	7.9%
Office equipment price growth rate	9.6%
Office vehicle price growth rate	11%

13.2 Revenue Assumptions

Table 24: Revenue Assumptions

Description	Details
Sale price growth rate	11.2%
Initial capacity utilization	60%
Capacity growth rate	5%
Maximum capacity utilization	90%

13.3 Financial Assumptions

Table 25: Financial Assumptions

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate used for NPV	25%

13.4 Debt related Assumptions

Table 26: Debt Related Assumptions

Description	Details
Project life (Years)	10

Debt: Equity	0:100
Discount Rate used for NPV	22%
Debt Tenure	5 years
Grace Period	1 Year
Interest Rate (KIBOR+3%)	19%

13.5 Cashflow Assumptions

Table 27: Cashflow Assumptions

Description	Details
Accounts receivable cycle (in days)	14
Accounts payable cycle (in days)	30

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