

In the name of God

Pre-Feasibility Studies

Project Name:

Kebab and Burger Production

Project Owner:

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Advisor of the project:

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**Project address: Ahvaz Central Industrial Zone, Ahvaz,
Khuzestan**

Preparation Date: February, 2021

Pre-Feasibility Study Summary:

General Information	
Project Title	Kebab and Burger
Capacity	1,000 tons
Employment	12 individuals
Business days	300 days
Product consumption	meals
Market	
Global Price of the Product	5 dollers
Domestic demand:	12000 ton
Domestic production	10000 ton
Import	2 Million dollers
Export	55 Million dollers
Technical Information	
Land Area	2,000
Buildings Area	800
Core Raw Material	Red Meat
How to supply raw materials	Purchase from slaughterhouses
Power Requirement	300 kW
Water Requirement	2,000
Fuel required	Petrol
Financial Information	
Fixed Investment	48,150 Million rials
Working Capital	138,000 Million rials
Total Investment	186,150 Million rials
Annual Sales	950,000 Million rials
Net Present Value (NPV)	۵۴۳۲ Million Rials
Internal Return Rate	76%
Payback Period	1.3 year
Ratio of investment resources	
Equity 32%	59.568
Financing 68%	126.582

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Introduction

Meat has a high nutritional value and its consumption provides a large amount of the body's needs for nutrients. Meat is an excellent source of high quality protein in terms of essential amino acids. In addition, meat has a large amount of B-complex vitamins and minerals, especially iron. Meat products, which have a wide variety of types, play a major role in people's diet and food variety. As mentioned, these products have a higher nutritional value in terms of nutrition due to their more complete combination of amino acids than pure meat. Contamination and spoilage of animal protein materials and animal products cause a significant decrease in nutritional value and ultimately the removal of nutrients from the consumption cycle. On the other hand, the use of meat and other meat products as an important and valuable food source can play an important role in ensuring the health of society. Therefore, these foods are very sensitive and highly perishable, and maintaining their quality from the hunting stage to consumption has a great importance. Therefore, the industries related to the processing and maintenance of these products can be effective in improving the quality and thus encouraging consumers to use these important products.

Important steps and challenges in the process of processing and packaging of protein products are the selection of appropriate and efficient devices, the need for basic facilities such as water, electricity, heating, cooling, etc., increasing meat prices and the complexity of administrative bureaucracies, customs issues, Financial transfers, transportation and insurance issues in the process of obtaining the necessary licenses from health organizations and veterinary organizations.

In the following, the mentioned cases will be examined.



1. Product Introduction

The hamburger has become a worldwide phenomenon since Ray Kroc founded McDonald's first restaurant in the mid-1950s. Kroc set up an industrial production line to produce hamburgers. Recognized as the best fast food service provider in the world today, the chain restaurant includes more than 30,000 restaurants in 120 countries. The factor that led to the rapid expansion of this company was McDonald's proper awareness of society's needs and people's new way of life. The hamburger is named after the port of Hamburg in Germany. The sailors of this city flattened the ground beef into a circle and ate it as a barbecue, and gradually, the American sailors of this port took this food to their country and introduced it to their compatriots as hamburgers. This paved the way for the beginning of the industrial production of hamburgers and its introduction to the world. During World War I,

due to anti-German sentiment in the world, the name hamburger was changed to steak burger for a while, and the sandwich lost its reputation due to the political issues of the day until the mid-1920s when Newcastle restaurant chains were established. These chain restaurants offered a variety of burgers. Of course, there were foods similar to hamburgers in ancient times. For example, in the Sassanid era, a ready-made food called Khamizak or Bazmavard was prepared for the kings who went to war, which was in fact semi-cooked smoked meat served in bread and consumed. Another hamburger-like food dates back to 1,200 AD, where the Mongols used lamb and mutton as food. The Mongol riders placed the meat under the horse's saddle, and the pressure of the saddle caused the meat to become brittle. This allowed them to eat the food they needed without dismounting. When the Mongols conquered Moscow, they took the hamburger there and made it a local Tatar steak. The young population of Iran, the increase in women's employment, as well as the speed and ease of preparation of these seeming protein products have reserved a special place for them on the Iranian table and have already sounded a serious alarm for the health of society.

Hamburger and chicken or beef Koobideh are meat products obtained through the formulation and mixing of permitted raw materials. The most important step in the process of preparing hamburgers and Koobideh is to prepare the ingredients and mix them. The very important point about the widely consumed foods industry, especially hamburgers and Koobideh, is hygiene and quality control. For proper quality control, the raw materials, different stages of the production process and the final product must be continuously tested and checked according to the standard. The condition of the product in terms of nutritional value, health and cost is directly related to raw materials, each of which has a special role in the final product. So lots of care and attention must be paid in the selection of its volume and quality. The composition of raw materials is determined according to the standard limits as well as the tastes of consumers. In addition to production line equipment, each production unit requires basic facilities such as water, electricity, heating, cooling, etc. which must be selected in accordance with the unit production capacity and production line equipment. In order to carry out the production process as well as support services, halls and buildings are needed, the area of which is determined according to the principles of industrial engineering. How to properly conduct the hamburger preparation process largely depends on choosing the right and efficient machines. Basically, the machines used in the food industry should be made of stainless steel and hygienic measures should be fully considered in the design and manufacturing process.

Comparing the quality of Iranian meat products to foreign products has always been the focus of economic activists. What is certain in this regard is the rule of codified and strong laws in all aspects of meat production in the country. Unfortunately, due to the lack of quality supervision and monitoring, there are manufacturers with different ratings in this industry. Of course, it should be borne in mind that there are factories in the country that produce meat products on a global quality level. These factories, which are a few, have put their agenda at producing lower-level quality

products. This does not mean that products of other meat factories pose a health risk to consumers. Since higher quality equals the use of more meat in products in the meat products industry, some uncertainties emerge. When it comes to the quality of meat-based products, the more meat is used, the higher the quality. Nevertheless, there is a lot of negative publicity behind the industry. There are two main causes. First, it must be accepted that in all industries, whether manufacturing, commercial or service providing, it is completely meaningless if quality grading is not taken into account. Otherwise, there would be no competition and development. Second, since we are not a reliable research-oriented and reference country, many nutritionists use the exact data of developed countries about the high per capita meat consumption and suggest the same prescription for the country.

In addition, another issue that has recently posed challenges for the meat industry is the increase in the price. Studies show that the root cause for high meat prices goes back to the rise in the exchange rate, which since the beginning of the year has caused the prices of many commodities, such as meat, to rise. Meanwhile, the multiplication of currency exchange rate leads to economic rent and corruption, and meat is not an exception. Allocating foreign currency at a government rate (1\$ = 42,000R) motivates economic agents to import large quantities of meat or livestock and export it to neighboring countries at higher prices. This process fuels the smuggling process. In addition, unilateral US sanctions have made it difficult to transfer money abroad and prevent traders from importing enough meat. This is now the biggest challenge for all industries of the country.

There are even more challenges for exporting meat products. The fact is that in addition to the obligation to obtain the necessary licenses from health and veterinary organizations, the export of these products in the country is slow. The complexity of bureaucracies, customs issues, financial transfers, transportation, and insurance disputes are among the most important factors that have increased both export costs and risk. Meanwhile, one of the concerns of artisans and producers is liquidity and working capital. As the value of the national currency has fallen sharply and the exchange rates of major currencies such as the dollar and the euro have risen, the cost of goods has also risen sharply. Due to these issues, the payment method of factories has changed from long-term to cash or even prepayment. This has led to the need for more liquidity to maintain the previous level of the production cycle.

Lack of proper information systems is one of the biggest challenges for the meat production industry. Unfortunately, the misinformation broadcasted through social media and news in recent years has induced a negative impression in the minds of consumers towards these products. This issue has drastically reduced the per capita consumption of meat products compared to the last decade. As a result, many factories were either shut down or were producing at low capacity. In this regard, regulating organizations and institutions should inform the audience and the public so the damage to the industry will stop.

If the economic conditions of the country in recent months continue to prevail, a good outlook for the industry can not be imagined. If we do not want to be only dependent on the oil industry for revenue, there is no other way but to seek the needs

of customers outside Iran. This can only be achieved by raising the quality of the products. Companies need to think about sustainable exports and find and develop export markets. But if they enter the target markets solely for the purpose of making a temporary profit and offer low-quality goods to customers, they will only discredit Iranian goods. So if a producer really wants to export, he must first have reached a certain level of quality.

However, it must be said that currency and export challenges and substandard producers are the challenges of all industries and artisans in the country. It's a common pain, not only in the meat products industry but also in other industries. In the current situation, the policy and decision-makers of the country's industry must identify these obstacles and take fundamental steps to improve and obviate them. The development of exports and the establishment of potent producers in the current economic conditions of the country can be a beacon for the difficult days ahead.

Meat has a high nutritional value and provides a large number of nutrients necessary to the body's needs. Meat is an excellent source of high-quality protein in terms of essential amino acids. In addition, meat has a large amount of B-complex vitamins and minerals, especially iron. Meat products, which have a wide variety of types, play a significant role in the nutrition and variety of people's food. As mentioned, these products have a higher protein value due to their more complete combination of amino acids than raw meat. In addition to meat characteristics, burgers have the following advantages:

- The final cost of the product is lower than meat which enables the low-income classes to purchase meat products.
- Due to the use of various types of animal and protein raw materials (meat, casein, milk powder, oil, soy protein, gluten, eggs, etc.), burgers are one of the most complete foods.

A hamburger is a mixture of halal animal meat, especially beef and mutton, which can contain large amounts of vegetable protein, potatoes, eggs, and a variety of spices and vegetables, which are rounded by a special mechanical device. It is supplied frozen in special wax papers with a normal weight of 100 grams.

Process characteristics, technical issues and operating conditions

Hamburgers are ground meat of halal animals, especially cattle, calves, sheep, with or without the addition of fat, herbs and vegetables such as onions and garlic, which are prepared by a special mechanical device in 100 grams patties and supplied frozen in waxed papers. In hamburger formulation, a fraction of vegetable proteins (Patti) can also be used. The shape of the hamburger, which depends on the mold of the hamburger machine, is usually circular or rectangular. It is packed between wax papers and in cardboard packages. The method of hamburger production is unique and the difference between different production units is in the automation of production line machines.

The process of hamburger production includes preparation and weighing of raw materials, mixing and molding. What is important in the production of hamburgers is the type of raw material and the volume used in the formulation. First, the raw

materials are delivered (appropriate and good quality raw materials must be delivered. The quality control of the input raw materials is very important, which is fully explained in the quality control section below). Raw materials such as meat must be prepared before entering the production line which includes dividing the carcass, taking out the viscera, cleaning the meat, deboning and grinding the meat. The raw materials are mixed according to a special formulation and transferred to the -25 storage after molding and packaging. After freezing, hamburgers can be wrapped in wax papers and transferred to the refrigerator after freezing. Due to the cost and time-consuming nature of this method, industrial units prefer not to use it.

Meat and meat products are the most important food sources in the daily diet of people in developed countries and their consumption rate is affected by several factors. Due to the variety and ease of use, consumption of such products has increased significantly and provides a significant part of the nutritional needs of society, especially youth and adolescents. On the other hand, in recent years, people have become more and more interested in consuming functional (health-friendly) foods, especially those that use meat in their composition, such as frozen meat products including hamburgers. Hamburger is one of the meat products that is highly consumed for various reasons such as ease of consumption, use of meat in a desired composition and taste. Due to the fact that this product remains raw until consumption, it is necessary to control its quality.

Hamburger is a type of meat product that consists of a heterogeneous mixture of meat, minced onion, spices and salt that is rounded and served fresh or frozen. In some products, bread flour, oil, eggs and soy are used. Hamburgers are one of the most popular meat products used by millions of consumers around the world. The fat content affects the sensory properties of the meat products and plays a major role in creating a creamy state, desirable appearance, deliciousness, texture acceptability and a feeling of satiety. Therefore, formulating a low-fat meat product without changing the taste, mouthfeel and other organoleptic characteristics is a very precise and specialized process. Epidemiological studies have shown that there's a direct relationship between the type of diet and the risk of some diseases such as colon cancer, obesity and cardiovascular disease. Thus, growing concerns about the potential dangers associated with consuming high-fat foods have led the food industry to develop new formulations and modify traditional food products to lower-fat products. Today, fat substitutes are new ways to produce a variety of new low-fat foods that have the same pleasant taste and texture as high-fat products but are devoid of unnecessary calories and cholesterol. In various studies, the use of alternatives such as hydrocolloids (carrageenan, agar and alginate), microbial gums (xanthan), cellulose, inulin, vegetable seed gum (locust), guar, starches, processed plant compounds (such as wheat bran, soy-based products, oat bran and fiber, citrus fiber and vegetable seeds, etc.), esterified vegetable oils and other compounds have shown satisfactory results in the production of various low-fat meat products. The quality and sensory characteristics of burgers depend on factors such as the type of animal, breed, pH of the meat, how it is ground, the piece of meat used (muscle type) and the type and amount of non-meat ingredients. Burgers are frozen after

production, but storage in cold conditions (zero to 4 degrees Celsius) is also common in some countries.

1.1. Product Name and Code (ISIC 3).

The most common classification in economic activities is the ISIC classification. The ISIC code of burger and koobideh production is presented in the table below.

ISIC Code	Product Name
1511312490	Hamburger
1511412406	Koobideh Kebab

Source: Industry, Mining and Trade Organization

1.2. Assessment and Presentation of Standards

National Standards

Item	Standard Number
Meat Products	924
Meat Products - Protein	712

Source: Institute of Standards & Industrial Research of Iran (2020)

1.2.1. Standards and Licenses:

Operation license issued by Ministry of Agriculture

Operation license issued by Ministry of Industry, Mine and Trade

Establishment permit issued by Food and Drug Administration

The technical expert license issued by Food and Drug Administration

Establishment permit issued by Institute of Standards & Industrial Research of Iran

۱.۳. Applications

Social busyness and time constraints have boomed the ready-to-eat and semi-prepared food market. Today, the pattern of food consumption in the world is changing, and the tendency to consume foods that are prepared quickly has become important. The importance of using these products becomes obvious due to the characteristics such as the completeness of the nuggets in terms of nutrients, hygiene, availability and quick preparation. In terms of production technology, meat products are generally divided into fresh, heated, pasted and cooked, and there is a distinct group called frozen products, which are called hamburgers or burgers. Therefore, hamburgers and koobideh kebabs have a special place in households and restaurants as meals.

1.3.1. Assessment of Alternative Products and their Effect on Product Applications

Types of the ground and processed meat or edible plants in different weights that are molded in different shapes and prepared in the form of fried, cooked or charcoaled. The products are first packed in permitted food packages and then supplied in cardboard boxed and frozen.

Type of ground and processed meat that is shaped into different shapes covered with salt, spices, breadcrumbs and supplied in a raw, semi-cooked, semi-fried or cooked state. Due to the variety of shapes in different sizes, the nuggets are first packed in permitted food packages and then supplied in cardboard boxed and frozen. In the case of shrimp nuggets, the product must be supplied in a cooked or semi-cooked state

١,٣,٢. Description of product applications in domestic and foreign markets

Modern man, who has to work day and night in a boring machine environment to meet his growing needs to buy new appliances and luxuries, has lost the patience to prepare food traditionally and has resorted to consuming a new type of food, known as fast food. Today, ready-made food has become an integral part of urbanization. Easy access, wide distribution and low prices play an important role in the vast consumption of such foods. The great variety of these foods, the use of different and fragrant spices, as well as the beautiful and attractive appearance, causes their consumption to increase. The main reasons that led to the increase in demand are:

- High-fat content
- Flavoring spices
- Less time to prepare food than traditional types
- Reasonable prices
- Different and sometimes more delicious taste than different foods

1.4. Assessing the current Market

Packaging tool has been considered by marketing experts as efficient for many years. The use of different types of packaging, while giving the product better storage capability, is also effective in gaining a higher market share for the product. Despite having very good quality, insufficient attention to hygienic packaging standards has caused the country's various food products to not be able to enter global markets and pave the way for increasing the level of domestic production, due to some secondary contaminants or being supplied in non-standard or unappealing sizes and shapes. Obviously, by implementing hygienic processing and

packaging projects, domestic food products will be able to compete with similar foreign products in the global market.

Contamination and spoilage of animal protein products cause a significant decline in nutritional value and ultimately the removal of nutrients from the consumption cycle. On the other hand, the use of fish, shrimp and other seafood as an important and valuable food source can play an important role in ensuring the health of society because the fat in seafood has low-density lipoprotein. However, these foods are very sensitive and perishable, and maintaining their quality from the fishing stage to consumption is very important. Therefore, industries related to the processing and storage of these products can improve the quality and thus encourage consumers to use these products.

The main function of food is to help maintain the health and stability of the body. In recent years, the relationship between various diseases and food has been extensively studied and significant results have been achieved in this field. In today's world, people are increasingly interested in ready-to-eat foods such as sausages, hot dogs and burgers due to the problems caused by industrial societies and job implications. Therefore, the quality and health of these food products are very important. Hamburger is a homogeneous mixture of meat, onion, breadcrumbs and other permitted additives that are produced and supplied manually or industrially in several production units in the country. According to the Institute of Standards and Industrial Research of Iran, the country's industrial burgers are divided into three groups of products containing 30% meat as ordinary burgers, products containing 60% meat as premium burgers and burgers with more than 60% meat. In ordinary burgers, the use of soy is allowed up to 12%, but in other types of burgers, soy is not allowed in the product formulation. According to manufacturing licenses issued by the Ministry of Health and Medical Education, only the use of beef is allowed in the production of industrial hamburgers. Beef or a mixture of beef and mutton is also used in the production of hand-made hamburgers, and there is no specific formulation for this type of hamburger, but it contains at least 75% meat. Since the type of meat used to make hamburgers is important in terms of nutritional value, common human-animal diseases, and religious issues, many efforts are being made to improve the quality of burgers around the world. In recent years, the demand, especially among the youth, for ready-to-eat foods is increasing. Most of these foods are rich in fat and sugar and devoid of carbohydrates. There is a direct link between this diet and the risk of cardiovascular disease and atherosclerosis. Statistics show that currently, the per capita consumption of hamburgers in China is 71, in the United States 69, in Europe 62 and Iran 4 kg per year, But the young population of Iran, the increase in women's employment, as well as the speed and simplicity of preparing these seeming protein products, caused them to be vastly found on the Iranian table and have already sounded a serious alarm for the health of society.

۱,۴,۱. Major Domestic Consumers

School students consume this type of food due to the long hours of school. Many office workers are also major consumers of this type of food. Working women and

young couples are other customers of these products. Also, restaurants and catering centers are the main customers of this product.

1.4.2. Export Conditions

Given the domestic demand as well as the demand of Iraq, a wide market could be imagined for this product.

1.4.3. Import Conditions

All ingredients required for final production are available in the country and there are no plans to import them.

۱. Supply and Demand Situation in Domestic and Foreign Markets

One of the most important issues for the establishment of an industrial unit is the study of supply and demand and the market and the functioning units in the country. These surveys provide an overview of supply and demand in the consumer market. As mentioned before, fruits are one of the basic and essential nutrition for families and their consumer market is not specific to specific regions. They are consumed in all parts of the country and all around the world. Fruits are one of those products that have a permanent market and will never be removed from people's food baskets. Therefore, with the increase in population growth, their consumption will continue to increase. Currently, some production units with a capacity of over 40,000 tons are operating in this field in the country including Isfahan Flower Company and Allah Bahar Hamedan Food Company. Several production units are also under construction that upon completion, the capacity for producing processed vegetables and fruits will increase and export will become an option and priority. In fact, due to the high export value of these products, serious measures must be taken in this regard. There is a very high domestic demand for the product and on the other hand, important markets such as Iraq and Kuwait can be covered.

Standards and Licenses

Operation license issued by Iran Veterinary Organization and its Provincial Department of Khuzestan

Pending C.E. code issued by Iran Veterinary Organization and its Provincial Department of Khuzestan

Operation license issued by Arvand Free-Trade Zone Organization

Operation license issued by Khuzestan Department of Industry and Trade and Mines

2.1. Consumption trend during the last five years

Annually, more than 600,000 tons of various meat products are produced and consumed in the country. In the past, the per capita consumption of these meat products in Iran was 1.5 kg, but in recent years, it has increased to more than 6.5 kg, while its per capita annual consumption is 60 and 70 kg in European countries and the United States, respectively. Although some people are pessimistic about semi-finished and fast foods, statistics show that the consumption rate in the country is on the rise. Some food industry experts in Iran believe that the production of meat products is in very good condition in terms of compliance with relevant standards.

3. Description of product applications in domestic and foreign markets

Today, increasing population growth, diversity of tastes and increasing food consumption have forced human beings to try to make more use of resources to meet their food needs. This led humans to one of the food sources, water reserves. Per capita access to seafood is currently 16.4 kg per year in the world, 67 kg per year in China and Japan and 9 kg per year in Iran. Seafood can provide many necessary nutrients and since the per capita consumption of seafood is very low in Iran, maybe the best way to increase that is to make seafood products that are easy to consume.

3.1. Major Customers and Providers

Canada, China, Japan, Russia, India, the United States are the largest producers of meat and European countries and Japan and the United States have the largest consumption rate. The most suitable target markets for the export of domestic products are European countries and neighboring countries in the Persian Gulf. EU countries are also a very good target market for meat products, as in 2018 they imported a significant amount of frozen burgers.

4. Assessment and Determination of the Minimum Economic Capacity including Fixed Investment Value in Rials and Dollars (Using the Available Data of Ongoing Units, UNIDO, Internet and Global Databases, Technology, Equipment, etc. Provider Companies)

The annual nominal capacity of the project is as follows, considering the domestic demands (especially Khuzestan province) and exporting.

500 tons of hamburger

500 tons of kebab for the first year

Over the first 5 years, the practical capacity will be the same as the nominal capacity, considering the need for liquidity to supply raw materials, manpower efficiency and unforeseen factors.

A 12-month period is estimated to purchase the required equipment and complete the production line. This volume of products is anticipated to be prepared in 300 days by an 8-hour day shift.

Production and Sales Plan over the Next 5 Years

Year 5	Year 4	Year 3	Year 2	Year 1	Year of Operation / Title	
100	100	100	100	100	Capacity Percentage - tons	
750	750	750	750	500	Hamburger	
750	750	750	750	500	Kebab	
					Revenue	
1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Hamburger price per kg	
1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	Kebab price per kg	
1,500,000	1,500,000	1,500,000	1,500,000	1,000,000	Sales	
1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	3,400,000	Total Sales
					Million Euros (1€=280,000R)	

Project Investment Details:

Total Cost		Required Cost					Cost (million Rials)	Item
Mill ion Eur os	Milli on Rials	Total (Million Rials)	Rial	Foreign Currencies				
			Million Rials	Equivalent to Rials (Million Rials)	Million Yuan	Million Dollars		
	4,000	-	-				4,000	Land
	1,500	-	-				1,500	Landscaping
	18,050	9,050	9,050				9,000	Construction
	6,100	-	-				6,100	Facilities
	9,050	12,000	12,000				-	Equipment and Machinery
	-	1,000	1,000				-	Laboratory Equipment
	12,000	2,500	2,500				-	Transportation
	1,000	1,000	1,000				-	Office Equipment
	2,500	2,000	2,000				-	Unforeseen Expenses
	48,150		27,550				20,600	Total Fix Assets
								Pre-Operation Costs
	48,150		27,550				20,600	Total Fixed Investment
	138,000		138,000				138,000	Working Capital
	186,150		165,550				158,600	Total Investment

- 1 Euro = 280,000 Rials
- 1 Dollar = 255,000 Rials
- 1 Yuan = 60,000 Rials

Land Details:

Equivalent to Euros	Total Cost of Available and Required	Total Cost (Million Rials)		Area (m ²)		Item
		Required	Available	Required	Available	
	4,000				2,000	Land

Building Details:

Equivalent to Euros	Total Cost (Million Rials)			Unit Price (Rials)	Area (m ²)		Item
	Total	Required	Accomplished		Required	Accomplished	
			9,000	30,000,000		300	Production Hall: Industrial Shed
	5,600			28,000,000	200		Raw Material and Products Warehouse: Industrial Shed
	2,500			25,000,000	100		Offices
	500			25,000,000	20		Electrical Room
	450			10,000,000	45		Security Building
	9,050		9,000		365	300	Gross Floor Area and Total Costs

Facilities Details:

Equivalent to Euros	Required Cost (Million Rials)			Technical Specifications	Item
	Total	Required	Accomplished		
	800		800	140 kV	Power Supply
	400		400	1 inch	Water Supply
	400		400	30 m ³	Gas Supply
	4,500		4,500	100 tons	Refrigerator
					Fire Extinguishing
	6,100				Total

Production Line Machinery:

Equivalent to Euros	Total (Million Rials)	Cost (Million Rials)		Equivalent in Million Rials	Equivalent in Dollars		Number		Machinery	Num
		Required	Accomplished		Required	Accomplished	Required	Available		
		2,000					2		Grinder	1
		2,000					2		Production Machine	2
		8,000					2		Packaging Line	3
		12,000					Total			

Office and Service Equipment

Equivalent to Euros	Required Cost (Million Rials)			Number		Items
	Total	Required	Accomplished	Required	Accomplished	
				3	2	Office Furniture
				4	5	Chairs
				-	1	Faxes
				-	1	Telephone/Modems
				5	3	Computers
				3	3	Printers
				5	1	Other
	1,000					Total

Working Capital Costs:

Equivalent to Euros	Total Cost				Duration (months)	Item
	Total (Million Rials)	Rials	Foreign Currencies			
		Million Rias	Equivalent to Million Rias	Million Yuan		
	133,000	133,000			2	Raw Material and Packaging
					1	Products in Process
					1	Liability
	5,000	5,000			1	Petty Cash
	138,000	138,000				Working Capital

Production Costs:

Equivalent to Euros	Cost (Million Rials)	Items
	800,000	Raw Material and Packaging
	263	Energy (Power, Water, Fuel, . . .)
	500	Repair and Maintenance
	500	Unforeseen
	600	Depreciation
	4,690	Personnel
	100	Office and Sales
	-	Financial Facilities
	300	Factory Insurance
	806,953	Total

5. The volume of Annual Required Raw Materials and Where to Supply Them From (Domestic or Foreign), The Cost (in Rials and Euros) and Examining the Fundamental Changes in the Process of Supplying the Required Items in the Past and Future

Equivalent to Euros	Total Price			Supply Location	Unit Price		Consumption Required per Total Capacity	Consumption Unit	Consumption per Unit of Product	Num.
	Total (Million Rials)	Foreign Currency (Yuan)	Domestic (Million Rials)		Foreign Currency (Yuan)	Domestic (Million Rials)				
			400,000	Iran		800	500	tons	Hamburger	1
			400,000	Iran		800	500	tons	Kebab	2
			100	Iran		100	1	tons	Cartons and Tape	3
			800,100	Total						

6. Human Resources and Employment Status

12 individuals will be employed. Specialized human resources will be available due to high-quality universities and technical and vocational training centers in Khuzestan province.

7. Assessment and Determination of Power, Water and Fuel Supply and Telecommunication and Transportation Facilities (Roads, Railways, Airports, Ports, . . .) and How to Provide Those to a Zone Suitable for the Project

Khoramshahr industrial zone has all the necessary infrastructures such as power, water, gas and telecommunication facilities. The distance between Khoramshahr and Ahvaz (Khuzestan capital) is 110 km. Khoramshahr port is one the most important commercial ports in the country which can facilitate export. Also, the Shalamchah border market within the 18 km distance to the project location can make the export efforts to Iraq much easier. The distance to Abadan airport and railway is 15 and 5 km, respectively.

Annual Salary and Benefits - 14 months	Salary - Rials	Number	Item	Num.
700	500,000,000	1	Manager	1
560	400,000,000	1	Quality Control Manager	2
420	300,000,000	1	Technical Expert	3
2,100	25,000,000	6	Skilled Worker	4
350	25,000,000	1	Administrative and Marketing Staff	5
560	20,000,000	2	Worker and Driver	6
4,690		12	Total	

Total Cost - Million Rials	Unit Price - Rials	Annual Consumption	Unit	Item	Num.
11	1,100	10,000	kw/h	Power	1
10	1,000	10,000	m ³	Water	2
32	4,000	8,000	liter	Diesel Fuel	3
210	30,000	7,000	liter	Gasoline	4
263	Total				

8. Commercial and Economic Support for the Project

Several supporting projects are ongoing to promote the industry.

- In order to evaluate, discuss and resolve the obstacles and problems facing the production units, a “Production Facilitation Committee” was appointed in all the provinces whose members are governor-general (chairman), provincial unit head of Ministry of Industry and Mines (secretary), head of provincial management and planning organization, head of the provincial chamber of commerce, industries, mines and agriculture, head of the provincial chamber of industry, mining and commerce, etc. The most important responsibility of the committee is to
 - facilitate, complete and launch semi-finished production projects and develop them
 - support and help the export of provincial products

- evaluate the cause of stagnation or suspension of production unit operations and try to solve the problem

- **Resistive Economy (Economic Prosperity) Committee:** Ministry of Industry, Mines and Commerce issued a resolution (12868) on May 15th, 2016 by which the completion of industrial projects with more than 60% physical progress and support of small and medium production units were funded.
- **Small Industries Investment Guarantee Fund:** Issuing credit guarantees facilitates the financing of small businesses and warrants the payback of principal plus interest to the bank. The guarantee will be issued after a thorough inspection and validation and offering the proper collateral.

8.1. Supporting Custom Tariff (of Products and Machinery) by International Tariffs

The tariff for importing the machinery required for the project is 5 to 10 percent to facilitate the technology provision and support domestic production. The tariff for importing MDF sheets is 55% to prevent the importing and support domestic production.

8.2. Financial Support (of Available Units and Projects) by Banks - Investment Companies

The funding by banks can be accomplished by

8.2.1. Foreign Exchange Reserve Fund:

The oil revenue surplus is allocated to manufacturers and exporters to finance some of their foreign currency needs in the shape of Islamic contracts and approved regulations and according to domestic import and export of commodity and services regulations.

8.2.2. Resistive Economy (Economic Prosperity) Committee:

Funding is considered to complete the industrial projects with more than 60% physical progress and support the small and medium production units.

۸,۲,۳. Foreign Investment Encouragement and Protection Law

Since 1955, the framework of foreign investment in Iran's law has been to attract and support foreign investment. In order to make reforms in the economic structure of the country, the Iranian parliament proposed new law on foreign investment called the Encouragement and Support of Foreign Investment Act which was finally approved in 2002. This new law has led to the development of the legal framework and the environment for foreign investors in Iran. Some of the progress made by the new law in the field of foreign investment are:

- The Government of the Islamic Republic of Iran welcomes the foreign investment of foreign entities, both natural and legal, in all areas of economic activity.
- Recognition of new investment methods in addition to foreign direct investment
- Facilitating the process of applying and approval of foreign investment
- Establishment of an organization called Foreign Investment Services Center within the Organization for Investment Economic and Technical Assistance of Iran in order to provide centralized and effective support to the activities of foreign investors in Iran

In case of attracting foreign investment, the government has considered incentives some of which are:

١. Tax exemption for products of foreign investment companies
٢. Providing insurance coverage to investors
٣. Granting customs exemptions on the import of inputs required by foreign investment companies
٤. Provide subsidies for local labor training
٥. Creating free-trade zones for investment
٦. Providing cheaper infrastructure and public services such as water and electricity
٧. Guaranteeing the return of profits and principal and preventing their confiscation and nationalization

9. Analysis, Conclusions and Suggestions:

- Economic Expert Report

Today, seafood has a special place in the consumer food basket. Every day, as people become more aware of the benefits of healthy foods, the demand for a variety of seafood is increasing. On the other hand, due to the low variety of seafood products, the per capita consumption in the country is not in a good position compared to other countries. However, the existence of technical knowledge and equipment and machinery and the possibility of access to appropriate domestic and foreign markets and most importantly, the existence of marine resources makes the implementation of this project economically justifiable.

Economic indicators all indicate that the implementation of this project is highly beneficial. Therefore, the implementation of the project will actually bring more profit to the investor than the profits granted in the banking system.

- Environmental Expert Report

None of the environmental criteria including air, soil and noise pollution and waste disposal were violated and thus, the project can be completely implemented.

- Management Expert Report

Since seafood products are highly in demand, the current supply cannot meet the domestic needs and there's a high demand for such products by neighboring countries, the implementation of this project is highly recommended.

10. Financial Report Summary

Burger: 806,953 rials	Product Final Cost
Kebab: 806,953 rials	
Burger: 950,000 rials	Product Sales Price
Kebab: 950,000 rials	
950,000	Total Sale (Million Rials)
76%	Sales Percentage at Break-Even Point
1,430,047	Profit (Million Rials)
76%	Internal Return Rate
24,270	Net Value Added (Million Rials)
1.3 year	Payback Period