

Agribusiness

Overview

Iran is the only Asian country in the Northern Hemisphere with four seasons, which has led to the best agriculture and livestock production and potentials to export fresh and processed products. Since land and air transit infrastructures are being constructed in Iran and investors can easily export products after processing and receive investment profits. The cultivated areas have grown to 18 mn hectares and there are 20 types of horticultural products which placed Iran between the 7th and 8th rankings in the world. According to FAO, in addition to its food supply, has the potential to supply Persian Gulf countries and there is also 30 to 35% agricultural waste. The agricultural and natural resources sectors account for gaining income and employment, as roughly 90% of the nutrition value and 19% of the employment. The value added of agricultural sector in the year ended March 2017, was estimated at 441,972 bn IRR (14.08 bn USD), at constant prices in 2012, which has increased by 4.2% over the same period of the previous year.

**Table 4-1 Agriculture Value added & GDP contribution
(constant price; 2012)**

	Yr. ended Mar 2012	Yr. ended Mar 2013	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017
Value added (bn IRR)	348,425	364,659	384,633	405,433	424,173	441,972
Value added growth (%)	-	4.66	5.48	5.41	4.62	4.20
GDP contribution (%)	5.47	6.21	6.57	6.71	7.13	6.61
CBI official exchange rate (IRR)	10,964	12,260	21,253	26,509	29,580	31,389

Source: CBI

Recent trends

- The increase of agricultural production up to 118 mn tons in the year ended March 2017
- Wheat production self-sufficiency
- About 20% of the total non-oil import is agricultural products

Agricultural lands

There are 35 mn hectares of usable lands in Iran, 18.7 mn hectares of which are agricultural lands holding 50% share of total lands and 11.5% of total area. Of total agricultural land, 2.3 mn hectares are allocated to the gardens and about 16 mn are arable lands, of which, about 4 mn hectares are not active due to being arid and only about 11.7 mn hectares are used for producing crops. However, about 5 mn hectares are rainfed and about 6.5 mn hectares are irrigated. Despite the 47% rainfed land, the share of this cultivation is less than 10% of total agricultural production.

Production

Over the recent years, agricultural production has had a steady growth, with 21.4% rising from 118.7 mn tons year ended March 2017 compared to the same period in 2014. Arable crops contribute up about 70% of total agricultural production with fisheries and aquaculture share of less than 1% as the smallest agricultural sector.

Table 4-2 Agricultural production (mn tons)

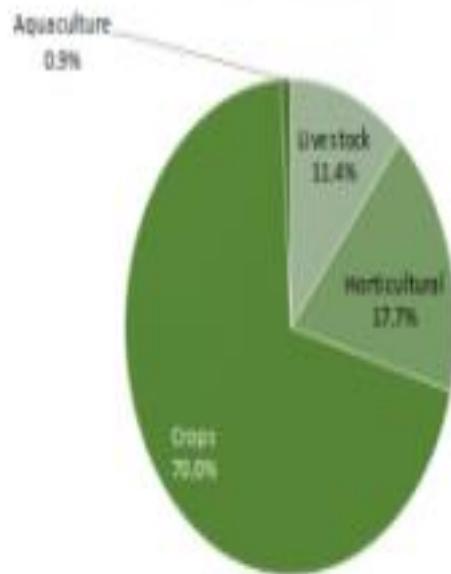
	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017
Crops	68.1	74.6	77	82.99
Share from total production (%)	69.6	70.6	69.1	69.94
Horticultural	15.96	16.5	19.4	21.02
Share from total production (%)	16.3	15.6	17.4	17.71
Livestock and poultry	12.8	13.6	14.1	13.57
Share from total production (%)	13.1	12.8	12.6	11.43
Fisheries and aquaculture	0.88	0.95	0.98	1.07
Share from total production (%)	0.91	0.9	0.88	0.9
Total	97.8	105.7	111.5	118.7

Source: Ministry of Agriculture Jihad

Figure 4-1 Agricultural production (mn tons)

Source: Ministry of Agriculture Jihad

Figure 4-2 Agricultural production in the year ended March 2017



Source: Ministry of Agriculture Jihad

Consumption & Demand

The annual need for livestock feed is over 9 mn tons, 7 mn tons, 700,000 tons and 5 mn tons for corn, wheat and feed barley. The share of import are 90, 30 and 36%. 90% of livestock and poultry meal are imported. The wheat per capita consumption is 167 kg, which accounts for almost 13.4 mn tons per year, considering 80 mn population., Iran has managed to achieve self-sufficient in the production of 14.6 mn tons of wheat in the year ended March 2017 and there is no need to import this product. The rice per capita consumption is over 50 kg, with an annual consumption of nearly 4 mn tons, which due to 2.4 mn tons the domestic production, 1.7 mn tons import is required. With regard to per capita consumption of livestock products and compared to domestic production, excluding red meat, Iran is able to provide domestic demand and export livestock and poultry products. With 140,000 tons of surplus production in seafood and fishery, Iran has 10 kg per

capita's consumption in agricultural and food products and achieved self-sufficiency in most agricultural strategic products. Livestock and poultry feed call for import of approximately 70%.

Table 4-3 Agricultural products consumption per capita (kg)

	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016
Wheat	166.9	167	167.4
Rice	49.9	50.2	50.4
Beef	10.99	10.79	11.43
Poultry Meat	25.16	25.48	26.1
Egg	11.12	10.99	10.7
Milk	102.28	105.45	109.35
Honey	0.923	0.93	0.96
Seafood & Aquaculture	8.5	9.2	10

Source: Ministry of Agriculture Jihad

Export & Import

Agriculture has a major share of non-oil export and agricultural crops both in export and import. In recent years, agricultural export accounted for about 13% of non-oil export. (Excluding gas condensate).

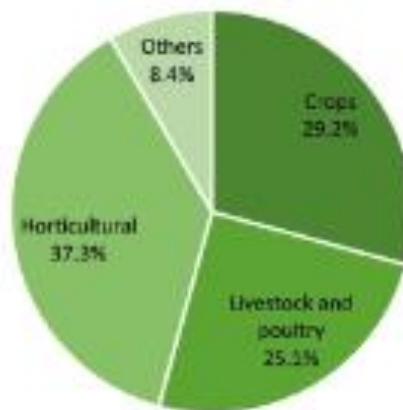
Table 4-4 Agricultural export

	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017	Apr-Sep 2017
Value (mn USD)	6,200.30	5,447.01	5,685.92	2,072.77
Non-oil export contribution (%)	12.26	16.7	12.97	-

Source: Ministry of Agriculture Jihad

Horticulture and subdivisions contributed to more than 37.3% of total agricultural export from April to September 2017. The major share of export is dedicated to crops with 29.22% and livestock and poultry with 25.05%. The main export products include pistachio, nuts, fresh fruits, animal products, saffron, raisin, potato, date and aquatic products.

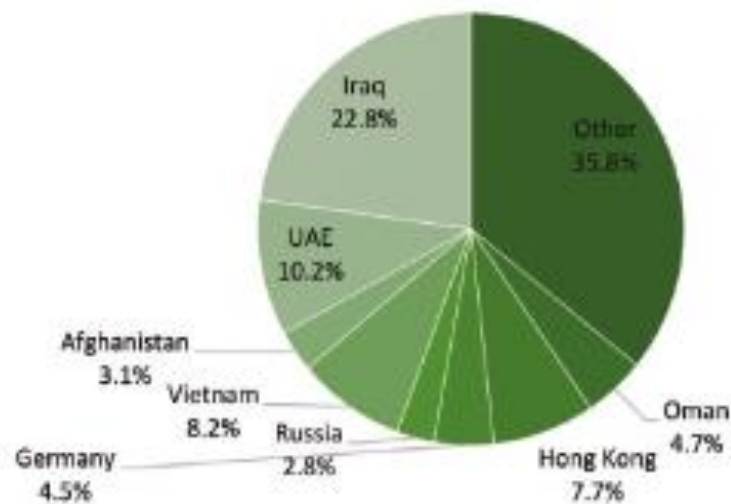
Figure 4-3 Agricultural export combination from April to September 2017



Source: Ministry of Agriculture Jihad

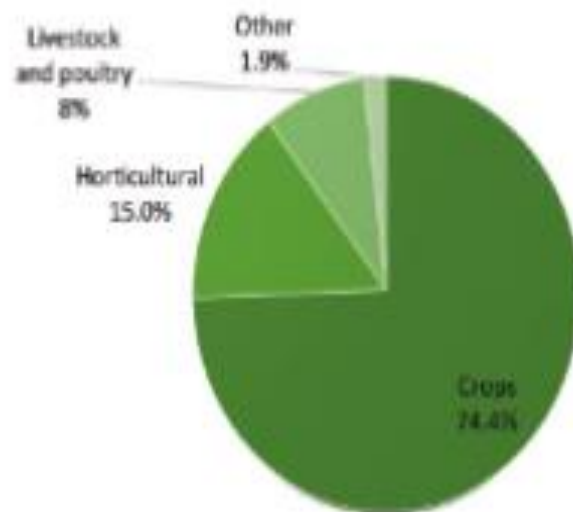
Iraq as the main export destination accounted for 22% of agricultural products in the year ended March 2017.

Figure 4-4 Agricultural export destinations in the year ended March 2017



Source: IRICA

Figure 4-5 Agricultural import combination from April to September 2017



Source: Ministry of Agriculture Jihad

Table 4-5 Agricultural import

	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017	Apr-Sep 2017
Value (mn USD)	8,907.0	8,882.2	8,780.4	5,506.5
Non-oil import contribution (%)	16.6	22.2	20.6	-

Source: Ministry of Agriculture Jihad

More than 14.96% of total agricultural import was dedicated to horticultural products, from April to September 2017. Crops and livestock and poultry had the major share of agricultural import with 74.37% and 8.73%. Three major imported products are comprised of feed corn, soybean and rice.

In previous years, wheat has been one of the main imported products, but since March 2016, following the self-sufficiency, Iran had almost no import. In late 2011, the order registration for this product was prohibited at government currency rate and imported only via free currency or import-for-export.

Table 4-6 Main import origins

	Vale (mn USD)	Exporting countries share (%)
Feed corn	1,413	Switzerland (21)
		Brazil (20.9)
		Ukraine (20.47)
		India (65)
Rice	690	Pakistan (25.4)
		UAE (4.1)
		Kazakhstan (26.4)
		Switzerland (16.5)
Barley	265	Russia (16)

Source: IRICA

Agricultural commodities constituted 16.71% of Iran's total foreign trade in in the year ended March 2017. In recent years, foreign trade balance has always suffered a negative level in the agricultural sector. Despite the emphasis on self-sufficiency, agricultural import is considered as the most important sector. The export and import of agricultural products were 1.7 bn USD and 4.7 bn USD, respectively from April to August 2017.

Figure 4-6 Import & Export trend (bn USD)



Source: Ministry of Agriculture Jihad

Crops

Roughly, 11.7 mn hectares of arable lands are cultivated crops, among which the grains are the main products and over 72% of the total cultivation areas are grains-related crops. Grains only account for 27% of total crop yield, despite that highest level of cultivation areas are related to these products and forage crops own the highest yield, after cereals.

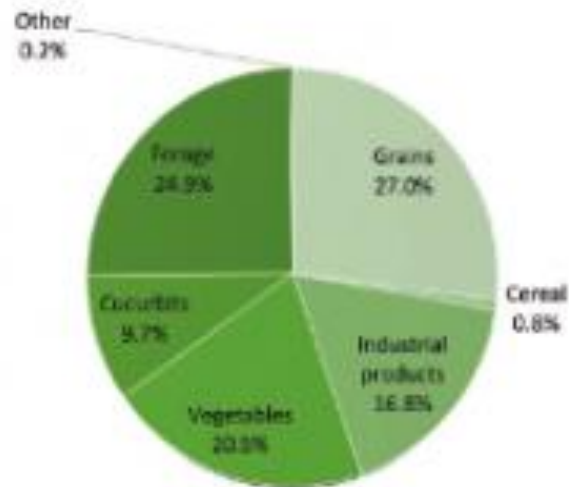
Table 4-7 Crops' under cultivation land & production (000 hectares- 000 tons)

	2014-2015		2015-2016		2016-2017	
	Area under cultivation	Production	Area under cultivation	Production	Area under cultivation	Production
Grains	8,548	17,551	8,175	18,241	8,443	22,408
Cereal	822	615	712	519	787	671
Industrial products	499	11,867	432	13,460	490	13,959
Vegetables	501	16,202	519	17,335	503	17,013
Cucurbits	346	9,806	305	7,607	326	8,048
Forage	1,020	18,437	1,077	19,696	1,050	20,704
Other	102	140	158	181	140	189
Total	11,838	74,619	11,377	77,039	11,739	82,992

Source: Ministry of Agriculture Jihad



Figure 4-7 Combination of crops production in the year ended March 2017

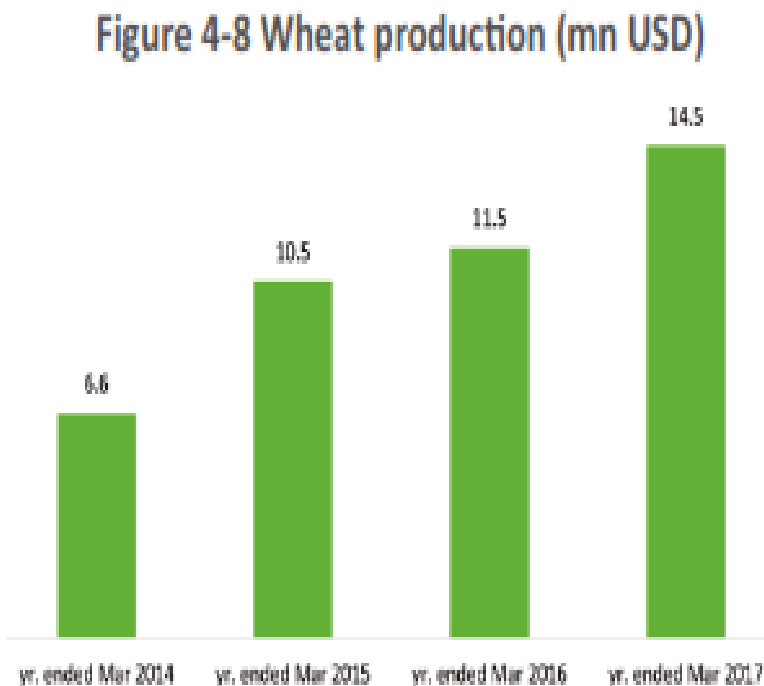


Source: Ministry of Agriculture Jihad

Wheat

Although having more than 50% of the cultivated areas, wheat possesses only 17.5% of the total crop production. Wheat production and guaranteed purchase increased from 2013 to 2017 and once again wheat self-sufficiency was

experienced, producing 14.5 mn tons and purchasing 11.5 mn tons by government, however import became more limited in the year ended March 2017.



Source: Ministry of Agriculture Jihad

Horticultural products

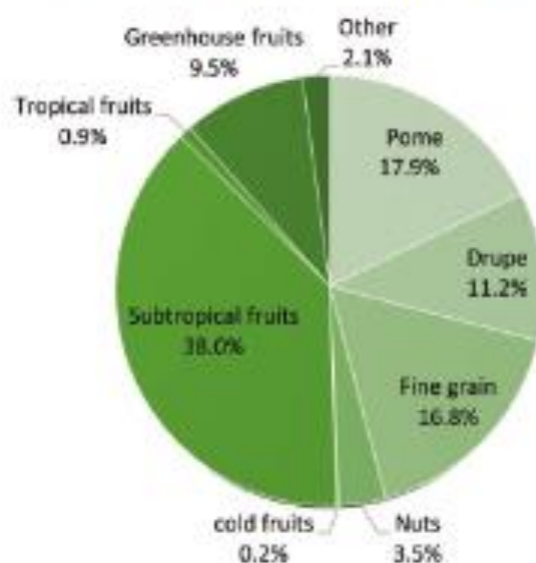
Iran's horticultural fertility level was 2.39 mn hectares, with the contribution of fertile levels of 10.1% pome, 9.5%, drupe, 12.5% small seed, 28.26% dried, 0.8% cold, 28.6% subtropical, 0.4% tropical and 0.3% greenhouse fruits in the year ended March 2017. Horticultural products were 21 mn tons in the year ended March 2017. Subtropical fruits had the highest volume with 38% of total production.

Table 4-8 Fertility level & production of horticultural (000 hectares- 000 tons)

	2014-2015		2015-2016		2016-2017	
	Area under cultivation	Production	Area under cultivation	Production	Area under cultivation	Production
Pome	227.0	3,683.4	233.4	3,768.4	243.3	3,756.9
Drupe	210.7	2,078.2	216.8	2,203.3	228.1	2,349.1
Fine grain	288.3	3,125.1	287.7	3,246.0	300.3	3,534.9
Nuts	622.5	610.5	651.2	679.5	678.3	730.0
Cold fruits	20.6	33.5	18.7	32.1	19.5	33.8
Subtropical fruits	644.3	6,412.9	661.3	7,106.5	686.4	7,992.2
Tropical fruits	10.0	186.9	10.1	188.5	10.5	192.1
Greenhouse fruits	-	-	7.8	1,729.4	8.7	1,996.1
Other	202.3	389.9	209.0	424.0	224.2	435.7
Total	2,225.6	16,520.5	2,296.0	19,377.7	2,399.4	21,020.9

Source: Ministry of Agriculture Jihad

Figure 4-9 Combination of horticultural production in the year ended March 2017

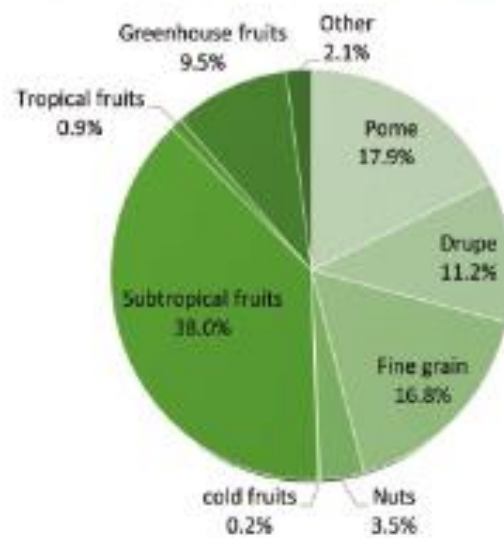


Source: Ministry of Agriculture Jihad

Saffron

Iran holds the world total production of saffron about 94%. Despite the significant contribution of Iran to global saffron production, statistics indicate that the average yield of in the year ended March 2017 was 3.2 kg per hectare, which, in this regard, has significant difference with other countries.

Figure 4-9 Combination of horticultural production in the year ended March 2017



Source: Ministry of Agriculture Jihad

Livestock & poultry

Milk and white meat with 68.7% and 14.7% had the largest amount of livestock products in the year ended March 2017.

Table 4-10 Livestock & poultry production (000 tons)

	Yr. ended Mar 2013	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017
Beef	747.0	755.0	785.0	806.0	823.0
Poultry meat	2,614.7	2,851.7	2,980.2	3,106.4	2,069.0
Egg	912.7	893.4	925.0	931.0	940.0
Honey	71.1	74.6	77.8	77.4	81.0
Milk	7,952.0	8,268.0	8,800.0	9,140.0	9,653.0
Total	12,297.5	12,842.7	13,568.0	14,060.8	14,060.8

Source: Ministry of Agriculture Jihad



Fishery

Table 4-11 Aquaculture production (tons)

	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017
Fishery	514,081	575,512	582,349	634,197
Aquaculture	370,876	371,229	401,548	455,000
Total	884,957	946,741	983,897	1,089,197

Source: Ministry of Agriculture Jihad

With over 1 mn tons of aquaculture production, this sector has risen over the past years.

Supportive policies & regulated market in agribusiness

Agricultural products supply, foodstuff and import management have been much considered to balance the total food supply and demand to support domestic production and create strategic reserves by introducing the products to the market, appropriate regulations and tariffs, seasonal import restrictions and support producers in harvesting season. In addition, it is aimed to sustain the production and producers share of market margins, reducing, and production costs and eliminate parallelism and mercantilism; support production and services with emphasis on value chains (from farm to table). The following measures have been taken in order to support the agricultural sector and optimize the market:

- Tax exemption as a supportive policy to exempt this sector from VAT exemptions and direct taxes of all agricultural items.
- Guaranteed purchase and pricing as supportive policies will encourage more farmers to continue operations and have self-sufficiency. Guaranteed purchases of

non-essential products are subject to acceptance of suitable crop patterns by farmers and producers.

- Tariffs on agricultural import as well as tariff exemptions on import of inputs, agricultural sector.

Table 4-12 Agricultural products import tariffs (%)

	Yr. ended Mar 2016	Yr. ended Mar 2017
Oil seeds	10	10
Barely	-	5
Rice	30	26
Wheat	4-10	10
Corn	4	5
Crude sugar	-	20
Meat of bovine animals, fresh or chilled	26	26

Source: IRICA

Import and export control of agricultural products are not limited to tariff restrictions and the government imposes nontariff barriers and restrictions on the basis of the conditions and the amount of production in different years. According to the customs procedures, the export of fruits and vegetables will be carried out after the beginning in November of 2017, only with approved packaging. It will also be possible to carry land and sea cargo to destinations in the buyer's countries with only refrigerated containers and boats.

Mechanization rate

**Table 4-13 Agricultural machinery production
(vehicle)**

	Yr. ended Mar 2014	Yr. ended Mar 2015	Yr. ended Mar 2016	Yr. ended Mar 2017
Combine	202	561	225	408
Tractor	27,122	22,429	11,851	14,607

Source: Ministry of Industry, Mine and Trade

Mechanization rate was 1.41 in the year ended March 2016. Both combine and tractor manufacturing had a growth rate of 81.3% and 23.2%, respectively in the year ended March 2017 in comparison with the previous year.

SWOT

Strengths

- Diversity in agricultural activities (agriculture, horticulture, animal husbandry and fisheries) and related products
- Agricultural priority in national programs by food security
- Arable Lands
- The potential of natural resources such as medicinal plants, industrial, food and forage production
- The relative advantage of horticultural products

Weaknesses

- The lack of development in affiliated and related industries

- Lack of flexible infrastructures to achieve sustainability
- Extreme waste in agriculture and lack of comprehensive management
- Lack of proper use of fertilizers and the mismatch between the chemical, biological and organic fertilizer patterns in the agricultural process
- Low return and high risk of investment in the agricultural sector and inability to compete with other sectors
- Increased desertification and reduced biological power
- Traditional agriculture and low mechanization rate
- Lack of diversity in aquaculture species

Opportunities

- Proximity to export markets such as Iraq, Afghanistan and the Gulf States
- Ability to develop aquaculture and fishing in southern and international waters
- Adequate capacities in mechanization development and conversion and complementary industries

Threats

- Reduction the quantity and quality of planned water resources for agricultural use
- Informal and retail markets through official channels led to reduction in effective flow of agricultural products and financial investment.
- Change of agricultural land use
- Increase of soil and water resources pollution

Investment advantages & incentives

- Iran has the highest rankings in many agricultural products which can be a significant factor for the capital owners and increased job opportunities and ranks

from 1st to 9th in 35 agricultural products in the world, as being the 1st producer in pistachio, saffron and caviar and 2nd in cucurbits and 3rd in dates.

- The proceeds of all activities of agriculture, animal husbandry, livestock breeding, fish farming and honey beekeeping and poultry raising, fishing, sericulture, reviving pasture and forest, garden, or any kind of land are exempted from taxation and all natural and legal persons (Iranian and non-Iranians) can benefit from the exemption from the beginning of the activity.
- Proceeds from the export of agricultural products, including crops, horticulture, livestock and poultry, fisheries, forest and rangelands and conversion and supplementary industries are exempt from taxes by 100%.
- Agriculture and animal husbandry provide the best opportunity to invest in Iran, because there is a volume of almost 120 mn tons of crops and livestock, in addition to high quality and has unique diversity in conversion and complementary industries. Tax and customs exemptions for the re-export of processed agricultural and animal products have provided incentives to attract investors.
- Iran has a four seasons climate, this has led to the best agricultural and livestock products. Given the proximity to Iraq and Afghanistan and Gulf regional states which lack agricultural potential, the existence of land and air transit infrastructures in Iran has enabled foreign investors to export products after processing and receive investment profits in foreign currency.
- Agricultural export has been important in non-oil sector during recent years, as raw and unprocessed products constitute the major part.
- Processing is among the industries that have a great influence on the agricultural sector. Considering the lack of significant expansion of processing industries in

agricultural sector and the policy of the Ministry of Agricultural Jihad toward the processing of agricultural products, processing and complementary industries can be considered as one of the significant investment opportunities.

- Iran is known as a unique and unrivaled producer of saffron in world markets and there are significant capacities to benefit from these conditions, but unfortunately, these products are exported traditionally with the least value added. Spain, due to advanced technologies, cultivates the product 6.5 kg per hectare, while this is 3.8 kg per hectare with less value added than its rivals due to the sale of this product in crude and unprocessed form. Therefore, applying advanced technologies and packaging as well as processing technologies can be good opportunities for foreign investors.

Investment opportunities

Crops

- Production of hybrid maize
- Cultivation of oil seeds
- Vegetable processing and packaging
- Choline chloride Plant (Poultry Feed Supplement) from corn grain
- Project of glucose and starch from corn
- Hybrid maize seeds production
- Construction of maize seeds hybrids processing plant
- Construction of cotton gin advanced equipment production plant
- Organic production

Horticulture

- Cultivation of medicinal plants and related industrial
- Production of edible mushrooms and mushroom processing industry

- Horticultural mechanization machinery
- **Pre-cooling** device for grapes and strawberries
- Pistachio automatic sorting machine and pasteurization equipment

Livestock

- Furnishing and optimization of milk collection centers
- Optimization of dairy cattle breeding equipment
- Production of milking machinery and equipment
- Laboratory analysis of milk equipment projects
- Sperm production centers projects (AI)
- The equipment to produce breeder (broilers and layers)
- Incubator equipment projects
- The slaughter of broilers equipment project
- Livestock and poultry feed equipment projects
- Dairy cattle nourishment
- Animal husbandry centers
- Production of veterinary drugs

Conversion & processing industries

- Rating, drying, packaging, processing, freezing, fruits dry powder
 - Pasteurization and sterilization projects of Pistachio, nuts and raisin processing
 - Dairy products equipment includes sterilized milk, ice cream, milk powder and cheese
 - Industrial poultry and slaughterhouse livestock slaughter house projects
- (Advanced)
- Canned aquatic production projects with modern processing and packaging, e.g. sardines, shrimp etc.

- New technology industry of fish oil and powder projects
- Modern industry of aquatic feed processing projects
- Olive-oil projects
- Leather production
- Dairy
- Pharmaceuticals process from fish oil
- Essence and aromatic substances production by using effective medicinal plants
- Production of extracts from medicinal plants
- Sorting, grading and packaging of saffron projects
- Two-circuit cooling

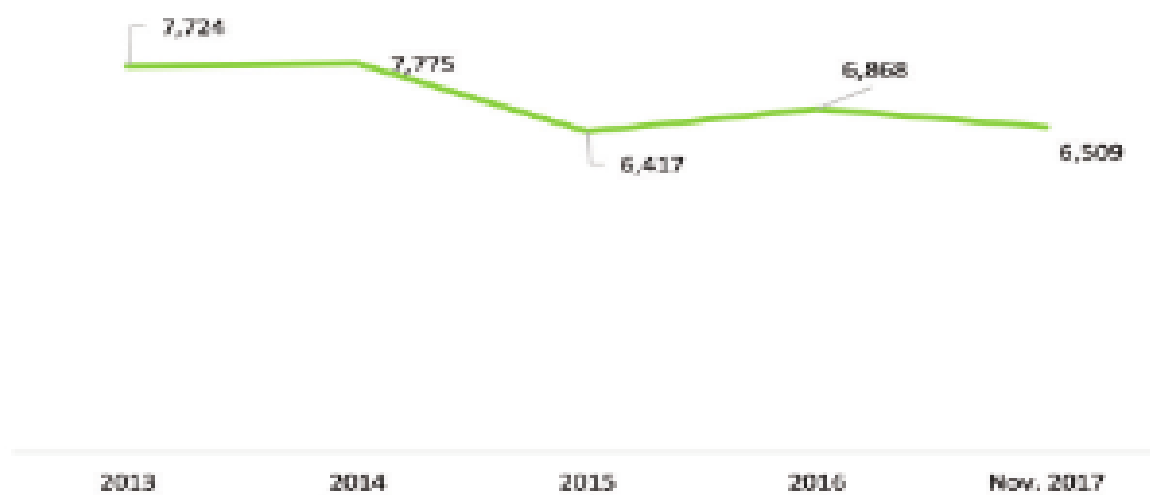
Aquaculture

- Aquaculture nourishing
- Construction and equipping caviar centers for the production of meat and caviar
- The construction and equipping of marine fishery
- Aquaculture feed and its raw materials projects
- The construction of fishing ships and equipment

Agricultural industry in Capital Market

Agriculture and livestock shares traded as agricultural group and related services.

Latest P / E ratio is 14.37.



Source: TSE