

Project Khoombi

Community Based
Mushroom Farming
and Selling

Team

Hasan Kamal Syed
Usama Ahmed
Abdus Salam Rafiq
waqas ishaq

Mentor

Mohammad Yafis Gardezi

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Executive Summary

Food shortage has become a global phenomenon. Problems such as extreme weather conditions in recent years have pushed for the need for crops that can provide more nutritional value while remaining resistant to climate fluctuations. The demand for mushrooms has soared globally due to changes in climate and food culture gaining momentum in local communities. Pakistan - with its agrarian background with vast agriculturally focused human capital - has the potential to answer the world's food needs in a cost-effective and efficient manner. Project Khoombi is a profitable venture - with potential for foreign exchange earnings – that can be established at very little cost on a community-based business model. This is where Project Khoombi aims to cater to the problems faced by farmers – lack of alternate revenue streams, easy to grow and minimal capital intensive food products that can be sold profitably to help support their families and communities

Khoombi is an entrepreneurial venture with social overtones in micro level farming and self-subsistence farming. It involves buying and selling mushrooms to fulfill local demand for this product. The mushrooms will be sourced from community based farming with Khoombi facilitating the training and production of mushrooms on a local level. The subsequent sale and marketing of these products will be handled by Khoombi providing a full-cycle service to its customers and stakeholders. The beauty of our competitive advantage is that everyone benefits through Project Khoombi. With an IRR of more than 30%, Project Khoombi is slated to show a new way of doing business responsibly with sustainable goals in mind.

The metropolitan cities of Pakistan – Lahore, Karachi and Islamabad – are our target market. Targeted and committed customers include restaurants that serve a variety of cuisines such as steakhouses, delis, pizzerias, full line discount retailers, multinational food chains, national and regional retailers, and specialized bakeries – all places that require mushrooms for their food products. We already have spoken to many organizations and have verbal agreements from a number of eateries and grocery stores for Khoombi's products. Our largest potential client is Metro, the German based discount store operating in Pakistan. Although the local business-to-business segment is Project Khoombi's key segment, after adequately fulfilling local demand, Project Khoombi plans to cater to international customers as well.

Project Khoombi is not a very capital intensive project; it does not require a lot of initial investment. An in-house mushroom farm can be built easily within PKR 10,000 for a single farmer. The only costs besides the cost of producing mushrooms associated with this project are warehousing and distribution. Our preliminary analysis shows that after accounting for operating expenses, a gross margin of 30% can be earned. An initial seed figure of PKR 200,000 which will be required, the bulk of this capital will be used to secure assets and begin the overall production. Within the financial sheet, Project Khoombi is returning PKR 900,000 which is more than enough to recover the seed investment in this venture.

The management team for Project Khoombi consists of two individuals, Usama Ahmed and Hasan Kamal Syed, who collectively bring around 6 years of management and IT experience to the table. Both have endeavored to utilize the best practices from their work experience to help Khoombi become a profitable yet socially responsible venture that helps local communities create a sustainable business model.

Currently, a number of experts from PARC (Pakistan Agricultural Research Center) and NARC (National Agricultural Research Center) including Dr. Muhammad Sheikh Iqbal (Principal Scientific Officer) and Sardar Taimur Hyat Khan (Bio-environmental Consultant) have been advising Project Khoombi with regards to mushroom growth. These experts have expressed their support for Project Khoombi and have been assisting our efforts to ensure Project Khoombi is a feasible project while assisting with technical aspects of the venture.

Project Khoombi is an extremely viable business idea. Based on initial secondary and primary research, there are strong indicators that Project Khoombi's offerings will be readily accepted within the target market. With our efforts already yielding an initial crop for testing purposes (please refer to the Appendix), we feel that Project Khoombi can set an example for sustainable and socially responsible business in an era where going global requires compromising on ethics and morals.

Company Information

Overview

Khoombi is an entrepreneurial venture with social overtones in micro level farming and self-subsistence farming. It involves buying and selling mushrooms to fulfill local demand for this product. The mushrooms will be sourced from community based farming with Khoombi facilitating the training and production of mushrooms on a local level. The subsequent sale and marketing of these products will be handled by Khoombi providing a full-cycle service to its customers and stakeholders.

Our Market

We will market our product to hotels (Pearl Continental, Avari, Holiday Inn, and Ambassador), eateries (Pizza Hut, Salt N Pepper, Freddy's, Trevi, etc.) and full line discount stores (Metro, Makro, Hyperstar). The primary focus will remain on business-to-business customers in the food industry. Currently, these can be broadly categorized as hospitality venues with cooking premises on-site to grocery stores specializing in food products.

Goals

Khoombi aims upon setting up a social enterprise that provides profitable business to local farmers, this program will improve the financial condition of the local population.

During our first 2 years of operation, Khoombi intends upon moving our self from local to the national market. There is huge demand for mushrooms all over Pakistan. After catering for this domestic need, Khoombi plans to export mushrooms to the international markets, which will bring huge revenues for the company.

Management Team

Currently Project Khoombi is the brainchild of Usama Ahmed, an computer science engineer with a social conscience looking to promote social enterprise from a grass roots level in Pakistan. As an engineer and budding entrepreneur, he has been working to build a case for social enterprise in Pakistan since his graduation from his alma mater (National University of Computer and Emerging Sciences – FAST). Although an engineer, he has been actively involved in a number initiatives encouraging local businesses to help address the concerns of an inflationary economy and help keep basic amenities in the hands of the underprivileged. He is currently looking to bring in angel seed for Project Khoombi while looking into a number of locally sourced businesses that can help support local communities and individuals.

Hasan Kamal Syed is a business undergrad from National University of Computer and Emerging Sciences – FAST with extensive experience working in the IT industry. Having started his career in IT working for large-scale IT firms (Computer Sciences Corporation) and small start-ups, he has brought 5 years of experience in a variety of IT and management related practices to social enterprise. An entrepreneur in a similar vein as Usama, he helped launch Pakistan's first student-run online bookstore looking to help students get better deals on university textbooks. Along with expertise in IT and business, he is currently pursuing an MBA from the University of Technology, Sydney while delving into micro-finance opportunities for Pakistan from local venture capital funds in Australia. He is also providing insights into how local businesses can be created as being socially responsible and sustainable for developing countries.

Products and Services

Khoombi will provide the local markets with fresh mushrooms, an item which is currently unavailable to most consumers. The local market is currently fulfilling its needs of mushrooms through the use of canned mushrooms imported from China along with a few boutique gourmet food stores that supply a very small amount of mushrooms.

Khoombi will provide them with an alternative to canned mushrooms. Fresh mushrooms will not only be preferable to canned mushrooms because of their freshness, but they will also be inexpensive compared to canned mushrooms. We will provide the customer with fresh mushrooms (button and oyster) and its quality will be superior compared to canned mushrooms available in the market. Our products will also be less costly compared to canned mushrooms. Established demand, first mover's advantage, level of quality and less costly supply compared to already available canned mushrooms are sources of our competitive advantage.

Features and Benefits

The basic purpose of Project Khoombi is to change how businesses shop for their ingredients in Pakistan. The change is induced through the following points:

Convenience

Currently the food industry is at the mercy of importers who source ingredients from a variety of locations. Unfortunately, the reliability and quality of such food items is questionable due to the cost and transportation issues which drive such decisions. Project Khoombi aims to show how local businesses can provide superior quality products at a fraction of the cost that importers charge from retailers and food-related institutions. Since our product is sourced locally, there is no hassle in delivery, transportation, variety and quality – we can verify everything before it goes to our customer.

Quality

Food culture has swept over Pakistan. The number of restaurants, delis, eateries, cooking channels, etc has resulted in an increased focus on food within Pakistan. A variety of culinary styles have rapidly emerged amongst Pakistan's food scene requiring unique ingredients. Freshness and availability of the right ingredients are key components of creating the exact taste and look of the dish. The market is saturated with tinned varieties of mushrooms while fresh mushrooms are a rarity. Resultantly, restaurants and other institutions are forced to utilize such an ingredient which degrades food quality. Project Khoombi addresses this need by providing fresh mushrooms that are hand-picked and grown under careful conditions so that the food industry does not have to rely on heavily preserved ingredients.

Accessibility

A majority of the food industry is reliant on imported goods to fulfill their mushroom needs. These products are inherently expensive due to freight and often close to their expiry dates due to their long clearances at customs. These delays and the inability to return defective material mean that mushrooms become a very expensive ingredient driving up the costs of each recipe. To absorb this cost, retailers and restaurateurs pass this cost onto consumers. Project Khoombi addresses this need by establishing a local supply of mushrooms that is readily available at all times to meet local demand. Since the costs are based in local currency and do not subject heavy duties at customs, they are extremely affordable for consumers and businesses. The cost-effectiveness and local sourcing of mushrooms ensures that they are within the reach of consumers and businesses alike in terms of cost and availability.

Considering that a number of restaurants/retailers/eateries are looking to promote local products due to cost effectiveness and quality, Khoombi addresses their need to showcase the seriousness they adopt in preparing their dishes. Upscale retailers and eateries are quickly grasping onto the concept of slow food, organic food and other concepts. Resultantly, they are looking to match these concepts with their dishes and ultimately require the right type of ingredients. Khoombi addresses this need with our product lines.

In terms of after-sale services we plan to provide specialized mushrooms to long-term customers to showcase the potential of mushroom farming within Pakistan. For institutions that require very specialized types of mushrooms for their dishes, we plan to offer them a contract where we plan to grow custom mushrooms for such customers.

Strategy & Plans Strategy Elements

Khoombi's strengths and core competencies include:

- Locally sourced facilities
- Quality/freshness of mushrooms
- First mover advantage
- Cost effectiveness

Khoombi aims upon setting up a social enterprise that provides profitable business to local farmers, this program will improve the financial condition of the local population in which the business

During our first 2 years of operation, Khoombi intends upon moving our self from local to the national market. There is huge demand for mushroom all over Pakistan. After catering for this domestic need, Khoombi plans to export mushroom to the international markets, which will bring huge revenues for the company.

Innovations

Khoombi intends upon increasing its product base, there are many innovative and cost effective mushroom derived products in the works, such as low-cost high-protein mushroom cookies for lactating mothers and newborns. Products like this will broaden our market for mushroom sales..

Above all these goals is the main objective of Khoombi that is to provide fresh and best quality products to our customers at affordable prices.

Scalability



The market for fresh food items, especially mushrooms, is growing very rapidly. Micro level farming unit design gives Khoombi the ability to dynamically change its production according to the market demand. Installing a new micro production unit is far easier than setting a new farm or extending an existing one. Khoombi has the potential for catering this high demand without compromising on the quality and price that are the main competitive advantage over our competitors.

Tactics

Educating farmers for best quality and optimum yield would help both the farmers and the Khoombi. Good quality would mean better price and no wastage translates into more money for the farmers.

Setting up a canning unit in the first 2 years of our operation would assist us in realizing our goal of moving ourselves from local to national and finally to an international market .

Research and Development

Setting up a R&D department at Khoombi, is among our plans. The task for R&D would include research over innovative mushroom derived products as well as coming up with better and cost effective strategies to increase quality and yield

Market research

In 1998-99 Pakistan exported some 79 tonnes of mushroom the value of which was \$ 4.49 million. In 1999-2000, mushroom exports registered an increase of 53 per cent over the previous year by earning a foreign exchange of \$ 6.90 million. Not only was the increase in the value of mushroom exports phenomenal but mushroom exports also contributed over 18 per cent to the overall vegetables exports of \$ 38 million the same year. The importance of mushrooms in the overall vegetable exports can hardly be over-stated.

Based on our primary and secondary market research, we've developed the following figures to base our marketing and production figures.

An estimated 43,800 kgs (Lahore market size) based on primary research conducted by visiting numerous restaurants, retailers (international and local) and various other eateries. This number was extrapolated by assessing the current consumption of mushrooms at these institutions through first hand interviews. In addition to interviews with proprietors of these establishments, data was also culled from government agencies such as the PARC (Pakistan Agriculture Research Center) and the NARC (National Agriculture Research Center) , both leading institutions in research of agricultural development within Pakistan.

Considering that we are the sole provider of mushrooms in the local market, we feel that a 15% market share is a very conservative estimate. Assuming that all major demand and supply fluctuations are resolved, there is an opportunity to capture an additional 10% of the mushroom market within Lahore. This figure is scaled upwards accordingly when it is applied to the whole of Pakistan. Taking into account the approximate total market demand (Lahore) based on the 48,000 kgs, a 15% of the total market demand would mean that we would be providing 6570 kg of mushrooms within our target market.

One trend that is fueling food consumption is the recent upsurge in food culture and interest in fresh products for cooking along with the launch of new cooking channels and magazines. As a result, the demand for fresh and exotic ingredients has drastically increased. This only serves to boost the demand for mushrooms as continental food begins to take a much more proactive role in cuisine within Pakistan.

The growth potential and opportunity is extremely high in this business primarily due to the lack of direct competitors while indirect competitors are extremely expensive in comparison. Based on the competitive advantages that have been listed, the opportunity to capture the local market is extensive.

Marketing Strategy

Since Khoombi operates in the business-to-business segment, our customers will be based primarily in the food industry. Our clientele includes but is not limited to restaurants (containing a continental menu, M.M. Alam based, Gulberg based, etc), bakeries (Gourmet, Shezan, Kitchen Cuisine, etc), multinational and local fast-food

chains (Pizza Hut, Dominoes, Pizza and Pasta, etc), multinational full line discount stores (Metro and Makro), local and regional retailers (HKB, Al Fatah, Jalal Sons, etc), and industrial based processing giants (Rafhan, etc).

Initially, Khoombi aims to focus within the Lahore market as an experimental pilot scheme. Lahore will be used to determine the ideal demand/supply combination along with the climate being ideal for mushroom growth. Therefore, the majority of our customers will be based in Lahore. However, once the Lahore market segment is catered to, there are plans to expand our operations to the other metropolitan cities of Pakistan which include Karachi, Islamabad, and Rawalpindi.

Competitors

Khoombi does not have any direct competitors as per our research efforts in the local market, however, a search online determines around 7 international exporters of mushrooms from within Pakistan. On a global level, China is our main contender based on an Alibaba listing of almost 1800 or more mushroom exporters operating from within China. We have heard competitors that are apparently supplying to local markets, however, the customers we have interviewed have yet to hear of a local supplier that has approached them. Additionally, a majority of the mushroom producers within Pakistan have been exporting their offerings to international markets. The only competitor that we have been able to verify is located in Islamabad and specifically caters to customers based in Islamabad only. Based on primary and secondary research regarding potential competitors, the quantities that they are supplying are very small and extremely expensive in comparison to the offerings of Khoombi.

Taking into consideration the number of exporters in this market, if Khoombi plans to expand into the exporting of mushrooms there will be significant challenges. A simple search of alibaba.com for Pakistani based mushroom exporters brings up almost 25 listed companies. However, a search for local competitors brings up only 2 results, thus the local market is clearly underserved and is a prime market to capture.

Marketing Programs

Branding

The marketing program for Khoombi is a very unique plan. Initially, the focus will be on branding the product with our own logo and ensuring that there is brand awareness for the actual product. This will be instigated by a focus on how mushrooms are beneficial for consumption through practical demonstrations for consumers about various recipes. Stalls will be setup by Khoombi staff to emphasize how mushrooms can be incorporated into everyday recipes emphasizing the healthier aspects of mushroom-based nutrition.

TV and Media

In addition to this, Khoombi plans to utilize the current food culture prevalent on media channels to focus on the mushroom's nutritional value. A number of channels such as Zauq and Zaika have begun to focus on continental cuisine and require the usage of mushrooms in their dishes. An endorsement by celebrity chefs will help boost the image of mushrooms as an excellent protein substitute.

Social Media Marketing



Khoombi plans to focus on social media marketing (SMM) to capture potential customers. Social networking websites such as Facebook and LinkedIn provide valuable direct contacts with customers reducing the effort in contacting these businesses. Khoombi plans to aggressively contact businesses through these platforms to gain the attention of concerned individuals.

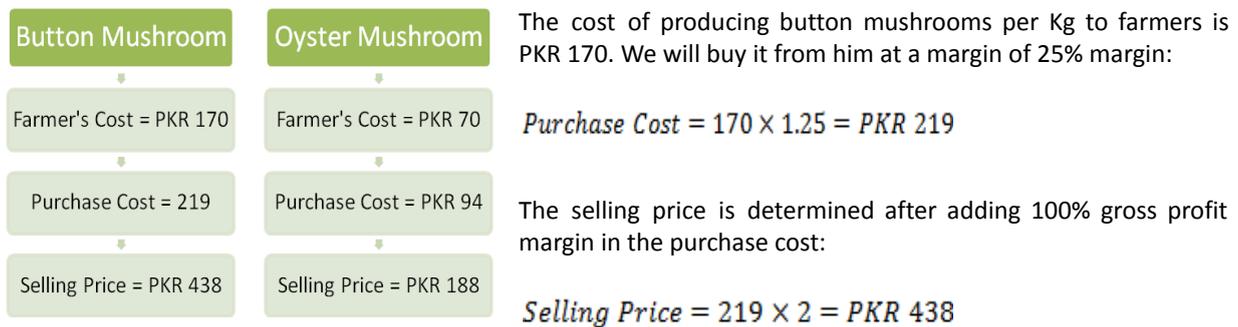
Khoombi would be doing an online promotion for our product through our web portal. Khoombi would do innovative e-marketing through social media. In order to bring awareness to the masses, we would run social

media campaigns through popular social networking platforms including twitter, facebook, Youtube, Slideshare, scribd, stumbleupon and wordpress. This strategy would provide us an insight into what people are talking about our product, the consumer response and how we can improve our services and products.

Our website would portray our new products and promotional offers, and there won't be as such any heavy maintenance requirements except for content updating which our team members can handle.

Pricing Strategy

Khoombi is using a cost-plus pricing strategy. We will buy mushrooms from farmers at 125% of their cost of production and then add our gross profit margin of 100% to reach our selling price. The pricing strategy of Khoombi can be graphically shown as below:



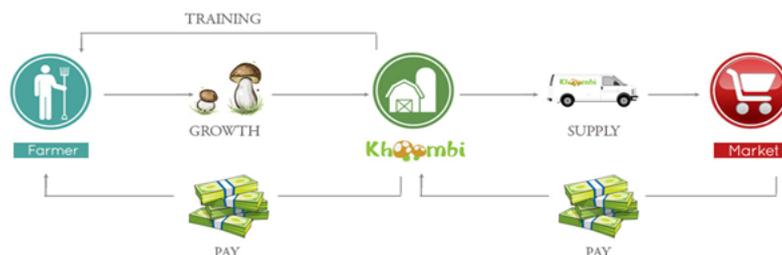
The price of oyster mushroom is also determined in the aforementioned way.

Sales Strategy

Our sales strategy will primarily focus on targeting major business-to-business clients as previously mentioned in the customer segment of the business plan. The sales strategy will rely on the following idea of modified rebuy where customers are not satisfied with their current solution and are looking for alternatives. Khoombi's competitive advantages here are an excellent means of convincing existing customers to change to our product.

Operational Plan Summary

Company location is very important for Khoombi, Khoombi would have its warehouse setup near the production units, near the producing community, making the process of mushroom collection cost effective. Our head office is situated at a location that is easily accessible by our clients. Moreover, location will be popular so that the office is used for the promotional purposes as well.



Operational Plan Summary will include the following points.

1. Mushroom Production by the farmers.
2. Farmers would bring their production to the warehouse ,where it would quality checked , and data entry would be made
3. Mushrooms would be packaged at the warehouse.
4. Supplying the mushroom to the businesses.
5. At the end of the month, Khoombi representatives would collect payment from businesses.
6. Payment would be made to the farmers.

Order Management and Fulfillment

Order from business will be taken by our sales representatives, Khoombi sales representative will report the order taken to the head office, and those then will be sent to supervisors handling the production units along with the farmers and they will ensure the constant supply of mushroom as per the order.

Customer Management

Considering that we specialize in a business-to-business market, the aim is to ensure that we build strong and proactive relationships with our customers. As a result, our aim would be to facilitate credit lines, establish supply times and other related services to ensure that our customers were satisfied. Initially we would be interested in establishing a generous returns policy to ensure the constant flow of high-quality products to our customers.

Demand oriented Production

Focusing on the fresh component of mushrooms, there is a potential threat in the fact that mushrooms are a highly perishable item. Project Khoombi plans to use a demand oriented production scheme to counter this risk. The production of mushrooms will be scheduled in a manner where production meets demand to avoid the aforementioned risk along with natural shelf-life increasing techniques to help boost sales and consumption. Khoombi would be training the local farmers into farming fresh mushrooms. For quality control we would be using the expertise of NARC, and PCSIR. These two organizations would provide their services to Khoombi for assuring the quality of production.

Milestones

The project is two phases, in the first phase (consisting of at least two years) we will be looking forward to educating and training local farmers for domestic production. This will cost us the expenditure of training workshops and the farm setup material, which in the end will be bought by the farmers. The risk factor is low as the production is on a small scale in the beginning.

Once we start getting production from small production units, the product will be processed and treated on a small scale and will be prepared for the local market. After the success in the local market and enough training, the production will be increased and the processing will be enhanced for the inter district export, and later on inter provincial and overseas export.

Financial Plan Summary

Project Khoombi's financial returns are shown in the financial table below. The appendices contain further detailed information based on a set of assumptions regarding the market. As an initial insight into the financial profitability, Khoombi provides profitable returns within the first year alone. The NPV of the overall project is profitable while assisting on the social enterprise front. Please refer to the detailed financial assumptions in the appendix for the projection of these figures.

Key Financial Indicators

In the following table, list the key financial indicators for the past two years, current year, and the next 3 years.

| Financial Projections | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|-------------------------|-----------------------|-----------|-----------|------------|------------|
| | Total Revenues | 4,633,500 | 5,861,377 | 18,691,428 | 27,943,685 |
| Gross Profit | 2,316,750 | 2,930,688 | 7,823,790 | 11,696,567 | 17,486,368 |
| Net Income | 974,350 | 1,293,679 | 4,337,005 | 6,748,866 | 10,390,977 |
| Capital invested | 300,000 | 100,000 | 1,000,000 | 0 | 0 |
| Working Capital | 0 | 0 | 0 | 0 | 0 |

Social & Economic Benefits

- Profitable business to local Farmers
- Job creation
- Eradicating food shortage
- Providing livelihood to widows and housewives
- By reviving cottage industry that would create employment for the youth , rural to urban migration could be stopped which inevitably results in poor quality of urban life.

This business plan by directly providing profitable business to local farmer would not only better the financial condition of the locality in which the business is located but the project has further out reaching consequence , the project will work as a catalyst in spreading awareness regarding withering cottage industry in Pakistan . A blooming cottage industry will not just bring wealth to the local farmer and craft men but also will fetch considerable revenue in terms of exports for the country.

Environment assessment

Farming Mushrooms is one natural way of converting hazardous organic waste into useful edible protein. All kinds of organic waste is suitable for growing mushrooms, and depends upon the locality where farming is done.

Appendices



Official Website

www.khoombi.com



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1. Mushroom Production by the farmers.
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3. Mushrooms would be packaged at the warehouse.
4. Supplying the mushroom to the businesses.
5. At the end month, Khoombi representative would collect payment from businesses.
6. Payment would be made to the farmers.

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Market Research:

The market size estimation is given below:

| Market Size Estimation of Button Mushroom | | | | | | |
|-------------------------------------------|--------------------------------------------|---------------------------------|-------------------------------|----------------|---------------|-----------------------|
| Classification of Food Places | Net weight of Mushrooms in one can (in Kg) | Gross weight of one can (in Kg) | No. of cans used in one month | No. of outlets | No. of months | Annual Demand (in Kg) |
| Pizza Hut | 0.1 | 0.5 | 600 | 7 | 12 | 5,040.00 |
| Other Eateries | 0.1 | 0.5 | 100 | 300 | 12 | 36,000.00 |

| | | | | | | |
|---------------------------|-----|-----|-----|---|----|-----------|
| Full line discount stores | 0.1 | 0.5 | 211 | 3 | 12 | 760.00 |
| Total Demand | | | | | | 41,800.00 |

We have come up with the above figures after doing primary research. We spoke with the regional manager of Pizza Hut and he informed us about the total number of Pizza Hut outlets and their monthly consumption of mushrooms. Other Eateries include delis and cafes operating on MM Alam Road, Lahore, and pizza restaurant operating in every nook and corner of Lahore city. Full line discount stores include Metro, Makro and Hyperstar; we spoke with the Department Manager Grocery & Canned Food of Metro, Mr. Abid Aziz Bajwa, and he informed us about the monthly mushroom consumption at Metro; based on the information provided by Mr. Bajwa, we extrapolated and came up with the above numbers.

| | |
|-------------------------------------------|---------------|
| Market Size Estimation of Oyster Mushroom | |
| Consumer | Annual Demand |
| | (in Kg) |
| Rafhan | 2,000.00 |

Currently only Rafhan is consuming oyster mushrooms, subject to our information. Last year NARC supplied oyster mushrooms to Rafhan and the above data is taken from their officials. But we suspect that Knorr might also be a consumer of oyster mushrooms as she is also dealing in soups, etc. Unfortunately we unable to find reliable information about Knorr so we have excluded it for now from our market size estimation.

Based on the above figures, our total market size (in Lahore) is 43,800 Kg per annum.

The demand is estimated as follow:

| Market We Will Serve | Percentage | In Kgs |
|----------------------|------------|-----------|
| Mushroom Type | | |
| Button Mushroom | 25% | 10,450.00 |
| Oyster Mushroom | 15% | 300.00 |
| Total Annual Supply | | 10,750.00 |

We have estimated that initially we will be able to cater 25% of black mushrooms market and 15% of oyster mushrooms market. We estimate the growth rate to be 10% for the first 2 years. In the third year we will install a canning unit, and will be looking at the export market. According to our own estimation and talks with the experts in the industry, the growth rate after the installation of canning unit is estimated to be 30% per annum.

Financial Information

Important Assumptions

| Assumption | Basis |
|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Sales of button mushrooms = 10,450 Kg | 25% of total market size of button mushrooms |
| 2. Sales of oyster mushrooms = 300 Kg | 15% of total market size of button mushrooms |
| 3. Cost of button mushrooms per kg = PKR 219 | PKR 175 is the cost of production to farmer (determined after talking with experts) and 25% margin |
| 4. Cost of oyster mushrooms per kg = PKR 94 | PKR 75 is the cost of production to farmer and 25% margin |
| 5. Price of button mushrooms per kg = PKR 438; price of oyster mushrooms per kg = PKR 188 | Calculated after adding 100% gross profit margin into respective costs |
| 6. Depreciation = PKR 0 for the first 2 years and PKR 70,000 for the rest of the years | We will install a canning unit after 2 years. The cost of canning unit will be PKR 1,000,000 and its salvage value after 10 years of economic life is estimated to be 30% of cost. The unit is depreciated on straight-line basis. |
| 7. Transportation costs = PKR 72,000 | Estimated after talking to freighters. |
| 8. Warehousing costs = PKR 12,000 | Estimated after finding out rent expenses in the suburban areas of Lahore. |
| 9. Packaging costs = PKR 53,570 | Estimated after talking to printers and PVC bags suppliers. |
| 10. Wages = PKR 444,000 | 1 employee at 7,000; 1 data entry operator at 20,000; 1 consultant at 10,000 (all wages are per month) |
| 11. Advertising cost = PKR 200,000 | Estimated after considering various promotional options and their respective costs |
| 12. Utility expenses = PKR 36,000 | Estimated after taking into account current commercial utility tariffs |
| 13. Tax Expenses = 35% | Board of Investment, Government of Pakistan |

The costing is given below:

| Costing (per Kg) | | |
|------------------|-----------------|----------------|
| Mushroom Type | Cost to Farmers | Purchase Price |
| Button Mushroom | 175 | 219 |
| Oyster Mushroom | 75 | 94 |

The purchase price is calculated after adding 25% margin into the cost to farmers. The cost to farmers has been calculated after speaking with the experts in the industry.

The pricing is given below:

| Pricing (per Kg) | | |
|------------------|--------|---------------|
| Mushroom Type | Margin | Selling Price |
| Button Mushroom | 100% | 438 |
| Oyster Mushroom | 100% | 188 |

The price is calculated after adding 100% gross profit margin into the purchase price (refer to the above table).

Profit & Loss Statement

| Profit & Loss Statement | 2011 | 2012 | 2013 | 2014 | 2015 |
|-------------------------|--------------|--------------|---------------|---------------|---------------|
| Revenues | 4,633,500.00 | 5,861,377.50 | 18,691,428.11 | 27,943,685.03 | 41,775,809.12 |
| COGS | 2,316,750.00 | 2,930,688.75 | 10,867,637.14 | 16,247,117.52 | 24,289,440.69 |
| Gross Profit | 2,316,750.00 | 2,930,688.75 | 7,823,790.98 | 11,696,567.51 | 17,486,368.42 |
| Other Expenses | | | | | |
| Depreciation | 0.00 | 0.00 | 70,000.00 | 70,000.00 | 70,000.00 |
| Transportation costs | 72,000.00 | 82,800.00 | 95,220.00 | 109,503.00 | 125,928.45 |
| Warehousing costs | 12,000.00 | 13,800.00 | 15,870.00 | 18,250.50 | 20,988.08 |
| Packaging costs | 53,750.00 | 61,812.50 | 71,084.38 | 81,747.03 | 94,009.09 |
| Wages | 444,000.00 | 510,600.00 | 587,190.00 | 675,268.50 | 776,558.78 |
| Advertising costs | 200,000.00 | 230,000.00 | 264,500.00 | 304,175.00 | 349,801.25 |
| Utility costs | 36,000.00 | 41,400.00 | 47,610.00 | 54,751.50 | 62,964.23 |
| PBT | 1,499,000.00 | 1,990,276.25 | 6,672,316.60 | 10,382,871.98 | 15,986,118.56 |
| Tax | 524,650.00 | 696,596.69 | 2,335,310.81 | 3,634,005.19 | 5,595,141.50 |
| PAT | 974,350.00 | 1,293,679.56 | 4,337,005.79 | 6,748,866.78 | 10,390,977.07 |

Balance Sheet

We will rent in everything we need in the first 5 years. Our production will follow demand – we will only produce when we have a confirmed order. Because of this we will not maintain any additional inventory. Moreover, because we are renting in everything, we will have no assets. Similarly, the funding will be provided by partners, no loan will be taken, so no liabilities also. Therefore Balance Sheet is not relevant and thus not included. However, the introduction of a canning plant will obviously change the balance sheet. Regardless, this is subject to the initial years of demand/supply being adequately met through the current production process.

Cash Flow Statement

| Cash Flow Statement for the Period Ended | 2011 | 2012 | 2013 | 2014 | 2015 |
|------------------------------------------|--------------|--------------|--------------|---------------|---------------|
| PBIT | 1,499,000.00 | 1,990,276.25 | 6,672,316.60 | 10,382,871.98 | 15,986,118.56 |
| Add: Depreciation | 0.00 | 0.00 | 70,000.00 | 70,000.00 | 70,000.00 |
| Less: Taxes | 524,650.00 | 696,596.69 | 2,335,310.81 | 3,634,005.19 | 5,595,141.50 |
| Less: CAPEX | 0.00 | 0.00 | 1,000,000.00 | 0.00 | 0.00 |
| Less: Net Working Capital | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Less: Increase in Other Assets | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Add: Cash at the beginning of the period | 0.00 | 974,350.00 | 2,268,029.56 | 5,675,035.35 | 12,493,902.14 |
| Free Cash Flows (End of the period) | 974,350.00 | 2,268,029.56 | 5,675,035.35 | 12,493,902.14 | 22,954,879.20 |

Net Working Capital (or change in NWC) equals Accounts Receivable minus Accounts Payable. We will extend one week credit to our buyers and pays farmers within a period of one week. Thus NWC will be 0 and no amount will be outstanding. The CAPEX (Capital Expenditure) of 1,000,000 in year 3 represents the amount we will have to invest to set up a canning unit for future demand planning.

Economics of Micro Production Unit

The economics for Phase-I of mushroom farming are as follows:

EXPENDITURE & INCOME: (Per Annum).

- **FIXED COST:**

- Kulla 5 ft x 5 ft x 7 ft high

I @ Rs.50/- sq ft. ---- Rs. 1,250.00

II Shelves x 8 @---- Rs. 50/- Rs. 400.00

III Tools; sprayers etc. ---- Rs. 1,000.00

TOTAL: ---- Rs. 2,650.00

- **DEPRECIATION/ INTEREST @ 25%: ---- Rs. 662.50**

- **RECURRING EXPENDITURE:**

I Spawn 80 bottles @ Rs.25/-: ---- Rs. 2,000.00

II Fertilizer/Chemicals. ---- Rs. 1,400.00

III Compost Material: ---- Rs. 880.00

IV Calcium Chloride: ---- Rs. 220.00

TOTAL: ---- Rs. 4,500.00

- **RETURNS:**

I 400 Kg @ ---- Rs. 94/- per Kg.

3 crops, 2 pickings each. ---- Rs. 37,600

Cost of Production, 1 Kg: ---- Rs. 75.90

(Survey Report by Khidmat Foundation SNDP)

Canning Machine Cost (Unit and Installation)

| | |
|----------------------------|---------------------|
| Cutter | Rs. 50,000 |
| Abrasive peeler | Rs. 100,000 |
| Two Washing Tubs (6x4x1) | Rs. 80,000 |
| Sealing Machine | Rs. 300,000 |
| Retard (250 box per batch) | Rs. 20,000~25,000 |
| Steam generator | Rs. 300,000~350,000 |
| Cooling Tank | Rs. 35,000 |
| Raw Material (Can 425gm) | Rs. 15~18 |
| Grand Total (of Maximum) | 940000 |

Plant Crew and skilled labor

| | |
|--------------------------|---------------|
| Skilled Workers x 10 | 7,000 ~ 8,500 |
| Supervisor | 15,000 |
| Manager | 25,000 |
| Grand Total (of Maximum) | 125,000 |

Consultant or consultants

Dr .Muhammad Sheikh Iqbal
Principal Scientific Officer
Mushroom Research Project
National Agriculture Research Centre,
Islamabad.

Mohammad Mahmood
Advisor and Consultant Mushroom
Technology
Mudair Mushroom Training centre
Islamabad

Mentors and key advisors

Sardar Taimur hyat khan
Bio Environmental consultant
National Agriculture Research Centre,
Islamabad.