

Pre-Feasibility Study
Pets Care and Breeding Farm Project

Madaba

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Madaba Governorate



1. Executive Summary

This study aims at determining the Pre-Feasibility Study for the establishment of a Pets Care and Breeding Farm in Al-Areed Area that is about 45 km from Amman, and is located in the District of Jebel Bani Hamida overlooking the Dead Sea. The following table shows the preliminary indicators of the project.

Table 1: Initial Indicators of the Project

Project Name	Pets Care and Breeding Farm
Sector	Agricultural - Animal Production
Governorate	Madaba
Region	Al-Areed
Products/Services	<ul style="list-style-type: none"> • Pets’ reproduction that include purebred cats and dogs, for the purpose of breeding and selling them in the local market, or exporting them to foreign markets, particularly the European and Arab Markets. • Pets, accommodation and care services, in the event when the owners travel and/ or when owners need a care for these animals, in terms of providing the suitable housing, feeding and veterinary treatments when needed. • Other services which include veterinary vaccines and treatments, training, and selling pets food and accessories.
Project Description	<p>The project is based on breeding and caring for household pets, such as cats and dogs from known origins in order to sell them to families wishing to possess and taking care of such pets, as well as exporting them. The project outputs are mainly divided into the following categories:</p> <p>a. Dogs, Which are divided generally into three basic categories, according to their nature, namely:</p> <ul style="list-style-type: none"> • Hunting dogs. • Guarding/watch dogs. • Household dogs. <p>b. Cats, Which are divided into many species and varieties, as the focus will be on the following varieties:</p> <ul style="list-style-type: none"> • Cats classified as long hair, such as Shirazi. • Cats classified as short hair, such as Scottish Cat. <p>At the beginning, a group of animals (from local sources or import) with known origins, and which have accredited certificates, will be brought, to the farm. Then the project will work on mating and reproduction of these animals inside the farm, to produce purebred and/ or hybrid</p>

	breeds according to clients request, while issuing birth certificates for these animals certified by the competent authorities, and then offering them for sale in the local or export markets.
Target Market	<ul style="list-style-type: none"> • Local customers from families in different Governorates, particularly the Capital Governorate and nearby Governorates (Madaba/ Balqa/ Karak). • Farm owners and producers of vegetables and fruits (Watchdogs/ guard dogs). • Hunting Practitioners. • Foreign residents, who work in diplomatic missions, development programs or economic projects. • Export Markets, particularly Europe and Arab countries.
Investment Cost	The investment cost of the project is about JD 677 thousand.
The Average return on investment	The average return on investment (ROI) during five years is about 18.7 %
Internal Rate of Return	The internal rate of return (IRR) for the project is about 16.4%
Average added value of the project	The average added value of the project in five years is about JD 231 thousand.
Risk Assessment	The Sensitivity Analysis indicates a low risk in case of 10% increase in investment cost, or 10% increase in operating costs, whereas a high risk in case of 10% decrease in revenues.
The Project Justifications	<ul style="list-style-type: none"> • Climate suitability in the area. • The proximity of the project to Queen Alia International Airport for exports. • The passage of many tourists in the area.
Partners/Stakeholders	<ul style="list-style-type: none"> • Ministry of Agriculture. • The Municipality.

2. The Macroeconomic Environment

1.1 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.

1.2 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

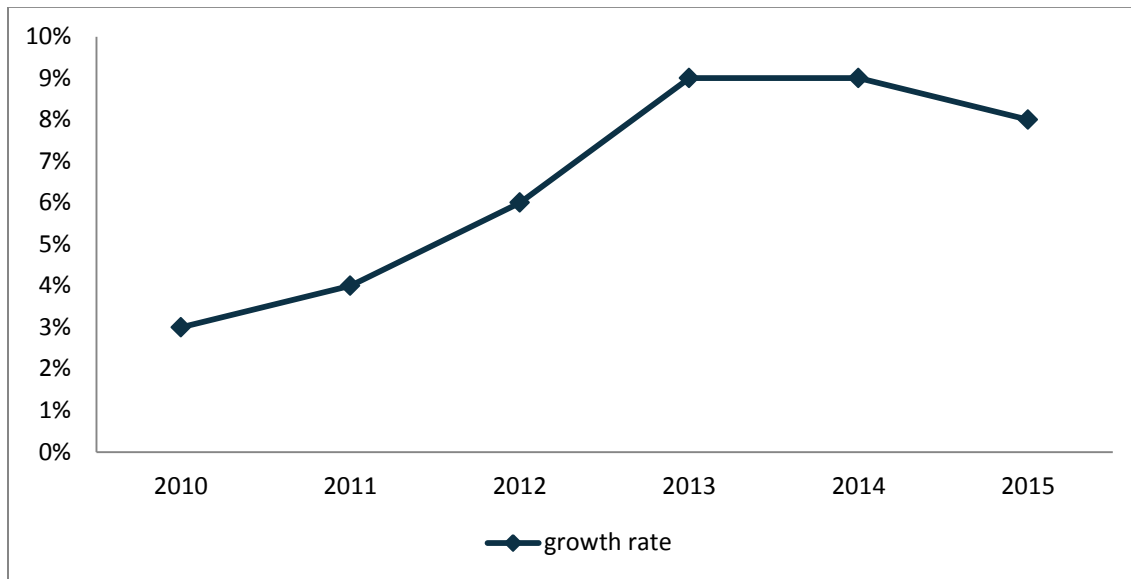
of the low-paid foreign workers on a large number of new jobs in the economy, according to the Central Bank of Jordan.

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



1.3 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%).

¹ The Central Bank of Jordan

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 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
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

	2011	2012	2013	2014	2015
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.

1.4 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.

1.5 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

The project is based on breeding and caring for household pets, such as cats and dogs from known breeds in order to sell them to families wishing to possess such pets, and taking care of and exporting them. The project outputs are mainly divided into the following categories:

1. Dogs. Which are divided generally into three basic categories, according to their nature, namely:
 - Hunting dogs.
 - Guard dogs/watch dogs.
 - Household dogs.
2. Cats. Which are divided into many species and categories, as the focus will be on the following categories:
 - Cats with long hair, such as Shirazi.
 - Cats with short hair, such as Scottish Cat.

At the beginning, a group of animals (from local sources or import) with known breeds, and which have accredited certificates will be brought, and then working on mating and reproduction of these animals inside the farm, to produce purebred and / or hybrid breeds upon request, and issuing certificates for these animals with the competent authorities. Then offering them for sale in the local market, or exporting such animals to foreign markets.

3.2 Expected Services Description

The expected project services include the following:

- Reproduction of pets that include cats and dogs for the purpose of:
 - Breeding them at the farm to use in reproduction.
 - Selling them in the local market.
 - Exporting them to foreign markets, especially the European markets.
- Pets shelters and care services, in the event when the owners travel and / or when owners need a care for these animals:
 - Providing the suitable housing, with or without feeding.
 - Providing veterinary treatments when needed.
- Other services:
 - Veterinary vaccines and treatments.
 - Training.
 - Selling pet supplies, such as food and accessories.

3.3 Expected Demand Analysis

The demand for the project services is influenced by the following indicators:

- People's desire to possess such animals.
- Improvement in the quality of life of the community.
- The development of cultural and societal habits in possessing these animals.

The demand volume for these products can be measured through studying and analyzing the following elements:

- The international foreign trade analysis of the project output.
- Studying and exploring the citizens' need and desire of possessing these animals, and determining the types of additional services needed by pets' owners.

Statistical reports issued by the Jordanian Department of Statistics and the United Nations have shown the existence of demand for the project outputs. The Kingdom's foreign trade records show importing a group of cats and dogs, for the purpose of reproduction and breeding with amount of JD 26,400 in 2015, while the imports were limited before that. The exports data shows that there were some exports of these animals that have been reproduced within the Kingdom, with an average of JD 15,000 per year during the period from 2013-2015.

By reviewing the foreign trade data released by the United Nations Organization, it is clear that the volume of the Kingdom's imports of these products, according to the data of the supplier countries to Jordan (without freight and insurance), increases at a rate more than the double from the foreign trade data issued by the Jordanian Department of Statistics for the same category. The reasons for this difference are due to the difference in the registration of the customs tariff code, or sometimes due to the estimate of the goods value between exporting and importing countries. In addition, many importers of these pets enter them as personal property and not as official imports.

The following tables show the foreign trade volume of the project products.

Table 7: The volume and the value of imports, and re-exports according to foreign trade statistics

	2013				2014				2015			
	The amount of re-exports (kg)	Re-export value (thousand JD)	The amount of imports (kg)	The value of imports (thousand JD)	The amount of re-exports (kg)	Re-export value (thousand JD)	The amount of imports (kg)	The value of imports (thousand JD)	The amount of re-exports (kg)	Re-export value (thousand JD)	The amount of imports (kg)	The value of imports (thousand JD)
Other animals of mammals species	0	0	2,147	23.6	0	0	3,324	53.7	0	0	2,747	53.2
Other live animals, including animals for zoos, cats, dogs and bees	0	0	0	0	0	0	10	1.7	311	6	2,409	26.4

Source: Department of Statistics, Foreign Trade

Table 8: Volume and value of exports, according to foreign trade statistics

	2013		2014		2015	
	The amount of the national exports (kg)	Value of national exports (thousand JD)	The amount of the national exports (kg)	Value of national exports (thousand JD)	The amount of the national exports (kg)	Value of national exports (thousand JD)
Other animals of mammals species	0	0	0	0	0	0
Other live animals, including animals for zoos, cats, dogs and bees	3,120	8.6	15,621	33.7	334	2.8

Source: Department of Statistics, Foreign Trade

Table 9: Volume and value of imports, according to the United Nations Organization statistics

	2013		2014		2015	
	The amount of exports (kg)	Value of exports (thousand JD)	The amount of exports (kg)	Value of exports (thousand JD)	The amount of exports (kg)	Value of exports (thousand JD)
Other animals of mammals species	434	19.4	1,220	47.4	1,882	88.7
Other live animals, including animals for zoos, cats, dogs and bees	5,705	63.9	1,568	42.8	1,756	35,7

Source: United Nations, UN-Comtrade

Table 10: Volume and value of exports, according to the United Nations Organization statistics

	2013		2014		2015	
	The amount of the national exports (kg)	Value of exports (thousand JD)	The amount of the national exports (kg)	Value of national exports (thousand JD)	The amount of the national exports (kg)	Value of national exports (thousand JD)
Other animals of mammals species	1,694	37.0	788	15.2	1,038	37.8
Other live animals, including animals for zoos, cats, dogs and bees	13	0	8	0.4	0	0

Source: United Nations, UN-Comtrade

On the other hand, in the following table the United Nations statistics data indicates an increase in international volume of foreign trade in other live animals, including animal for zoos, cats and dogs with an average of us\$ 250 million during the year 2015. The largest importing countries are the United States, Netherlands and Spain, while the largest exporting countries are Netherlands, Canada and Belgium.

Table 11: The main exporting countries according to the United Nations Organization statistics

Country Name	The value of exports (US \$ million)
Netherlands	76.0
Canada	38.0
Belgium	33.4
Britain	21.2
France	16.1
Egypt	15.9
Denmark	14.5
Spain	11.8

Source: United Nations statistics data,2015

Table 12: The main importing countries according to the United Nations Organization statistics

Country Name	The value of imports (US \$ million)
United State	52.9
Netherlands	29.7
Spain	27.1
France	17.9
Britain	11.1
Italia	9.6
Belgium	8.9
Korea	6.6
Germany	6.5

Source: United Nations statistics data,2015

Local Demand

It is difficult to determine the local demand of possessing and breeding pets through released statistics. Therefore, a survey among a group of local families and individuals has been conducted, especially in the targeted areas such as West Amman and Central Amman Districts(Amman Qasba, Tariq, Al-Jamea and Wadi Al-Seer). In order to determine the volume of expected actual demand for the project outputs and the nature of the most demanding species. The field study showed the desire of almost 1.5% of the households in the target areas for possessing pets, including families that currently owns pets of cats and dogs, with a total of

7,500 pets, including about 5000 dogs and 2500 cats. The following are the main results of this field study:

Individuals and families that currently have pets in West Amman area:

- The Percentage of households possess pets is 5% of the respondents.
- The Percentage of those who want to possess another animal is 12%.
- The Percentage of those who wish to possess cats is 33% and dogs is 67%.
- The Percentage of Jordanians is 80%, and non-Jordanians is 20% (mostly Arabs).
- The source of buying animals are distributed as follows:
 - Direct import: 20%.
 - Through a friend: 33%.
 - Specialized shops: 33%.
 - Local farms: 14%.
- 60% are forced to put pets with friends when traveling, due to the lack of a sufficient number of specialized care centers.
- 80% of pet owners buy food for their animals from specialist shops, in addition to the use of household food remnants.
- 60% of the treatments are provided in veterinary clinics and 40% in animals care centers.
- Among the main services that current pet's owners lack are the care for their pets in the event when they travel by 80%.

Individuals and families who currently do not possess pets:

- The percentage of people who want to possess pets is 20% of the respondents.
- The percentage of people who wish to possess cats is 33% and dogs is 67%.
- The percentage of people who are serious about having a pet does not exceed 5% (It is similar the actual percentage of the current owners).

Based on the results of the general census of the population of the Kingdom for the 2015, the number of households in the target area for the project outputs (Amman Kasba, Tariq, Al-Jamea and Wadi Al-Seer) has reached to about 487 thousand families, and thus the total volume of the market can be estimated as follows:

Table 13: Estimated Market Size

Statement	Percentage	Number
The number of households in the target area	-	487,000
The number of households owning pets	5%	24,350
The number of households owning pets and want to buy a second animal	12%	2,922
The number of households owning pets and want to buy a second animal (cat)	33%	974
The number of households owning pets and want to buy a second animal (dog)	67%	1,948
The number of households that do not have pets	95%	462,650
The number of households that do not have pets and want to buy an animal	20%	92,530
The number of households that do not have pets and are serious about buying an animal	5%	4,627
The number of households that do not have pets and are serious about buying an animal (cat)	33%	1,542
The number of households that do not have pets and are serious about buying an animal (dog)	67%	3,084
The total size of the market (cats)	33%	2,516
The total size of the market (dogs)	67%	5,032
The total size of the market (pet)	100%	7,549
The Percentage From he number of households in the target area		%1.55

On the other hand, the volume of Jordanian imports of " Dogs or Cats Food, put up for Retail Sale" in 2015 amounted to about 963 tons according to the Department of Statistics data, with an average of 40-50 kg per pet annually. In addition to what is being used of household food remnants to feed the animals. This is considered an acceptable rate at the local level according to the interviews conducted with the owners of shops that sell pet food and supplies. Thereby, this enhances the results of the field study on market size. The following table shows the volume and value of Jordan's imports from the "Dogs or Cats Food, put up for Retail Sale" during the period from 2013 - 2015 according to the Jordanian Department of Statistics data and the United Nations statistics data.

Table 14: The volume and value of Jordan's imports of dogs or cats' food according to the Department of Statistics and the United Nations data

The year	Department of Statistics data		United Nations data	
	The amount of imports (tons)	The value of imports (thousand JD)	The amount of imports (tons)	The value of imports (thousand JD)
2013	567	696	765	1,040
2014	615	766	820	1,211
2015	963	1,141	855	1,691

Source: Department of Statistics and the United Nations data

Supply Analysis

The supply on the project's products in the local market is mainly affected by the following factors:

- The existence of a group of hobbyists breeders / suppliers who possess pets and working on their reproduction.
- What is being traded between individuals through direct import of some pets, as subject to availability in the market
- The number of competent institutions in breeding and caring of local pets, and their work volume and the nature of the services they provide.

Statistics and reports issued by the Ministry of Agriculture did not refer to the existence of such institutions, but the field research indicated the presence of some institutions specialized in pets breeding, caring and training. In addition, there are some unlicensed private farms, which their owners work on animal breeding individually (particularly in the northern Governorates). Usually those people offer animals for sale randomly through stores that sell pet supplies, or through an irregular market that is held weekly in the City Center of the major cities in the kingdom. In terms of reproduction of purebred animals, they are not currently available.

On the other hand, interviews with a group of breeders and pets collectors have been conducted, as well as shops selling pet accessories, who indicated that possessing purebred animals is one of the priorities of a good percentage of pets owners and breeders, which may amount to almost 50%, which drives some of them to import directly from outside the kingdom through foreign dealers. The following are the top service providers that provide services similar to the project services, which can be a direct and indirect competitor for the project.

Table 15: The service providers concerned with pets in the Kingdom

Party	Services Provided								
	Reproduction	Selling	Sheltering	Caring	Training	Supplies	Treatments	Vaccinations	Other
Humanitarian Center for Animal Care		✓	x	x			x	x	<ul style="list-style-type: none"> • Operations • Veterinary obstetrics
Dog Hotel (Airport Road)			x	x	x	x	x	x	
Specialty shops		x		x		x			
Individual farms for breeding animals	x	x			x				
Animal market (Amman city center)		x							

Source: Field survey of the study Team

When analyzing the supply and demand trends on the project services. It is noticeable the presence of a high volume of demand in the Kingdom that cannot be achieved, due to the limited institutions that offer distinguished and integrated services, and thus the project does not face an actual competition.

3.4 Price Analysis

The prices of pets, which will be sold, have been evaluated on the grounds that the age is from 2-3 months, depending on the prevailing prices. This was in the Kingdom for the local market and according to internationally recognized prices, based on a field market study on prices that included the opinion of experienced pets owners and breeders / collector in order to get a clear picture of the market.

The following table shows the estimated sales prices of the products and services in the market.

Table 16: The average sale price for the project services in the Kingdom

Category	Average selling price (JD)
Household Cats	200 -150
Watchdog/ Guard dog	600 -400
Hunting Dog	300 -200
Household dog	300 -150
Vaccines	20 -10
Accessories	Varying
Accommodation (during the day)	10 -5

Category	Average selling price (JD)
Treatments (for a case)	25 -15
Operations (for a case)	60 -40
Special foods / dog (bag)	60
Special foods / cats (bag)	20

Source: Market Research

3.5 Marketing Strategy

Target Market

The project targets the following customers:

- Local customers from families in different Governorates, particularly the Capital Governorate and nearby Governorates (Madaba / Balqa / Karak).
- Farm owners and producers of vegetables and fruits (Watchdogs/ Guard dogs).
- Hunting Practitioners.
- Foreign residents, who work in the diplomatic sector or development programs and funded projects.
- Foreign Market, particularly Europe and Arab countries.

Excepted Services and Products

Products and services expected of the project include the following:

- Pets' reproduction that include purebred cats and dogs, for the purpose of breeding and selling them in the local market, or exporting them to foreign markets, particularly the European and Arab Markets.
- Pets shelters/accommodation and care services, in the event when the owners travel and / or when owners need a care for these animals, in terms of providing the suitable housing, feeding and veterinary treatments when needed.
- Other services: include veterinary vaccines and treatments, training, and selling pet foods and accessories.

The project aims at attracting customers who seek for excellence, and thus achieve good returns; the products and services strategy will include the following:

- The adoption of purebred breeds and maintaining them.
- Issuing identification certificates, and proving the breeds that are reproduced.
- The provision of best types of vaccines and treatments.
- The provision of temporary accommodation services to project customers.

- Maintaining a clean and safe working and breeding environment, to ensure not exposing the animals to diseases.
- Maintenance and equipping the project site with all the necessary means for the work.
- Abide by rules and instructions of the animal care centers, issued by the Ministry of Agriculture and others concerned parties.
- Credibility in dealing with customers.
- The provision of the best types of nutrition for the animals.

Expected Prices

Pricing strategy for the project includes the following:

- Selling household cats aged 2-3 months, at an average price of JD 180 per animal.
- Selling all kinds of purebred dogs 2-3 months, with an average price of JD 550 per dog.
- The provision of other services for only the local market, which include:
 - Vaccines and treatments at the rate of JD 15 per vaccine.
 - Accommodation at a rate of JD 7 per night.
 - Dog Training by type of required work, at a rate of JD 150 (does not include food and treatments).
 - Selling special foods, at a rate of JD 50.
 - Selling accessories at various prices, according to the type and within the local market prices.

Promotion

Promotional strategy for the project includes the following:

- Designing an attractive website and a social media page.
- Preparing brochures of the project, and distributing them.
- Advertisements in magazines specialized in environment and animal welfare.
- Contacting and communicating the sites of local and international associations concerned in pets breeding and caring.
- Building a network of contacts with importers, zoos and racing tracks in the world.

Selling

Selling strategy for the project includes the following:

- Direct Selling for people interested in having pets, through contacting and receiving them at the project center.
- Selling through specialized commercial shops in Kingdom, on demand and in return for a certain percentage.

- Preparing and shipping of exported animals by air transport, and after conducting and achieving all the health requirements of the Ministry of Agriculture and in the importing country (the cost of shipping and insurance will be add to the importer’s bill)

2.8 The Expected Market Share

Current Market Size

The analysis of data and results obtained through interviews with a range of shops owners who provide pet supplies, and with independent breeders, and with pets care institutions in addition to the analysis of the households field survey results, showed that the current market size is estimated at 2500 cats and 5,000 dogs annually, from different varieties and species as previously described.

The Expected Sales Volume of the Project

Due to the nature of the current competition, particularly from random and irregular farms, the project will work to cover the relatively clear gap between supply and demand in the current market (ie the expected difference between the total market size and the percentage of production and supply on the local market level that is 50%, according to the estimates of specialized shops owners) by about 25% for cats and 13% for dogs in the first year, while exports will begin during the second year of operation, as follows:

Table 17: Market Share of the Project in the First Year

Statement	Cats	Dogs
The Local Demand Size	2,500	5,000
Current Local Supply Size (50%)	1,250	2,500
Expected Gap	1,250	2,500
The Expected Project Share for the First Year (25%) for cats and (13%) for dogs	312	316

Due to the nature of the project, the project born animals will be used and exploited during the year of establishment as reproduction animals and not for direct sale, and then the project will work in subsequent years to take advantage of a limited proportion of born animals as reproduction animals to replace the animals that their productive life ends.

On the other hand, project sales volume of accommodation and other services is estimated at 25% of the total sales revenue of pets, and therefore it is expected that the project sales during the first five years of the project are as follows:

Table 18: Expected Sales for the Project

Statement	First Year	Second Year	Third Year	Fourth Year	Fifth Year
Number of Produced Dogs Pairs	56	76	96	116	136
Production Quantity	336	456	576	696	816
Sales Amount	316	436	556	676	796
Selling Price	550	567	583	601	619
Revenues of Selling Dogs	173,800	246,994	324,423	406,276	492,748
Number of Produced Cats Pairs	56	76	96	116	136
production quantity	336	456	576	696	816
Sales amount	312	432	552	672	792
Selling Price	180	185	191	197	203
Revenues of Selling Cats	56,160	80,093	105,411	132,176	160,453
Total Revenues (thousand JD)	230.0	327.1	429.8	538.5	653.2
Other Revenues (25% of pets sale Revenue) - thousand JD	57.49	81.77	107.46	134.61	163.30
Total Annual Revenue - thousand JD	287.45	408.86	537.29	673.07	816.50

4. Technical Study

4.1 The Designed Project Capacity

The following table represents the designed capacity of the project; as the absorptive designed capacity of the project is about 500 animals annually, including the accommodation sites.

Table 19: The Project Designed Capacity

Item	First Year	Second Year	Third Year	Fourth Year	Fifth Year
The number of animals (breeds)	112	152	192	232	272
The number of produced animals	672	912	1,152	1,392	1,632
The retention period of produced animals after weaning (month)	1.5	1.5	1.5	1.5	1.5
The average number of existing produced animals	84	114	144	174	204
Total number of animals	196	266	336	406	476
Accommodation sites	25	25	25	25	25
Total absorption capacity (animal)	221	291	361	431	501

The following table shows the area required for the project. In order to reach the designed capacity. It requires the purchase of a land with an area of about 5000 m², and the establishment of administration and barns buildings with a total area of 2,000 m², and equipping open and roofed training sites with a total area of 2,000 m² as well.

Table 20: Area Required for the Project

Item	Unit
Land m ²	5,000
Buildings and Barns m ²	2,000
Roofed Training Spaces	1,000
Open Training Spaces	1,000

4.2 The Required Material Resources

The following table shows the material resources required for the project.

Table 21: Required Material Resources

Item	Unit	Price	Value (JD)
Land m ²	5,000	10	50,000
Buildings m ²	2,000	100	200,000
Training Space m ²	2,000	50	100,000

Item	Unit	Price	Value (JD)
Furniture and Fixtures	-	-	20,000
Transport vehicles	1	20,000	20,000
Information Technology (Computers and Software)	-	-	20,000
Other			20,000
Total			430,000

* The numbers are estimated from the Market Study

4.3 The Required Human Resources

The following table shows the human resources required for the project. The number of required staff is about 14 employees, with total salaries of about JD 66,000 annually.

Table 22: Human Resources Required for the Project

Item	Number of Employees	Salary (JD/monthly)	Total salary (JD/annually)	Operational (JD/annually)	Administrative (JD/annually)
Director General / veterinarian	1	1,200	14,400	-	14,400
Accountant	1	500	6,000	-	6,000
Administrator	1	400	4,800	-	4,800
Customer service / Marketing	1	400	4,800	-	4,800
Worker	10	300	36,000	36,000	-
Total	14	2,800	66,000	36,000	30,000

The following table also shows the general job description of the jobs required in the project.

Table 23: General Job Description of the Jobs required in the project

Job	Job Description
Director General / veterinarian	<ul style="list-style-type: none"> ▪ General supervision of the administrative and technical affairs at the farm as well as the foreign marketing. ▪ Developing a nutrition program for the animals in the farm. ▪ Supervision of the mating process, and ensuring the accuracy of breeds. ▪ Following-up the born and resident animals. ▪ Provision of the necessary vaccines and treatments for animals and born animals that are used for reproduction, and issuing their vaccines record. ▪ Provision of the necessary treatments and vaccines upon request, and issuing required certificates for such procedures. ▪ Supervision of feeding workers to make sure the animals get the appropriate nutrition. ▪ Issuing certificates required to prove lineage and / or breeds. ▪ Checking on imported animals, and examining them to make sure they are free of diseases. ▪ Supervision of the cleaning workers in the barns, to ensure the site cleanliness and the safety of the animals.
Accountant	<ul style="list-style-type: none"> ▪ Proofing accounting operations records. ▪ Preparing periodic financial reports to the administration. ▪ Preparing monthly account statements send to customers and suppliers. ▪ Auditing and conformance between the bank accounts balances in the records and the statements of these bank accounts.
Administrator	<ul style="list-style-type: none"> ▪ Assisting in all aspects of administrative management, and coordinating between operating departments and units in resolving the administrative and operational issues daily. ▪ Scheduling and coordinating meetings, interviews, events and other similar activities. ▪ Sending and receiving mail and packages, and preparing correspondence. ▪ Achieving and updating employees' affairs files.
Sales Coordinator /Manager	<ul style="list-style-type: none"> ▪ Receiving Customers coming to the farm, and guiding them to the concerned person by the required service. ▪ Organizing the booking and schedules of accommodation, vaccines and treatments to customers, in coordination with the concerned employee. ▪ Supervising the exhibition sales, and sending the cash amount and

Job	Job Description
	revenue in the farm to the sales manager. <ul style="list-style-type: none"> ▪ Receiving payments from customers, and the cash sales revenue from the exhibition and sending them to the bank. ▪ Implementation the executive policies and programs for sales management, and the implementation of the approved sales and all work orders. ▪ Reporting a weekly report to the Director General to indicate what has been accomplished, and what has been postponed with a statement of reason.
Worker	<ul style="list-style-type: none"> ▪ Providing food and drink for the animals within specific programs. ▪ Receiving items and supplies from the warehouse. ▪ Preparing meals within the specific program prepared by the veterinarian. ▪ Preparing and documenting the reports of food provided for the animals. ▪ Monitoring the health status of the animals, to report any medical or abnormal condition. ▪ Maintain and organizing the training site. ▪ Ensuring the barns cleanliness periodically, according to programs designed by the veterinarian. ▪ Performing simple daily maintenance work on the farm as needed. ▪ Ensuring the safety of barns, and inform the administration of any errors to make the necessary and main maintenance through farm administration.

4.4 Special Requirements

The following table shows the general and specific requirements that must be considered for the development and implementation of the project based on the "Health and Technical Requirements that must be met in the pets' shelter, training and reproduction centers" issued by the Ministry of Agriculture instructions under the Agriculture Law (Instructions No. G / 3 for the year 2014).

Table 24: General Requirements that must be met in the Pets' Shelter, Training and Reproduction Centers

Statement	Requirements
The location and building	<ul style="list-style-type: none"> ▪ The project shall be located outside the organizational boundaries of the concerned municipality. ▪ The land area shall not be less than 4 dunums. ▪ The building shall not be less than 500 meters far from the area.
Facilities and barns	<ul style="list-style-type: none"> ▪ The project shall be surrounded by a fence at least 2 meters height, in addition to one meter of wire fence. ▪ There shall be enough space for shelter according to animal type, and shall not be in places where the wind blows. ▪ The provision of enough space with a material that absorbs moisture for animal movement and defecating. ▪ The training area shall be three times of the shelter area, and half of it shall be roofed. ▪ Food preparation areas shall have ceramic and porcelain walls. ▪ Animals which are displayed for sale shall be in visible cages. ▪ Shall be connected with independent sewerage network. ▪ The provision of a special clinic in the center. ▪ Taking fire-fighting measures in coordination with the Civil Defense Directorate, including the entrances, exits and fire extinguishers.
care	<ul style="list-style-type: none"> ▪ The provision of the appropriate environment in terms of climate, space, food, freedom of movement and behavior, health and mating. ▪ Attaching great importance to the permanent and periodic cleanness in animal shelters and workplaces. ▪ Taking appropriate measures to fight and control diseases, and reporting them in coordination with the Department of Agriculture.
Administration and workers	<ul style="list-style-type: none"> ▪ Providing an administration office in an appropriate place in the center. ▪ The center shall be under the supervision of a veterinarian or agronomist. ▪ Workers shall be trained to deal with animals properly, and that none of the animals shall be treated by workers with the exception of veterinarian.

4.5 The Required Licenses

The following table shows the necessary licenses and documents from various parties to implement the project.

Table 25: Licenses Required for the Project

Stage	Statement / procedure	Concerned institution
Project registration	Prior approval	<ul style="list-style-type: none"> ▪ Municipality ▪ Directorate / Ministry of Environment
	Construction permit	Central Committee (the Committee of licensing, registration and control of zoos, circus, animal shops, animal accommodation centers, animal training and breeding centers, and animal care associations)
Licensing	Ministry of Agriculture licensing.	<ul style="list-style-type: none"> ▪ Central Committee (for recommendation) ▪ Minister of Agriculture
Operating	Center License	<ul style="list-style-type: none"> ▪ Municipality ▪ Civil Defense

4.6 Project Timetable

The following figure shows the timeline to implement the project, which amounts to 18 months, as follows:

Stage	The first year (in months)												The second year (in months)					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Studies	■	■																
Approvals and the registration of the company			■	■	■	■												
Construction and finishing					■	■	■	■	■									
Equipment, furniture											■	■						
Licensing													■	■				
Employment and commissioning															■	■	■	■
Total Duration	onths 18																	

5. Financial Study

5.1 Financial Assumptions

The following table illustrates the financial assumptions of the project.

Table 26: The Financial Assumptions of the Project

Item	Assumption
Inflation Rate	3%
Financing Structure	Equity constitutes 75% of the investment and loans constitute 25%
Interest Rate	9%
Working Capital	6 months of annual cost
Pre-Operating Expenses	2% of total investment
Life stock cost	JD 128 thousand in the Year of incorporation, with annual 10% increase
Tax Rate	20%
Exemptions	Fixed assets are exempted from customs and tax exemptions by 40% of the income tax
Assets Depreciation Rate	4%-20% of the asset value
Annual Salaries Increase	5%
Staff Benefits	25% of salaries
Materials cost out of other revenues	30% of other revenues
Food costs	JD 111 thousand at the first year
Marketing Expenses	2% of total revenues
Electricity, water, and services cost	JD 12 thousand at the first year, with annual 10% increase
Other expenses	JD 2 thousand at the first year, with annual 5% increase
Accounts Receivable	2 months of total revenues
Inventory	JD 20 thousand at the first year, with annual 5% increase
Accrued expenses	5% of operating costs

5.2 Investment Cost

The project's Investment cost is estimated at JD 677 thousand distributed among fixed assets of JD 430 thousand, life stock cost of JD 68 thousand, working capital of JD 106 thousand, and pre-operating expenses JD 14 thousand.

The following table shows the project's Investment cost.

Table 27: the project's investment cost

Item	Value (in thousand JD)
Fixed assets	430
Life stock cost	68
Breeding cost for the first year	60
Working capital	106
Pre-operating expenses	14
Total	677

5.3 Financing

The project will be financed with the shareholders by 75% which is estimated at about JD 508 thousand, while the other 25% of the project investment cost will be financed through bank loans of about JD 169 thousand.

The following table shows the financing structure for financing the project, where:

- The interest rate is 9%.
- The loan will be paid during 4 years.

Table 28: Project financing schedule

Item	Value (in thousand JD)	%
Equity	508.1	75%
Loan	169.4	25%
Total	677	100%

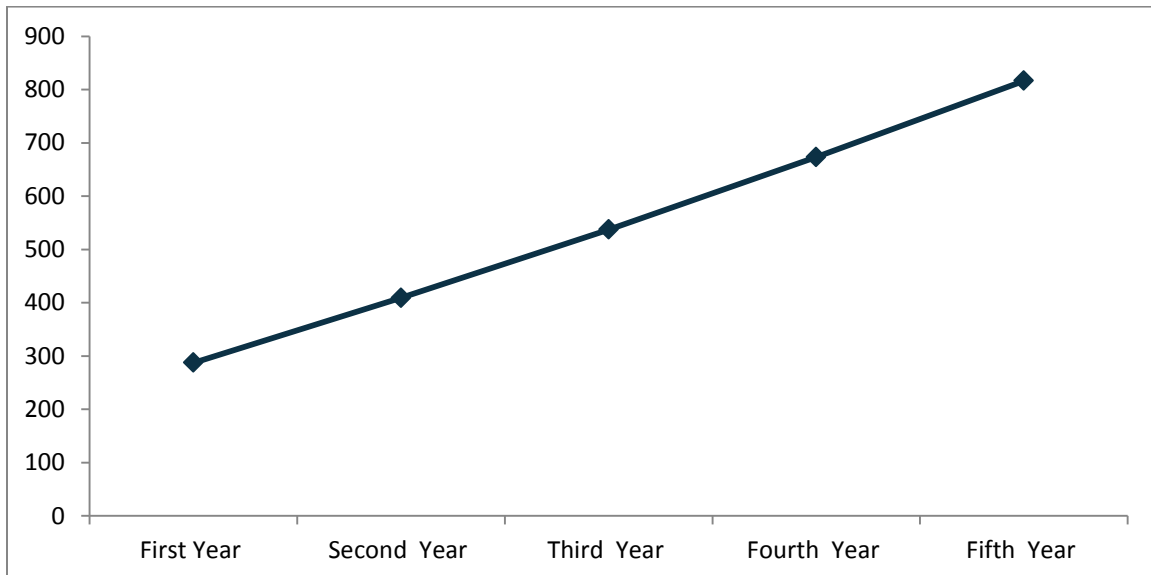
5.4 Revenues

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 288 thousand, and increased to reach up to JD 817 thousand in the fifth year, and that's because of project's growth and the increase of life stock size.

Table 29: The Expected Revenues

Statement	First Year	Second Year	Third Year	Fourth Year	Fifth Year
Number of Produced Dogs Pairs	56	76	96	116	136
Production Quantity	336	456	576	696	816
Sales Amount	316	436	556	676	796
Selling Price	550	567	583	601	619
Revenues of Selling Dogs	173,800	246,994	324,423	406,276	492,748
Number of Produced Cats Pairs	56	76	96	116	136
production quantity	336	456	576	696	816
Sales amount	312	432	552	672	792
Selling Price	180	185	191	197	203
Revenues of Selling Cats	56,160	80,093	105,411	132,176	160,453
Total Revenues (thousand JD)	230.0	327.1	429.8	538.5	653.2
Other Revenues (25% of pets sale Revenue) - thousand JD	57.49	81.77	107.46	134.61	163.30
Total Annual Revenue - thousand JD	287.45	408.86	537.29	673.07	816.50

Figure 3: Total expected revenues



5.5 The Projected Costs

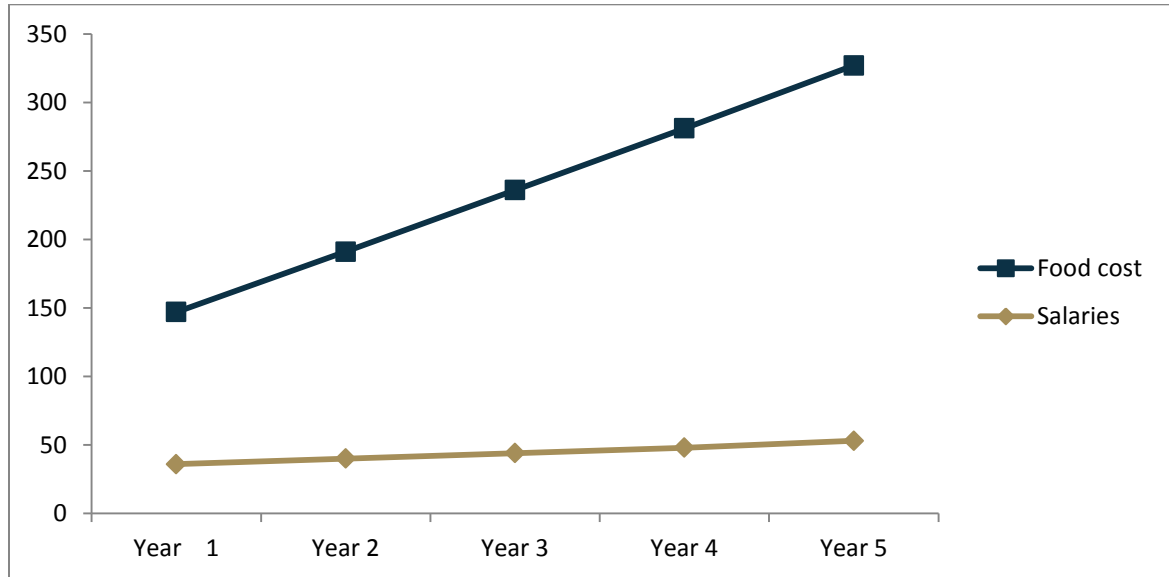
Operating Costs

The following table shows the project's operating costs over five years. The food cost in year 1 amounted to JD 111 thousand which increase to reach JD 274 thousand in year 5, and salaries cost in Year 1 amounted to JD 36 thousand which increase to reach JD 53 thousand in Year 5.

Table 30: Operating Costs

Operating Costs (in thousand JD)					
Item	Year 1	Year 2	Year 3	Year 4	Year 5
Salaries	36	40	44	48	53
Staff Benefits	9	10	11	12	13
Food cost	111	151	192	233	274
Depreciation	27	27	27	27	27
Electricity, water, services costs	12	13	15	16	18
Breeding costs and others	17	25	32	40	49
Total	212	266	320	376	433

Figure 4: Projected Operating Costs of the Project



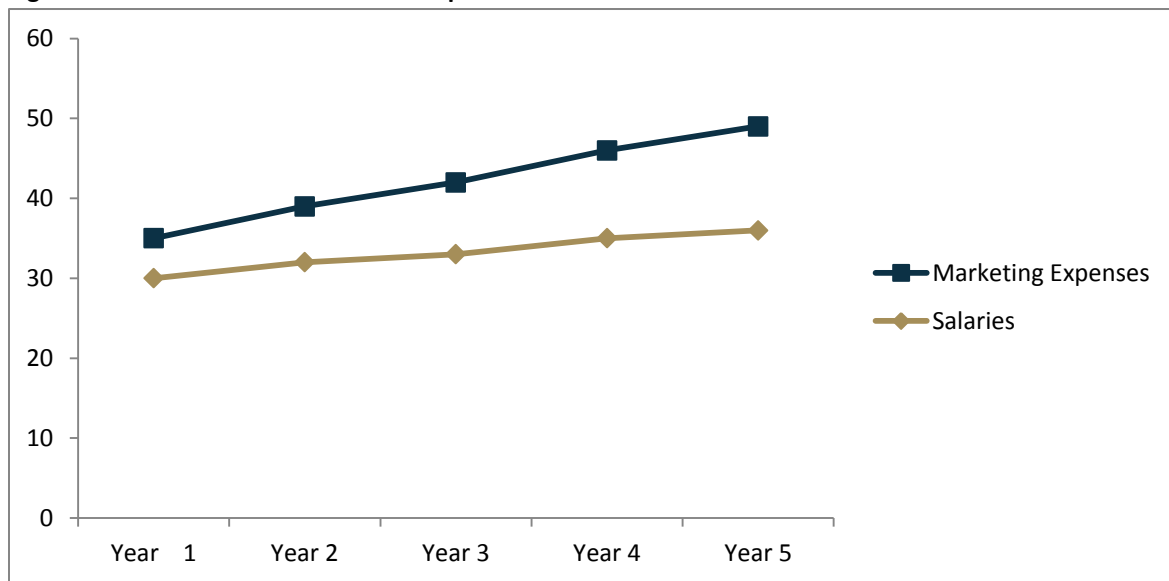
Administrative Expenses

The following table shows the projected administrative expenses of the project. Employees' salaries reach JD 30 thousand in the first year and increase to JD 36 thousand in the fifth year. The marketing expenses are about JD 5 thousand in the first year and increase to reach JD 13 thousand in the fifth year.

Table 31: General and Administrative Expenses

General and Administrative Expenses (in thousand JD)					
Item	Year 1	Year 2	Year 3	Year 4	Year 5
Salaries	30	32	33	35	36
Staff Benefits	8	8	8	9	9
Hospitality	4	4	4	5	5
Professional Fees	2	2	2	2	2
Marketing Expenses	5	7	9	11	13
Other Expenses	2	2	2	2	2
Amortization	14	-	-	-	-
Total	64	54	59	63	68

Figure 5: General and Administrative Expenses



5.6 Projected Financial Statements

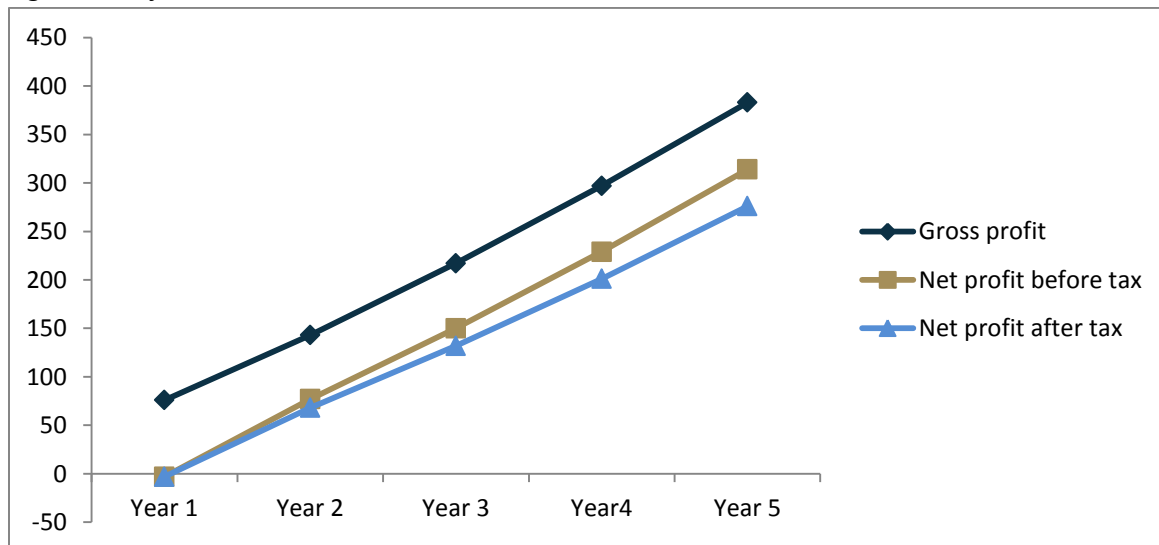
Income Statement

The following table shows the projected income statement of the project. It indicates that gross profit will increase from JD 76 thousand in the first year to JD 383 thousand in the fifth year. The net profit before tax will also increase from JD 77 thousand in the second year to JD 314 thousand in the fifth year, and the net profit after tax will increase from JD 68 thousand in the second year to JD 276 thousand in the fifth year.

Table 32: The Projected Income Statement

Income Statement (in thousand JD)					
Item	Year 1	Year 2	Year 3	Year4	Year 5
Revenues	287	409	537	673	817
Operating costs (cost of sales)	212	266	320	376	433
Gross profit	76	143	217	297	383
Administrative expenses	64	54	59	63	68
Net profit	12	89	158	233	315
financial expenses	15	12	8	4	1
Net profit before tax	(3)	77	150	229	314
Tax	(0)	9	18	27	38
Net profit after tax	(3)	68	132	201	276

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 677 thousand in the year of incorporation to about JD 778 thousand in the fifth year. The Total liabilities will decrease from JD 140 thousand in the first year to about JD 22 thousand in the fifth year. Moreover, the Shareholders' Equity will increase from JD 508 thousand in the year of incorporation to reach JD 756 thousand in the fifth year.

Table 33: 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	106	33	56	47	57	116
Receivables	-	48	68	90	112	136
Inventory	128	141	155	170	187	206
Pre- Paid Expenses	-	20	21	22	23	24
Total Current Assets	234	242	300	329	379	483
Fixed Assets	444	444	444	444	444	444
Cumulative Depreciation	-	41	68	95	122	149
Net Fixed Assets	444	403	376	349	322	295
Total Assets	677	645	676	678	701	778
Shareholders Equity and Liabilities						
Accrued Expenses and Payables	-	11	13	16	19	22
Long Term Loans	169	129	89	49	9	-
Total Liabilities	-	140	103	65	28	22
Shareholders Contributions	508	508	508	508	508	508
Retained Earnings	-	(3)	65	105	165	248
Shareholders' Equity	508	505	573	613	673	756
Shareholders Equity and Liabilities	677	645	676	678	701	778

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 -128 thousand in the first year to JD 262 thousand in the fifth year; while the Cash at the ending period will increase from JD 106 thousand in the year of incorporation to JD 116 thousand in the fifth year.

Table 34: 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	-	(3)	68	132	201	276
Depreciation	-	41	27	27	27	27
Change In Working Capital	(128)	(70)	(33)	(35)	(38)	(41)
Cash Flow From Operation	(128)	(32)	62	124	190	262
Investing Activities						
Fixed Assets	(444)	-	-	-	-	-
Cash From Investing Activities	(444)	-	-	-	-	-
Financing Activities						
Capital (Equity)	508	-				
Loan	169	(40)	(40)	(40)	(40)	(9)
Dividends		-	-	(92)	(141)	(193)
Cash Flow From Financing Activities	677	(40)	(40)	(132)	(181)	(203)
Net Cash Flow	106	(72)	22	(9)	9	60
Cash At The Beginning Period	0	106	33	56	47	57
Cash At The Ending Period	106	33	56	47	57	116

5.7 Financial, Economic and Social Analysis

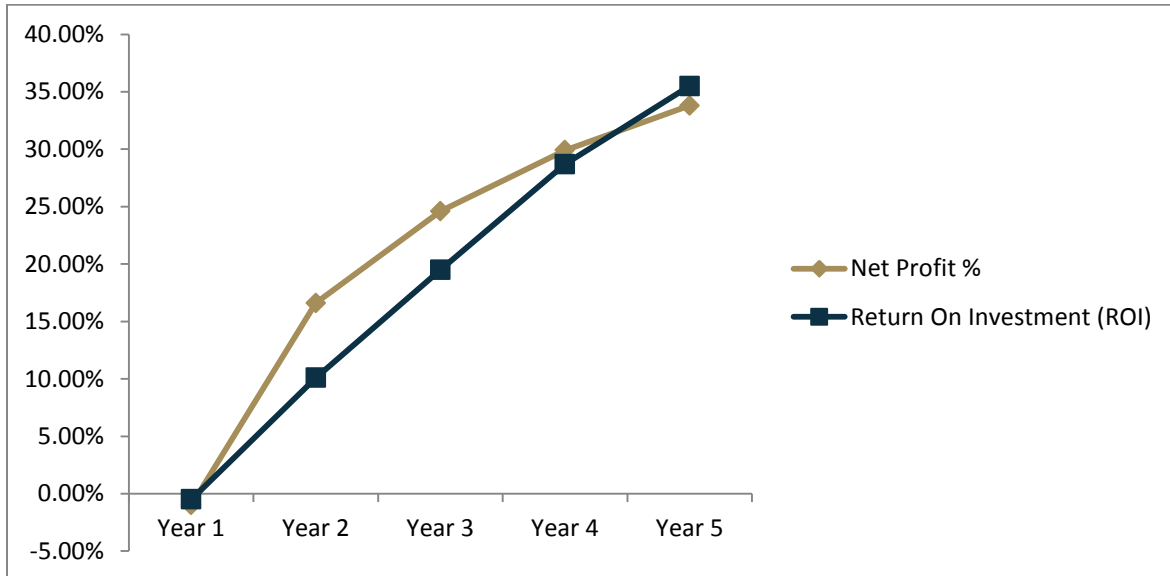
Financial Analysis

The following table shows the financial analysis of the project. It indicates that the net profit ratio will increase from 16.6% in the second year to 33.8% in the fifth year, and the return on investment will increase from 10.1% in the second year to 35.5% in the fifth year.

Table 35: Financial Analysis

Financial Analysis (In Thousand JD)					
Item	Year 1	Year 2	Year 3	Year 4	Year 5
Assets	645	676	678	701	778
Revenues	287	409	537	673	817
Profits	(3)	68	132	201	276
Capital (Equity)	508	508	508	508	508
Net Profit %	-1.0%	16.6%	24.6%	29.9%	33.8%
Return On Investment (ROI)	-0.5%	10.1%	19.5%	28.7%	35.5%
Return On Capital (ROC)	-0.6%	13.4%	26.0%	39.6%	54.4%
Net Profit On Revenues	-1.0%	16.6%	24.6%	29.9%	33.8%
Assets Turnover (Time)	0.45	0.60	0.79	0.96	0.47

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 16.4%. It exceeded four times the return on assets, which means the economic feasibility of the project
- The present value of the project reached about JD 775 thousand. It exceeds the net present value with JD 477 thousand, which means the economic feasibility of the project.
- The profitability index of the project reached 1.14 times, which means that the expected value of the project will increase by one time the investment value, which proves that the project is feasible.
- The project payback period is 5.2 years.

Table 36: 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	(677)	(32)	62	124	190	262
terminal value	-	-	-	-	-	756
Net Cash flow	(677)	(32)	62	124	190	1,018
Internal Rate of Return (IRR)	16.4%					
present Value	775					
Net present value	98					
Profitability Index (Time)	1.14					
Payback period (Year)	5.20					

Social Analysis

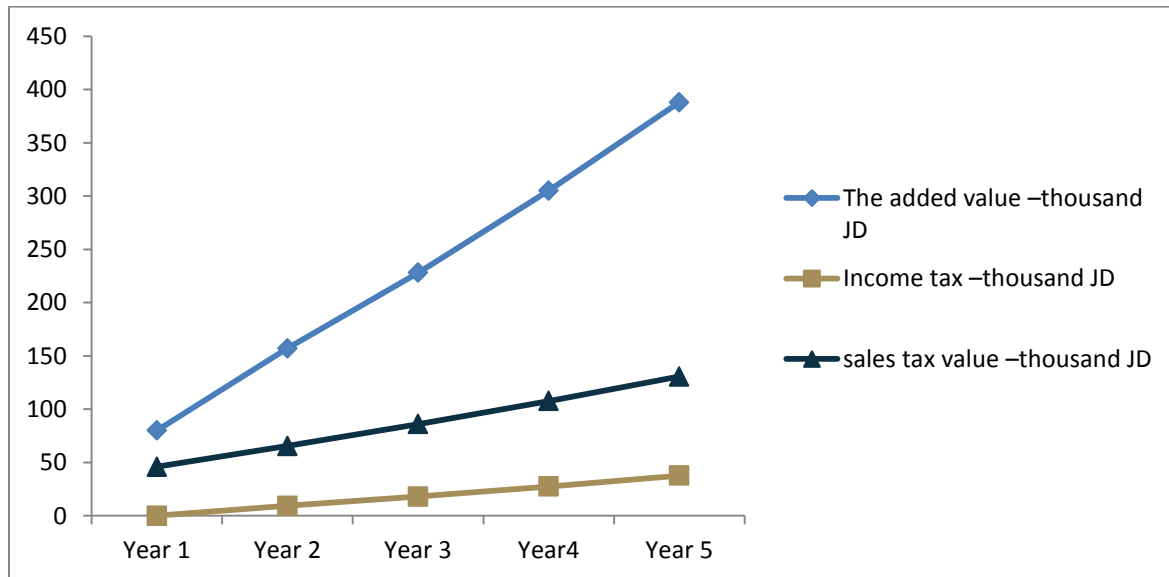
The following table shows the social analysis of the project. It is noticed that the number of staff required for the project will increase from 14 employees in the first year to 20 employees in the fifth year. All the staff will be with Jordanian nationality.

The added value of the project will also increase from JD 80 thousand in the first year to JD 388 thousand in the fifth year. The income tax will also increase from JD 9.3 thousand to reach JD 37.7 thousand in the fifth year.

Table 37: The Social Analysis of the Project

Social Analysis					
Statement	Year 1	Year 2	Year 3	Year4	Year 5
Number of Employees	14	15	17	19	20
Jordanian employees	14	15	17	19	20
The added value –thousand JD	80	157	228	305	388
Income tax –thousand JD	0	9.3	18.0	27.5	37.7
sales tax value –thousand JD	46.0	65.4	86.0	107.7	130.6
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 38: 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 	<ul style="list-style-type: none"> ▪ The financial risks that may face the company are low, because the company payment method is cash ▪ There is no risk of currency exchange, because the company sales and purchases by local currency ▪ There is no risk of inflation because the company's pricing is based on an annual basis

Risks	Type of Risks	Risk Assessment
	<p>financial instrument, due to fluctuations in foreign currency exchange rates.</p> <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. 	
<p>Business risk (sector risk)</p>	<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 	<ul style="list-style-type: none"> ▪ The risks are considered moderate before the company's establishment, because of getting the approval of the official authorities such as municipality, Health ▪ Reputational risk is moderate, as the company deals with certain community. ▪ Market risk in the short term will be low because there is no competition from other companies in the governorate

Risks	Type of Risks	Risk Assessment
	<p>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 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. 	<ul style="list-style-type: none"> ▪ Operational risks are very low, for the company will contract with specialized technical bodies to develop the required information systems, in order to manage operations ▪ 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
	<ul style="list-style-type: none"> ▪ 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 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 39: Investment Increase by 10%

Index	Base	Impact	Change
Internal Rate of Return (IRR)	16.4%	14.6%	1.8%
The Present Value at a discount rate of 13% (in Thousand JD)	775	796	-21
Net Present Value at a discount rate of 13% (in Thousand JD)	98	49	49
Profitability Index (Time)	1.1	1.1	0
Payback period (Year)	5.2	5.5	-0.30
The Net Profit Ratio – an average of 5 years	20.8%	20.4%	0.4%
Return on Investment - an average of 5 years	18.7%	17.1%	1.6%
Return on Capital – an average of 5 years	26.6%	23.8%	2.8%
Net Profit On Revenues - an average of 5 years	20.8%	20.4%	0.4%
Assets Turnover (Time) – an average of 5 years	0.7	0.6	0.09
The added value - an average of 5 years (in thousand JD)	231	230	1
income tax - an average of 5 (in thousand JD)	18	18	0
sales tax - an average of 5 years (in thousand JD)	87	87	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 14.6%, which is considered suitable for investment purposes
- The new payback period is 5.5 years, and it is reasonable for recovery purposes
- The return on capital is 23.8%, 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 40: Reducing Revenues 10%

Index	Base	Impact	Change
Internal Rate of Return (IRR)	16.4%	8.8%	7.6%
The Present Value at a discount rate of 13% (in Thousand JD)	775	564	211
Net Present Value at a discount rate of 13% (in Thousand JD)	98	-112.99	211
Profitability Index (Time)	1.1	0.8	0
Payback period (Year)	5.2	6.4	-1.20
The Net Profit Ratio – an average of 5 years	20.8%	13.3%	7.5%
Return on Investment - an average of 5 years	18.7%	13.8%	4.9%
Return on Capital – an average of 5 years	26.6%	17.1%	9.5%
Net Profit On Revenues - an average of 5 years	20.8%	13.3%	7.5%
Assets Turnover (Time) – an average of 5 years	0.7	0.6	0.1
The added value - an average of 5 years (in thousand JD)	231	183	48
income tax - an average of 5 (in thousand JD)	18	13	5
sales tax - an average of 5 years (in thousand JD)	87	78	9

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 8.8%, which is considered low for investment purposes
- The new payback period is 6.4 years, and it is reasonable for recovery purposes
- The return on capital reaches 17.1%, which is suitable 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 41: Increasing the Operating Costs by 10%

Index	Base	Impact	Change
Internal Rate of Return (IRR)	16.4%	11.7%	4.7%
The Present Value at a discount rate of 13% (in Thousand JD)	775	641	134
Net Present Value at a discount rate of 13% (in Thousand JD)	98	-36.39	134
Profitability Index (Time)	1.1	0.9	0
Payback period (Year)	5.2	5.9	-0.70
The Net Profit Ratio – an average of 5 years	20.8%	15.4%	5.4%
Return on Investment - an average of 5 years	18.7%	16.0%	2.7%
Return on Capital – an average of 5 years	26.6%	21.0%	5.6%
Net Profit On Revenues - an average of 5 years	20.8%	15.4%	5.4%
Assets Turnover (Time) – an average of 5 years	0.7	0.7	0
The added value - an average of 5 years (in thousand JD)	231	203	28
income tax - an average of 5 (in thousand JD)	18	15	3
sales tax - an average of 5 years (in thousand JD)	87	87	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 11.7%, which is considered suitable for investment purposes
- The new payback period is 5.9 years, and it is reasonable for recovery purposes
- The return on capital is 21%, which is suitable for investment purposes