



Pre-feasibility Study

MANUFACTURING UNIT FOR PERFUMES

October 2021

“The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, 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 to be obtained by the user. 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

Document No.	225
Prepared by	SMEDA-Punjab (OS)
Revision Date	October 2021
For information	helpdesk.punjab@smeda.org.pk

2. EXECUTIVE SUMMARY

Perfume is defined as a fluid preparation used for scenting. It is prepared by mixing different types of natural and/or synthetic essences. Perfumes are used on daily basis in nearly every household of the country. They have pleasant smell and are commonly used by people to make themselves more presentable and acceptable for other people. Scents are reported to also enhance health and well-being by improving mood, reducing anxiety and stress, increasing cognitive functions and improving sleep. These are considered as agents which can create feelings of happiness between human beings.

Growing beauty and fashion industry and a rising awareness about personal care are the key factors to boost the growth of the perfume industry of Pakistan. Increasing consumption trends of perfumes creates the opportunity rationale for establishing this business.

Perfume is a mixture of different types of notes, including base notes, middle notes and top notes/essential oils. Along with essential oils, other important ingredients are ethanol and SD alcohol.¹ Ethanol (Ethyl Alcohol) is used as the main solvent since it has a soothing and non-irritating odor which makes it ideal for addition to the formulations of scented products. It helps retain both the fragrance and the clarity of the scent. Another important additive is a fixative which represents a group of two-three chemicals; sold under the name fixer chemical. A fixative is used to equalize the vapor pressures, and thus the volatilities, of the raw materials in a perfume oil, as well as to increase the tenacity.

This “Pre-feasibility Document” (hereinafter referred to as proposed unit) provides details for setting up a “Manufacturing Unit for Perfumes”. The proposed unit may be established in industrial areas of major cities like Karachi, Lahore, Islamabad, Peshawar, Quetta, Faisalabad, Hyderabad, Multan, etc. or in medium cities like, Rawalpindi, Bahawalpur, Sargodha, Sukkur, Sheikhpura, Gujranwala, Sialkot, Mardan, Muzaffarabad, etc. These cities are suitable due to availability of strong supply chains and industrial infrastructure and presence of distribution channels (retail stores, multi retail stores, and online retail stores). Availability of skilled and low-cost labor are also important factors to make these locations suitable for this business.

The proposed unit will be set up in a rented building with an area of 3,038 square feet (13.5 Marla). The project requires a total investment of PKR 24.32 million. This includes capital investment of PKR 16.38 million and working capital of PKR 7.93 million. It is proposed that the project shall be financed through 100% equity and will have total production capacity of 224,000 bottles of 100 ml each. The Net Present Value (NPV) of project is PKR 169.64 million with an Internal Rate of Return (IRR) of 68% and a Payback period of 2.34 years. Further, this project is expected to generate Gross Annual Revenues of PKR 92.80 million during 1st year, Gross Profit (GP) ratio

¹ SD alcohol is Denatured alcohol. It is ethanol that's been mixed with other ingredients. it's “denatured” with additional ingredients to discourage people from drinking it.

ranging from 29% to 55% and Net Profit (NP) ratio ranging from 5% to 26% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 38% (85,283 bottles) with annual breakeven revenue of PKR 70.66 million.

The proposed project may also be established using leveraged financing. At 50% financing at a cost of KIBOR+3%, the proposed business provides Net Present Value (NPV) of PKR 215.35 million, Internal Rate of Return (IRR) of 68% and Payback period of 2.36 years. Further, this project is expected to generate Net Profit (NP) ratio ranging from 4% to 26% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 41% (91,406 bottles) with breakeven revenue of PKR 75.74 million.

The proposed project will provide employment opportunities to 24 people, working in one shift of 8 hours each during 280 days in a year. High return on investment and steady growth of business is expected with the entrepreneur having some prior experience or education in the related field of business. The legal business status of this project is proposed as “Private Limited Company”.

3. INTRODUCTION TO SMEDA

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

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

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

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

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 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 facilitate potential investors about establishing a business of “Manufacturing Unit for Perfumes” by providing a general understanding of the business with the intention of supporting them in making correct 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 & PRODUCTS

Perfume is used to give a pleasant and desirable scent to a person's clothes, typically with the aim of increasing self-appeal and self-confidence. Scents enhance health and well-being by improving mood and reducing anxiety and stress.

Perfume is a fragrant liquid, typically made from essential oils extracted from various plants, fruits and woods. These oils/scents are called “Notes”. In addition to these notes, other ingredients like ethanol (Ethyl Alcohol), SD alcohol and fixative are also used in perfume manufacturing. Details of these ingredients are provided in the following paragraphs:

Essential Oils (Notes)

Different types of notes used in making of perfumes are discussed in the following paragraphs:

Top Notes

When perfumes are applied on the clothes/body, top notes are represented by the scent that spreads in the beginning; usually within the first 10 to 15 minutes. Popular essential oils that are used as top notes include basil, bergamot, grapefruit, lavender, lemon, lime, mint, neroli, rosemary, and sweet orange.

Middle Notes

Middle notes spread scent after the top notes vanish. These notes determine the category to which the perfume actually belongs; such as oriental, woody, fresh, or floral. The essential oils used as middle notes include black pepper, cardamom, chamomile, cinnamon, clove, fir needle, jasmine, juniper, lemongrass, neroli, nutmeg, rose, rosewood and ylang-ylang.

Base Notes

Base notes emphasize and fix the fragrance of middle notes, also known as its theme. They comprise the fragrance foundation, making the scent last up to 4 or 5 hours on the clothes. The essential oils used as base notes include cedar wood, cypress, ginger, patchouli, pine, sandalwood, vanilla and vetiver.

Other Chemicals

Other chemicals used in perfume manufacturing are discussed in the following paragraphs:

Ethanol

Ethyl alcohol, or ethanol, is the traditional and the most commonly used solvent in perfumery. Since middle-ages, alcohol has been considered an optimal option for dissolving aromatic substances. It quickly evaporates bringing the top notes of the composition into the spotlight.

SD Alcohol

SD Alcohol is a denatured alcohol² and is generally considered a popular choice for making perfumes because it evaporates quickly and helps diffuse the perfume notes. It is “denatured” with additional ingredients to discourage people from drinking it. The use of SD alcohol in the perfume helps break down perfume ingredients. It helps merge essential oils and aroma products together. SD alcohol also works as anti-foaming agent.

Fixative (perfumery)

Fixative is a blended mixture of more than one chemical, though a single name “fixative” is used for it. Fixatives are used to equalize the vapor pressures to restrict the volatility of fragrance components and help prolong the durability of the aroma in the perfumes. Synthetic fixatives include substances of low volatility such as Diphenylmethane, Dipropylene Glycol (DPG), Cyclopentadecanolide, Ambroxide, Benzyl Salicylate and virtually odorless solvents with very low vapor pressures like Benzyl Benzoate, Diethyl Phthalate, Triethyl Citrate, etc.

² The term 'denatured alcohol' refers to alcohol products mixed with toxic and/or bad tasting additives (e.g., methanol, benzene, pyridine, castor oil, gasoline, isopropyl alcohol and acetone), making it unsuitable for human consumption.

Suggested Products

This document provides details about the raw materials, machinery and equipment, production process and the products to be manufactured in the proposed business unit.

The proposed unit will only manufacture alcohol-based perfumes, which may be used by both males and females. The products have been identified as under:

- Alcoholic Perfume A-100 ml
- Alcoholic Perfume B-100 ml
- Alcohol Perfume C-100 ml

The details of the above-mentioned products are discussed below:

Alcoholic Perfume A-100ml

Alcoholic perfume A-100 ml will be produced by using two base notes (pine essential oil 1.9 ml, cypress essential oil 0.4 ml), two middle notes (neroli essential oil 0.4 ml and clove essential oil 0.9 ml) and two top notes (rosemary essential oil 1.1 ml and mint essential oil 0.4 ml). All these ingredients are mixed in a mixer machine to create a blend of different essential oils. In the next step, sweet almond oil (20 ml) is added into the mixer to further dilute the mixture of perfume. Along with these essential oils, ethanol (Ethyl Alcohol), SD alcohol, and fixative are also used in the quantity of 60 ml, 10 ml and 5 ml respectively to produce the final product.

Alcoholic Perfume B-100ml

Alcoholic perfume B-100 ml will be produced by using two base notes (sandalwood essential oil (1.9 ml), ginger essential oil (0.4 ml)), two middle notes (jasmine essential oil (0.4 ml) and lemongrass essential oil (0.9 ml)) and two top notes (lavender essential oil (1.1 ml) and lemon essential oil (0.4 ml)). All these ingredients are mixed in a mixer machine to create a blend of different essential oils. In the next step, sweet almond oil (20 ml) is added into the mixer to further dilute the mixture of perfume. Along with these essential oils, ethanol, SD alcohol and fixative are also used in the quantity of 60 ml, 10 ml and 5 ml respectively to produce the final product.

Alcohol Perfume C-100ml

Alcoholic perfume C-100 ml will be produced by using two base notes (vanilla essential oil 1.9 ml, orange essential oil 0.4 ml), two middle notes (rose essential oil 0.4 ml and ylang ylang essential oil 0.9 ml) and two top notes (bergamot essential oil 1.1 ml and grape fruit essential oil 0.4 ml). All these ingredients are mixed in a mixer machine to create a blend of different essential oils. In the next step, sweet almond oil (20 ml) is included in the mixer to further dilute the mixture of perfume. Along with these essential oils, ethanol, SD alcohol and fixative are also used in the quantity of 60 ml, 10 ml and 5 ml respectively to produce the final product.

Based on the results of market research, the selling prices of Perfume A, Perfume B and Perfume C are determined by adding a markup of 40% on the total direct costs of these three products.

The proposed unit will sell its products to large retail shops, malls and cosmetic stores chains in Pakistan.

5.1. Machinery and Equipment

Details of the machinery and equipment used in this proposed project are as follows:

Perfume Mixer/Mixing Machine

The perfume mixer / mixing machine having capacity of 20 liters. 2 hours are required for preparing one batch (20 liter) of perfume. The proposed unit will manufacture 4 batches per day. Essential oils are added in this machine to create a mixture. After creating a mixture of these essential oils, other ingredients, including sweet almond oil, ethanol, SD alcohol and fixative (it is a group of two-three chemicals that is found though single name called fixative) are also added into the mixing machine for further mixing of material until the perfume is ready. All the above materials are added into the mixing machine as per the formula of each product. Figure 1 shows perfume mixing machine. Perfume is ready after mixing of above-mentioned ingredients.

Figure 1: Perfume Mixer



Perfume Filling Machine

A perfume filling machine having capacity of filling 200 bottles per hour is used to fill the perfumes in the bottles of 100 ml. Figure 2 shows perfume filling machine.

Figure 2: Perfume Filling Machine**Perfume Capping Machine**

Once the bottles of different sizes and shapes are filled with perfumes, a capping machine having capacity of 200 bottles per hour is required to securely apply plastic or metal threaded caps, lids, snap caps, plugs or other similar closures to the bottles. Figure 3 shows perfume capping machine used in the manufacturing of perfume.

Figure 3: Perfume Capping Machine

Standard Digital Pump Systems

A peristaltic pump is commonly used when performing a Low-Pressure Liquid Chromatography.³ In the proposed project, this machine is used in laboratory for quality testing using liquid chromatography. Peristaltic pumps use a rotor to pinch tubing and generate a vacuum. Its power consumption is 2 KW. Figure 4 shows digital peristaltic pump system.

Figure 4: Standard Digital Pump Systems



Chromatography Columns with Two Adjustable End Pieces

These chromatography columns are used for Low Pressure Liquid Chromatography (LPLC) using standard digital pumps. LPLC is performed with these columns using gravity to “pump” the solvent through the column. Figure 5 shows Chromatography Columns.

Figure 5: Chromatography Columns



Perfume Wrapping and Packing Machine

A perfume wrapping and packing machine having capacity of packing 200 boxes of perfume per hour securely applies plastic wrapping to the perfume boxes. Power of

³ Low pressure liquid chromatography (LPLC) is a chromatographic technique that operates at low pressure.

the suggested machine is 16 KW. Figure 6 show perfume wrapping and packing machine.

Figure 6: Perfume Wrapping and Packing Machine



Electronic Weigh Scales

Weigh scale is used to determine the weight of Product. In the proposed project, three weigh scales have been suggested, which are required in the production department and quality test lab for weighing.

- Electronic Weight Scale (30 Kg) is used for measuring the quantity of raw material to be used for production.
- Electronic Weight Scale (100 Kg) is used for verifying the quantity of raw materials supplied by a supplier. It consumes electric power of 10 watts.
- Lab precision weigh scale will be used is lab to measure very small quantities, it has the precision of 0.001 gram. Figure 7 shows electronic weight scale.

Figure 7: Electronic Weight Scale



Measuring Cups 5L

Liquid measuring cups are usually glass or plastic with a handle. They allow you to pour a liquid into the cup and bring it even with a measurement line without spilling. The proposed unit will use measuring cups to measure the exact quantity being poured in the manufacturing process. Figure shows measuring cup.

Figure 8: Measuring Cup**Other Lab Equipment**

Other lab equipment includes nonsterile syringe filters, conical flasks of different sizes, glass beakers of different sizes, graduated cylinders, burettes, and test tubes, test tube holders, test tube stands, stands for flask and beakers, magnetic mixers, pipettes, lab thermometers, glass funnels, glass stirrers, filter papers, etc. Figure 9 shows nonsterile syringe filters and graduated cylinder.

Figure 9: Nonsterile Syringe Filters and Graduated Cylinder (100 ml)

Figure 10 shows conical flasks and glass beakers.

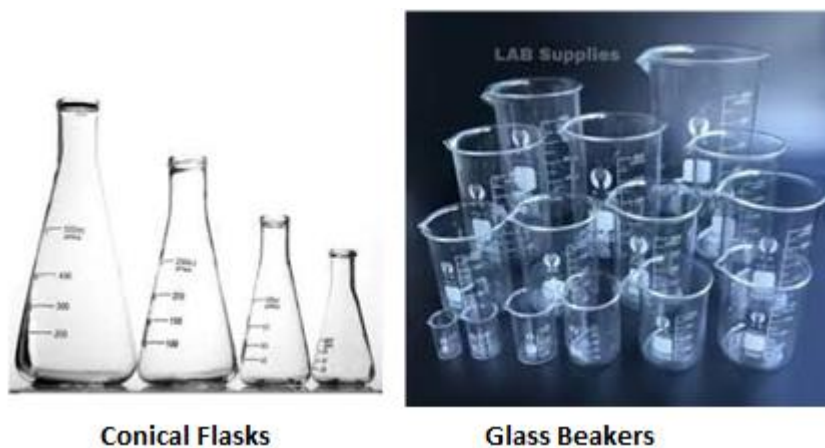
Figure 10: Conical Flask and Glass Beakers

Figure 11 shows burette 50 ml and test tubes.

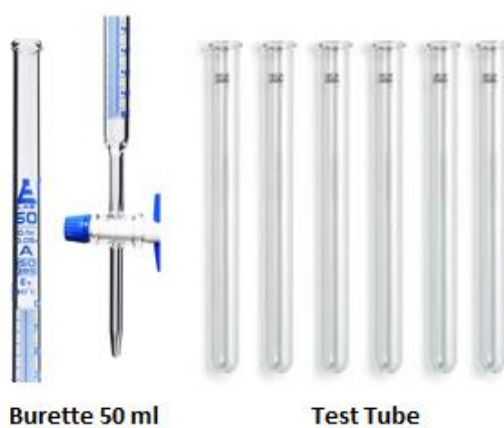
Figure 11: Burette 50 ml and Test Tubes

Figure 12 shows test tube stand and test tube holder.

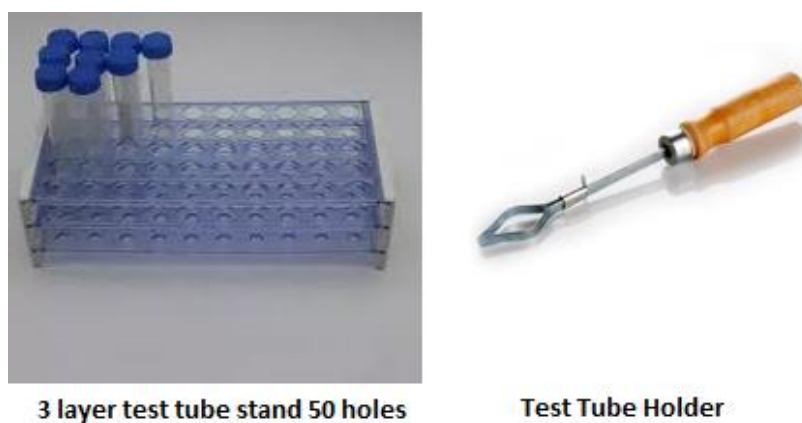
Figure 12: Test Tube Stand and Test Tube Holder

Figure 13 shows magnetic mixer (300 ml) and adjustable micropipette set.

Figure 13: Magnetic Mixer 300 ml and Adjustable Micropipette Set**Magnetic Mixer 300 ml****Adjustable Micropipette set**

Figure 14 shows laboratory thermometer 110°C and glass funnel set.

Figure 14: Laboratory Thermometer 110°C and Glass Funnel Set**Laboratory thermometer 110°C****Glass Funnel Set**

Figure 15 shows glass stirrer and filter paper box.

Figure 15: Glass Stirrer and Filter Paper Box**Glass Stirrer****Filter Paper Box**

Platform Trolley

Trolley is used for carrying load or to transport the material from one point to another. In the proposed project, trolley is used to transport materials from raw material store to production department and finished products from the production hall to the finished goods store. Figure 16 shows platform trolley.

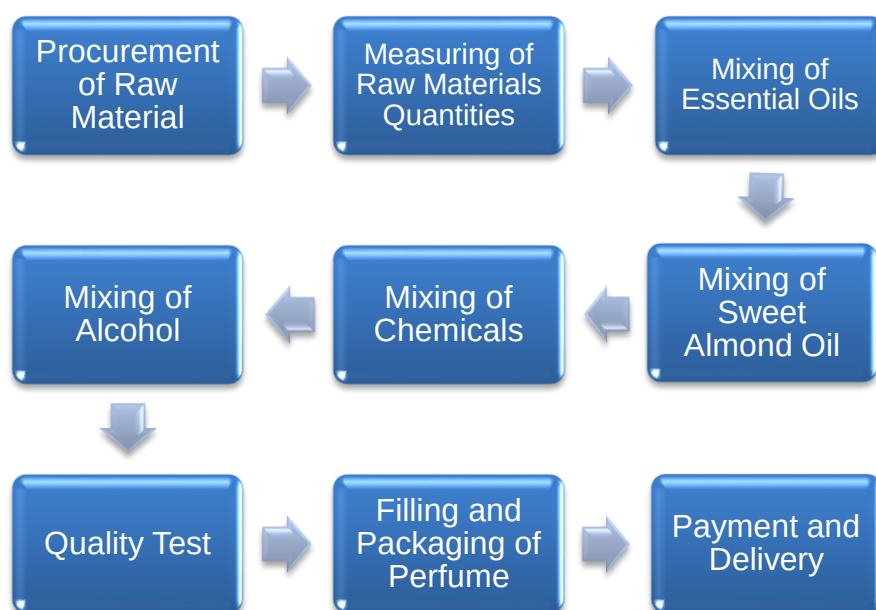
Figure 16: Platform Trolley

**5.2. Process Flow for Manufacturing of Perfume**

The manufacturing process of all perfumes is the same. Difference is in terms of the raw materials required in different formulations. It is driven by the base of perfume scent that the customer wants to create because different essential oils are used for the manufacturing different scents.

Alcoholic Perfume

To manufacture alcoholic perfumes, top, middle and base notes are the main raw materials. When perfumes are prepared, first base notes are added, followed by middle notes and then finally top notes are added. After creating the mixture of these notes, sweet almond oil is added for diluting the mixer. Further, ethanol, SD alcohol and fixative (a group of two-three chemicals that is found though single name called fixative) are added to manufacture alcoholic perfume. The manufacturing process flow of alcoholic perfume is shown in Figure 17.

Figure 17: Process Flow for Manufacturing of Alcoholic Perfume**Procurement of Raw Material (Essential Oils & Glass Bottles)**

Main raw materials for manufacturing perfumes are the essential oils. There is a large number of essential oils used in perfumery industry; such as basil, bergamot, grapefruit, lavender, lemon, lime, mint, neroli, sweet orange, cinnamon, clove, jasmine, rosewood, ylang ylang, ginger, vanilla, pine, cypress, sandalwood, etc. In addition to essential oils, sweet almond oil, ethanol, SD alcohol and fixative are the other important ingredients for making perfumes. Along with these ingredients, glass bottles and packing boxes are also required by this manufacturing unit. All these raw materials are bought from the local suppliers which generally exist in all the major cities.

The proposed Unit will only purchase essential chemicals from suppliers who are registered with International Fragrance Association. Certification from International Fragrance Association will be the proof of quality of raw materials used for making perfumes.

100 ml glass bottles (of different designs) will be used for filling the manufactured perfumes. These bottles are easily available in the local market and the proposed unit can also get them manufactured as per the required product design and packs (100 ml). The raw material store maintains two months of raw material inventories. Payment to suppliers is made within 60 days from the receipt of raw materials.

Measuring of Raw Materials

Before mixing of all the essential oils and other chemicals in the perfume mixing machine, the production supervisor measures the required quantities for preparing a standard batch according to the standardized mixing ratio/formula using measuring

cups, graduated cylinders and burettes. This process is repeated for every batch as this forms the basis for manufacturing a high quality product.

Mixing Essential Oils

In this process, essential oils (such as basil, bergamot, grapefruit, lavender, lemon, lime, mint, neroli, sweet orange, cinnamon, clove, jasmine, rosewood, ylang ylang, ginger, vanilla, pine, cypress, sandalwood) are mixed in the high-power mixer machine. Essential oils are added according to standardized mixing sequence. This sequence includes first adding two essential oils of base notes, two essential oils of middle notes and then finally two essential oils of top notes.

Mixing of Sweet Almond Oil

After mixing of essential oils, a mixture of different notes is created. This mixture is also called a base or accord. Once the base or accord is created, then next process is to add sweet almond oil (20% of total quantity of perfume), to dilute the base.

Mixing of Chemicals

After mixing almond oil, ethanol and fixative are added. Ethanol is used as solvent in the perfume and it also helps enhancing the quality of scent by retaining both the fragrance and the clarity of scent. Major proportion i.e., 60% of total perfume consists of ethanol. Along with ethanol, approximately 5% of fixative is also used in the manufacturing of perfume. A fixative is used to equalize the vapor pressures, and thus the volatilities, of the raw materials in a perfume oil, as well as to increase the quality.

Mixing of SD Alcohol

After mixing ethanol and fixative, SD alcohol is added. The use of SD alcohol (10%) in the perfume helps break down perfume ingredients. It helps merge essential oils and aroma products together during the manufacturing of perfume in a mixer machine. SD Alcohol evaporates almost instantly, which makes it an ideal base for perfumes. SD Alcohol helps to diffuse and lift perfumes notes.

After mixing all these ingredients for 2 hours, perfume is ready, after which quality test is performed.

Quality test

A small sample of perfume is sent to the testing lab where the quality controller performs chromatography test using standard digital pump systems. Chromatography is a process for separating components of a mixture. Different components of the mixture travel through the stationary phase at different speeds, causing them to separate from one another. Chromatography tests verify that all the ingredients of the perfumes are added according to the required ratios of the formula. Reagents⁴ can also be used to perform chromatography, sulfuric acid solution (98%) and potassium permanganate solution (1%-5%) are used as reagents for liquid chromatography.

⁴ A reagent is a substance or compound added to a system to cause a chemical reaction, or added to test if a reaction occurs.

Filling and Packaging of Perfume

After passing the quality tests, the manufactured perfume is filled in the bottles of different sizes and shapes using a perfume filling machine. It is followed by a capping machine which puts caps on the filled bottles. The capped bottles are packed into a box packing manually by the packing staff.

Shrink Wrapping

The packed perfumes boxes are wrapped into a plastic wrap using automatic shrink wrapping and packing machine which makes the perfume look attractive to meet the consumer's expectations. Figure 18 shows finished product.

Figure 18: Finished Product



Perfume

Payment and Delivery

After packing, the finished products are delivered to the finished goods store of the manufacturing unit. They are then transported to the customers' locations through carry van. The sales are done at an average of 30 days credit.

5.3. Installed and Operational Capacities

The proposed production unit will run for 8 hours per day for 280 days in a year. The proposed business will have maximum capacity of producing 224,000 bottles in a year which includes 89,600 bottles of Alcoholic Perfume A-100 ml, 67,200 bottles of Alcoholic Perfume B-100 ml and 67,200 bottles of Alcoholic Perfume C-100 ml. The project is assumed to attain 50% capacity utilization during the first year of operations; which is equal to a total of 112,000 bottles; including 44,800 bottles of Alcoholic Perfume A-100 ml, 33,600 bottles of Alcoholic Perfume B-100 ml and 33,600 bottles of Alcoholic Perfume C-100 ml. The operational capacity utilization is assumed to increase at the rate of 5% per annum to reach a maximum of 85% in Year 8. Table 1 shows details of maximum annual capacity and operational capacity utilized during first year of operations.

Table 1: Installed and Operational Capacity

Particulars	Production Ratio	No of Machine	Average Time per Batch (Hours)	Machine Capacity per Batch (Ltrs)	Bottles / Batch (bottles)	Hours / Day	Batch per Day	Bottle processed /Day	Bottle processed/ Year	Maximum Bottle production/ Year (100% capacity)	Production per year @50% Capacity
Alcoholic Perfume A-100 ml	40%	1	2	20	200	8	4	800	224,000	89,600	44,800
Alcoholic Perfume B-100 ml	30%									67,200	33,600
Alcoholic Perfume C-100 ml	30%									67,200	33,600
Total	100%									224,000	112,000

6. CRITICAL FACTORS

Before making the decision to invest in manufacturing unit for perfume, one should carefully analyze the associated risk factors. The important considerations in this regard include:

- Appointment of skilled staff
- Use of good quality raw materials
- Use of modern technology and machines for maintaining quality and boosting appearances
- Strict compliance with standards of quality control
- Maintenance of manufacturing machinery
- Continuous inspection of production process
- Fine finishing as visual appeal is central to the consumer decisions
- Focused marketing and branding strategy to create a strong brand
- Strong distribution channels

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed manufacturing unit has potential to provide good entrepreneurship opportunity if the business is established in large to medium cities of Pakistan like Karachi, Lahore, Islamabad, Peshawar, Quetta, Gujranwala, Sheikhpura, Faisalabad, Sukkur, Hyderabad, Rawalpindi, Multan, Bahawalpur, Sargodha, Sialkot, Gujrat, Mardan, Muzaffarabad, etc. The proposed locations are suitable because of easy access to raw materials and availability of low-cost labor. Other reasons of proposing large to medium cities for setting up of this business are the large populations and presence of industrial infrastructure and strong distribution channels; including cosmetic stores, large retail outlets, etc.

8. POTENTIAL TARGET MARKETS/CUSTOMERS

The potential target market for perfumes are beauty stores, retail stores, super markets and general household. Perfume industry is being driven by the growing beauty and fashion industry and the increasing awareness among consumers about personal well-being and grooming. The market is further supported by the increasing disposable incomes and rising standards of living of Pakistani people. The growing inclination of both men and women towards beauty and personal care is expected to further provide basis for the market growth. The diversification of fragrances and the rising popularity of existing products among youth is expected to further bolster the market growth in future. Furthermore, the growing e-commerce sector, along with

attractive deals offered by various e-commerce platforms, is expected to positively influence the market growth.

The growth of the fragrances and perfumes market is primarily influenced by unpredictable and continuously changing fashion trends. Thus, the key market players focus on developing exciting, unique, and new fragrances to attract different consumer groups.

The market of the proposed unit is primarily segmented between male and female customers. The female segment is larger than the male segment. An increasing expenditure by women on cosmetics and personal well-being is one of the major reasons for the growth of this segment. Increasing participation of women in the workforce is expected to further increase the use of premium personal care products to look presentable and leave a good impression on people.

As per Euro monitor reports by different market research companies, the worth of the beauty and personal care market of Pakistan is \$1.7 billion, with an annual growth rate of around 15%.⁵ Improved lifestyles have also led to developing consumer preferences and increasing rate of urbanization, combined with rising per capita disposable incomes (largely due to the increased contribution of women in the workforce), has created an increasing demand for quality personal care products.

Considering the above-mentioned analysis and the fact that perfume has become a necessity in daily life of general public, the customer base of products produced by the proposed units can be considered quite large. The customers include working men and women, youngsters, people working in the showbiz industry, etc.

9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of manufacturing unit for perfumes. Various assumptions relevant to revenue and costs along with the results of the analysis are outlined in this section.

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

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

9.1. Initial Project Cost

Table 2 provides fixed and working capital requirements for establishment of manufacturing unit for perfume.

⁵ <https://aurora.dawn.com/news/1143226>

Table 2: Initial Project Cost Estimates

Particulars	Cost (PKR)	Reference
Land	-	9.1.1
Building / Infrastructure	688,175	9.1.2
Machinery & equipment	3,495,600	9.1.3
Furniture & fixers	1,694,000	9.1.5
Office vehicles	1,293,500	9.1.6
Office equipment	1,509,500	9.1.4
Pre-operating costs	7,173,750	9.1.7
Security against building	450,000	9.1.9
Legal & licensing fee	79,000	9.1.8
Total Capital Cost – (A)	16,383,525	
Working Capital Requirement		
Consumables inventory	27,092	
Raw material inventory	6,754,511	
Upfront building rent	150,000	
Cash	1,000,000	
Total Working Capital – (B)	7,931,603	
Total Project Cost - (A+B)	24,315,127	

9.1.1. Land

The proposed unit will be established on rented land having an area of 3,038 sq. feet (13.5 Marla). Rental cost per month has been estimated as PKR 150,000. The breakup of the space requirement is provided in.

Table 3.

Table 3: Breakup of Space Requirement

	Number	Length	Width	Area (Sq. Ft.)
Production Area				
Raw Material Store Room	1	20	20	400
Production & Packing Department	1	30	30	900
Finished Goods Store Room	1	24	24	576

Washrooms	3	8	8	192
Office Block				
Executive Office	1	10	12	120
Accounts dept.	1	8	10	80
Procurement dept	1	8	10	80
HR and Admin dept	1	8	10	80
Conference Room	1	14	15	210
Sales and Marketing dept	1	10	12	120
Testing Lab	1	12	15	180
Kitchen	1	10	10	100
Total				3,038

9.1.2. Building / Infrastructure

There will be no cost of building construction since the manufacturing unit for perfume will be started in a rented building of 3,038 square feet. However, there will be a renovation cost required to make the building usable for the business. Building rent of PKR 150,000 per month has been included in the operating cost. The proposed project requires electricity load of around 26 KW for which an industrial electricity connection will be required. Table 4 provide details of building renovation cost.

Table 4: Building Renovation Cost

Cost Item	Unit of Measurement	Total Units	Cost/Unit (PKR)	Total Cost (PKR)
Paint Cost	Liter	45	500	22,725
Labour Cost	Square Feet	4,545	10	45,450
Glass partition	Square Feet	980	550	539,000
Shelves- Precasted	Square Feet	180	300	54,000
Blinds	Units	7	3000	21,000
Curtains	Units	2	3,000	6,000
Ceramic Floor Tiles-12*12 inch	Square Feet	3,038	110	334,180
Total (PKR)				688,175

9.1.3. Machinery and Equipment

Table 5 provides details of machinery and equipment for the proposed project.

Table 5: Machinery Cost Details

Cost Item	Number of Items	Unit Cost (PKR)	Total Cost (PKR)
High Power Mixer Machine for Perfume (20 Liter per two hour)	1	250,000	250,000
Perfume Filling Machine (200 bottles/hour) (50w)	1	150,000	150,000
Perfume Bottle Capping Machine-200 bottles/hour (0.1kw)	1	80,000	80,000
Automatic Shrink Wrapping & Packing Machine 200 boxes/hour (16 kw)	1	500,000	500,000
Platform Trolley	4	30,000	120,000
Generator (30 KW)	1	1,000,000	1,000,000
Electronic Weigh Balance (30 Kg)	2	4,800	9,600
Electronic Weigh Balance (100Kg)	2	10,500	21,000
Lab Equipment			
Chromatography Columns	5	121,000	605,000
Standard Digital Pump Systems	1	730,000	730,000
Lab precision weight scale	2	15000	30000
Total			3,495,600

9.1.4. Office Equipment

Table 6 shows details of equipment cost required for the manufacturing unit for perfume.

Table 6: Equipment Cost Details

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Laptops	6	80,000	480,000
Desktop Computers	7	25,000	175,000
Printers	2	40,000	80,000
CCTV Cameras (2 MP)	13	2,000	26,000
DVR	2	12,000	24,000
LED	1	15,000	15,000

Air Conditioners	7	80,000	560,000
Exhaust Fan	13	3,000	39,000
Ceiling Fan	9	4,500	40,500
Bracket Fan	4	5,000	20,000
Water Dispenser	2	20,000	40,000
Wi-Fi / Internet Router	2	5,000	10,000
Total Cost (PKR)			1,509,500

Table 7: Laboratory Consumable Expense (Year 1)

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Nonsterile Syringe Filters	100	250	25,000
Conical Flasks (4 pieces per set) (100ml/250ml/500/1000ml)	5	3,000	15,000
Glass Beakers (5 pieces per set) 25ml/50ml/100ml/250ml/500ml	5	1,850	9,250
Burette 50 ml	10	850	8,500
Graduated Cylinder 100 ml	10	600	6,000
Measuring Cups 5 liters	10	2,000	20,000
Test Tubes	100	50	5,000
3 Layer Test Tube Stand (50 holes)	4	2,000	8,000
Test Tube Holder	10	60	600
Magnetic Mixer 300 ml	4	5,000	20,000
Adjustable Micropipette set	4	25,000	100,000
Laboratory Thermometer 110°C	5	550	2,750
Glass Funnel (5 Piece Set) 50mm - 60mm - 75mm - 90mm - 100mm	5	2,000	10,000
Glass Stirrer (set of 3)	4	1,500	6,000
Filter paper box of 100 papers	30	300	9,000
Stands for glass apparatus	15	500	7500
Lab Gloves-box	10	1,000	10000

Face Mask-box	10	500	5,000
Reagents			
Sulfuric acid (2.5 Liter bottle)	10	3,000	30,000
Potassium permanganate (1 liter bottle)	5	5,500	27,500
Total			325,100

9.1.5. Furniture and Fixture

Table 8 provides details of furniture and fixtures.

Table 8: Furniture & Fixtures Cost Details

Cost Item	Number of Items	Unit Cost (PKR)	Total Cost (PKR)
Office Table	14	25,000	350,000
Executive Table	1	35,000	35,000
Executive Chairs	1	20,000	20,000
Office Chairs	36	10,000	360,000
Racks	38	8,000	304,000
Cabinets	9	10,000	90,000
Sofa Set	1	35,000	35,000
Conference Room Furniture			500,000
Total Cost (PKR)			1,694,000

9.1.6. Vehicles

Table 9 provides details of the vehicles required along with their cost for the proposed project.

Table 9: Office Vehicle Cost Details

Cost Item	Number of Vehicles	Unit Cost (PKR)	Total (PKR)
Suzuki Bolan	1	1,200,000	1,200,000
Motorcycle	1	80,000	80,000
Registration Charges-Motorcycle			1,500
Registration Charges-Suzuki bolan			12,000
Total Cost (PKR)			1,293,500

9.1.7. Pre-Operating Costs

Due to the nature of business, marketing, advertisement and brand launching activities are required. For this, marketing cost of 5 months and sample products cost of 5 months are added in pre-operating cost.

Table 10 provides details of estimated pre-operating costs.

Table 10: Pre-Operating Cost Details

Costs Item	No.	Hiring Months Before in Year 0	Unit Cost (PKR)	Total Cost (PKR)
Labour Skilled-Material Mixing	1	1	35,000	35,000
Labour Skilled-Bottle Filling Machine	1	1	35,000	35,000
Procurement Officer	1	1	40,000	40,000
Sales Officer	1	1	40,000	40,000
Marketing Officer	1	1	40,000	40,000
Security Guard	1	1	25,000	25,000
Office Boy	1	1	20,000	20,000
Brand launching Cost		5	1,000,000	5,000,000
Sample Products Cost ⁶				1,855,275
Utilities expense				83,475
Total Cost (PKR)				7,173,750

9.1.8. Licenses and Permits

The legal status of a “Manufacturing Unit for Perfume” is private limited company. Therefore, it is required to register the company with Securities and Exchange Commission of Pakistan and it is also necessary to register a trade mark of brand name that is manufactured. The details of legal and licensing fee is provided in the Table 11.

Table 11: Licenses, Permits Cost Details

Particular	Amount
<u>Trade Mark Registration</u>	
Professional charges for registration	30,000
Trade Mark search fee	500
Trade Mark application fee	1,000
Trade Mark Certificate fee	3,000

⁶ 1000 free samples of each perfume will be distributed in the market to create awareness about the brand.

Miscellaneous Expenses	1,500
Total	36,000
<u>Company Registration Charges -SECP</u>	
Professional charges for registration	40,000
Company Incorporation fee	3,000
Total	79,000

9.1.9. Security against Building

Table 12 provides details of security against building for the project.

Table 12: Security against Building

Particular	Months	Rent per month (PKR)	Total (PKR)
Average Rental Cost-Industrial	3	150,000	450,000
TOTAL (PKR)			450,000

9.1.10. Initial Working Capital

Table 13 provides details of working capital requirements for the project.

Table 13: Initial Working Capital Details

Particulars	No. of Months	Total Cost (PKR)
Consumables inventory	1	27,092
Raw material inventory	2	6,754,511
Upfront building rent	1	150,000
Cash		1,000,000
Total Working Capital		7,931,603

9.2. Breakeven Analysis

Table 14 shows calculation of break-even analysis.

Table 14: Breakeven Analysis

Particulars	Amount First Year (PKR)	Profitability Ratio
Sales (PKR) – A	92,801,779	100%
Variable Cost (PKR) – B	67,670,334	73%
Contribution (PKR) (A-B) = C	25,131,445	27%
Fixed Cost (PKR) – D	19,136,492	21%

Contribution Margin	27%
Breakeven Analysis	
Breakeven Revenue (PKR)	70,664,481
Breakeven (Bottles)	85,283
Breakeven Capacity	38%

9.3. Revenue Generation

Table 15 provides details regarding revenue generation from the manufacturing unit for perfume during the 1st of its operations.

Table 15: Revenue Details

Products	Units Sold during the Year (Bottles) (A)	Price Per Bottle (PKR) (B)	Total Revenue (PKR) (A*B)
Alcoholic Perfume A-100 ml	42,933	854	36,664,782
Alcoholic Perfume B-100 ml	32,200	865	27,857,186
Alcohol Perfume C-100 ml	32,200	878	28,279,811
Total	107,333		92,801,779

9.4. Variable Cost Estimate

Variable costs of the project have been provided in Table 16.

Table 16: Variable Cost Estimate

Description of Costs	Amount (PKR)
Raw material cost- Perfume A	15,885,210
Raw material cost-Perfume B	12,169,990
Raw material cost-Perfume C	12,471,865
Lab Consumable	325,100
Packing Cost	18,064,360
Direct Electricity	623,407
Direct Labour	5,820,000
Generator Fuel cost	19,880
Office vehicles Fuel Cost-Carry Van	198,800
Communications expense (phone, fax, mail, internet, etc.)	748,800
Vehicle Maintenance Cost-Motorcycle	18,000

Bad debt expense	464,009
Vehicle Maintenance Cost- Carry van	84,000
Office vehicles Fuel Cost-motor cycle	27,832
Office expenses (stationery, entertainment, janitorial services, etc.)	748,800
Total Variable Cost (PKR)	67,670,334

Table 17: Total Raw Material Cost

Products	Bottles Sold during the Year (Bottles) (A)	Cost Per Unit (PKR) (B)	Total RM Cost (PKR) (A*B)	Reference
Alcoholic Perfume A-100 ml	42,933	370	15,885,210	Table 19
Alcoholic Perfume B-100 ml	32,200	378	12,169,990	Table 20
Alcohol Free Perfume C-100 ml	32,200	387	12,471,865	Table 21
Total Cost	107,333		40,527,065	

Table 18: Total Packing Cost

Products	Bottles Sold during the Year (Bottles) (A)	Cost Per Unit (PKR) (B)	Total Packing Cost (PKR) (A*B)	Reference
Alcoholic Perfume A-100 ml	42,933	240	10,303,920	Table 22
Alcoholic Perfume B-100 ml	32,200	240	7,728,000	
Alcohol Free Perfume C-100 ml	32,200	240	7,728,000	
Total Cost	107,333		25,759,920	

Table 19: Raw Material Cost - Alcoholic Perfume-A

Raw material / Input name	Standard Ratio/Batch (Liter)	Standard Ratio/Batch (ml)	Standard Ratio/Bottle (ml)	Standard Ratio/Bottle Liter	Raw Material cost (PKR/Liter)	R.M Cost/ Bottle (PKR)
Carrier Oil-Sweet almond oil	4.00	20.0	0.02000	10,000	200.00	20.0
Base Notes-Pine essential oil	0.38	1.9	0.00188	29,000	54.38	1.9
Base Notes-Cypress Essential oil	0.08	0.4	0.00038	67,000	25.13	0.4
Middle Notes-Neroli essential oil	0.08	0.4	0.00038	24,000	9.00	0.4
Middle Notes-Clove essential oil	0.18	0.9	0.00088	12,500	10.94	0.9
Top Notes-Rosemary essential oil	0.23	1.1	0.00113	25,000	28.13	1.1
Top Notes-Mint essential oil	0.08	0.4	0.00038	22,700	8.51	0.4
Ethanol	12.00	60.0	0.06000	120	7.20	60.0
SD alcohol	2.00	10.0	0.01000	700	7.00	10.0
Fixer Chemical	1.00	5.0	0.00500	4,000	20.00	5.0
Total	20.00	20,000	100.0	0.10000		370.00

Table 20: Raw Material Cost – Alcoholic Perfume B

Raw material / Input name	Standard Ratio/Batch (Liter)	Standard Ratio/Batch (ml)	Standard Ratio/Bottle (ml)	Standard Ratio/Bottle Liter	Raw Material cost (PKR/Liter)	R.M Cost/ Bottle (PKR)
Carrier Oil-Sweet almond oil	4.00	4,000	20.0	0.02000	10,000	200.00
Base Notes-Sandalwood essential oil	0.38	375	1.9	0.00188	25,000	46.88
Base Notes-Ginger Essential oil	0.08	75	0.4	0.00038	70,000	26.25
Middle Notes-Jasmine essential oil	0.08	75	0.4	0.00038	22,000	8.25
Middle Notes-Lemongrasss essential oil	0.18	175	0.9	0.00088	37,000	32.38
Top Notes-Lavender essential oil	0.23	225	1.1	0.00113	20,000	22.50
Top Notes-Lemon essential oil	0.08	75	0.4	0.00038	20,000	7.50
Ethanol	12.00	12,000	60.0	0.06000	120	7.20
SD alcohol	2.00	2,000	10.0	0.01000	700	7.00
Fixer Chemical	1.00	1,000	5.0	0.00500	4,000	20.00
Total	20.00	20,000	100.0	0.10000		377.95

Table 21: Raw Material Cost – Alcoholic Perfume C

Raw material / Input name	Standard Ratio/Batch (Liters)	Standard Ratio/Batch (ml)	Standard Ratio/Bottle (ml)	Standard Ratio/Bottle Liter	Raw Material cost (PKR/Liter)	R.M Cost/ Bottle (PKR)
Carrier Oil-Sweet almond oil	4.00	4,000	20.0	0.02000	10,000	200.00
Base Notes-Vanilla essential oil	0.38	375	1.9	0.00188	30,000	56.25
Base Notes-Orange Essential oil	0.08	75	0.4	0.00038	27,000	10.13
Middle Notes-Rose essential oil	0.08	75	0.4	0.00038	54,000	20.25
Middle Notes-ylang ylang essential oil	0.18	175	0.9	0.00088	16,000	14.00
Top Notes-Bergamot essential oil	0.23	225	1.1	0.00113	25,000	28.13
Top Notes-Grape fruit essential oil	0.08	75	0.4	0.00038	65,000	24.38
Ethanol	12.00	12,000	60.0	0.06000	120	7.20
SD alcohol	2.00	2,000	10.0	0.01000	700	7.00
Fixer Chemical	1.00	1,000	5.0	0.00500	4,000	20.00
Total	20.00	20,000	100.0	0.10000		387.33

Table 22: Packing Cost per Bottle

Particulars	Cost / Bottle (PKR)
Perfume Bottle-100ml	220
Label & Plastic Wrapping	5
Box	15
Total	240

9.5. Fixed Cost Estimate

Table 23 shows the estimated fixed cost of the project.

Table 23: Fixed Cost Estimates

Description of Costs	Amount (PKR)
Administration expense	6,240,000
Administration benefits expense	1,447,200
Building rental expense	1,800,000
Electricity	318,002
Professional fees (legal, audit, consultants, etc.)	124,800
Promotional expense	3,712,071
Depreciation expense	1,267,708
Amortization of pre-operating costs	1,434,750
Amortization of legal, licensing, and training costs	7,900
Research and Development expense	2,784,053
Total Fixed Cost	19,136,492

Promotional expense includes all marketing and advertisement expenses. It is a need of this business to advertise the products every year to compete and create/maintain a brand name in the market.

9.6. Financial Feasibility Analysis

The financial feasibility analysis provides the information regarding projected Internal Rate of Return (IRR), Net Present Value (NPV) and Payback period of the study, which is shown in Table 24.

Table 24: Financial Feasibility Analysis

Description	Project
IRR	68%
NPV (PKR)	169,642,461
Payback Period (years)	2.34
Projection Years	10
Discount rate used for NPV	15%

9.7. Financial Feasibility Analysis with 50% Debt

The financial feasibility analysis provides the information regarding projected IRR, NPV and payback period of the study on the basis of Debt: Equity Model (50:50), which is shown in Table 25.

Table 25: Financial Feasibility Analysis with 50% Debt

Description	Project
IRR	68%
NPV (PKR)	215,354,045
Payback Period (years)	2.36
Projection Years	10
Discount rate used for NPV	12%

9.8. Human Resource Requirement

The proposed manufacturing unit shall require the workforce as provided in Table 26.

Table 26: Human Resource

Personnel	Number of Personnel	Salary per Head (PKR)	Annual Salaries (PKR)
G Manager Production	1	100,000	1,200,000
Production Supervisor	1	70,000	840,000
Labour Skilled-Material Mixing	1	35,000	420,000
Labour Skilled-Bottle Filling Machine	1	35,000	420,000
Labour Unskilled	3	25,000	900,000
Store Keeper	2	40,000	960,000
Procurement Officer	1	40,000	480,000
Accounts Manager	1	50,000	600,000
Accounts Officer	1	40,000	480,000
Admin and HR Manager	1	50,000	600,000
Marketing and Sale Manager	1	80,000	960,000
Sales Officer	1	40,000	480,000
Marketing Officer	1	40,000	480,000
Packing Staff	2	30,000	720,000

Quality Control officer	1	70,000	840,000
Quality Control Assistant	1	40,000	480,000
Security Guard	2	25,000	600,000
Driver	1	30,000	360,000
Office Boy	1	20,000	240,000
Total	24		12,060,000

10. CONTACT DETAILS

The contact details of major suppliers of machinery and equipment and raw materials are given in Table 27.

Table 27: Contact Details

Name of Supplier	Category	Location	Contact	Website/ Email
Pak Essential Oil	Essential oils supplier	Pakistan	923004177429	https://Pak_Essential_Oil_Company
Hafiz Jee Oil & Perfume Company (HJOPC)	Essential oil supplier	Pakistan	+923314238865	https://hjopc.com/contact-us/
Biobase Biotech (Jinan) Co., Ltd	Laboratory Equipment	China		http://www.biobase.com
Medsinglong co Ltd.	Perfume Machinery and Equipment	China		http://medmsl.com
Guangzhou Lianmeng Machinery Equipment Co., Ltd.	Capping Machine and other production machines	China		http://www.lienm.com/en/
AG Industries	Essential Oil Suppliers	India		https://www.pureoilsindia.com/essential-oils/organic-essential-oil/
Jiangyin Ida Equipment Co., Ltd	Mixer and filling Machine	China	+8613585068675	http://www.idamill.com
Guangdong Shanghang	Production Machinery	China		http://zonesuntech.com

Technology Limited				
Professional Pure essential oil	Essential Suppliers	Oil	China	https://www.chinaessentialoils.com/
Mughal Technoplas	Glass Bottle		Lahore	0345 8474447
Munshi Bottle store	Glass Bottle		Lahore	0321 6904891
Ghani Glass (Karachi Plant)	Glass Bottle		Karachi	(021) 35020761
Bottle Galleries	Glass Bottle		Karachi	https://bottle-galleries.business.site/
Al-Hafiz Crystoplast (Pvt) Limited	Glass Bottle		Peshawar	0334 9029664
Northern Bottling Company	Glass Bottle		Peshawar	(091) 5817100

11. USEFUL LINKS

Table 28: Useful Links

Name of Organization	E-mail Address
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
The International Fragrance Association	https://ifragrance.org/
Government of Pakistan	www.pakistan.gov.pk
Ministry of Federal Education and Professional Training	www.mofept.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
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
Pakistan Stock Exchange (PSX)	www.psx.com.pk
Pakistan Standards and Quality Control Authority (PSQCA)	http://www.psqca.com.pk
Punjab Small Industries Corporation	https://www.psic.gop.pk/
Sindh Small Industries Corporation	https://ssic.gos.pk/
Government of KPK	https://small_industries_de_kp.gov.pk/
Government of Balochistan Industries and Commerce	https://balochistan.gov.pk/departments-download/industries-and-commerce/
International Fragrance Association	https://ifragrance.org/

12. ANNEXURES

12.1. Income Statement

Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue										
Alcoholic Perfume A-100ml	36,664,782	46,622,019	56,573,547	68,170,566	81,656,964	97,306,279	115,438,351	136,413,193	152,062,842	169,093,881
Alcoholic Perfume B-100ml	27,857,186	35,421,744	42,983,411	51,794,561	62,040,225	73,931,206	87,707,535	103,642,368	115,533,484	128,473,234
Alcoholic Perfume C-100ml	28,279,811	35,959,132	43,635,518	52,580,343	62,981,445	75,052,826	89,038,157	105,214,740	117,286,257	130,422,318
Revenue	92,801,779	118,002,895	143,192,477	172,545,471	206,678,634	246,290,312	292,184,044	345,270,301	384,882,583	427,989,433
Cost of sales										
Raw material cost- Perfume A	15,885,210	18,164,780	19,822,010	21,479,610	23,137,580	24,794,810	26,452,410	28,110,380	28,179,200	28,179,200
Raw material cost-Perfume B	12,169,990	13,916,119	15,186,031	16,455,943	17,725,855	18,995,767	20,265,679	21,535,591	21,588,504	21,588,504
Raw material cost-Perfume C	12,471,865	14,261,307	15,562,719	16,864,131	18,165,543	19,466,955	20,768,367	22,069,779	22,124,004	22,124,004
Lab Consumable	325,100	361,511	402,000	447,025	497,091	552,765	614,675	683,519	760,073	845,201
Packing Cost	18,064,360	22,965,815	27,863,607	33,570,460	40,206,246	47,906,317	56,827,147	67,145,688	74,842,686	83,218,669
Direct Electricity	623,688	779,956	973,789	1,213,964	1,511,265	1,878,938	2,333,241	2,894,122	3,473,207	4,168,160
Direct Labour	5,820,000	7,029,379	8,490,062	10,254,272	12,385,079	14,958,661	18,067,026	21,821,300	26,355,700	31,832,336
Generator Fuel cost	19,880	24,317	29,499	35,536	42,556	50,703	60,140	71,056	79,014	87,863
Office vehicles Fuel Cost-Carry Van	198,800	218,879	240,986	265,325	292,123	321,627	354,112	389,877	429,255	472,609
Total cost of sales	65,578,893	77,722,063	88,570,703	100,586,265	113,963,338	128,926,543	145,742,796	164,721,310	177,831,642	192,516,547
Gross Profit	27,222,886	40,280,833	54,621,774	71,959,205	92,715,297	117,363,769	146,441,248	180,548,991	207,050,942	235,472,886
General administration & selling expenses										
Administration expense	6,240,000	6,845,280	7,509,272	8,237,672	9,036,726	9,913,288	10,874,877	11,929,740	13,086,925	14,356,357
Administration benefits expense	1,447,200	1,587,578	1,741,574	1,910,506	2,095,825	2,299,120	2,522,135	2,766,782	3,035,160	3,329,570
Building rental expense	1,800,000	1,980,000	2,178,000	2,395,800	2,635,380	2,898,918	3,188,810	3,507,691	3,858,460	4,244,306
Electricity	318,010	361,207	409,603	463,785	524,402	592,174	667,896	752,452	820,173	893,988
Vehicle Maintenance Cost- Carry van	84,000	92,484	101,825	112,109	123,432	135,899	149,625	164,737	181,375	199,694
Office vehicles Fuel Cost-motor cycle	27,832	30,949	34,415	38,270	42,556	47,323	52,623	58,516	65,070	72,358
Communications expense (phone, fax, mail, internet, etc.)	748,800	821,434	901,113	988,521	1,084,407	1,189,595	1,304,985	1,431,569	1,570,431	1,722,763
Vehicle Maintenance Cost-Motorcycle	18,000	19,818	21,820	24,023	26,450	29,121	32,062	35,301	38,866	42,792
Office expenses (stationery, entertainment, janitorial services, etc.)	748,800	821,434	901,113	988,521	1,084,407	1,189,595	1,304,985	1,431,569	1,570,431	1,722,763
Research and Development expense	2,784,053	3,936,577	5,311,914	7,117,692	9,480,604	12,562,976	16,573,204	21,777,799	26,995,278	33,380,850
Promotional expense	3,712,071	4,720,116	5,727,699	6,901,819	8,267,145	9,851,612	11,687,362	13,810,812	15,395,303	17,119,577
Professional fees (legal, audit, consultants, etc.)	124,800	136,906	150,185	164,753	180,735	198,266	217,498	238,595	261,738	287,127
Depreciation expense	1,267,708	1,267,708	1,267,708	1,267,708	1,267,708	1,267,708	868,078	2,273,327	2,273,327	2,273,327
Amortization of pre-operating costs	1,434,750	1,434,750	1,434,750	1,434,750	1,434,750	-	-	-	-	-
Bad debt expense	464,009	590,014	715,962	862,727	1,033,393	1,231,452	1,460,920	1,726,352	1,924,413	2,139,947
Subtotal	21,227,933	24,654,154	28,414,853	32,916,556	38,325,820	43,414,945	50,912,959	61,913,142	71,084,852	81,793,319
Operating Income	5,994,953	15,626,679	26,206,921	39,042,649	54,389,477	73,948,824	95,282,289	118,635,849	135,966,090	153,679,567
Gain / (loss) on sale of machinery & equipment	-	-	-	-	-	-	873,900	-	-	-
Gain / (loss) on sale of office equipment	-	-	-	-	-	-	377,375	-	-	-
Gain / (loss) on sale of office vehicles	-	-	-	-	-	-	323,375	-	-	-
Earnings Before Interest & Taxes	5,994,953	15,626,679	26,206,921	39,042,649	54,389,477	73,948,824	97,102,939	118,635,849	135,966,090	153,679,567
Earnings Before Tax	5,994,953	15,626,679	26,206,921	39,042,649	54,389,477	73,948,824	97,102,939	118,635,849	135,966,090	153,679,567
Tax	1,160,022	3,342,337	6,251,903	10,007,795	14,611,843	20,479,647	27,425,882	33,885,755	39,084,827	44,398,870
NET PROFIT/(LOSS) AFTER TAX	4,834,930	12,284,342	19,955,018	29,034,855	39,777,634	53,469,177	69,677,057	84,750,095	96,881,263	109,280,697

12.2. Balance Sheet

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											
<i>Current assets</i>											
Cash & Bank	1,000,000	3,072,868	8,882,035	14,639,399	21,367,714	28,976,997	36,653,697	86,622,593	168,039,445	261,393,290	394,148,589
Accounts receivable		7,627,543	8,663,206	10,734,056	12,975,532	15,584,552	18,615,162	22,129,083	26,196,754	30,006,283	33,405,699
Finished goods inventory		2,732,649	3,238,209	3,690,446	4,191,325	4,748,230	5,371,939	6,072,888	6,863,100	7,409,340	8,021,186
Lab Consumable	27,092	33,018	40,241	49,044	59,772	72,847	88,783	108,204	131,874	160,721	-
Raw material inventory	6,754,511	8,503,795	10,216,988	12,189,580	14,456,504	17,056,801	20,034,997	23,440,913	25,871,768	28,484,816	-
Pre-paid building rent	150,000	165,000	181,500	199,650	219,615	241,577	265,734	292,308	321,538	353,692	-
Total Current Assets	7,931,603	22,134,874	31,222,179	41,502,175	53,270,462	66,681,004	81,030,312	138,665,989	227,424,478	327,808,143	435,575,474
<i>Fixed assets</i>											
Building / Infrastructure	688,175	619,358	550,540	481,723	412,905	344,088	275,270	206,453	137,635	68,818	-
Machinery & equipment	3,495,600	2,971,260	2,446,920	1,922,580	1,398,240	873,900	349,560	6,640,421	5,644,358	4,648,295	3,652,232
Furniture & fixtures	1,694,000	1,439,900	1,185,800	931,700	677,600	423,500	169,400	3,218,009	2,735,308	2,252,606	1,769,905
Office vehicles	1,293,500	1,099,475	905,450	711,425	517,400	323,375	129,350	1,970,780	1,675,163	1,379,546	1,083,929
Office equipment	1,509,500	1,283,075	1,056,650	830,225	603,800	377,375	150,950	2,867,524	2,437,395	2,007,266	1,577,138
Security Against Building	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
Total Fixed Assets	9,130,775	7,863,068	6,595,360	5,327,653	4,059,945	2,792,238	1,524,530	15,353,186	13,079,858	10,806,531	8,533,203
<i>Intangible assets</i>											
Pre-operation costs	7,173,750	5,739,000	4,304,250	2,869,500	1,434,750	-	-	-	-	-	-
Legal, licensing, & training costs	79,000	71,100	63,200	55,300	47,400	39,500	31,600	23,700	15,800	7,900	-
Total Intangible Assets	7,252,750	5,810,100	4,367,450	2,924,800	1,482,150	39,500	31,600	23,700	15,800	7,900	-
TOTAL ASSETS	24,315,127	35,808,041	42,184,988	49,754,627	58,812,557	69,512,741	82,586,442	154,042,875	240,520,137	338,622,574	444,108,678
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable		9,075,448	10,518,957	11,786,539	13,153,522	14,636,843	16,256,340	18,035,716	19,762,884	20,984,058	17,189,465
Other liabilities											
Total Current Liabilities	-	9,075,448	10,518,957	11,786,539	13,153,522	14,636,843	16,256,340	18,035,716	19,762,884	20,984,058	17,189,465
<i>Shareholders' equity</i>											
Paid-up capital	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127	24,315,127
Retained earnings		2,417,465	7,350,904	13,652,961	21,343,908	30,560,771	42,014,974	111,692,031	196,442,126	293,323,389	402,604,085
Total Equity	24,315,127	26,732,593	31,666,031	37,968,088	45,659,035	54,875,898	66,330,101	136,007,158	220,757,253	317,638,516	426,919,213
TOTAL CAPITAL AND LIABILITIES	24,315,127	35,808,041	42,184,988	49,754,627	58,812,557	69,512,741	82,586,442	154,042,875	240,520,137	338,622,574	444,108,678

12.3. Cash Flow Statement

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
<i>Operating activities</i>											
Net profit		4,834,930	12,284,342	19,955,018	29,034,855	39,777,634	53,469,177	69,677,057	84,750,095	96,881,263	109,280,697
Add: depreciation expense		1,267,708	1,267,708	1,267,708	1,267,708	1,267,708	1,267,708	868,078	2,273,327	2,273,327	2,273,327
amortization of pre-operating costs		1,434,750	1,434,750	1,434,750	1,434,750	1,434,750	-	-	-	-	-
amortization of training costs		7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900	7,900
Accounts receivable		(7,627,543)	(1,035,662)	(2,070,851)	(2,241,476)	(2,609,020)	(3,030,610)	(3,513,921)	(4,067,671)	(3,809,529)	(3,399,416)
Finished goods inventory		(2,732,649)	(505,560)	(452,237)	(500,879)	(556,905)	(623,709)	(700,948)	(790,212)	(546,241)	(611,845)
Raw material inventory	(6,754,511)	(1,749,284)	(1,713,193)	(1,972,593)	(2,266,924)	(2,600,297)	(2,978,196)	(3,405,916)	(2,430,855)	(2,613,049)	28,484,816
Accounts payable		9,075,448	1,443,509	1,267,582	1,366,982	1,483,322	1,619,497	1,779,376	1,727,168	1,221,174	(3,794,593)
Cash provided by operations	(6,931,603)	4,490,333	13,160,071	19,410,324	28,072,223	38,170,054	49,691,674	64,665,630	81,416,852	93,353,845	132,755,299
<i>Financing activities</i>											
Issuance of shares	24,315,127	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	24,315,127	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(16,383,525)	-	-	-	-	-	-	(14,696,733)	-	-	-
Acquisitions											
Cash (used for) / provided by investing activities	(16,383,525)	-	-	-	-	-	-	(14,696,733)	-	-	-
NET CASH	1,000,000	4,490,333	13,160,071	19,410,324	28,072,223	38,170,054	49,691,674	49,968,897	81,416,852	93,353,845	132,755,299

13. KEY ASSUMPTIONS

13.1. Operating Cost Assumptions

Table 29: Operating Cost Assumptions

Description	Details
Operating costs growth rate	10.1%
Administration benefits expense	12% of HR Salaries
Communication expenses	12% of administration expenses
Office expenses (stationery, janitor, etc.)	12% of administration expenses
Research and Development expense	3% of revenue
Promotional Expense	4% of revenue
Professional fees (legal, audit, consultants, etc.)	2% of administration expense
Bad debt expense	0.5% of revenue

13.2. Revenue Assumptions

Table 30: Revenue Assumptions

Description	Details
Sale price growth rate	11.2%
Capacity utilization	50%
Capacity utilization growth rate	5%
Maximum capacity utilization	85%

13.3. Financial Assumptions

Table 31: Financial Assumptions

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate	15%

13.4. Debt Related Assumptions

Table 32: Debt Related Assumption

Description of Cost	Details
Project Life (Years)	10
Debt: Equity	50:50

Discount Rate	12%
Debt Tenure	5 Years
Debt Grace Period	1 Years
Interest Rate (KIBOR+3%)	11.3%

13.5. Cash Flow Assumptions

Table 33: Cash Flow Assumptions

Description	Details
Accounts receivable cycle (no. of days)	30
Accounts payable cycle (no. of days)	60

Small and Medium Enterprises Development Authority

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REGIONAL OFFICE PUNJAB	REGIONAL OFFICE SINDH	REGIONAL OFFICE KPK	REGIONAL OFFICE BALOCHISTAN
3 rd Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road Lahore, Tel: (042) 111-111-456 Fax: (042) 36304926-7 helpdesk.punjab@smeda.org.pk	5 TH Floor, Bahria Complex II, M.T. Khan Road, Karachi. Tel: (021) 111-111-456 Fax: (021) 5610572 helpdesk-khi@smeda.org.pk	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A Chaman Housing Scheme Airport Road, Quetta. Tel: (081) 831623, 831702 Fax: (081) 831922 helpdesk-qta@smeda.org.pk