



Faculty of Business & Economic  
Business Department

**BUSA2301**

**Mushroom Farm**

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## Executive Summary

In general, there are many Palestinian products in the market, however, we noticed a lack of Palestinian grown mushrooms, which is a very important source of fiber, protein, and antioxidants that is widely used in recipes, upon further look we also saw that mostly our source of mushrooms is Israeli produced mushrooms, and with the rise of Palestinian liberation movement and the emphasis on the importance of BDS movement and the huge negative effect boycotting Israeli products has on their economy, we decided to provide the market with an alternative source for mushrooms and by doing so make replacing the Israeli product in our market easier.

Which is why in this project we decided to create a mushroom farm, where we grow mushrooms, package them and sell them to supermarkets, vegetables markets and restaurants.

Since we don't really have mushroom farms in the west bank means that it's something new to the market and will give us the advantage of having low local competition, our biggest competition will be the occupation which is in our favor since it will encourage the customers to pick our product over theirs.

Our project will not only help weaken the occupation's economy, but it will also allow us to contribute to the growth of the Palestinian economy and provide employment opportunities to people who may not be employed.

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# 1. Defining the Project

## 1.1. Project Scope

### 1.1.1. Project Objective

The overall objective is to construct a mushroom farm that sells mushrooms locally.

Our objectives are:

- Provides a new product in the local scene.
- Provides a replacement to Israeli produced mushrooms.
- Provides job opportunities for those who didn't work.
- Improving the Palestinian economy.

### 1.1.2. Deliverables

The overall deliverable of the project is a farm that grows mushroom.

- Delivers fresh mushrooms to restaurants and supermarkets.
- Creates suitable rooms and environment to grow mushrooms.
- Makes an easier way for people to boycott Israeli products.

### 1.1.3. Milestones

- Getting a business license.
- Ministry of health licensing for food safety and quality.
- Finishing the feasibility study and making precise time and resource estimations for the Project along with assigning roles to several personnel. Where project plans have a specific start date, corresponding to the start of the first task, and specific end date, corresponding to the end of the last task.
- Finding a place for growing mushrooms.
- Finding a place for storage.
- Purchasing equipment which provides the main services and objectives that we wish to provide through our project.
- Growing our first batch of Mushrooms.
- Advertising the platform through social media, posters and public meetings and talks. Some paid advertisements can also be made to publish this application.
- Expanding and creating more and larger farms to cover more Palestinians territories.

#### 1.1.4. Technical requirements

- Provide experts in agriculture to maximize efficiency.
- Provide farm temperature and humidity management system.
- Provide suitable fertilizers and pesticides.
- Provide workers that maintain the farm.
- Provide warehouse for storing equipment and products.

#### 1.1.5. Limits and exclusions

- Convincing supermarkets and restaurants to buy our product and finding consumers for it.
- High dependency on electricity, while the electricity in Palestine is known for Power outages.
- Poor production.
- Producing less than expected quantities.
- Strong competition.

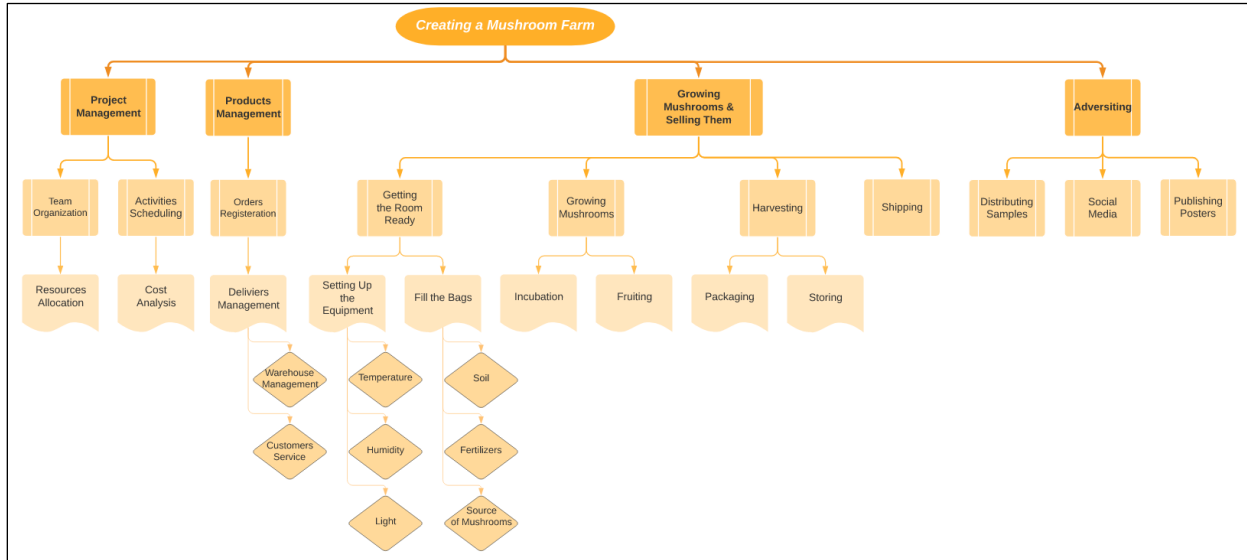
### 1.2. Project Priorities

Defining the priorities is the main part of any project management. So, it is very important to set the priorities that we need to consider in terms to make the project success. Priorities in our project from top to down are:

- Make a feasibility study to find the percentage of willing to buy a new to the market locally produced mushrooms.
- Provide the market with a good enough quality and quantity of the product to be able to completely replace the Israeli product in the market.
- Calculating the project costs in all aspects so that costs cover the required equipment's and achieve the required efficiency and specifications.
- Provide financing which is the process of providing funds for business activities, making purchases, or investing.
- Find appropriate warehouses (size, location, and price), because we need a place to store the goods after harvesting.
- Searching workers and purchasing equipment's.

### 1.3. Work Breakdown Structure

The following picture shows WBS of our system.



## 1.4.Coding the WBS for the Information System

**Project:** Creating a mushrooms farm

1. Project Management
  - 1.1. Team Organization
    - 1.1.1.Resources Allocation
  - 1.2. Activities Scheduling
    - 1.2.1.Cost Analysis
2. Products Management
  - 2.1. Orders Registration
    - 2.1.1.Deliveries Management
      - 2.1.1.1. Customers Service
      - 2.1.1.2. Warehouse Management
3. Growing Mushrooms and Selling Them
  - 3.1. Getting the rooms ready
    - 3.1.1.Setting Up the Equipment
      - 3.1.1.1. Temperature
      - 3.1.1.2. Humidity
      - 3.1.1.3. Light (windows)
    - 3.1.2.Fill the bags
      - 3.1.2.1. Soil
      - 3.1.2.2. Fertilizers
      - 3.1.2.3. Source of mushrooms
  - 3.2. Growing Mushrooms
    - 3.2.1.Incubation
    - 3.2.2.Fruiting
  - 3.3. Harvesting
    - 3.3.1.Packaging
    - 3.3.2.Storing
  - 3.4. Shipping
4. Advertising
  - 4.1. Distributing samples of the product to restaurants and supermarkets.
  - 4.2. Advertising on social media.
  - 4.3. Publishing Posters.

## 2. Estimating Project Times and Costs

### 2.1.Costs

Name	Cost
Warehouse Rent	500\$ Monthly
Shipping costs	5\$ for each order
Equipment	2000\$ for temperature and humidity controller
	20\$ for light
	40\$ for shelves
	5\$ for bags
Advertising	100\$
Utility	100\$ monthly
License fees	275\$
Taxes	17%
Packaging costs	3\$ monthly
Contingent Costs	500\$
Employees' wages	500\$ monthly per employee

### 2.2.Times

Name	Time
Finishing the feasibility study	10 days
Finding a warehouse	10 to 15 days
Buying equipment	one week to a month
Rooms/setting up equipment	a month
Fill the bags	5 to 10 days
Incubation period	3 weeks to 4 weeks
Fruiting	a week to 10 days
Harvesting	3 to 5 days
Packaging and Storing	3 to 4 days
Advertising	A week

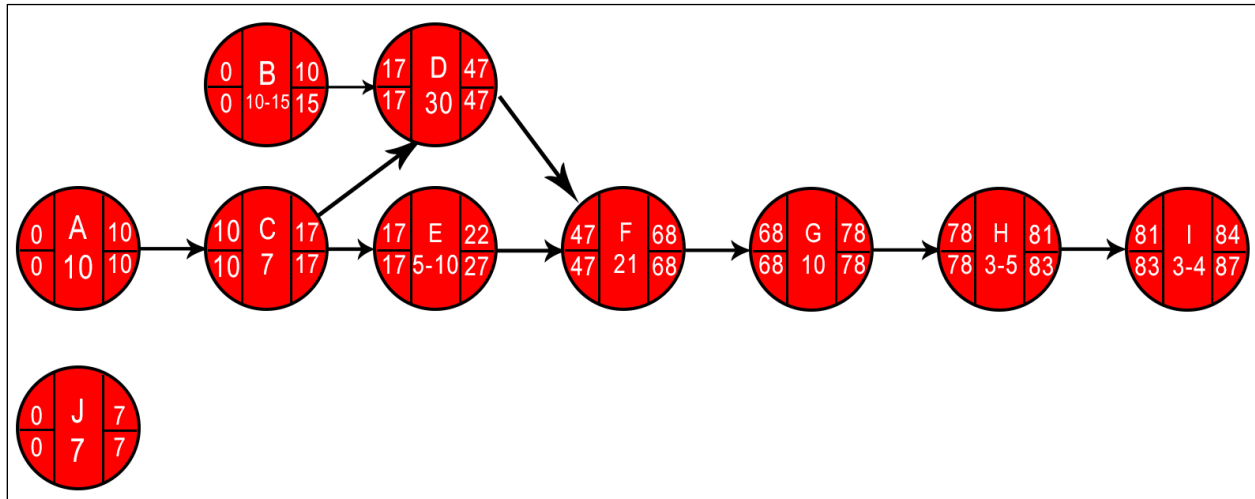


### 3. Developing a Project Plan

In the table below, we developed relationships among the activities and we decided which activities must precede and which must follow others.

Activities, Predecessors and Time Estimates			
Activity	Description	Duration	Immediate predecessors
A	Finishing the feasibility study and making precise time and resource estimations.	10	-----
B	Finding a warehouse	10-15	-----
C	Buying equipment	7	A
D	Rooms/setting up equipment	30	B,C
E	Fill the bags	5-10	C
F	Incubation period	21	E, D
G	Fruiting	10	F
H	Harvesting	3-5	G
I	Packaging and Storing	3-4	H
J	Advertising	7	-----
<b>Total</b>		<b>196</b>	

In the picture below, we developed our project network (AON):



### 3.1. Marketing Plan

- Business Information
  - Our work place will be the mushroom farm we'll build
  - Our Mission statement: "To provide fresh, healthy, Palestinian grown mushrooms".
  - Since we're still a small business right now the marketing team consists of the business owners themselves.
  
- Introduction and Goals
  - What you're hoping to achieve is to grow mushrooms in our mushroom farm and deliver them to the markets in the west bank.
 

The mushrooms will be grown in bags that are filled with soil, fertilizers and mushroom spores and put on shelves. The mushroom farm will consist of three rooms, one for incubation, the other for fruiting period and one for storage.
  
- Our business' strengths and weaknesses
  - Our strength is a mushroom farm business in the west bank is that there are little to no mushroom farms already existing in the west bank which means very low local competition.
 

Also, the rising need of boycotting Israeli products, which means people are in need of a local replacement
  - Our weakness is that we're new to the mushrooms farming process so it might take us a while to perfect our techniques.

- Our target customers
  - Citizens in the west bank through supermarkets and vegetable markets, and restaurants.
  - Our product will be sold in supermarkets and vegetable market.
- Marketing Strategies
  - We'll use social media platforms to promote our product.
  - On social media we'll also raise awareness to the effectiveness of boycotting Israeli products to resisting the occupation and how our products helps with that.
  - We'll also be distributing product samples to introduce our product to the local market.
- Measurements of success of marketing plan
  - Based on the response to our products, the market's acceptance our products which we can observe by seeing how many supermarkets agree to sell the product
  - Provide the customers with a way to review the product on our social media. Which can also help us see what we can do to improve the product in the future.
  - Measure number of sales for the first 3 months, compare the increase or decrease of the number of sales, try to observe the pattern, and if there is a decrease try to pinpoint the problem and see what we can do to fix it.

In general, our marketing plan will rely on social media, getting the local citizens interested in the product, distributing samples on as many local markets as we can, and observing the results to improve.

### 3.2.Financial plan

The table below shows start-up costs for our project which is obvious that is an approximate costs. Some of the costs continue regularly and some of them for once.

START-UP COSTS				
Mashroom Farm				May 23, 2021
COST ITEMS	MONTHS	COST/ MONTH	ONE-TIME COST	TOTAL COST
Advertising/Marketing	9	\$100		\$900
Employee Salaries	12	\$500		\$6,000
Employee Payroll Taxes and Benefits	12	\$25		\$300
License fees			\$275	\$275
Packaging costs	9	\$3		\$27
Equipments	12	\$5	\$2,060	\$2,120
Rent/Lease Payments/Utilities	12	\$600		\$7,200
Postage/Shipping	9	\$5		\$45
Contingent costs			\$500	\$500
<b>ESTIMATED START-UP BUDGET</b>				<b>16867</b>

This table shows the revenues and costs for every month, calculate the net income and shows the total in year, also it shows what the revenues for our project are and what the expenses are.

Mashroom Farm	May 25, 2021												
REVENUE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
Estimated Product Sales (100-150kg/month)	\$6,000	\$5,000	\$6,000	\$3,000	\$4,000	\$3,000	\$3,000	\$3,000	\$3,000	\$4,000	\$5,000	\$6,000	\$51,000
Less Sales Returns & Discounts	\$100	\$150	\$100	\$100	\$150	\$100	\$100	\$250	\$150	\$100	\$100	\$100	\$1,500
Service Revenue	\$0	\$0	\$0	\$0	\$0	\$250	\$350	\$100	\$0	\$0	\$1,245	\$1,360	\$3,305
Other Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Net Sales	\$6,100	\$5,150	\$6,100	\$3,100	\$4,150	\$3,350	\$3,450	\$3,350	\$3,150	\$4,100	\$6,345	\$7,460	\$55,805
Cost of Goods Sold	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$4,116
Gross Profit	\$5,757	\$4,807	\$5,757	\$2,757	\$3,807	\$3,007	\$3,107	\$3,007	\$2,807	\$3,757	\$6,002	\$7,117	\$51,689
EXPENSES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YTD
Salaries & Wages (3 workers)	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$18,000
Marketing/Advertising	\$0	\$100	\$0	\$100	\$0	\$100	\$0	\$0	\$100	\$0	\$100	\$0	\$500
Sales Commissions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Rent	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$6,000
Equipment and Utility	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$343	\$4,116
Total Expenses	\$2,343	\$2,443	\$2,343	\$2,443	\$2,343	\$2,443	\$2,343	\$2,343	\$2,443	\$2,343	\$2,443	\$2,343	\$28,616
Income Before Taxes	\$3,414	\$3,314	\$3,414	\$3,314	\$3,414	\$3,314	\$3,414	\$3,414	\$3,314	\$3,414	\$3,314	\$3,414	\$40,468
Income Tax Expense	\$512	\$497	\$512	\$497	\$512	\$497	\$512	\$512	\$497	\$512	\$497	\$512	\$6,070
<b>NET INCOME</b>	<b>\$2,902</b>	<b>\$2,817</b>	<b>\$2,902</b>	<b>\$2,817</b>	<b>\$2,902</b>	<b>\$2,817</b>	<b>\$2,902</b>	<b>\$2,902</b>	<b>\$2,817</b>	<b>\$2,902</b>	<b>\$2,817</b>	<b>\$2,902</b>	<b>\$34,398</b>

## 4. Project Budget

### 4.1.Item Based Budget

Item	Description	Cost (\$)
<b>License fees</b>	Farming Business License	275
<b>Equipment</b>	Temperature and humidity	2000 (at the beginning)
	Light	20 (at the beginning)
	Shelves	40 (at the beginning)
	Bags to grow mushrooms in	5 (monthly)
<b>Rent</b>	Warehouse Rent	500(monthly)
<b>Utility</b>	Water and Electricity	100 (monthly)
<b>Advertising</b>	Sponsored Ads on social media	100 (monthly)
<b>Shipping</b>	Delivering products	5 (per order)
<b>Packaging costs</b>	Package Products to sell	3(monthly)
<b>Contingent Costs</b>		500 (at the beginning)
<b>Taxes</b>	For government	17%
<b>Employees' wages</b>		500\$ (monthly per employee)

### 4.2.Item based budget versus activity based budget

Activity Based Budget	Description	Budget (USD)	
<b>10 Days</b>	Finishing the feasibility study	0****	0****
<b>10 to 15 days</b>	Finding a warehouse	500	500
<b>One week to a month</b>	Buying equipment :	2000	2065
	For temperature and humidity controller	20	
	Light	40	
	Shelves	5	
<b>A month</b>	Rooms/setting up equipment	200***	200***
<b>5 to 10 days</b>	Fill the bags (50 bags)	6*50	300
<b>3 weeks to 4 weeks</b>	Incubation period	30	30
<b>A week to 10 days</b>	Fruiting	10	10
<b>3 to 5 days</b>	Harvesting	**	**
<b>3 to 4 days</b>	Packaging and storing	3	3
<b>A week</b>	Advertising	100	100