



Pre-Feasibility Study
Agricultural Services Company
Madaba

April, 2017



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Madaba Governorate



1. Executive Summary

This study aims to determine the preliminary economic feasibility for the project of establishing of a company specialized in providing the agricultural services. The head office of this proposed project will be at Qasabet Madaba, which is located about 40 Km away from the capital of Amman. It will provide the services to all the agricultural regions in Madaba Governorate and all the agricultural regions around it, including the regions of Naour and Al-Jizah in the governorate of the capital. The following table shows the preliminary indicators of this project.

Table 1: The preliminary indicators of this project

| | |
|----------------------------|--|
| Project Name | Agricultural services Company |
| Sector | Agricultural – plant production |
| Governorate | Madaba |
| Region | Qasabet Madaba |
| Products/Services | <ul style="list-style-type: none"> • The provision of advisory and guidance services to the farmers on right agricultural practices and the use of the suitable materials. • Leasing high productivity agricultural equipment. • Emergency and periodical maintenance for machining and equipment, such as: irrigation networks, water ponds and pumps, and green houses. • The supply of agricultural production inputs, such as fertilizers, pesticides and seeds in addition to supervising the implementation of the agricultural processes using modern equipment to ensure highly efficient implementation. • The supply and/or installation of agricultural equipment and supplies, such as water ponds and tanks, irrigation networks and green houses. • The supply and/or installation of other machinery and equipment, including modern technology systems to generate the electricity and to provide heat for the plastic greenhouses using clean renewable energy. |
| Project Description | <p>The project is based on purchasing available modern machinery, equipment, and technologies, and renting that to the farm owners of, with or without manpower, to use in their operations and increase the productivity of their farms; in addition to providing them with the various agricultural advisories and services. The project will be established on a 4,000 m² plat of land, with 300 m² hangar, which will be established to store the equipment and materials. A showroom will be also rented in Qasabet Madaba for facilitating the reception of the clients to order their required services and materials, where the showroom will be provided with some materials that will be sold to the clients.</p> |

| | |
|---|--|
| Target Market | <p>The project will target the farmers in all the agricultural regions in Madaba and the surrounding regions, This will include the following regions:</p> <ul style="list-style-type: none"> • Qasabet Madaba District • Dhiban District • the area of Southern regions of the capital, including Naour, Al-Jizah and Um Ar-Rasas; and • Wadi al-Mujib region in the governorate of Karak |
| Investment Cost | The investment cost of this project will be JD 553 thousands. |
| The Average Return on Investment | The average return on investment (ROI) within the five years is about 10.6%. |
| Internal Rate of Return | The internal rate of return (IRR) is about 23%. |
| Average added value of the Project | The average value added on the project within the five years is JD 297 thousands. |
| Risk Assessment | The Sensitivity Analysis indicates a low risk in case of 10% increase in investment cost, whereas a high risk in case of 10% increase in operating costs, or 10% decrease in revenues. |
| The Project Justifications | <ul style="list-style-type: none"> • The availability of the agricultural lands in the governorate. • The current low productivity of the agricultural lands in Madaba • Savings in cost of the non Jordanian manpower working in agricultural sector. • The employment of the national manpower. • Increasing backward linkages and integration within the agricultural sectors. |
| Partners /Stakeholders | <ul style="list-style-type: none"> • Ministry of industry, trade, and supply. • Ministry of agriculture. • The Municipality. |

2. The Macroeconomic Environment

2.1 An Overview of the Hashemite Kingdom of Jordan

The Hashemite Kingdom of Jordan is a landlocked country surrounded by land except at its southern extremity at the port of Aqaba, where that area is the only sea exit area in Jordan. The Kingdom is bordered at its west side by Palestine and the Mediterranean Sea, at its south and east by the Kingdom of Saudi Arabia, at north east by Iraq and at north by Syria.

Figure1 : Map of the Hashemite Kingdom of Jordan



Jordan is marked by three climatic zones from west to east including the Jordan Valley, most of which lies below sea level and is considered subtropical, and upland areas to the east of the Jordan Valley, ranging in height from 100 to 1500 meters above sea level and this is one of the areas dominated by Mediterranean climate, and the desert areas stretching to the east of the highlands.

The total area of the Kingdom is approximately 89.3 thousand square kilometers, and the semi-desert conditions prevail in over 80% of this area where there are some wet lands settings like Azraq Basin.

The kingdom is divided administratively into twelve governorates distributed into three regions: the Northern Region (includes the governorates of Irbid, Ma'raq, Jerash and Ajloun) while the Central Region (includes the governorates of the capital, Zarqa, Balqa, Madaba) and the Southern Region (includes the governorates of Karak, Tafila, Ma'an, Aqaba), and the major cities are Amman (the capital), Zarqa and Irbid.

2.2 Population

Based on the General Census of Population and Housing in 2015, the population in the kingdom amounted to about 9.5 million people with a population density of 107.3 inhabitants per km², where the Capital City knocked off other governorates by population amounting to about 4 million people and a population density of 538.8 inhabitants per km², mainly because Amman is the most attractive governorate for Jordanians and for those coming to Jordan from other countries, followed by Irbid Governorate with a population of 1.8 million people, and then Zarqa Governorate with a population of 1.4 million. Tafila Governorate which is considered to be the least populous governorate whose population is about 96 thousand people.

Table 2: Number of population and population density in the Kingdom for 2015

| Governorate | Population (people) | Area (Km ²) | Population density (people/ km ²) |
|-------------------------|---------------------|-------------------------|---|
| Central Region | | | |
| Capital | 4007526 | 7,579 | 528.8 |
| Zarqa | 1364878 | 4761 | 286.7 |
| Balqa | 491709 | 1120 | 439.0 |
| Madaba | 189192 | 940 | 201.3 |
| North Region | | | |
| Irbid | 1770158 | 1572 | 1126.1 |
| Mafraq | 549948 | 26551 | 20.7 |
| Jerash | 237059 | 410 | 578.2 |
| Ajloun | 176080 | 420 | 419.2 |
| Southern Region | | | |
| Karak | 316629 | 3495 | 90.6 |
| Tafeileh | 96291 | 2209 | 43.6 |
| Maan | 144082 | 32832 | 4.4 |
| Aqaba | 188160 | 6905 | 27.2 |
| Total of Kingdom | 9531712 | 88793.5 | 107.3 |

Source: Department of Statistics, Jordan General Population and Housing Census, 2015

On the other hand, the population growth rate has reached about 3% in 2010 and increased to 9% during the years 2013 and 2014 and then dropped a little during 2015 to reach about 8%, according to demographic surveys for the Department of Statistics. The reason for the high growth rates is attributed to the influx of large numbers of refugees from Syria to the Kingdom which resulted in a marked decline in per capita real GDP index by 5.4% to JD 1,197.4, based on the Statements of the Central Bank of Jordan.

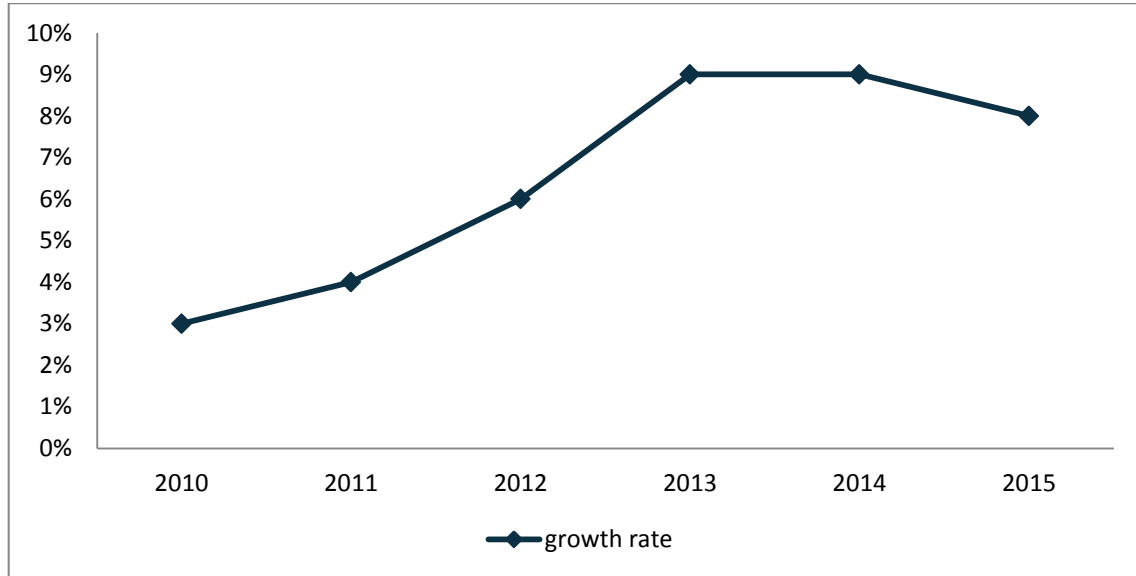
The unemployment rate among Jordanians also witnessed a rise by 1.1 percentage to reach to 13%, due to the structural imbalances that the labor market is suffering from and the acquisition of the low-paid foreign workers on a large number of new jobs in the economy, according to the Central Bank of Jordan.

Table 3: Number of population and population growth in the Kingdom, thousand

| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|-------------|--------|--------|--------|--------|--------|--------|
| population | 6698.0 | 6993.0 | 7427.0 | 8114.0 | 8804.0 | 9531.7 |
| growth rate | %3 | %4 | %6 | %9 | %9 | %8 |

Source: Department of Statistics

Figure 2: population growth rate in the Kingdom



2.3 Economic Indicators in the Kingdom ¹

Countries across the Middle East are still suffering from instability and closure or partial closure of borders; including the borders of important markets for the Kingdom's products. These factors led to a decline in the performance of many of the economic sectors, including the external sector, national exports, touristic income, and Foreign Direct Investment (FDI), and they contributed to a slowdown in the economic growth to about 2.4% in 2015, compared to 3.1% in 2014. The growth achieved in 2015 came from growth across several economic sectors, especially in the finance, insurance, and real estate services; the transport, storage, and communications services; the mining industry; the manufacturing industry; and the agriculture sector. These sectors contributed a combined 1.8 percentage points (or 75%) of the growth rate achieved during 2015, reflecting the diversity of the economic growth sources in the Kingdom.

Additionally, the general price level registered a decline in the prices of oil, commodities, and other related services in the global markets. Therefore, the general price level, measured by the relative change in the average consumer price index deflated by 0.9% in 2015, compared to the inflation of 2.9% in 2014.

The budget deficit, after aid, increased by 1.2% to a record 3.5% of GDP, compared with 2.3% in the previous year. In addition, the Balance of Payments' Current Account recorded a deficit of 8.9% of GDP, compared with 7.3% in 2014. At the end of 2015, the net public debt amounted to 22,847.5 million Jordanian Dinars (85.8% of the GDP), with an increase of 5.0% of the GDP. However, the total public debt reached 24,876.5 million Jordanian Dinars (93.4% of GDP). This increase resulted from financing both the general budget deficit and the guarantees for loans for the National Electricity Company and the Water Authority, as well as the slowdown of economic growth during 2015. The indebtedness of the National Electricity Company and the Water Authority recorded 6.7 billion Jordanian Dinars at the end of 2015.

On the monetary and banking front, most monetary indicators experienced positive development in performance in 2015, primarily in the Central Bank's foreign reserves, which maintained comfortable levels that amounted to about \$14.2 billion. The dollarisation rate decreased, which reflected positive demand for Jordanian Dinars in comparison to other major foreign currencies. With regards to the activities of licensed banks, the outstanding balance of credit increased by 9.5%, to reach 21,103.5 million Jordanian Dinars at the end of 2015. The total deposits registered with licensed banks increased by 7.7%, to reach 32,598.5 million Jordanian Dinars at the end of 2015. The increase in deposits came as a result of the high dinar deposits, which increased by 2,001.4 million Jordanian Dinars (8.3%), and higher foreign currency deposits, which increased by 336.1 million Jordanian Dinars (5.4%).

Furthermore, many of the external sector indicators registered a drop in performance in 2015 due to the deepening instability in the region and almost full closure of the borders

¹ The Central Bank of Jordan

with Iraq and Syria. However, the drop in oil prices in the global markets contributed to the decline in the Kingdom's imports bill for energy, as it dropped by 40.6%, which in turn contributed to a decline in total imports and the trade deficit by 11.4% and 14.0%, respectively. Thus, the Current Account, excluding aid, declined to 11.9% of GDP, compared to 12.4% in 2014.

The Current Account deficit increased after aid, to reach 2,365.6 million Jordanian Dinars (8.9% of GDP) in 2015, compared with a deficit of 1,851.7 million Jordanian Dinars (7.3% of GDP) in 2014. This decline is due mainly to the decline in total exports by 6.6% and the decline in surplus in the services account by 27.7%, as touristic income decreased by 7.1%, and the decline in the surplus in the current transfers account decreased as a result of reduced foreign aid.

Capital and financial accounts resulted in a net inflow of 1,593.7 million Jordanian Dinars in 2015, compared to 909.0 million Jordanian Dinars in 2014; this was due to the Kingdom's higher net obligations towards the outside world. Foreign Direct Investment registered a net inflow of 909.4 million Jordanian Dinars, and the reserved investment registered an inflow of 918.4 million Jordanian Dinars due to the Kingdom issuing Eurobonds that are worth \$2.0 billion in the global markets. The withdrawal of bank loans on behalf of the Central Bank increased the use of funds from the International and Arab Monetary Funds by 543.3 million Jordanian Dinars. This led to the registration of a surplus in the overall Balance of Payments of 328.7 million Jordanian Dinars during 2015, compared to a surplus of 1,550.7 million Jordanian Dinars during 2014.

According to the Central Bank of Jordan, the increased international investment at the end of 2015 showed an increase in the external net liabilities of the Kingdom, which reached 24,357.5 million Jordanian Dinars, compared with 22,578.8 million Jordanian Dinars at the end of 2014. This was due to an increase in the external balance of assets and financial liabilities for all of the economic sectors in the Kingdom, which reached to 18,657.9 million Jordanian Dinars and 43,015.5 million Jordanian Dinars, respectively, during 2015.

Table 4: main economic indicators 2011 to 2015 in millions of dinars

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|--|----------|----------|----------|----------|----------|
| Population (millions) | 6.993 | 7.427 | 8.114 | 8.804 | 9.532 |
| Unemployment rate | 12.9 | 12.2 | 12.6 | 11.9 | 13.0 |
| Production and Prices | | | | | |
| GNP at current market prices | 20,288.8 | 21,690.0 | 23,611.2 | 25,141.2 | 26,289.6 |
| GDP at current market prices | 20,476.6 | 21,965.5 | 23,851.6 | 25,437.1 | 26,637.4 |
| The rate of growth in GDP at constant market prices (%) | 2.6 | 2.7 | 2.8 | 3.1 | 2.4 |
| The total national disposable income at current prices | 23,743.5 | 24,774.9 | 28,424.5 | 30,302.1 | 30,234.7 |
| The rate of growth in gross national disposable income at current prices (%) | 4.7 | -0.2 | 8.6 | 3.1 | -2.4 |
| Change in the index of consumer prices (%) | 4.2 | 4.5 | 4.8 | 2.9 | -0.9 |
| The change in the GDP deflator (%) | 6.4 | 4.5 | 5.6 | 3.4 | 2.3 |
| Money and Banking | | | | | |
| Exchange rate of the Jordanian dinar to the US dollar | 1.410 | 1.410 | 1.410 | 1.410 | 1.410 |
| Money supply (P2) | 24,118.9 | 24,945.2 | 27,363.4 | 29,240.4 | 31,605.5 |
| Net foreign assets of the banking system | 9,370.1 | 6,665.5 | 6,923.4 | 7,932.3 | 8,137.3 |
| Net domestic assets of the banking system | 14,748.8 | 18,279.7 | 20,440.0 | 21,308.1 | 23,468.2 |
| Net debt of the government | 6,701.4 | 9,461.3 | 10,494.8 | 10,473.9 | 11,386.4 |
| Private sector debts (Residents) | 14,925.0 | 15,953.6 | 17,222.5 | 17,852.8 | 18,704.5 |
| Other factors ⁽¹⁾ | -6,877.6 | -7,135.2 | -7,277.3 | -7,018.5 | -6,622.7 |
| Deposits in dinars at licensed banks | 19,119.1 | 17,711.1 | 21,003.0 | 24,013.1 | 26,014.5 |
| Foreign currency deposits at licensed banks | 5,258.8 | 7,258.6 | 6,590.2 | 6,247.9 | 6,584.0 |
| Rediscount rate (%) | 4.50 | 5.00 | 4.50 | 4.25 | 3.75 |
| Treasury bills interest rate for 6 months (%) | 3.232 | 3.788 | - | - | - |
| Public Finance | | | | | |
| Total revenue and foreign aid | 5,413.9 | 5,054.2 | 5,758.9 | 7,267.6 | 6,796.4 |
| Ratio to GDP (%) | 26.4 | 23.0 | 24.1 | 28.6 | 25.5 |
| Total spending | 6,796 | 6,878.2 | 7,077.1 | 7,851.1 | 7,722.9 |
| Ratio to GDP (%) | 33.2 | 31.3 | 29.7 | 30.9 | 29.0 |
| Overall deficit/savings (on an accrual basis) | -1,382.7 | -1,824.0 | -1,318.2 | -583.5 | -926.5 |

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|----------|----------|----------|----------|----------|
| Ratio to GDP (%) | -6.8 | -8.3 | -5.5 | -2.3 | -3.5 |
| Net outstanding balance of the domestic public debt | 8,915.0 | 11,648.0 | 11,863.0 | 12,525.0 | 13,457.0 |
| Ratio to GDP (%) | 43.5 | 53.0 | 49.7 | 49.2 | 50.5 |
| Outstanding external public debt ⁽²⁾ | 4,486.8 | 4,932.4 | 7,234.5 | 8,030.1 | 9,390.5 |
| Ratio to GDP (%) | 21.9 | 22.5 | 30.3 | 31.6 | 35.3 |
| Foreign Trade and Balance of Payments | | | | | |
| Current account | -2,098.8 | -3,344.9 | -2,487.7 | -1,851.7 | -2,365.6 |
| Ratio to GDP (%) | -10.2 | -15.2 | -10.4 | -7.3 | -8.9 |
| Trade balance (Deficit) | -6,261.7 | -7,486.6 | -8,270.1 | -8,495.6 | -7,249.3 |
| Ratio to GDP (%) | -30.6 | -34.1 | -34.7 | -33.4 | -27.2 |
| Commodity exports | 5,684.5 | 5,599.5 | 5,617.9 | 5,953.6 | 5,558.3 |
| Imports of goods (FOB) ⁽³⁾ | 11,946.2 | 13,086.1 | 13,888.0 | 14,449.2 | 12,807.6 |
| Balance of services (net) | 896.0 | 1,332.3 | 1,209.5 | 1,778.9 | 1,286.4 |
| Income account (net) | -187.8 | -275.5 | -240.4 | -295.9 | -347.8 |
| Current transfers (net) | 3,454.7 | 3,084.9 | 4,813.3 | 5,160.9 | 3,945.1 |
| Capital and financial account (net) | 2,298.9 | 3,808.9 | 1,811.1 | 908.9 | 1,593.7 |
| Direct foreign investment in Jordan (net) | 1,055.0 | 1,074.3 | 1,281.2 | 1,426.7 | 905.1 |

Source: Monthly Statistical Bulletin, Central Bank of Jordan

1. Includes the debts of public and financial institutions and other factors, as shown in the Monetary Survey Agenda.
2. This represents the total balance of drawn loans, minus total repayments.
3. Does not include imports of non-resident entities.

2.4 The Jordanian Investment Environment

Investment Law No. 30 for 2014

Investment Law no. 30 for 2014 is considered an appropriate legislative framework to attract foreign investments and stimulate local investments. It is considered a competitor to other investment laws in the region because it contains many advantages, incentives, and guarantees, and it offers a range of incentives and benefits in and outside the Development and Free Zones. The law includes a series of public provisions, such as foreign investment guarantees (depositing and withdrawal of capital, investment management, and transfers) and the inadmissibility of the disbarment of investment property. The law offers provisions to settle investment disputes, protection, and encouragement of mutual investment agreements between the Kingdom and other countries.

The following shows the major incentives granted by the law:

❖ Incentives and Benefits outside the Development and Free Zones

- The production inputs for the industrial and crafts sectors are exempted from customs duties.
- The return of the general sales tax on the production inputs for the industrial and crafts sectors within 30 days.
- Production inputs and fixed assets of the industrial and crafts sectors are exempted from customs duties and are granted a reduction in general sales tax to 0%.
- Returning to the sales tax on the services needed to practice economic activity within 30 days.
- The goods that are necessary for the economic activities of the following sectors are exempted from customs duties and are subject to 0% general sales tax:
 - Agriculture and livestock, hospitals and specialised medical centres, hotels and touristic facilities, touristic entertainment and recreation centres, call centres, scientific research centres and laboratories, art and media production, convention centres and exhibitions, transfers and/or distributions and/or extraction of water, gas and oil derivatives, air transport, maritime transport, and railways.

❖ Incentives and Benefits inside the Development and Free Zones

- 5% income tax on the income generated from economic activity within the Development Zone.
- 5% income tax on income generated from economic activity in the industrial sector.
- Tax exemptions that are granted in the Kingdom on goods and services exports.
- Reduction of sales tax to 0% on goods and services that are used by the establishment in order to exercise its activity inside the Development Zone.
- 7% sales tax on specific services provided by a registered company in the zone when these services are consumed in the zone.

- Exemptions from customs duties except for a specified number of goods.

- ❖ **The Reduction of Income Tax in the Least Developed Areas for Regulation No. 44 for 2016**

- The reduction of income tax in the least developed areas for Regulation No. 44 for 2016 was approved. It aims to create an attractive environment for investments that promote economic development through the reduction of income tax outside the Development Zones and in the least developed areas in the Kingdom. The regulation specified the areas that are considered least developed and identified the activities that are excluded from this reduction.
- Under the provisions of Articles 4 and 5 of this regulation, the areas that were categorised as least developed and enjoy the reduction in income tax are divided into four categories; each category enjoys a reduction in income tax on their activities for a period of 20 years.
- Category A includes the Northern Valley District, Deir Alla District, Shouneh Al-Janoubieh District, the Southern Valley District, Rweished District, the Northern Desert District, the North Western Desert District, Al-Azraq Province, Al-Jiza District except for the borders of the new Al-Jiza municipality, Al-Moakar District except for the borders of Al-Moakar municipality, and the Governorate of Aqaba except for the Aqaba Special Economic Zone. The reduction rate for this category is 100%.
- Category B includes the Governorates of Maan, Tafileh, Karak, and Ajloun. The reduction rate for this category is 80%.
- Category C includes the Governorates of Jarash, Mafraq, and Irbid except the borders of the Greater Irbid Municipality. The reduction rate for this category is 60%.
- Category D includes the Governorates of Madaba, Balqa, Amman except for the Greater Amman Municipality, and Zarqa except for the borders of Zarqa Municipality and Russaifeh Municipality. The reduction rate for this category is 40%.

❖ **Trade and Free Trade Agreements**

The most important agreements are:

- Jordan joining the World Trade Organisation in 2000, which led to the opening of the markets of 150 countries for Jordanian exports in goods and services, and provided new opportunities of access to other countries within a clear and transparent environment of laws, regulations, and procedures.
- A series of regional trade agreements, such as the Jordan Partnership Agreement with the European Union, Agadir Agreement, Free Trade Arab Agreement, the free trade agreement between Jordan and the European Free Trade Association, and the adoption of the Euro-Mediterranean simplification of the rules of the Origin System, which includes the decision to simplify the rules of the origins of Jordanian products between Jordan and the European Union came into effect on July 19, 2016, and will remain in effect until December 31, 2026.

- A series of bilateral trade agreements with many countries, such as the free trade agreement between Jordan and the United States of America, the Qualified Industrial Zones Agreement, the free trade agreement between Jordan and Singapore, the free trade agreement with Turkey, the free trade agreement with Canada, and many other agreements.
- Jordan has signed more than 35 agreements with Arab and foreign countries in order to prevent double taxation between Jordan and these countries, thus protecting investors' rights.
- The Agreement of Promotion and Protection of Investments and the Movement of Capital between the Arab Countries was signed in 2000 with 11 Arab countries who are members of the Arab Economic Unity Council, in order to establish an appropriate environment for investments and economic cooperation between investors in the Arab countries, thus pushing and stimulating investment activities by providing encouragement and mutual protection for Arab investments.

Human Development Report for 2015

The Human Development Report that was issued by the United Nations Development Program in 2015 showed that Jordan fell 3 points to number 80. Please note that Jordan's place on the Human Development Report index value has improved slightly.

Global Competitiveness Report

The Kingdom's rank has improved by one point in the Global Competitiveness Report for the year 2016/2017, at 63 out of 138 countries compared to 64 out of 140 countries in the 2015/2016 report. It is considered an insignificant improvement, especially because of the reduction in the number of countries participating in this year's report. Amongst the Arab countries, Jordan was ranked after the United Arab Emirates, Qatar, the Kingdom of Saudi Arabia, Kuwait, and Bahrain, who were ranked 16, 18, 29, 34, and 39, respectively.

Doing Business Report

In the Doing Business Report that was issued by the World Bank Group, Jordan is still ranked 118, up one rank from the 2016 report, because of the variation in the performance of the different sub-indicators. Jordan ranked ninth among the Arab countries; the United Arab Emirates was ranked first among the Arab countries at 26, followed by Bahrain at 63 and Oman at 66.

2.5 The Economic Environment in the Short and Medium Term

Risks analysis implemented by BMI indicates that the Jordan's political and economic risks in the short and medium term are less than the overall average of the world and the Middle East. The state's risks and the operational risk are estimated to be within the acceptable levels. The international institutions' forecasts point out that the economic and foreign trade indicators are expected to achieve acceptable rates of growth with the exception of the continued increase in internal and external indebtedness.

Table 5: Assessment of short and long-term risks

| | Long term | | Short term | | Operational risks | State risks |
|--------------------|-----------|----------|------------|----------|-------------------|-------------|
| | political | Economic | political | economic | | |
| Jordan | 63.1 | 39.2 | 66.6 | 46.2 | 58.7 | 55.4 |
| Turkey | 60.2 | 49.4 | 58.4 | 56.9 | 55.9 | 56.1 |
| Egypt | 53.3 | 45 | 52.4 | 48.7 | 42.9 | 47.5 |
| Lebanon | 45.8 | 54 | 55.4 | 53.5 | 44.2 | 49.5 |
| West Bank and Gaza | 33.1 | 38.1 | 32.2 | 36.5 | 32.5 | 34.3 |
| Syria | 22.9 | 24.4 | 22.4 | 23.6 | 29.3 | 26.1 |
| Regional average | 49.4 | 46.9 | 51.2 | 48.7 | 46.6 | 48.3 |
| global average | 64.1 | 50.7 | 61.3 | 51.9 | 49.8 | 54.6 |

Source: the economy and state risks, IHS, 15/09/2016

Table 6: The most important key economic indicators 2016-2020

| Indicator | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|-------|-------|-------|-------|-------|
| The growth rate of GDP | 2.6 | 2.7 | 2.8 | 3.2 | 3.1 |
| GDP (in USD billions) | 39.6 | 42.1 | 44.8 | 47.8 | 50.9 |
| Population (In millions) | 9.8 | 10.1 | 10.4 | 10.7 | 11.0 |
| Consumer Price Index (% change) | -0.7 | 1.8 | 3.3 | 4 | 3.2 |
| Exports (in USD billions) | 7.3 | 7.6 | 8.2 | 8.8 | 9.6 |
| Imports (in USD billions) | 18.3 | 19.2 | 20.1 | 21.3 | 22.8 |
| Foreign direct investment, the net value (in USD billions) | 1.5 | 1.5 | 1.6 | 1.6 | 1.7 |
| Foreign direct investment, the net value (% of GDP) | 3.7 | 3.7 | 3.6 | 3.4 | 3.3 |
| Foreign exchange reserves (in USD billions) | 13.9 | 14.9 | 15.7 | 16.8 | 17.7 |
| Total external debt (in USD billions) | 24.4 | 27.8 | 30.7 | 33.7 | 36 |
| Total external debt (% of GDP) | 61.6 | 66 | 68.6 | 70.4 | 70.6 |
| Total external debt (% of foreign currency earnings) | 127.3 | 138.3 | 143.6 | 147.5 | 147.8 |

Source: the economy and state risks, IHS, 15/09/2016

3. Market Study

3.1 Project Description

This project is considered as an enterprise that which is specialized in the provision of quality agricultural services to the farmers for the improvement of the quality of the products, and the increase in the land productivity and efficiency for the products and crops. The services of the project will include the provision of the specialized advisory services in addition to renting and/or the sale of the equipments which are required for the improvement in the productivity of the agricultural lands, such as the automatic harvesting of olive and the operations of the tillage, fertilization and pesticides spraying, as well as the maintenance works for the green houses and the irrigation networks and/or the supplying of such when necessary.

3.2 Expected Services Description

The services of the project will include the following areas:

- The services of the agricultural advisories and guidance including:
 - The determination of the optimal methods for the agriculture practices whether in the rainfed or irrigated agricultures, the protected or exposed vegetable production as well as whether plantation of the vegetables or the fruits;
 - The application of the quality standards in the agricultural product (such as the good agricultural practices – GAP);
 - The methods of protection from pests and the agricultural diseases, that infect the agricultural crops; and
 - The best practices in fertilization and pest control, and the organic agriculture.
- The provision of the renting services of the productive agricultural equipments - such as the following:
 - The automatic harvesting for the olive;
 - The tillage equipments (the tractors – plough); and
 - The high efficiency equipment of spraying pesticides and protection from the agricultural diseases (the tractors – spray tank).
- The provision of the emergency and periodical maintenance services for the agricultural equipments and machines – such as the following:
 - The plastic greenhouses;
 - The irrigation networks;
 - The ponds of water collection;
 - The water pumps; and
 - The agricultural equipments.
- The supply of the agricultural equipment and supplies and/or installation of such when it is required. This includes:

- The plastic greenhouses;
- Irrigation networks;
- The ponds of water collection;
- The fertilizers and the pesticides of different kinds
- The seeds and seedlings;
- The water tanks (the fixed and moveable); and
- Modern technologies using the solar and wind energy.

3.3 Demand Analysis

The governorate of Madaba is distinguished by the variety of its topography, where it is famous of the wide flat plains, which provide the Kingdom with plentiful quantities of the field crops, in addition to its abyssal and semiarid zones that are considered very important sources for the production of vegetables, fruits (especially, the grapes) and olive. Almost of 63% of the lands in the governorate of Madaba are agricultural lands (as per the data of the directorate of agriculture).

The demand on the services of this project depends on the size and type of the agriculture existing in the region. The following table shows the most important types of agriculture in the governorate:

Table 7: the most important types of the agricultures in the governorate of Madaba for the season of 2014 - 2015

| Item | Irrigated Area (dunum) | Rainfed Area (dunum) | Total (dunum) |
|--------------------------------|------------------------|----------------------|----------------|
| Olive | 7,000 | 62,000 | 69,000 |
| Field crops | - | 60,108 | 60,108 |
| Vegetables in all kinds | 9,133 | 9,570 | 18,703 |
| Fruits (specially: the grapes) | 6,400 | 3,420 | 9,820 |
| Other | 724 | - | 724 |
| Total | 23,257 | 135,098 | 158,355 |

Source: directorate of agriculture in Madaba governorate

Noting that the total area of the lands used in agriculture is 220,000 dunum, whereas the area of the arable lands in Madaba reach to 300,000 dunum. Therefore, the rate of the actual planted area in the season of 2014 – 2015 composes 72% and 53% out of the lands used in agriculture and the arable lands respectively. From another aspect, the number of the plastic greenhouses (the protected farming of vegetables) in Madaba is 1,570 units with an area 0.5 dunum for each house.

The demand on the agricultural advisory services is affected by the following factors:

- The increase of farmer's awareness about the importance of the modern agricultural technologies;
- The seasonality as demand is affected by the farming and preparation times.
- The increase of the competition between the producers (farmers); and
- The increase of the demand on the agricultural product; especially for the export purposes.

The demand on the services of renting equipment is affected by the following factors:

- The seasonality in agricultural production;
- The distance from the project to the location of the farm; and
- The competition from individual suppliers.

The demand on the services of the machinery and the equipment maintenance is affected by the following factors:

- The awareness of the farmers and their capability to properly manage their farms;
- The technical skills of the workers in the agricultural sector;
- The operating life for the equipment; and
- The seasonality; especially within the preparation period.

The demand on the supply services is affected by the following factors:

- The seasonality; where the type of the supplied product varies according to stage (the preparation, care, harvesting);
- The level of the agricultural growth and the need of the farmers to increase; and
- The climate and topography of the region.

The demand on the proposed services of the project varies based on the following elements:

- The comprehensiveness of the provided services;
- The professional capacity and efficiency of the workers in the project;
- The responsiveness of the project and the fulfillment of the client's needs.
- The quality of the used equipment; and
- The competitive prices.

The demand on the services of the project is measured based on the kind of the provided services as follows:

- The advisory services: the number of the advisories provided per annum;
- The rental service: the rate of operation (occupation) of the equipment within the season;

- The periodical maintenance services: the number of the annual contracts which are signed with the owners of farms;
- The emergency maintenance services: the number of the annual field visits
- The supply and/or installation services: the number of the systems which are supplied and/or installed from each type of the provided services; and
- The number of the plastic green houses in the region.

3.4 Supply Analysis

The supply of the project products and services is affected by number of the agricultural enterprises, which provide similar services in the governorate of Madaba. The following table shows the number of the agricultural companies and enterprises working in the region, in addition to the types of services that they provide.

Table 8: The agricultural services enterprises working enterprises in Madaba

| Region | Number of agricultural enterprises | Olive oil Refineries | Plant nurseries | Exhibitions | Veterinary services |
|-------------------------|------------------------------------|----------------------|-----------------|-------------|---------------------|
| Qasabet Madaba District | 9 | 2 | 2 | 4 | 9 |
| Garena District | 2 | 1 | 0 | 0 | 0 |
| Lob & Mleeh District | 0 | 0 | 0 | 0 | 1 |
| Total | 11 | 3 | 2 | 4 | 10 |

The agricultural services enterprises are considered the main competitors for the project; however while reviewing the actual services which are provided by these enterprises, their competition will be limited due to the nature and type of the services that will be provided by the project.

While analyzing the demand and supply on the project services, the following points are noted:

- The project does not face any real competition due to the limitation of the services which are provided by the competitive entities; and
- There is an impelling need for the services of the project, for which the farmer has to go to Amman to get it.

3.5 Price Analysis

A field study has been made by meeting with a group of the agricultural services providers who have experience and know-how for the purpose of determining the current prices for the services of the project in addition to visit of the directorate of agriculture in Madaba to identify the types and prices of services which are provided by the stores of the agricultural services in Madaba. The following table shows the average prices of services that will be provided by the project as per the type of the provided services, where the study shows the following:

Table 9: the average selling in the similar projects

| Service | Current market price | Unit |
|--|----------------------|--|
| Guidance and advisory services | 25 | Jordanian Dinars per visit |
| The rental of the equipment for harvesting the olive (with labor) | 50 | Jordanian Dinars per day |
| The tillage service (tractor and plough) | 10 | Jordanian Dinars per dunum |
| The service of spraying the pesticides (tractor and spraying tank) | 10 | Jordanian Dinars per dunum |
| The services of the emergency maintenance (without spare parts) | 20 | Jordanian Dinars per visit |
| The services of the periodical maintenance (12 visits per annum) | 200 | Jordanian Dinars per contract (for one year) |
| The cost of the plastic green house (0.5 dunum) | 1,650 | Jordanian Dinars per house |
| Drip irrigation network | 150 | Jordanian Dinars per dunum |
| The excavation and preparation of the water collection ponds (without equipment) | 1 | Jordanian Dinars per cubic meter |
| The fertilizers and pesticides (an average) | 400 | Jordanian Dinars per dunum |
| The movable water tanks (delivery of water) (20 m ³) | 30 | Jordanian Dinars per delivery |
| The systems of alternative energy (the generation of electricity from the solar energy and wind) | 1,000 | Jordanian Dinars per Kilowatt (KW) |
| The agricultural pumps | 500 | Jordanian Dinars per pump |
| The systems of heating plastic green houses for the frost resistance | 300 | Jordanian Dinars per house |

3.7 Marketing strategy

The targeted market

The project targets the farmers in all the agricultural regions in Madaba and the surrounding regions. This includes the following regions:

- Qasabet Madaba District;
- Dhiban District;
- The southern area of the capital – including: regions of Naour, Al-Jizah and Umm Al-Rasas; and
- The region of Wadi al-Mujib in the governorate of Karak

The expected services and products

The expected services of the project will include the following items:

- The provision of advisory and guidance services to the farmers on right agricultural practices and the use of the suitable materials.
- Leasing high productivity agricultural equipment.
- Emergency and periodical maintenance for machining and equipment, such as: irrigation networks, water ponds and pumps, and green houses.
- The supply of agricultural production inputs, such as fertilizers, pesticides and seeds in addition to supervising the implementation of the agricultural processes using modern equipment to ensure highly efficient implementation.
- The supply and/or installation of agricultural equipment and supplies, such as water ponds and tanks, irrigation networks and green houses.
- The supply and/or installation of other machinery and equipment, including modern technology systems to generate the electricity and to provide heat for the plastic green houses using clean renewable energy.

The project will focus on the provision of comprehensive and integrated services with an added value, which help the farmer in increasing the productivity of his land through getting the service from one entity as follows:

- Qualifying a distinguished technical cadre of specialized agricultural engineers and workers for the supervision and implementation of the required services;
- The company credibility and punctuality;
- Maintaining the project tools and equipment and insuring their readiness continuously;
- Contracting local supplies (sub-contractors) from the residents of the region;
- Focusing on quality of the materials with high value leading to agricultural production cost savings
- Providing after sales and follow up services for the farmers to ensure that the works properly are implemented.

The expected prices

The price strategy includes the provision of the services of prices which are in line with the market prices and fulfill the farmers needs and requirements, in addition to being distinguished from the other suppliers in terms of the follow up and participation in implementing the provided services, as well as providing the after sales services as shown in the following table:

Table 10: the prices of the project services

| Service | The expected sales price (in Jordanian Dinar) | Unit |
|--|---|--|
| Guidance and advisory services | 25 | Jordanian Dinars per visit |
| The rental of the equipments for harvesting the olive (with labor) | 50 | Jordanian Dinars per day |
| The tillage services (tractor and plough) | 10 | Jordanian Dinars per dunum |
| The service of spraying the pesticides (tractor spraying tank) | 15 | Jordanian Dinars per dunum |
| The services of the emergency maintenance (without spare parts) | 25 | Jordanian Dinars per visit |
| The services of the periodical maintenance (12 visits per annum) | 200 | Jordanian Dinars per contract (for one year) |
| The revenue of the installation of the plastic green house (0.5 dunum without frame) | 300 | Jordanian Dinars per house |
| The installation of the drip irrigation network | 40 | Jordanian Dinars per dunum |
| The excavation and preparation of the water collection ponds (without pump or network) | 1 | Jordanian Dinars per cubic meter |
| The fertilizers and pesticides (an average) | 400 | Jordanian Dinars per dunum |
| The movable water tanks (delivery of water) (20 m ³) | 30 | Jordanian Dinars per delivery |
| The systems of alternative energy (the generation of electricity from the solar energy and wind) | 1,000 | Jordanian Dinars per Kilowatt (KW) |
| The agricultural pumps | 500 | Jordanian Dinars per pump |
| The systems of heating plastic green houses for the frost resistance | 300 | Jordanian Dinars per house |

* Modern technologies and effective equipment will be used in the process of spraying pesticides, which lead to using less quantity of pesticides. Accordingly the expected selling price for the project will be higher than the current price in the market.

Promotion

The promotion strategy of the project will include the following items:

- The preparation of attractive guiding manuals and brochures to motivate the farmer to demand the service;
- The establishment of a data base of all farmers and the type of their products to communicate with them continuously;
- Advertising in the weekly advertising newspapers about the services of the project as per the season;
- Design and launch an electronic website and a page in social media;
- The organization of periodical meetings with the farmers to offer the services of the project; and
- The participation in the agricultural events, which are held in the governorate.

Selling

The sale strategy of the project will include the following items:

- The provision of the services to the farmer through the main showroom in the center of the governorate;
- The provision of an integrated service to the farmer as per their needs;
- The provision of the direct services, such as fertilization, pesticides spraying, harvesting and protection in the farm location under direct supervision of the project engineers and the workers; and
- The provision of the after sales services, such as the maintenance and follow up.

3.8 The Expected Market Share

The expected sales

Based on the demand and supply data, it is expected that the project will achieve good revenues due to the impelling need for the services of the project, as follows:

Table 11: The expected sales of the project

| Service | The expected selling price | Unit | Quantity in the first year | The revenues in the First year (in thousand Jordanian Dinars) | Remarks |
|--|----------------------------|--|----------------------------|---|--|
| Guidance and advisory services | 25 | Jordanian Dinars per visit | 288 | 7 | 24 visits in the month |
| The rental of equipment for harvesting the olive (with labor) | 50 | Jordanian Dinars per day | 450 | 23 | 6 devices – 75 days in the season |
| The tillage service (tractor and plough) | 10 | Jordanian Dinars per dunum | 5,400 | 54 | 6 tractors – 2 rounds – 2 seasons – 60 days in the season – 5 dunum in the day |
| The service of spraying the pesticides (tractor and spraying tank) | 15 | Jordanian Dinars per dunum | 8,100 | 122 | 6 tractors – 2 rounds – 2 seasons – 90 days in the season – 5 dunum in the day |
| The services of the emergency maintenance (without spare parts) | 25 | Jordanian Dinars per visit | 300 | 8 | - |
| The services of the periodical maintenance (12 visits per annum) | 200 | Jordanian Dinars per contract (for one year) | 30 | 6 | - |
| The revenue of the installation of the plastic green house (0.5 dunum without any frame) | 300 | Jordanian Dinars per house | 100 | 30 | - |

| Service | The expected selling price | Unit | Quantity in the first year | The revenues in the First year (in thousand Jordanian Dinars) | Remarks |
|--|----------------------------|------------------------------------|----------------------------|---|---|
| The installation of the drip irrigation networks | 40 | Jordanian Dinars per dunum | 2,000 | 80 | - |
| The excavation and preparation of the water collection ponds (without pump or network) | 1 | Jordanian Dinars per cubic meter | 10,500 | 11 | 15 ponds – average of 700 m ³ each bound) |
| The fertilizers and pesticides | 400 | Jordanian Dinars per dunum | 1,000 | 400 | - |
| The movable water tanks (delivery of water – 20 m ³) | 30 | Jordanian Dinars per transport | 1,000 | 30 | - |
| The systems of modern technologies to generate electrically from alternative energy | 1,000 | Jordanian Dinars per Kilowatt (KW) | 30 | 30 | 12 systems at the average of 2.5 Kilowatt for every system |
| The agricultural pumps | 500 | Jordanian Dinars per pump | 42 | 21 | 15 pumps for the ponds – 5% of the maintenance services include changing the pumps – 12 pumps as sales in of the showroom |
| The systems of heating plastic green houses | 300 | Jordanian Dinars per house | 50 | 15 | 50% of the modern houses |
| The sales of other equipment inside the showroom (the equipment of harvesting, spaying, plastic pipes, etc.) | 1,500 | Jordanian Dinars per month | 12 | 18 | - |
| The total amount of the revenues in the First year | | | | 853,000 | |

The following table states the expected sales of the project in the first five years of operation.

Table 12: the expected sales of the project (In thousand Jordanian Dinars)

| Statement | The first year | The second year | The third year | The fourth year | The fifth year |
|---|----------------|-----------------|----------------|-----------------|----------------|
| Guidance and advisory services | 7 | 8 | 8 | 8 | 9 |
| The rental of equipment for harvesting the olive | 23 | 24 | 25 | 26 | 27 |
| The tillage service of the tiller (tractor and plough) | 54 | 57 | 60 | 63 | 66 |
| The service of spraying the pesticides (tractor and spraying tank) | 122 | 128 | 134 | 141 | 148 |
| The services of the emergency maintenance (without spare parts) | 8 | 8 | 8 | 9 | 9 |
| The services of the periodical maintenance (12 visits per annum) | 6 | 6 | 7 | 7 | 7 |
| The revenue of the installation of the plastic green house (0.5 dunum without frame) | 30 | 32 | 33 | 35 | 36 |
| The installation of drip irrigation networks | 80 | 84 | 88 | 93 | 97 |
| The excavation and preparation of the water collection ponds (without pump or network) | 11 | 11 | 12 | 12 | 13 |
| The fertilizers and pesticides | 400 | 420 | 441 | 463 | 486 |
| The movable water tanks (delivery of water) (20 m ³) | 30 | 32 | 33 | 35 | 36 |
| The systems of modern technologies to generate electricity and heat plastic green houses as well as other equipment | 84 | 88 | 93 | 97 | 102 |
| The total amount of revenues – in thousand Jordanian Dinars | 853 | 896 | 941 | 988 | 1,037 |

4. Technical Study

4.1 The Designed Project Capacity

The following table shows the area required for the project. For the purpose of reaching the design capacity, it is required to purchase a 4,000 m² plot of agricultural land and build a hangar on it to store the tractors and agricultural equipments, as well as prepare the external storage areas. In addition, the project includes the rental of a store in the center of the governorate to as showroom receive and serve the farmers including of direct sales of some materials and equipment.

Table 13: the required area for the project

| item | Unit (in m ²) |
|---|---------------------------|
| The land | 4,000 |
| The building of one hangar in addition to varied preparations | 300 |
| The development for the external area | 1,000 |
| One room for a guard | 15 |
| The rental of the shop (showroom) | 80 |

4.2 The Required Fixed Assets

The following table shows the required resources for the project:

Table 14: the required resources

| Item | Unit | Unit Price | Vale (in Jordania n Dinar) |
|--|-------|------------|----------------------------|
| The land (in square meter) | 4,000 | 20 | 80,000 |
| The building of one hangar in addition to varied preparations (in square meter) | 300 | 120 | 36,000 |
| the development of the external areas in square meter | 1,000 | 40 | 40,000 |
| One room for a guard in square meter | 15 | 200 | 3,000 |
| the decorations of the shop in square meter | 80 | 125 | 10,000 |
| The transport media | 2 | 20,000 | 40,000 |
| The tractors | 6 | 20,000 | 120,000 |
| The information technology (lump sum) | - | 5,000 | 5,000 |
| The preparations and equipments (ploughs – spraying tanks – the equipment of harvesting the olive – etc. | - | 25,000 | 25,000 |
| The total amount | | | 359,000 |

* The numbers were estimated based on the study of the market

4.3 The Required Human Resources

The following table shows the human resources required for the project. The required number of the employees is about 24 employees, with annual salaries reaching to a total amount of JD 158,400 as follows:

Table 15: the human resources required for the project

| Job Title | Number of employees | Monthly Salary (JD) | Total annual salary (JD) | The operational employees | The administrative employees |
|--|---------------------|---------------------|--------------------------|---------------------------|------------------------------|
| General manager | 1 | 1,500 | 18,000 | - | 18,000 |
| Accountant / Treasurer | 2 | 500 | 12,000 | - | 12,000 |
| Field agricultural engineer | 2 | 1,000 | 24,000 | - | 24,000 |
| Agricultural engineer (procurements – sales) | 2 | 750 | 18,000 | - | 18,000 |
| Receptionist - stores | 2 | 350 | 8,400 | - | 8,400 |
| Guard | 2 | 350 | 8,400 | - | 8,400 |
| A driver of the tractor | 6 | 500 | 36,000 | 36,000 | - |
| Agricultural workers | 7 | 400 | 33,600 | 33,600 | - |
| The total amount | 24 | - | 158,400 | 69,600 | 88,800 |

The following table also shows the general job descriptions for the jobs required in the project.

Table 16: the general job description for the jobs required in the project

| Job Title | The job description |
|-----------------|---|
| General manager | <ul style="list-style-type: none"> ▪ The planning, organization, coordination and control of matters related to the internal management of the company; ▪ The participation in the determination of the company policy and the management of operational activities related to the work; ▪ The preparation and implementation of the marketing policies as well as the achievement of the targeted sales; ▪ The review of the administration reports, the supervision the analysis process and solving problems; ▪ The technical and administrative supervision of the employees and upgrading their efficiencies; and ▪ Taking into consideration the application of the instructions of safety and occupational health regulations. |

| Job Title | The job description |
|--------------------------------------|---|
| Field - Agricultural engineer | <ul style="list-style-type: none"> ▪ The study of how to increase the productivity and improve the nutritional value for the plant; ▪ The supervision of the agricultural operations to upgrade the productivity of the seeds and seedlings, using also the Genetic Engineering as per the supplying companies; ▪ The supervision of the agricultural services provided for the clients – such as: the installation of the irrigation networks, the plastic green houses, pumps, and others; ▪ The provision of guidance required for the farmers on how to protect their production concerning the aspects of harvesting, fertilizing, pruning, trimming and the efficient use of the pesticides; ▪ The study of the chemical, physical, biological and mineral components of the soil; ▪ The determination of the suitable types of the plants to grow in different kinds of soil; ▪ The implementation of researches on the impact of the climatic and environmental elements for the efficiency, quality and productivity of soil; and ▪ The provision of the farm owners with guidance about the schedules for using pesticide and the efficient way for pest control. |
| Agricultural engineer - procurements | <ul style="list-style-type: none"> ▪ The organization and keeping the records and forms of the department of procurements, as well as the data entry of such; ▪ The participation in planning and the preparation of the executive programs for the department of procurements; ▪ Checking the capabilities of the suppliers to fulfill the requirements of the purchase orders and the request of quotation; and ▪ The preparation of the register of suppliers and the participation in the preparation of the balance sheets of the procurements department. |
| Agricultural engineer - sales | <ul style="list-style-type: none"> ▪ The marketing and promotion for the services of the company for the farmers in the region as well as the explanation of the importance of using the modern and effective agricultural techniques to upgrade the productivity level of the agricultural lands; ▪ Ensuring the provisioning services and receiving the cash funds and revenues; ▪ The implementation of the executive policies and programs of the department of sales in addition to the implementation of the approved sales policy and all work orders; ▪ The implementation of all tasks which are required by the general |

| Job Title | The job description |
|-------------------------|--|
| | <p>manager related to the department of marketing and sales; and</p> <ul style="list-style-type: none"> ▪ The submittal of a weekly report to the general manager to state what is achieved and what is postponed with justification statement. |
| Receptionist | <ul style="list-style-type: none"> ▪ The reception of the clients and the registration of their requests; ▪ Ensuring tidiness of the department that he works at; ▪ Providing guidance to the clients on the different products of the company as per their needs; ▪ The preparation of the invoices for the clients; and ▪ The supply of the cash funds received to the treasure. |
| Treasurer | <ul style="list-style-type: none"> ▪ The receipt of the cash funds from the clients or the reception as per the invoices; and ▪ Preserving the cash funds and sending it to the approved bank. |
| Accountant | <ul style="list-style-type: none"> ▪ The registration of the accounting transactions and the preparation of monthly statements of accounts to be sent to all of the clients and suppliers; and ▪ The review and matching the balances of bank account statements accounts in the company records with the statements of accounts received from these banks. |
| Store Keepers | <ul style="list-style-type: none"> ▪ The request of the materials upon reaching to the reorder point; ▪ The follow up of the preparation of the inventory cards and the registration of the required information on it, as well as updating then borrowed procedures continuously; ▪ The registration and re-receipt of the materials from the store by the employees as per; ▪ Holding the full responsibility for the assets of the store; and ▪ Taking into consideration the application of the basics of safety and occupational health in the store. |
| Administrative employee | <ul style="list-style-type: none"> ▪ The provision of help in all the aspects of the administrative organization and the coordination between the departments and units that are working on finding the solutions for the administrative and operational problems on a daily basis; ▪ The preparation of the schedules and the coordination for the meetings, interviews, events and other similar activities; ▪ Sending and receiving the mails and parcels as well as the preparation of the correspondences; and ▪ Keeping and updating the files of personnel affairs. |
| Worker | <ul style="list-style-type: none"> ▪ The performance of the agricultural services required for the clients as per order (the installation of the irrigation networks and devices – the plastic green houses – pumps - ... etc.); ▪ The conservation of the cleanliness of the used tools and machines; ▪ The conservation of the cleanliness of the company and its |

| Job Title | The job description |
|-----------|---|
| | readiness; <ul style="list-style-type: none"> ▪ Reporting any breakdowns in the equipments and machines; and ▪ The request of the materials from the store to ensure the fulfillment of the needs of the clients and their comfort. |
| guard | <ul style="list-style-type: none"> ▪ The guardianship of the location of hangar; and ▪ Ensuring the security and safety of the equipment and fixture. |

4.4 The special requirements

The following table states the special instructions and requirements set for the offices and shops that use and provide the service of the pesticides.

Table 17: the special requirements of using the pesticides set for the offices and shops of the agricultural services as per the instructions issued by Ministry of Agriculture no. (K/ 18) and the instructions no. (K/ 21) of 2016.

| Statement | Terms and conditions |
|--|---|
| The license of an office and shop of the services of spraying the pesticides | The applicant of the license for an office or shop of the services of spraying the agricultural pesticides shall have any of the following qualifications or have contracted with any of the following: <ul style="list-style-type: none"> ▪ He shall be a Jordanian national and resident in The Hashemite Kingdom of Jordan; ▪ He shall have a bachelor degree in agricultural sciences – plants protection or agricultural production; ▪ He shall have a bachelor degree in agricultural sciences from the other majors with an experience in this field for two years at least; ▪ He shall have an agricultural diploma with an experience in this field for three years at least; ▪ The agricultural engineer shall be practitioner of this career from the syndicate of agricultural engineers and shall work on full time basis with an actual and permanent way. In case of making a contract, he shall hold the joint and several liability with the owner of the shop in all what is related to the application of these instructions; and ▪ The applicant of the license shall have workers who have been trained and licensed to perform the services of spraying and they shall have the sufficient experience in the field of spraying. |
| The store and the building | <ul style="list-style-type: none"> ▪ The space shall be at least 16 M2; ▪ The ground of the store shall be a waterproof and not slippery easily; ▪ The means of fire extinguishers and the clear instructions on how to be used which are determined by the competent bodies shall be available in it; ▪ A source for water which is connected to the network of sewage disposal shall be available in it; and |

| Statement | Terms and conditions |
|--|---|
| <p>The terms and conditions that shall be followed when performing the process of spraying</p> | <ul style="list-style-type: none"> ▪ It shall be a place which it is easily reachable by all the kinds of mechanisms – including: the fire fighting cars. ▪ It is prevented to use any pesticides that are not registered or approved by the Ministry of Agriculture; ▪ The applicant of the license of the spraying services shall be an owner of the machines required for the processes of spraying; ▪ The applicant of the license shall assign special equipment for the weed control and he shall not allow to use these equipments for any other spraying processes. As well as he shall take the full responsibility for the damage resulted from its use for the other spraying processes and under the pain of liability; ▪ He shall keep protective clothing specialized for the work – such as: (uniform – glasses – sleeves – paws – protective shoes) during the processes of spraying as well as first aid kit; ▪ He shall abide by the instructions of using the pesticide as mentioned in the technical pamphlet, which is enclosed or attached to the package, in addition to any instructions issued by the competent bodies in the Ministry of Agriculture; ▪ It is totally prevented to use the pesticides in a concentration other than the recommended on the stickers or the technical pamphlets enclosed to the pesticides; ▪ It is prevented for the children or those who are under the age of maturity to perform the processes of spraying; ▪ It is prevented to spray the pesticides on any plant or plant products which are not recommended to be used for it; or to perform the process of spraying in any time other than the time which is recommended in the technical pamphlet of the pesticides or the competent bodies in the Ministry of Agriculture; ▪ The empty packages shall be disposed in an environmental safe ways and as per the instructions set by the Ministry of Environment; and ▪ It is a must to put prominent red signs on the borders of the sprayed areas which show the risk of the place and the non entrance to it. It is also a must that these signs shall include the time of harvesting the crops and the termination of the danger of the pesticide (the safety period of the pesticide) and these signs shall be remain till the end of the determined period. |

4.5 The Required Licenses

The following table states the licenses required from the different competent bodies for the implementation of the project:

Table 18: the licenses required for the project

| Statement | Analysis |
|---------------------------------|---|
| The registration of the company | <ul style="list-style-type: none"> ▪ Ministry of Agriculture - General Directorate of Protection ▪ Ministry of Industry, Trade and Supply |
| The license of the building | <ul style="list-style-type: none"> ▪ The Municipality |
| The actual operation | <ul style="list-style-type: none"> ▪ The Municipality – Social Security Corporation – Income and Sales Tax Department |

4.6 Project Timetable

The following table shows the time table for the implementation of the project which is 12 months, this is as follows.

Table 19: the term of the implementation of the project

| Stage | The first year (by month) | | | | | | | | | | | |
|---|---------------------------|---|---|---|---|---|---|---|---|----|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| The purchase of the land and the rental of the shop | █ | █ | | | | | | | | | | |
| The studies and the registration of the company | | | █ | █ | █ | | | | | | | |
| The building and finishing | | | | | | █ | █ | | | | | |
| The preparation and the purchase of the equipments | | | | | | | | █ | █ | █ | █ | |
| commissioning and trial operation tests for the project | | | | | | | | | | | | █ |
| The total term | 12 months | | | | | | | | | | | |

5. Financial Study

5.1 Financial Assumptions

The following table illustrates the financial assumptions of the project.

Table 20: The Financial Assumptions of the Project

| Item | Assumption |
|--------------------------|---|
| Inflation Rate | 3% |
| Financing | Equity constitutes 100% of the investment |
| Working Capital | 3 months of total cost |
| Pre-Operating Expenses | 2% of total investment |
| Tax Rate | 20% |
| exemptions | Fixed assets are exempted from customs and tax exemptions by 40% of the income tax |
| Materials cost | 80% of Revenues of fertilizers, pesticides, water tanks, electricity generation systems, heating systems and others |
| Staff Benefits | 25% of salaries |
| Annual Salaries Increase | 5% |
| Staff Incentives | 4% of total revenues |
| Assets Depreciation Rate | 4%-20% of the asset value |
| Maintenance | JD 8 thousand at the first year, with 5% annual increase |
| Growth rate of expenses | 3% |
| Electricity and fuel | 5% of total revenues |
| Marketing expenses | 1% of total revenues |
| Insurance | JD 5 thousand at the first year, with 5% annual increase |
| Other operating expenses | JD 8 thousand at the first year, with 5% annual increase |
| Accounts Receivable | 1% of total revenues |
| Inventory | 20% of materials cost |
| Accrued expenses | 5% of operation costs |

5.2 Investment Cost

The project's Investment cost is estimated at JD 553 thousand distributed among fixed assets of JD 359 thousand, working capital of JD 183 thousand, and pre-operating expenses totaled of JD 11 thousand.

The following table shows the project's Investment cost.

Table 21: the project's investment cost

| Item | Value (in thousand JD) |
|------------------------|------------------------|
| Fixed assets | 359 |
| Pre-operating expenses | 11 |
| Working capital | 183 |
| Total | 553 |

5.3 Financing

The project will be fully financed by the partners' shares (shareholders) in the company by 100%.

Table 22: Project financing schedule

| Item | Value (in thousand JD) | % |
|--------------|------------------------|-------------|
| Equity | 553 | 100% |
| Loan | - | 0% |
| Total | 553 | 100% |

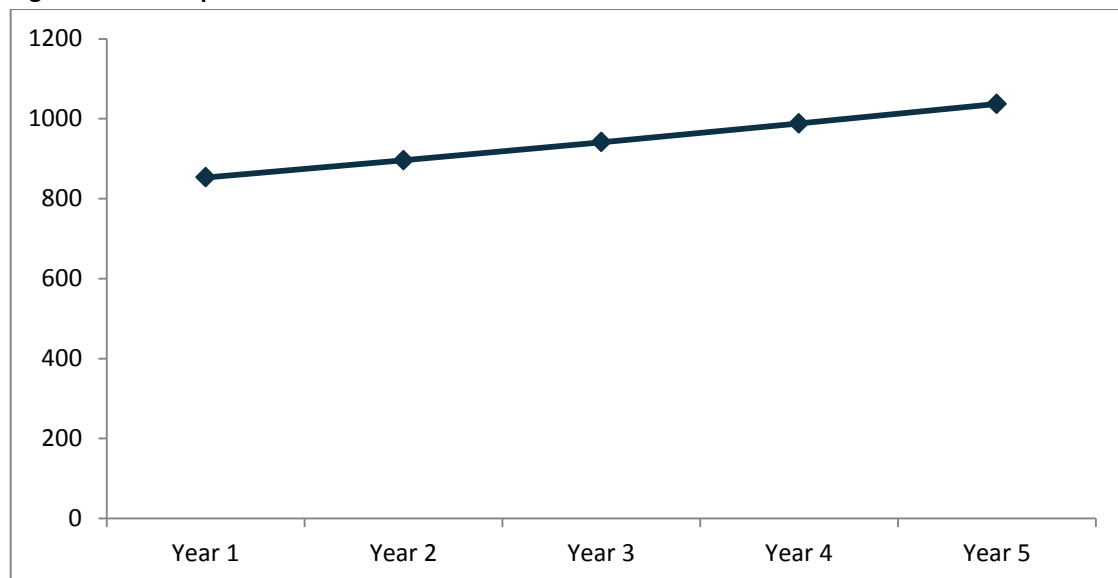
5.4 Revenues

The following table shows the total revenues of the project, where it is noted that the revenues in the first year amounts to about JD 853 thousand, and increased to reach up to JD 1 million in the fifth year, due to the increasing sales.

Table 23: The Expected Revenues

| Statement | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|------------|------------|------------|------------|--------------|
| Guidance and advisory services | 7 | 8 | 8 | 8 | 9 |
| The rental of equipment for harvesting the olive | 23 | 24 | 25 | 26 | 27 |
| The tillage service of the tiller (tractor and plough) | 54 | 57 | 60 | 63 | 66 |
| The service of spraying the pesticides (tractor and spraying tank) | 122 | 128 | 134 | 141 | 148 |
| The services of the emergency maintenance (without spare parts) | 8 | 8 | 8 | 9 | 9 |
| The services of the periodical maintenance (12 visits per annum) | 6 | 6 | 7 | 7 | 7 |
| The revenue of the installation of the plastic green house (0.5 dunum without frame) | 30 | 32 | 33 | 35 | 36 |
| The installation of drip irrigation networks | 80 | 84 | 88 | 93 | 97 |
| The excavation and preparation of the water collection ponds (without pump or network) | 11 | 11 | 12 | 12 | 13 |
| The fertilizers and pesticides | 400 | 420 | 441 | 463 | 486 |
| The movable water tanks (delivery of water) (20 m ³) | 30 | 32 | 33 | 35 | 36 |
| The systems of modern technologies to generate electricity and heat plastic green houses as well as other equipment | 84 | 88 | 93 | 97 | 102 |
| The total revenues – in thousand JD | 853 | 896 | 941 | 988 | 1,037 |

Figure 3: Total expected revenues



5.5 The Projected Costs

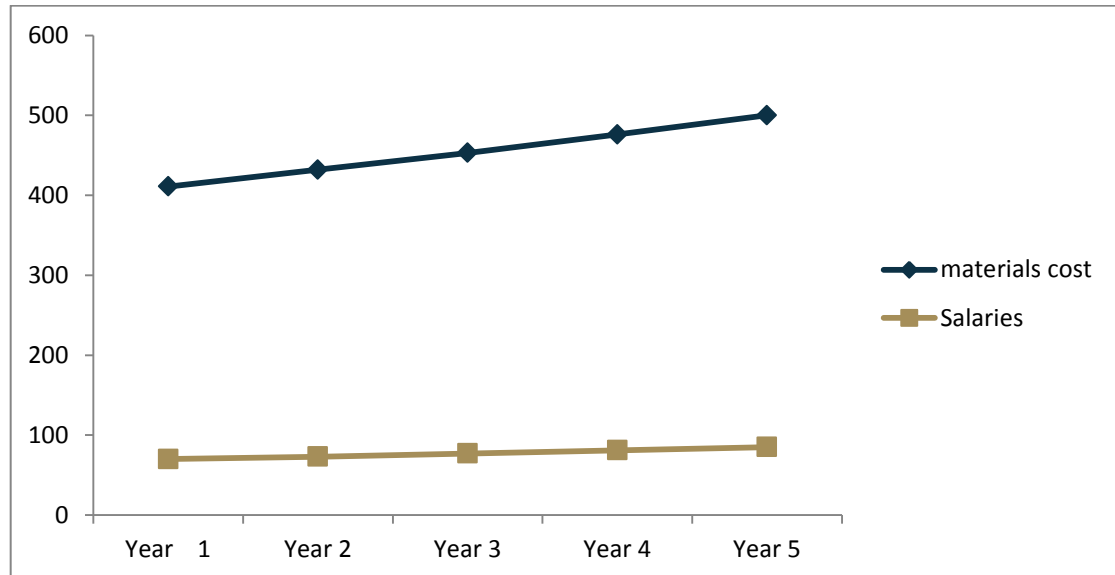
Operating Costs

The following table shows the project's operating costs according to the previous assumption over five years. The cost of materials in Year 1 amounted to JD 411 thousand which increase to reach JD 500 thousand in Year 5, while salaries in year 1 amounted to JD 70 thousand which increase to reach JD 85 thousand in Year 5.

Table 24: Operating Costs

| Operating Costs (in thousand JD) | | | | | |
|----------------------------------|------------|------------|------------|------------|------------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| materials cost | 411 | 432 | 453 | 476 | 500 |
| Salaries | 70 | 73 | 77 | 81 | 85 |
| Staff Benefits | 17 | 18 | 19 | 20 | 21 |
| Staff Incentives | 18 | 19 | 19 | 20 | 21 |
| IT Cost | 5 | 5 | 6 | 6 | 6 |
| Depreciation | 44 | 44 | 44 | 44 | 44 |
| Maintenance | 8 | 8 | 9 | 9 | 10 |
| Electricity, Gas, and fuel cost | 43 | 45 | 47 | 49 | 52 |
| Others | 8 | 8 | 9 | 9 | 10 |
| Total | 623 | 652 | 682 | 714 | 748 |

Figure 4: Operating Costs



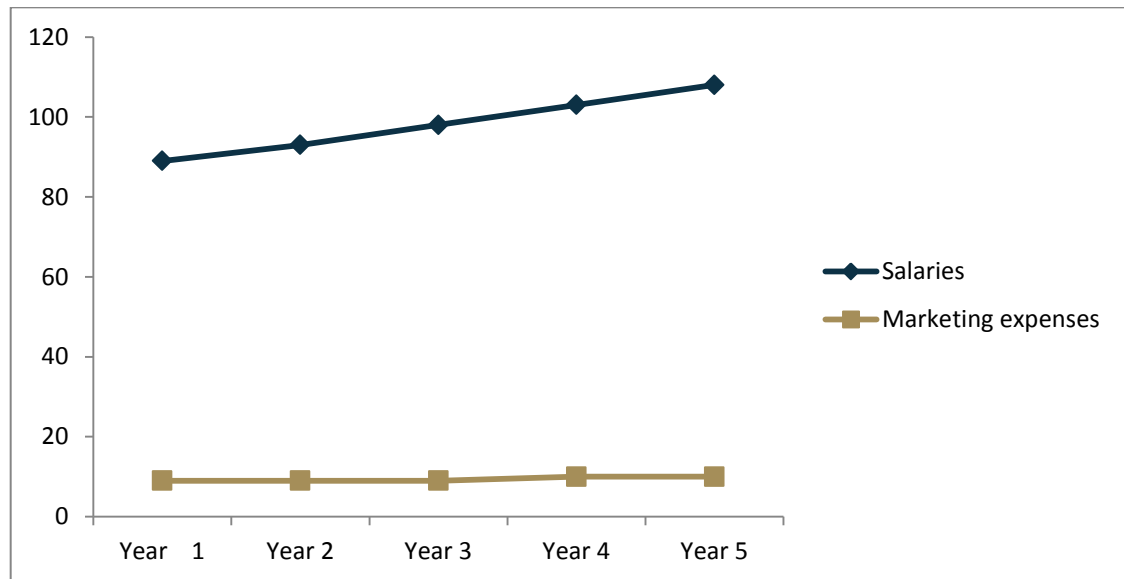
Administrative Expenses

The following table shows the projected administrative expenses of the project. Employees' salaries reach JD 89 thousand in the first year and increase to JD 108 thousand in the fifth year. The marketing expenses are about JD 9 thousand in the first year and increase to reach JD 10 thousand in the fifth year.

Table 25: General and Administrative Expenses

| General and Administrative Expenses (in thousand JD) | | | | | |
|--|------------|------------|------------|------------|------------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Salaries | 89 | 93 | 98 | 103 | 108 |
| Staff Benefits | 22 | 23 | 24 | 26 | 27 |
| Staff Incentives | 17 | 18 | 19 | 20 | 21 |
| Stationery | 4 | 4 | 4 | 5 | 5 |
| Professional Fees | 2 | 2 | 2 | 2 | 2 |
| Marketing expenses | 9 | 9 | 9 | 10 | 10 |
| Rental costs | 4 | 4 | 4 | 5 | 5 |
| Amortization | 11 | - | - | - | - |
| Other Expenses | 5 | 5 | 6 | 6 | 6 |
| Total | 163 | 159 | 167 | 175 | 184 |

Figure 5: General and Administrative Expenses



5.6 Projected Financial Statements

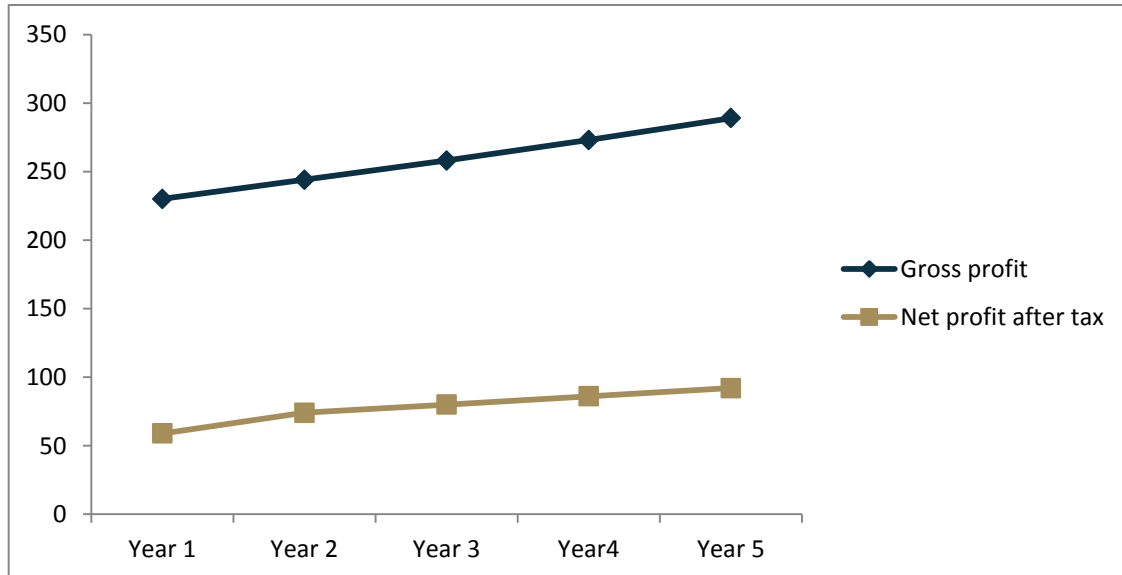
Income Statement

The following table shows the projected income statement of the project. It indicates that gross profit will increase from JD 230 thousand in the first year to JD 289 thousand in the fifth year. The net profit before tax will increase from JD 67 thousand in the first year to JD 105 thousand in the fifth year, while the net profit after tax will increase from JD 59 thousand in the first year to JD 92 thousand in the fifth year.

Table 26: The Projected Income Statement

| Income Statement (in thousand JD) | | | | | |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|
| Item | Year 1 | Year 2 | Year 3 | Year4 | Year 5 |
| Revenues | 853 | 896 | 941 | 988 | 1,037 |
| Operating costs (cost of sales) | 623 | 652 | 682 | 714 | 748 |
| Gross profit | 230 | 244 | 258 | 273 | 289 |
| Administrative expenses | 163 | 159 | 167 | 175 | 184 |
| Net profit | 67 | 85 | 91 | 98 | 105 |
| Net profit before tax | 67 | 85 | 91 | 98 | 105 |
| Tax | 8 | 10 | 11 | 12 | 13 |
| Net profit after tax | 59 | 74 | 80 | 86 | 92 |

Figure 6: Projected Income Statement



Projected Balance Sheet

The following table shows the projected balance sheet of the project during the first five years. It indicates that total assets will decrease from JD 553 million in the year of incorporation to about JD 802 thousand in the fifth year. The Total liabilities will increase from JD 31 thousand in the first year to about JD 37 thousand in the fifth year. Moreover, the Shareholders' Equity will increase from JD 553 thousand in the year of incorporation to reach JD 764 thousand in the fifth year.

Table 27: Projected Balance Sheet

| Projected Balance Sheet (in thousand JD) | | | | | | |
|--|-----------------------|--------|--------|--------|--------|--------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Assets | | | | | | |
| Cash | 183 | 232 | 347 | 411 | 477 | 544 |
| Receivables | - | 9 | 9 | 9 | 10 | 10 |
| Inventory | - | 82 | 86 | 91 | 95 | 100 |
| Pre- Paid Expenses | - | 5 | 5 | 6 | 6 | 6 |
| Total Current Assets | 183 | 328 | 447 | 516 | 587 | 660 |
| Fixed Assets | 370 | 370 | 370 | 370 | 370 | 370 |
| Cumulative Depreciation | - | 55 | 98 | 142 | 185 | 229 |
| Net Fixed Assets | 370 | 315 | 272 | 228 | 185 | 141 |
| Total Assets | 553 | 643 | 719 | 745 | 772 | 802 |
| Shareholders Equity and Liabilities | | | | | | |
| Accrued Expenses and Payables | - | 31 | 33 | 34 | 36 | 37 |
| Total Liabilities | - | 31 | 33 | 34 | 36 | 37 |
| Shareholders Contributions | 553 | 553 | 553 | 553 | 553 | 553 |
| Retained Earnings | - | 59 | 134 | 158 | 184 | 211 |
| Shareholders' Equity | 553 | 612 | 687 | 711 | 737 | 764 |
| Shareholders Equity and Liabilities | 553 | 643 | 719 | 745 | 772 | 802 |

Cash Flow Statement

The following table shows the projected cash flow statement of the project during the first five years. It indicates that the cash flow from operation will increase from JD 49 thousand in the second year to JD 132 thousand in the fifth year; while the Cash at the ending period will increase from JD 183 thousand in the year of incorporation to JD 544 thousand in the fifth year.

Table 28: The Expected Cash Flows Statement

| Cash Flow Statement (in thousand JD) | | | | | | |
|--------------------------------------|-----------------------|--------|--------|--------|--------|--------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Operation Activities | | | | | | |
| Net Profit | - | 59 | 74 | 80 | 86 | 92 |
| Depreciation | - | 55 | 44 | 44 | 44 | 44 |
| Change In Working Capital | - | (65) | (3) | (4) | (4) | (4) |
| Cash Flow From Operation | - | 49 | 115 | 120 | 126 | 132 |
| Investing Activities | | | | | | |
| Fixed Assets | (370) | - | - | - | - | - |
| Cash From Investing Activities | (370) | - | - | - | - | - |
| Financing Activities | | | | | | |
| Capital (Equity) | 553 | - | - | - | - | - |
| Loan | - | - | - | - | - | - |
| Dividends | - | - | - | (56) | (60) | (65) |
| Cash Flow From Financing Activities | 553 | - | - | (56) | (60) | (65) |
| Net Cash Flow | 183 | 49 | 115 | 64 | 66 | 67 |
| Cash At The Beginning Period | 0 | 183 | 232 | 347 | 411 | 477 |
| Cash At The Ending Period | 183 | 232 | 347 | 411 | 477 | 544 |

5.7 Financial, Economic and Social Analysis

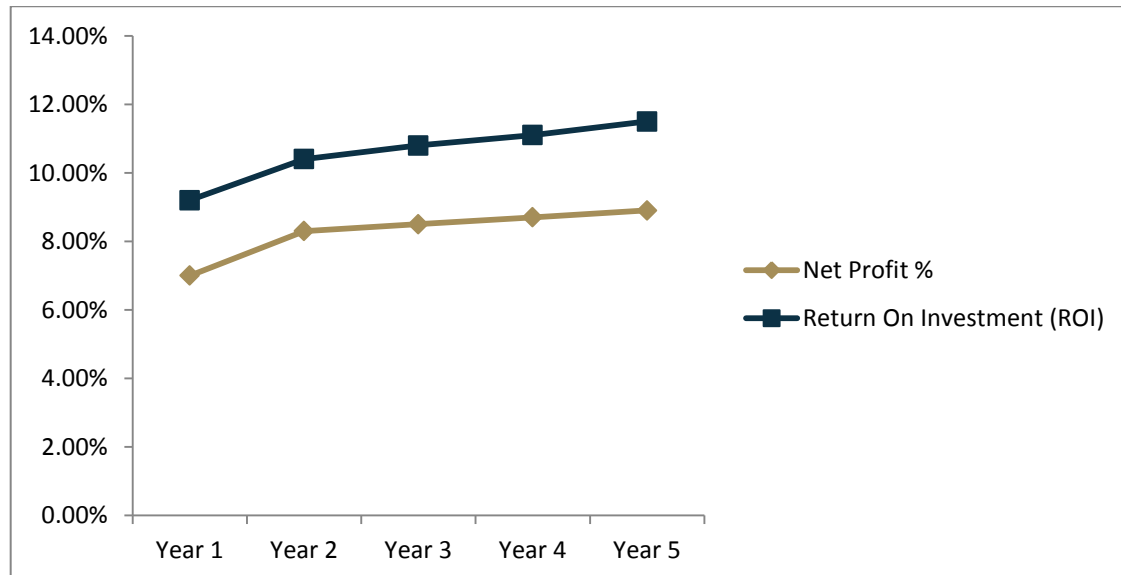
Financial Analysis

The following table shows the financial analysis of the project. It indicates that the net profit ratio will increase from 7% in the second year to 8.9% in the fifth year, and the return on investment will increase from 9.2% in the first year to 11.5% in the fifth year.

Table 29: Financial Analysis

| Financial Analysis (In Thousand JD) | | | | | |
|-------------------------------------|--------|--------|--------|--------|--------|
| Item | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Assets | 643 | 719 | 745 | 772 | 802 |
| Revenues | 853 | 896 | 941 | 988 | 1,037 |
| Profits | 59 | 74 | 80 | 86 | 92 |
| Capital (Equity) | 553 | 553 | 553 | 553 | 553 |
| Net Profit % | 7.0% | 8.3% | 8.5% | 8.7% | 8.9% |
| Return On Investment (ROI) | 9.2% | 10.4% | 10.8% | 11.1% | 11.5% |
| Return On Capital (ROC) | 10.7% | 13.5% | 14.5% | 15.6% | 16.7% |
| Net Profit On Revenues | 7.0% | 8.3% | 8.5% | 8.7% | 8.9% |
| Assets Turnover (Time) | 1.33 | 1.25 | 1.26 | 1.28 | 1.29 |

Figure 7: The Financial Analysis



Economic Analysis

The following table shows the economic analysis of the project during the first five years, we conclude that:

- The Internal rate of return is 23%. It exceeded six times the return on assets, which means the economic feasibility of the project
- The present value of the project reached about JD 780 thousand. It exceeds the net present value with JD 553 thousand, which means the economic feasibility of the project.
- The profitability index of the project reached 1.41 times, which means that the expected value of the project will increase by one time and half the investment value, which proves that the project is feasible.
- The project payback period is 5 years.

Table 30: the Economic Analysis

| Economic Analysis (in Thousand JD) | | | | | | |
|---|-----------------------|--------|--------|--------|--------|--------|
| Statement | Year of incorporation | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Net cash flow from operating and investing activities | (553) | 49 | 115 | 120 | 126 | 132 |
| terminal value | - | - | - | - | - | 764 |
| Net Cash flow | (553) | 49 | 115 | 120 | 126 | 896 |
| Internal Rate of Return (IRR) | 23% | | | | | |
| present Value | 780 | | | | | |
| Net present value | 227 | | | | | |
| Profitability Index (Time) | 1.41 | | | | | |
| Payback period (Year) | 5 | | | | | |

Social Analysis

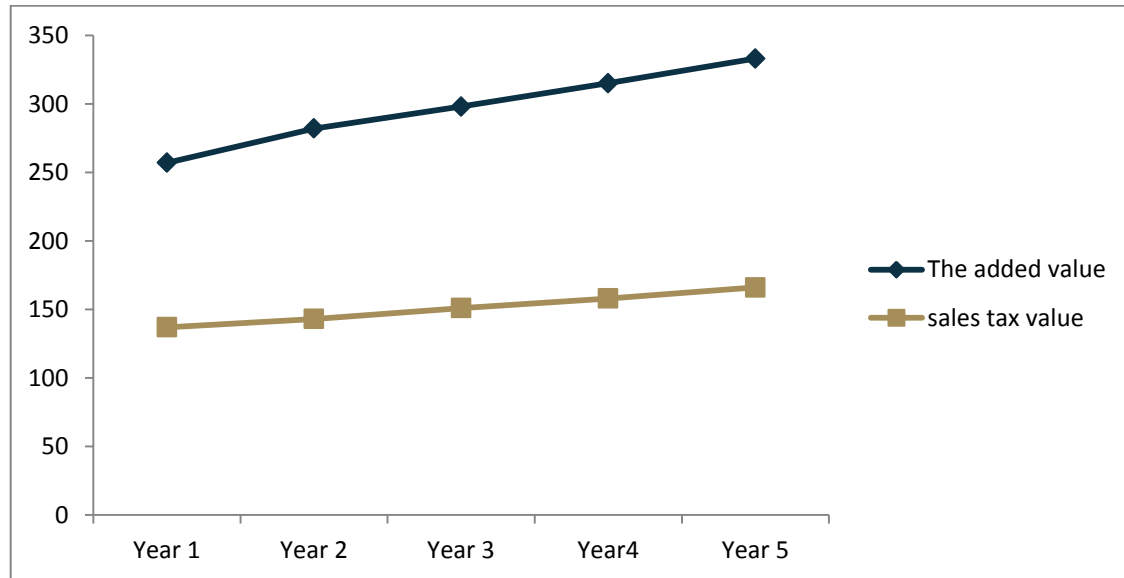
The following table shows the social analysis of the project. It is noticed that the number of staff required for the project will increase from 24 employees in the first year to 26 employees in the fifth year, Jordanian employees are 12 employees at the first year, and they increase to reach 13 employees at the fifth year.

The added value of the project will also increase from JD 257 thousand in the first year to JD 333 thousand in the fifth year, income tax is JD 8 thousand at the first year, and reaches to JD 13 thousand at the fifth year.

Table 31: the Social Analysis of the Project

| Social Analysis | | | | | |
|--------------------------------------|--------|--------|--------|-------|--------|
| Statement | Year 1 | Year 2 | Year 3 | Year4 | Year 5 |
| Number of Employees | 24 | 24 | 25 | 25 | 26 |
| Jordanian employees | 12 | 12 | 12 | 13 | 13 |
| The added value –thousand JD | 257 | 282 | 298 | 315 | 333 |
| Income tax –thousand JD | 8 | 10 | 11 | 12 | 13 |
| sales tax value –thousand JD | 137 | 143 | 151 | 158 | 166 |
| Exports value / imports substitution | - | - | - | - | - |

Figure 8: The Social Analysis



6. Risk and Sensitivity Analysis

6.1 Risk Analysis

The following table shows the risk matrix analysis that may face the project.

Table 32: Project Risk Matrix

| Risks | Type of Risks | Risk Assessment |
|------------------------|--|---|
| Financial Risks | <ul style="list-style-type: none"> ▪ Credit Risk Credit risk represents the risk of the company's financial loss as a result of the customer's default of the contractual obligation or that of the party dealing with the company through a financial instrument. These risks are mainly caused by trade receivables and others. ▪ Liquidity Risk Liquidity risk is the risk resulting from the company's inability to meet its financial obligations at time. The company's liquidity management is to ensure as much as possible that the company always maintain enough liquidity to meet its obligations as they become due and payable in normal and emergency conditions without incurring unacceptable losses or risks that affect the company's reputation. ▪ risk of currency fluctuation Currency risk is the risk of the fluctuation of the value of financial instrument, due to fluctuations in foreign currency exchange rates. | <ul style="list-style-type: none"> ▪ The financial risks that may face the company are moderate, because the company payments will be based on credit ▪ There is no risk of currency exchange, because the company sales and purchases will be in the local market ▪ There is no risk of inflation because the company's pricing is based on an annual basis |

| Risks | Type of Risks | Risk Assessment |
|-----------------------------|---|--|
| | <ul style="list-style-type: none"> ▪ inflation risk It is the risk associated with the possibility that the inflation or the rise in the cost of living might lead to the decrease the real value of the investment. | |
| Business risk (sector risk) | <ul style="list-style-type: none"> ▪ Strategic Risk It is the risk resulting from taking bad decisions by the company's management, or implementing the decisions in a wrong way, or not taking the decisions at the right time; which leads to losses or causes loss of alternative opportunities. ▪ Legal and Regulatory Risks These risks are reflected as a result of non-compliance with laws, guidelines and instructions governing the work. Legal risks are caused by the company's break of the laws governing the work in the state in which the company operates. While regulatory risks arise from the company's violation of laws and standards issued by the regulatory authorities. ▪ Reputation Risk Reputation risk arises from influential negative public views which result in great losses of customers or money. It includes the actions of the company's management or its employees which project a negative image of the | <ul style="list-style-type: none"> ▪ The risks are considered moderate before the company's establishment, because there is no difficulty in getting the approval of the official authorities such as municipality and agriculture. ▪ Reputational risk is low, as the company deals with very varied issues ▪ Market risk in the short term will be moderate because there is no competition from other companies in the governorate |

| Risks | Type of Risks | Risk Assessment |
|--------------------------------|--|--|
| | <p>company, its performance and its relationships with customers and other stakeholders. Reputation risk also results from circulating rumors about the company and its activities.</p> <ul style="list-style-type: none"> ▪ Competition Risk Competition risk results from domestic and external competitors and reduces sales and profits. | |
| <p>Operational Risk</p> | <p>Operational risk involves losses resulting from the failure of internal operations, human resources and systems. It includes:</p> <ul style="list-style-type: none"> ▪ IT Risks They are losses arising from downtime or systems failure due to the infrastructure, information technology, or the lack of systems, and any failure or malfunction in the systems. They include: the crash of computer systems, breakdowns in communication systems, programming errors, computer viruses and opportunities losses due to breakdown. ▪ Human Resources Risk Losses caused by employees or related to them (intentionally or unintentionally). It also includes acts that are intended as methods of cheating, abusing property or | <ul style="list-style-type: none"> ▪ Operational risks are very low, for the company will contract with specialized technical bodies to develop the agricultural services ▪ Labor forces will have suitable experience ▪ Competitive salaries will be paid ▪ Information security plan will be put in place to safely keep the company information |

| Risks | Type of Risks | Risk Assessment |
|-------------------|---|--|
| | circumvent the law, regulations or company policy by officials or employees, as well as losses arising from the relationship with the customer, shareholders, regulators and any third party. | |
| State Risk | State Risk includes politicians' interference, civil unrest, wars, financial and monetary policies, and high level of debts. | <ul style="list-style-type: none"> ▪ State Risk is considered to be low, due to security and political stability; international reports indicate that State Risk is low both in medium and long terms |

6.2 Sensitivity Analysis

First: Increase of Investment Cost By 10%

The following table shows the results of the sensitivity analysis when investment cost increases by 10%.

Table 33: Investment Increase by 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | %23 | %21 | %2 |
| The Present Value at a discount rate of 13% (in Thousand JD) | 780 | 811 | 30- |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 227 | 201 | 26 |
| Profitability Index (Time) | 1.41 | 1.33 | 0.08 |
| Payback period (Year) | 5.00 | 5.1 | 0.1- |
| The Net Profit Ratio – an average of 5 years | %8.3 | %8.3 | %0.0 |
| Return on Investment - an average of 5 years | %10.6 | %9.8 | %0.8 |
| Return on Capital – an average of 5 years | %14.2 | %12.8 | %1.3 |
| Net Profit On Revenues - an average of 5 years | %8.3 | %8.3 | %0.0 |
| Assets Turnover (Time) – an average of 5 years | 1.3 | 1.2 | 0.1 |
| The added value - an average of 5 years (in thousand JD) | 297 | 297 | 0 |
| income tax - an average of 5 (in thousand JD) | 11 | 11 | 0 |
| sales tax - an average of 5 years (in thousand JD) | 151 | 151 | 0 |

The above analysis refers to the feasibility of investment in the project, in light of the high cost of the total investment of the project, which increased by 10%. It is noted that:

- The internal rate of return reaches 21%, which is considered high for investment purposes
- The new payback period is 5.1 years, and it is reasonable for recovery purposes
- The return on capital is 12.8%, which is suitable for investment purposes

Second: Reducing Revenues by 10%

The following table shows the results of the sensitivity analysis when reducing revenues by 10%.

Table 34: Reducing Revenues 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | %23 | %4 | %19 |
| The Present Value at a discount rate of 13%(in Thousand JD) | 780 | 367 | 414 |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 227 | -186 | 414 |
| Profitability Index (Time) | 1.41 | 0.66 | 0.75 |
| Payback period (Year) | 5.00 | 13.00 | 8.0- |
| The Net Profit Ratio – an average of 5 years | %8.3 | %0.6- | %8.9 |
| Return on Investment - an average of 5 years | %10.6 | %0.8- | %11.4 |
| Return on Capital – an average of 5 years | %14.2 | %0.8- | %15.0 |
| Net Profit On Revenues - an average of 5 years | %8.3 | %0.6- | %8.9 |
| Assets Turnover (Time) – an average of 5 years | 1.3 | 1.5 | 0.2- |
| The added value - an average of 5 years (in thousand JD) | 297 | 214 | 83 |
| income tax - an average of 5 (in thousand JD) | 11 | 1- | 11 |
| sales tax - an average of 5 years (in thousand JD) | 151 | 136 | 15 |

The above analysis shows the low sensitivity of the project in case of reducing the revenues or demand by 10%. It indicates that:

- The internal rate of return is 4%, which is considered low for investment purposes
- The new payback period is 13 years, and it is long period for recovery purposes
- The return on capital reaches -0.8%, which is low for investment purposes

Third: Increasing the Operating Costs by 10%

The following table shows the results of the sensitivity analysis when increasing the operating costs by 10%.

Table 35: Increasing the Operating Costs by 10%

| Index | Base | Impact | Change |
|--|-------|--------|--------|
| Internal Rate of Return (IRR) | %23 | %10 | %13 |
| The Present Value at a discount rate of 13% (in Thousand JD) | 780 | 482 | 298 |
| Net Present Value at a discount rate of 13% (in Thousand JD) | 227 | 70- | 298 |
| Profitability Index (Time) | 1.41 | 0.87 | 0.54 |
| Payback period (Year) | 5.0 | 9.0 | 4.0- |
| The Net Profit Ratio – an average of 5 years | %8.3 | %1.9 | %6.4 |
| Return on Investment - an average of 5 years | %10.6 | %2.9 | %7.7 |
| Return on Capital – an average of 5 years | %14.2 | %3.3 | %10.9 |
| Net Profit On Revenues - an average of 5 years | %8.3 | %1.9 | %6.4 |
| Assets Turnover (Time) – an average of 5 years | 1.3 | 1.5 | 0.2- |
| The added value - an average of 5 years (in thousand JD) | 297 | 237 | 60 |
| income tax - an average of 5 (in thousand JD) | 11 | 2 | 8 |
| sales tax - an average of 5 years (in thousand JD) | 151 | 151 | 0 |

The above analysis shows the feasibility of the project in light of increasing the operating costs of the project by 10%. It indicates that:

- The internal rate of return is 10%, which is considered low for investment purposes
- The new payback period is 9 years, and it is long for recovery purposes
- The return on capital is 3.3%, which is low for investment purposes