







: موافق قديرلي، مجيد -١٣۵٩ سر شناسه Movafegh Ghadirly, Majid Iran animal feed market[Book]/ Majid Movafegh Ghadirly; عنوان و نام پدیدآور editors Amir Mostafavi, Andisheh Haghighatnezhad; ,sponsored & supervised by Iran feed industry association; Iran Business Time. : تهران: مهکامه، ۱۳۹۸ = ۲۰۱۹م. مشخصات نشر : ۱۵۰ص.: مصور(رنگی) ؛ ۲۲ × ۲۹ سم. مشخصات ظاهرى 978-600-8731863 : شاىك وضعيت فهرستى نويسي : انگلیسی ىادداشت : انيمال... آوا نویسی عنوان : خوراک حیوانی -- ایران -- برنامهریزی موضوع Feeds -- Iran -- Planning : موضوع . مصطفوی،امیر –۱۳۵۸، ویراستار شناسه افزوده Mostafavi, Amir شناسه افزوده : حقیقت نژاد، اندیشه، -۱۳۵۹، ویراستار شناسه افزوده Haghighatnezhad, Andisheh : شناسه افزوده : انجمن صنایع خوراک دام، طیور و آبزیان ایران شناسه افزوده Iran feed industry association : شناسه افزوده : شرکت ایران بیزینس تایم شناسه افزوده Iran Business Time : شناسه افزوده SF۹۵ رده بندی کنگره ۶۳۶/۰۸۵ : رده بندی دیویی ۵۸۸۲۰۶۲ : شماره کتابشناسی ملی

# Animal Feed Market

### **Second Edition 2019**

ISBN: 978-600-8731863

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Publisher Mahkameh

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Majid Movafegh Ghadirly Author & IFIA Chairman of the Board

#### **Foreword**

The importance and necessity of supplying food, because of population growth and increase of consumption levels on the one hand, and depletion of resources along with climate change on the other, has made agriculture in developed and developing countries particularly significant, and has also created a special competitive environment in the production of agricultural crops in terms of meeting domestic needs and export.

Also, Iran holds a special international strategic and climatic status among the neighboring countries. The animal feed industry as the key chain among the livestock, poultry and fishery sectors, is the most important industry in food production and food security in the world. Therefore, special attention has been paid to the animal feed industry in Iran's agricultural development programs, such as plans for increase and optimization of production, consumption and export capacity of animal feed in Iran, the most important of which is creation of value chains.

A successful agricultural and animal feed industries are not restricted to farming and breeding units, but also to the production of basic goods, all the processes involved in the various sub-sectors, including the supply and equipping of raw materials for production, maintenance, processing, packaging, marketing, distribution and delivery.

Development of an agricultural products value chain is the most prioritized policy of the Ministry of Agriculture-Jahad, hence the IFIA, through the valuable efforts of producers and activists in the animal feed sector, and despite the existing challenges, has been able work in the diverse and expanding areas of the value chain for livestock and the feed industry, and has an important and admirable role to play in enhancing national production, food security, job creation and reducing dependencies.

Activities such as preparation and publication of the "Iran Animal Feed Market Report 2019" provides a unique opportunity for protein supply chains stakeholders and industry activists to introduce capabilities in national and transnational arena and play an important role in updating the needs of this strategic industry.

### Iran Feed Industry Association

### Overview

With the formation of livestock and poultry feed mill institutions, organizations and associations in Iran, to receive opinions on the animal

feed industry, be stakeholders and meet the needs of largescale industries (entrepreneurs), as well as managers, the status of an institution was required and therefore, a number of public and private sector entrepreneurs and managers became involved in this issue.

IFIA as the Official Member of IFIF (International Feed Industry Federation) is Iran's largest organization devoted exclusively to making laws and legislations as well as defending the legal interests of the animal feed industry and the suppliers.

IFIA also is the recognized leader for international companies and provincial associations, and 650 members

which include domestic parties, such as livestock feed and additive feed manufacturers, integrators,

pharmaceutical companies, ingredient suppliers, equipment manufacturers and companies which supply other products, services and suppliers for feed manufacturers. The feed industry plays a significant role in providing feed safety, nutrition and the environment, as well as healthy, wholesome meat, milk, fish and eggs. More than 80 % of the commercial feed in Iran is manufactured by IFIA members.

Besides, setting the foundation to interact with domestic institutions, universities, colleges, there is also relations with international entities such as IFIF (International Feed Industry Federation), FAO, as well as some Chinese, Indian and European institutions.

### History

Iran's feed Industry was established 60 years ago, simultaneously with the industrialization of animal husbandry. Nowadays, despite the high depreciation, 3 generations of technology have been integrated into feed mills.

In 2002, the number of animal feed mills was at 300 with the capacity of about 8 million tons production annually, while the number of mills reached 645 with a production capacity of 20 million tons after 15 years.

Over time, a significant number of feed mills were established with a production capacity of over 30,000 tons, due to the high efficiency two working shifts become the norm. Moreover, unlike the old units, the new ones were active at higher or almost actual capacity.

Also, the technology utilized was completely up to date with GMP certifications and Iranian authority's new standards. Most animal farms prefer to purchase their feed requirements

from the newly established mills.

### Mission

- Organize livestock and poultry feed industries with faster coordination, consistency in the activities of the industry.
- Enhance bargaining power in the domestic and international markets
- ♦ To improve product quality, with the aim of improving civil and guild management.
- ♦ To pave the way for further exploitation of investment for suitable production of the required merchandise.
- ♦ Apply and transfer stakeholder scientific and practical experience to update achievements of the legal and developmental goals.
- Organize all affairs relating to animal feed production.
- Receive data relating to supply and demand, prices and consumption markets, sent to members.
- ♦ Participate in decision-making and determine production of relevant goods and services.
- ♦ Forge relationships and communication with state banks and credit institutions as well as national and international monetary organizations, as per regulations, aimed at facilitating and expanding financial services according to IRI regulations.
- Create a database for areas related to the goals of the association to provide data via a network, in addition to publication of books, magazines, journals, special-interest and exchange of relevant information;

### Goals & Plans

- Develop and strengthen the contribution of animal feed industry to the national economy.
- Strengthen the role of animal feed industry in terms of employment and national income.
- ♦ Efforts to promote social knowledge, regarding the role of animal feed industry on inclusive development.
- ♦ Attempts to promote leadership and management knowledge and skills for industrial and semi-industrial feed mills.
- Attempts to optimize use of resources and environmental protection.
- ♦ Participate with government agencies to create a favorable environment, unity and solidarity among activists in the field of development.
- ♦ Increase bargaining power in the domestic and international markets.
- Apply and transfer stakeholders scientific and practical experience to update the achievement of the legal developmental goals.

### **Beliefs & Core Values**

Core values are basic beliefs, traits and behavioral norms that would motivate criteria decision making of the organizational culture and all members and stakeholders are expected to commit the implementations and executives and signify the necessary commitment in practice. The beliefs include:

- ♦ Accountability
- **♦**Commitment
- ♦ Cooperation and empathy
- ♦ Independence in providing comments
- Respect other's opinions and attempts to reach consensus
- ♦ Respect the national and social interests

#### Vision

- ♦ Transform the association into an information resource and the decision-makers in the field of animal feed industry, so that the relevant industrial policies would not be applied except the participation and presence of the Association.
- ♦ The vision will be realized by focusing on the following strategic issues:
- ♦ Turn to a stable organization having an optimal financing system
- Establishing and maintaining relationships, collaboration and effective partnerships at home and abroad
- ♦ Creation of a think-tank and expert industrial /economical professionals
- ♦ Lead in creating and developing standards of corporate governance, social responsibility and business ethics
- ♦ Extend recruitment and increasing members circle.

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### IFIA Members of the Board



Majid Movafegh Ghadirly Chairman of the Board Managing Director of Iran Feed, Drug & Additive Joint-Stock Company



Reza Savari Vice – Chairman Managing Director of Keyvan Morghe Partalaie Mahabad Company



Seyyed Ali Kheirie Member of the Board Managing Director of Setare Kian Birjand Company



Ahmad Salahshoor Treasure Managing Director of Gohardane Shargh Company



**Keyvan Estiri** Secretary of the Board Chairman of Mehr Chine Chineh Kian Company



**Amir Miran Amoli** Member of the Board (Alternate) Chairman of Amol Behdane Tabarestan



**Amir Amini**Member of the Board (Alternate)
Chairman of Semolina Zar Ind.



**Peyman Zolfagharian** Secretary General of IFIA

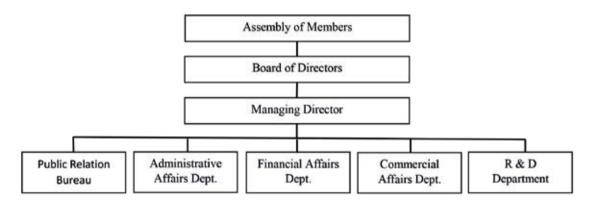
### Iran Feed, Drug & Additive Joint-Stock Company

### Overview

In 1998, a group of highly reputed and renowned pioneers established Iran Feed, Drug & Additive Joint—stock company to create one of the most comprehensive companies in the field of animal feed industry. The organization under the Ministry of Agriculture-Jahad support and a number of highly reputed entrepreneurs and industry owners and with more than half a century experience, managed to plan and implement strategies in order to improve the Feed industry in Iran. Iran Feed, Drug and Additive Joint-Stock Company (IFDAC) was established with the aim to be one of the most comprehensive and consolidated commercial-trade organizations to improve feed production in a high quality and quantity.

Having more than 145 affiliated feed mills as the members, now the company supplies about two third of the total feed production in Iran. Appropriate geographical distribution of members, warehousing high capacity, well-equipped laboratories, remarkable technological capabilities, considerable turnover and active education and research department, enable the company to cope with its duties perfectly.

The organization chart is illustrated below:



### Mission

Participation in economic development by strengthening the promotion and expansion of animal feed, and provide an environment with effective and constructive role in the recovery and improvement of business environment and individuals' quality of life for the industrial companies, scientific centers, organizations and professional companies in the city centers of provinces.

### Vision

- Transforming the company into a database in the field of animal feed industry, so that the relevant industrial policies are not implemented without the participation and presence of the Joint-stock company.
- ♦ The vision would be more touchable by focusing on the following strategic issues:
- ♦Becoming a stable organization having optimal financial system.
- Stablishing and remaining in the relationships, with collaborations and effective partnerships nationally and internationally.

- Creation of a think-tank and expert industrial / economical professionals.
- Becoming a leader in creating and developing standards of corporate governance, social responsibility and business ethics.
- Very broad recruitment and increasing the circle members.

#### Strategy

At the moment, with support and assistance of the private sector and valuable strategies of Ministry of Agriculture-Jahad, the organization has the possibility to become a member of related professional and specific associations. The management tries to expedite and facilitate the industry's activities by following up important issues with the authorities. Some of the activities implemented by the organization include possibilities of offering low interest loans, lowering custom tariffs, facilitating export, and controlling strategies of quality.

Already, the R&D center of the organization tries to increase the quality and lower the production cost of animal feed by accessing or importing new raw material technology.

In the other words, a high amount of investment has been made to cooperate with R&D sections, and organizations in Europe, Asia and India, which the Pro-biotic animal feed production is one of the major implemented strategies.

### **Main Duties**

- ♦ Dealing with the trade affairs through contact with the relevant state organizations.
- Providing the members with the raw material and feedstuff.
- ♦ Marketing and exporting members' products.
- Supplying the members with technical services in order to improve the sufficiency and profitability.
- Conducting some projects to enhance quality assurance of products and productivity.
- Holding seminars, workshops and short-term training courses for expert and staff members.
- Offering technical consultation on nutrition and feed to the members as well as animal farmers.

In fact, the company makes efforts to facilitate the activities in feed industry through making suggestions to official organization, taking the relevant steps such as offering bank credits with low interest rate, lowering tariffs rate, providing export credits, lowering taxation rate, ensuring the products for quality assurance, promoting the distribution system of feedstuff.

### **Significant Enterprises**

- ♦ Member of specialized committees in Ministry of Agriculture-Jahad.
- Member of livestock, poultry and aquatic Feed Codex Committee in Iran.
- Member of Feed Committee of Iranian Institute of Standard and Industrial Research
- Cooperation with some domestic and international educational institutions by singing up MOUs.
- ♦ Holding some domestic, regional and international workshop, short-term training courses in feed technology.
- ♦ Attendance in some regional and international, exhibition to present Iranian capability of feed industry.
- ♦ Having cooperation with domestic and international research institutions to apply the outcome of the researches in the plants.
- Offering technical services and consultation to the members as well as livestock, poultry and aquatic farmers
- Suppling proposals to officials and policy makers concerning feed manufacture to improve the situation in the industry.
- ♦ Establishing a Wide Area Network (WAN) in the specialized field to join the members.

### IFDAC Members of the Board



Reza Savari Chairman of IFDAC Managing Director of Keyvan Morghe Partalaie Mahabad Company



Majid Movafegh Ghadirly Managing Director of IFDAC



Seyyed Ali Kheirie Vice – chairman of IFDAC Agent of Khorak gostaran dame Company



**Gholam Reza Nosrt**Memeber of IFDAC
Managing Director of Hashtgerd
Supplement Company



Mohammad Reza Khabiri Member of IFDAC Managing Director of Javaneh Khorasan Company







### IRAN ECONOMY



### Overview

The Islamic Republic of Iran is a country in the Middle East (West Asia), which has borders The Islamic Republic of Iran is a country in the Middle East (11661-1561), multiplication with Armenia, Azerbaijan, and Turkmenistan in North, Afghanistan and Pakistan in East, Iraq in

West and Turkey in Northwest, and in the South bordered by the Persian Gulf and Oman Sea. Iran is divided into five regions with 31 provinces (Ostān); the provinces are divided into counties (Shahrestān) and subdivided into districts (Bakhsh) and villages(Dehestān), each governed by an appointed governor-general (Ostāndār).

**Table 1.-1** General Information

Official Name	Islamic Republic of Iran
Capital	Tehran
Largest city	Tehran
Official language	Persian
Government	Islamic republic
Area	Total 1,648,195 km <sup>2</sup> (18th) - Water: (%) 0.7
Population	79.93 mn, 2016 census, (17th) - Density: 45/km² (163rd) - 116.6/sq m²
Currency	Rial (IRR)
Time zone	IRST (UTC+3:30)- Summer (DST) Iran Daylight Time (IRDT) (UTC+4:30)
Drive	on the right
Internet TLD	.ir
Calling code	+98



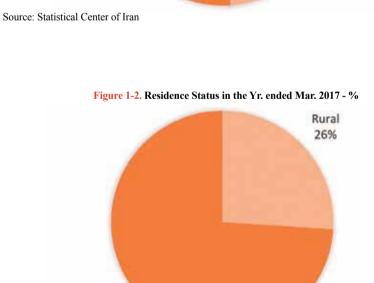
### **Population**

ccording to the latest census, Iran's total population was 81.1 million, of which 51 According to the latest census, man's total population mas of the state of the stat respectively, in the year ended March 2018. The population growth had a downward trend, reaching from 2.46% during the 1986 - 1991 period, to 1.4% in the year ended March 2018.

Female Male 49% 51%

Figure 1-1. Gender Ratio in the Yr. ended Mar. 2017-%





Source: Statistical Center of Iran

Urban 74%





Figure 1-3. Gender Ratio in the year ended March 2017-%

Source: Statistical Center of Iran

### GDP & Economic Growth

ccording to the Central Bank, the GDP amounted to 6,941,000 bn IRR (Constant Price; International Monetary Fund (IMF) predicted that GDP growth will be 4% in the year ended March 2019 and given the financial sector reforms, the trend will increase to 4.5%, in the average run and the GDP evaluated to 431.9 bn USD in the year ended March 2018.

Table 1-2. GDP & Economic Growth (Constant Price; 2012)

			,		
	Yr. ended Mar.2015	Yr. ended Mar.2016	Yr. ended Mar.2017	Yr. ended Mar.2018	Jun.2019
GDP; Constant Price (000 bn IRR)	6,043	5,947	6,691	6,941	1,688
Economic Growth (%)	3.2	-1.6	12.5	3.7	1.8
GDP; Current Price (bn USD)	434.5	376.2	405.0	431.9	-

Source: CBI

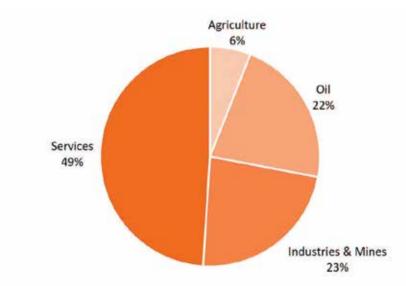


Figure 1-4. GDP & Economic Growth -000 bn IRR/%



Source: CBI

Figure 1-5. GDP Composition - %



Source: CBI

### Inflation

20

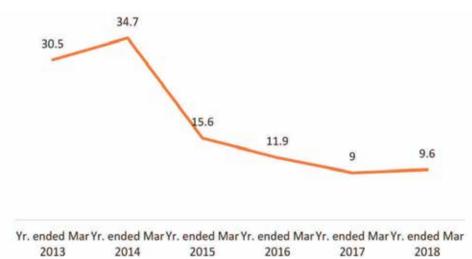
Currently, production cost are increasing and aggregate demand is among the main determinants of inflation. The average inflation rate reached 9.6% the year ended March 2018. According to the International Monetary Fund forecast, Iran inflation rate was 10.529% to 10.1% from in the year ended March 2017 to 2018.

Table 1-3. Inflation - %

| Yr. ended |
|-----------|-----------|-----------|-----------|-----------|-----------|
| Mar. 2013 | Mar. 2014 | Mar. 2015 | Mar. 2016 | Mar. 2017 | Mar. 2018 |
| 30.5      | 34.7      | 15.6      | 11.9      | 9         |           |

Source: CBI

Figure 1-6. Inflation - %



Source: CBI

### Employment & Unemployment

In the year ended March 2019, Iran's working population was approximately 27.07 million, of which the employed and unemployed accounted for 23.81 and 3.26 million, respectively. The unemployment rate was 12% in the year ended March 2019 and was predicted to reach 11.7% in 2019, according to the IMF.



Table 1-4. Comparison between Employment & Unemployment -Person

	Yr. ended	Yr. ended	Yr. ended	Changes	
	Mar. 2017	Mar.2018	Mar.2019	Amount	%
Working Population	25,791,177	26,588,819	27,073,796	484,977	1.82
Employed Population	22,587,779	23,778,613	23,813,045	34,432	0.14
Unemployed Population	3,203,398	3,210,206	3,260,796	6,808	1.60
Unemployment Rate (%)	12.4	12.1	12	-0.1	-
Economic Participation Rate (%)	39.4	40.3	40.5	0.2	-

Source: Statistical Center of Iran

### Gini Index

T he income distribution indicates the Gini coefficient increased in urban and rural households to 0.40 in the year ended March 2017, from the highest rate of 2003. The status of the class distinction has been improving more than the previous years.

Table 1-5. Gini Index

	Yr. ended Mar. 2013	Yr. ended Mar. 2014	Yr. ended Mar. 2015	Yr. ended Mar. 2016	Yr. ended Mar. 2017
Total Gini Coefficient	0.37	0.37	0.38	0.39	0.39
Urban Gini Coefficient	0.35	0.35	0.36	0.37	0.37
Rural Gini Coefficient	0.33	0.32	0.34	0.34	0.34

Source: CBI

### Foreign Trade

The non-oil export amounted to 117,228,000 tons, 44,310 million USD, declined by 12% in volume and 5.7% in value in the year ended March 2019. The import volume reached 320,460 tons and 42,612 million USD, which grew by 17.5% and 21.75% in volume and value, compared to the same period in the previous year.

Table 1-6. Non-Oil Export & Import - 000 tons/ mn USD

	Yr. ended Mar. 2017			Yr. ended Mar. 2018		Yr. ended Mar. 2019	
	Value	Volume	Value	Volume	Value	Volume	
Export	44,042	129,892	46,931	132,300	44,310	117,228	
Import	43,684	33,399	54,302	38,736	42,612	320.46	
Trade Balance		358		(7,371)	1,698		

Source: IRICA

### Exchange Rate

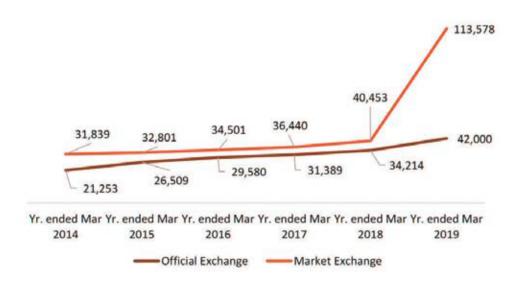
The official rate of the Central Bank and the market rose by 22.76% and 180.76%, while the exchange rate gap was 71,578 IRR, in the year ended March 2019.

Table 1-7. Average Exchange Rate - USD/IRR

	Yr. ended Mar. 2015	Yr. ended Mar. 2016	Yr. ended Mar.2017	Yr. ended Mar.2018	Yr. ended Mar.2019
Official CBI Rate	26,509	29,580	31,389	34,214	42,000
Market Rate	32,801	34,501	36,440	40,453	113,578

Source: CBI

Figure 1-7. Average Exchange Rate - USD/IRR



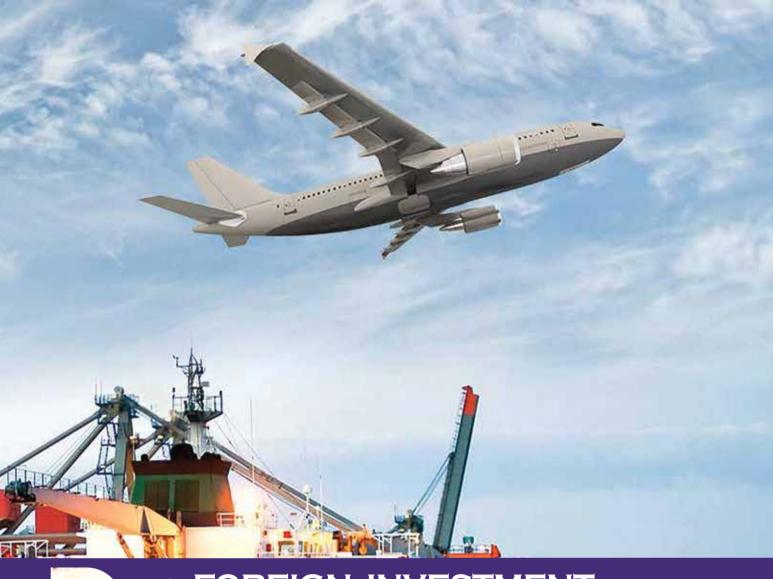
### Stock Exchange Index

The Iranian stock exchange market grew significantly in the year ended March 2018, the main reasons for which were growth of metal and mineral prices in global market and increasing exchange rates in the domestic market, placed the metal group at the top of the shareholder's interest.

**Table 1-8. Stock Exchange Index** 

	Yr. ended Mar. 2015	Yr. ended Mar. 2016	Yr. ended Mar. 2017	Yr. ended Mar. 2018	Yr. ended Mar. 2019
TEDPIX	62,532	80,219	77,230	96,290	178,659
Industry Index	51,296	66,994	66,100	86,082	161,031
Top 50 Index	2,576	3,254	3,035	4,036	7,668

Source: TSE





# FOREIGN INVESTMENT INCENTIVES



### Incentives Features & Advantages of Foreign Investment Promotion & Protection Act (FIPPA)

- ♦ Unrestricted volume and percentage on foreign investment participation of Iranian company registration possibility with 100% foreign capital.
- ♦ Transfer of capital, dividend and the profits gained in the form of currency or goods.
- Equal behavior with both foreign and domestic investors.
- ♦ Investment possibility for foreign natural and legal persons and Iranians residing abroad.
- ♦ Investment possibility in all areas permitted for the private sector.
- Providing protection for all foreign investment plans.
- ♦ Approving foreign capital in a short and fast process.
- ♦ Issuance of a 3-year residence visa for investors, managers, foreign experts and their first-degree relatives.

### Risks Covered by FIPPA

- Expropriation and nationalization.
- ♦ Unlimited transfer of principal and dividend.
- ♦ Guarantee of purchasing goods and services produced in foreign investment projects with BOT method via monopsony.

### Customs Incentives

- ♦ Exemption of Customs duties production line machineries and equipment provided that being new and not being made domestically.
- Raw material used for export commodities production.
- ♦ All production line machineries and raw materials in free zones.
- ©Components imported by manufacturing units for producing domestic goods are exempted from 20% customs duties, provided that they have not been made in Iran and recognized by Ministry of Industries, Mine and Trade.
- Knowledge-based companies and institutions are exempted from commercial taxes, customs
   and export duties.

### Tax Incentives

- Taxable incomes of knowledge-based institutions resulted from the contracts, research and
- development activities, commercialization and knowledge-based services are exempted from taxes for 20-year.
- ♦ Companies with more than 50 employees: in case of increasing the employment volume up to 50% in comparison to the last year, will enjoy one added year exemption.
- ♦If foreign companies with the capacity of domestic production units start business with authentic brands and export at least 20% of total production, can benefit 50% of tax exemption.

Table 2-1. Fixed Corporation Income Tax at a Flat Rate of 25%

Activity	Level	Duration
Industry & Mine	80%	4 Years
Industry & Mine in Less Developed Areas	100%	20 Years
Agriculture	100%	Perpetual
Tourism	50%	Perpetual
Export of Services & Non-oil Goods	100%	During 6th development
Salary in Less Developed Area	50%	Perpetual
Profit used to Development of Existing Unites or Setting up New Units	50%	Perpetual

Source: Ministry of Industry, Mine & Trade

Table 2-2. Income Tax with rate of 0%

Duration	<b>Economic Sector</b>
5 Years	Industry, mine & services (Hospital & Hotels)
7 Years	Industry, mine & services (Hospital & Hotels) years in industrial parks and
/ Teals	economic especial zones
10 Years	Industry, mine & services (Hospital & Hotels) years in less developed areas
13 Years	Industry, mining & services (Hospital & Hotels) in less developed areas located
13 16418	at industrial parks and economic especial zones

Source: Ministry of Industry, Mine & Trade

### Other Tax

Total taxable income <= registered capital 50% of income is tax free

### Less Developed Areas

Total taxable income capital <= double of registered capital 100% of income is tax free. In case of each 5% foreign investment, 10% will be added to the 2 incentives, maximum up to 50%.

### Regional Incentives

### Investment Incentive in Special Economic Zones

- Import from economic zone for domestic consumption would be subordinate to export and import regulations, while export from the areas will be carried out without any formalities.
  - ♦ Import from abroad, free zones, or industrial areas would be carried out with minimal customs formalities and domestic transit are performed in accordance with the relevant Regulations.
  - ♦ Goods imported from abroad, industrial areas or other commercial zones could be exported with no formalities.
  - Management of the region is allowed to assign the region to qualified natural or legal persons after classification and valuation.
  - Nowners of goods imported to the region could send all or part of their goods for temporary entry in to the country after doing customs clearance regulations.
  - ♦ If the processing of imported goods were to some extent that changes the goods tariff, the commercial benefit rate of the goods would be calculated equal the commercial benefit of raw material and spare parts.
  - ♦ Importers of goods are allowed to hand over to others part or all of their products against warehouse receipt to be issued by the district administration, in this case the breakdown warehouse receipt holder would be the owner.
  - The management of each district is authorized to issue certificated of origin for goods per applicant out of the area with the approval of the customs.
  - ♦ All the goods imported to the region for the required production or services are exempted from the general import-export laws. Import of goods to other parts of Iran will be subordinated to export and import regulations.
  - Percentage of goods produced in the zone, based on paragraph (d) of article (25) in the law of the second economic, social and cultural development plan of the Islamic republic of Iran imported to the country, the proportion of total value added and domestic parts and material used in the total price of the commodity production is allowed without any limitation and in addition to not having to order and open letter of credit.
  - ♦ Goods manufactured in special economic zones, as well as raw material and imported CKD parts into the country is not subject to price regulation due to unutilized resources and allocated currency.

# Incentive & Advantages for Investment in Trade-Industrial Free Zones

#### The list of the special economic zones of the Islamic Republic of Iran are as follows:

- Salafchegan special economic zone
- ♦ Shiraz special economic zone
- ♦ Assaluye special economic zone
- ♦ Arge Jadid special economic zone
- ♦ Payam Airport special economic zone
- Persian Gulf special economic zone
- ♦ Lorestan special economic zone
- Amirabad port special economic zone
- ♦ Bushehr Port special economic zone
- ♦ Shahid Rajaee Port special economic zone
- ♦ Sarakhs special economic zone
- ♦ Sirjan special economic zone
- ♦ Yazd special economic zone
- Bushehr special economic zone



- Tax exemption for 20 years from the date of operation for all economic activities.
- Foreign investment and nearly a hundred percent of the amount invested.
- Exemption of entry and exit of capital and profits.
- Protection and guarantees for foreign investments.
- ♦ Abolition of entry visas and easily issue of residence permits for foreigners.
- ♦ Facilitated regulation on labor relations, employment and social security.
- ♦ Transfer of part manufactured goods to the mainland without paying customs duties.
- Elimination of pay customs duties on import from outside to the region and vice versa.
- Employed trained and skilled work force in all different skill levels and professions.
- ♦ Utilization of raw materials, oil and gas as feedstock and fuel for all industrial activities.

### Other Incentives

#### The list of the Trade-Industrial Free Zones of the Islamic Republic of Iran are as follows:

- ♦ Chabahar Trade-Industrial Free Zone
- ♦ Aras Trade-Industrial Free Zone
- ♦ Anzali Trade-Industrial Free Zone
- Arvand Trade-Industrial Free Zone
- ♦ Kish Trade-Industrial Free Zone
- ♦ Maku Trade-Industrial Free Zone
- ♦ Take advantage from local currency facilities of the National Development Fund.
- The partnership possibility of development organizations (Iran Industrial Development and Renovation Organization, Iranian Mines and Mining Industries Development and Renovation Organization) in implementation of investment projects in less developed regions.
- The possibility of establishing new industries in estates industries areas with restrictions of the establishment of industries (120 kilometers distance from Tehran and 50 km and 30 km distance from the centers of some provinces).
- ♦ Government's guarantee for foreign investment while political risks emerges.
- Foreign investments have benefited from all rights, protections and similar facilities to local investors.
- Guarantee importation and exportation of original interest and installment of investors' financial facilities.
- Exemption of export commodities produced by financial corporation with participation of foreign investors.
- Possibility of temporary importation without customs duties payment for export commodity processing.
- Awards and export subsidies (participating costs in fairs and marketing).
- Export commodities exemption from paying all type of duties.
- Possibility of foreign investment for private sector activity in all permitted areas in Iran. No restrictions in investment volume and the percentage of partnership.
- ♦ Free import of machinery and raw material from free industrial trade zones and special economic zones (except passenger cars and recreational boats).





### 3 AGRICULTURAL SECTOR





### Overview

Developing and strengthening the agricultural sector is crucial to fostering economic foundations in developing countries. Stability and continuous growth in the agricultural sector are essential to social stability and economic growth since the mentioned sector is important to supply food and raw materials for industries, employment, and income. The agricultural sector is significant in terms of providing skills in the rural societies, because of the important role played at providing job opportunities, income and local & national security. The growth of the agricultural sector facilitates the development process through sustainability, transitions and resources of the other economic sectors. Moreover, the economic growth of agricultural sector plays an important role in decreasing poverty. Hence, regarding the promotion of utilization and efficiency levels, agricultural development is critical to achieve economic growth.

Agriculture is the 2<sup>nd</sup> largest economic sector after Services in Iran. Almost one-third of land is arable and fundamental from the aspects of economy, food security, production, employment, export, protection, utilization of natural sources, research and technology development as well as public participation. Agricultural growth directly affects economic growth which holds about 3.8% of GDP, 14.4% of non-oil exports, 17.7% of total employment and over 80% of the domestic supplied food.

The cultivated area of crops is 16.5 million hectares and hold first to tenth place in world ranking by cultivation of 20 horticultural products and 7 crops which provides food for the Persian Gulf neighboring countries besides the local food supply and has 47% of arable lands and 10% of the total area of Iran. Horticultural and cultivated lands cover about 2.85 million hectares and 11 million hectares from the total arable lands, respectively, 54% and 46% of which belongs to irrigation and dry land farming. In the year ended March 2019, the agricultural value added was estimated, the constant price (year ended March 2012), 440 billion IRR which had 3.5% decrease in comparison to the same period the previous year while the share of GDP was 3.8%.

The average growth rate of value added of the agricultural sector was 3.4% during the years ended March 2013-2019. The trend of agricultural value added was upward (constant price from the year ended March 2012 to March 2017). Although an upward trend, the growth of value added was down in the year ended March 2018 and the value added had a negative trend in the year ended March 2019.

### Crops

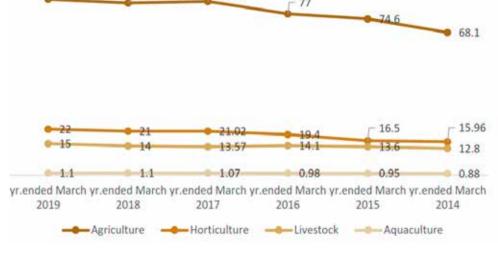
The crops production has experienced an upward trend in the past few years, the total amount The crops production has experienced an upward using in the passion, jumps, and of crops reaching 122 million tons with a 21.4% rise in year ended March 2019 compared to a share of 70% of the total agricultural sector in Iran. The horticultural products have 18% and animal products 12% share take the second and third places, respectively and fishery and aquatic products have 1% share and are the smallest parts of the agricultural sector.

**Table 3-1. Agricultural Products** 

	Yr. ended Mar. 2014	Yr. ended Mar. 2015	Yr. ended Mar. 2016		Yr. ended Mar. 2018	Yr. ended Mar. 2019
Crops (mn tons)	68.1	74.6	77	82.9	82.2	84.0
Total production share (%)	69.6	70.6	69.1	69.9	69.4	68.8
Horticulture (mn tons)	15.9	76.5	19.4	21.0	21	22
Total Production Share (%)	16.3	16.5	17.4	17.7	17.7	18.0
Livestock (mn tons)	12.8	13.6	14.1	13.5	14	15
Total Production Share (%)	13.1	12.8	12.6	11.4	11.8	12.3
Aquaculture (mn tons)	0.9	0.9	0.9	1.0	1.1	1.1
Total Production Share (%)	0.9	0.9	0.8	0.9	0.9	0.9
Total (mn tons)	97.7	105.6	111.5	118.6	118.3	122.1

Source: Ministry of Agriculture-Jahad

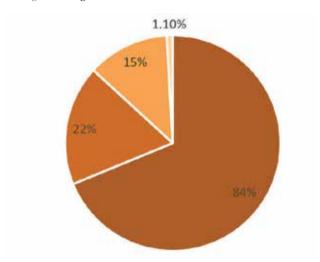
Figure 3-1. Agricultural Production -mn tons



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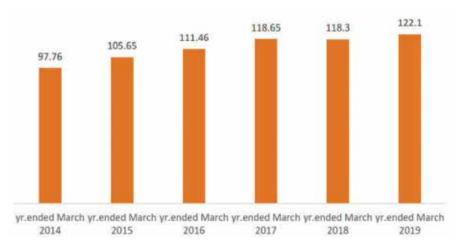


Figure 3-2. Agricultural Combinations - Yr. ended Mar. 2019-%



Source: Ministry of Agriculture-Jahad

Table 3-2. Total of Agricultural Products -mn tons





### Crops

### Under Cultivated Land

The cultivated land is about 11 million hectares including grain, beans, industrial products, vegetables, cucurbits and forage plants. About 54% and 46% of the total land area is allocated to agricultural irrigation and dry land farming, respectively.

In addition, crops forming the total cultivated land include about 7.65 million hectares grain (69.5%), 799,000 hectares bean (7.27%), 552,000 hectares industrial products (5.02%), 517,000 hectares vegetables (4.71%), 1.04 million hectares forage plants (9.4%), 296,000 hectares cucurbits (2.7%), and 144,000 hectares crops (1.31%). Grain, forage plants, and bean have the largest share of 86.2% in terms of total crops.

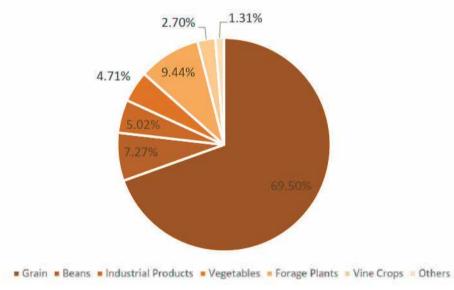


Figure 3-3. Under Cultivated Land -%

Source: Ministry of Agriculture-Jahad

### Production

In the arable years of 2016-2017, from the total amount of 82.2 million tons of crops, 19.65 million tons was grain (23.9%), 700,000 tons bean (0.85%), 16.46 million tons industrial products (20.03%), 16.97 million tons vegetable (0.64%), 8.03 million tons cucurbits (9.77%), 20.18 million tons forage plants (20.46%) and 203,000 tons crops (12.66%). Wheat (15.09%), corn (12.66%), sugar beet (0.25%), sugarcane (9.49%), alfalfas (7.73%), tomatoes (6.51%), potatoes (6.11%), and other vegetable (5.22%) and watermelons (4.67%) had the highest shares, respectively. The total amount of crops comprised 92.2% irrigation and 7.1% dry land.

### Horticultural Products

### Fertility Area

The orchards of Iran occupied a total amount of 2.91 million hectares in the year ended March 2019 (both fertile and unfertile)-2.46 million hectares fertile. Irrigation had a share of 74%, dry land, of which 10.2% were pome fruits (about 279,000 hectares), 9.6% drupe fruits (270,000 hectares), 12.4% seed-bearing fruits (317,000 hectares), 28.1% dry fruits (839 thousand hectares), 0.8% cool temperate climate fruits (24,000 hectares), 28.2% subtropical fruits (818,000 hectares), 0.4% tropical fruits (13,000 hectares), 0.4% greenhouse crops, and 9.9% other horticulture crops.

The most fertile horticultural crops were pistachios with 17.15% (9,000 hectares) and 276,000 hectares other crops such as grapes (10.6%), apples (8.43%), dates (8.8%), oranges (6%), almonds (6.3%), and walnuts (5.5%), while 62.75% of fertile gardens belonged to 7 crops.

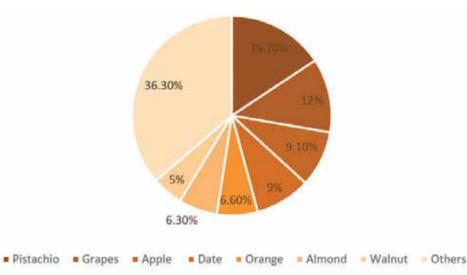


Figure 3-4. Fertility of Horticultural Products -%

### Production

In the year ended March 2018, the volume of major horticultural products was 21 million tons, about 4 milliontons (19.2%) of which were pome fruits, 2.5 million tons (12%) drupe fruits, 3.3 million tons (15.6%) seed-bearing fruits, 756,000 tons (3.6%) fruit chips, 37,700 tons (0.2%)

cold-climate fruits, 7.7 million tons (36.7%) subtropical fruits, 158,000 tons with 0.7% tropical fruits, 2 million tons (9.6%) greenhouse products and 492,000 tons with 2.3% other horticultural products. The total share of horticultural products (64.2%) is for 6 products.

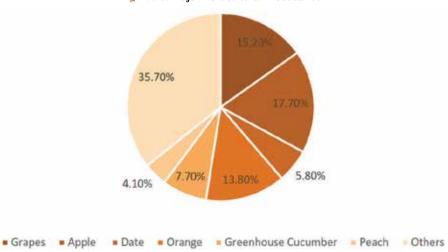
The major share of horticultural products were apples (17.7%), grapes (15.2%), oranges (13.8%), greenhouse cucumbers (7.7%), dates (5.8%) and peaches (4.1%).

Table 3-2. Major Horticultural Products -mn tons

	Volume	Total (%)
Apple	3.7	17.7
Grapes	3.2	15.2
Orange	2.9	13.8
Greenhouse Cucumber	1.6	7.7
Date	1.2	5.8
Peach	0.85	4.1

Source: Ministry of Agriculture-Jahad

Figure 3-5. Major Horticultural Products -%





Export & Import of the Agriculture Sector

**Export** 

The export of the agricultural sector reached 6,941,190 tons with 5.4 % rise and its value fell to 6391.76 million USD with 2.84 % decrease (in the year ended March 2019). Meanwhile, the highest volume of exported crops by the agriculture sector were 67.12 % for the arable sector subcategory, 21.6 % for horticulture, 9.1 % for livestock and poultry, and in terms of volume 41% for arable, 35.6 % for horticulture, and 17 % for livestock and poultry. The large volume of exports by the agricultural sector in terms of weight accounted for 768,000 tons watermelons, 572,860 tons tomatoes, 529,780 tons fresh potatoes, 424,940 tons apples, 342,670 tons onions and garlic, and five major export crops at a value of 326 million USD for pistachios, 267 million USD for saffron, 244.74 million USD for tomatoes, 229.2 million USD for apples, and 202.9 million USD for potatoes.

Table 3-3. Exports by Agriculture Sector

	Yr. ended Mar. 2016	Yr. ended Mar. 2017	Yr. ended Mar. 2018	Yr. ended Mar. 2019
Value (mn USD)	6200.33	5683.5	5770.42	6391.76
Total non-oil Export Share (%)	12.26	12.97	12.34	14.43

Source: Ministry of Agriculture-Jahad

### **Import**

Agricultural sector import reached 2,047,880 tons with about 0.4% increase in terms of volume and its value reached 10,716.90 million USD with 0.40% decrease in the year ended March 2019.

During the same period, the volume of agricultural import was allocated to crops, horticulture, and animal husbandry with a share of 92.2%, 5.5%, and 1.3% in terms of weight, respectively. The major volume of agribusiness import was for crops, horticulture, and animal husbandry with a share of 74.8%, 12.1% and 11.53% in terms of value, respectively.

Meanwhile, major crops were feed corn 895,587 tons, barley 2,648,480 tons, soybean 2,538,660 tons, white and semi polished rice 1,607,870 tons, and soybean meal 1,429,880 tons. Major import were feed corn 2,089.2 million USD, white and semi polished rice 1,622.11 million USD, soybean 1,161.1 million USD, meal 651.24 million USD, and barley 602.63 million USD, in terms of value.

Table 3-4. Agricultural Import

	Yr. ended Mar. 2015	Yr. ended Mar. 2016	Yr. ended Mar. 2017	Yr. ended Mar. 2018	Yr. ended Mar. 2019
Value (mn USD)	8,907	8,882.2	8,780.4	10,523.8	10,716.9
Total non-oil Import Share (%)	16.63	22.22	20.56	20.39	26.02



were added to the chain, recently.

# Development & Renovation of Agricultural Mechanization

Achines play an important role in decreasing costs and waste in the process of agricultural production. In the past 4 years, about 500,000 tractors, over 1,500 combines, over 45,000 seed planters and over 44,000 poison sprayers were utilized in the agricultural sector. The combined volume increased from 64 machines to 17,334 in the 1977-2018 period. The number of tractors increased from 68,451 machines to 555,133 in the same period. Although the lack of rice trans planters and combine machines were clearly felt in 1977, the chain of agricultural mechanization came to full circle with 7,220 and 7,878 vehicles, respectively. In addition, 18,000 soil mixing machines and 44,895 tractor, and poison sprayers

# Complementary & Processing Industry

Using modern technologies has helped the complementary and processing industry to develop swiftly in the past 4 decades. The industry's capacity increased from 3.3 million tons of raw material absorption to over 47 million tons, in the agriculture sector, in the 1977-2018 period.

Moreover, Agro-processing companies grew to 20,000 in the year ended March 2019. Cold storage and refrigerators reached 1,830 units with 4,500,000 tons of growth in capacity. Industrial slaughterhouses experienced remarkable growth from 4 to 75 units and industrial poultry slaughterhouses reached from 3 to 273 units between the years 1977 and 2018.

### Crops Insurance

Agricultural Units with the approval of the IRR insurance law (1984) and Agricultural Insurance Fund (AIF), to manage farmer risks and to supplement their income.

At present, agricultural insurance guarantees 3.5 million hectares of arable land and 419,000 hectares of horticultural land. Besides, about 3,619,000 livestock, over 693 million poultry and over 3,143 hectares of aqua-farm have been under insurance coverage since March 2018. In the year ended March 2017, 12,570 billion IRR was paid to agricultural producers for over 875,000 compensation cases.

Status of Active Agricultural Companies in the Securities Exchange

A gricultural and animal husbandry stocks are traded under the title of Agriculture and Services. P/E ratio of Agriculture and Services is 14.37.

In the year ended March 2017, the total value and volume of agricultural products in Iran Mercantile Exchange was 33.1 billion IRR and 3 million tons, respectively, signifying a growth of 17.7% and 18% compared to the previous year. The highest volume and value of agricultural exchanges was for wheat. The volume of agricultural products increased in Iran Mercantile Exchange causing an increase in the total agricultural shares from 9.9% to 11.1% in the 2016-2017 period.



### Strength & Opportunities of the Agricultural Sector

### Strength

- Diversity in agricultural activities (crops, horticulture, animal husbandry, 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

### **Opportunities**

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

### Investment Advantages & Incentives

Iran has high rankings in many agricultural products which can be a significant factor for asset owners creating job opportunities and raising the IRI to the 1<sup>st</sup> to 9<sup>th</sup> ranks for the 35 agricultural products in the world. Iran is the 1<sup>st</sup> producer of pistachio, saffron and caviar 2nd in cucurbits and 3<sup>rd</sup> in dates at present.

- The proceeds of all activities at 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) could benefit from the exemption from the beginning of the activity.
- ♦ Export of agricultural products, including crops, horticulture, livestock and poultry, fisheries, forest and rangelands, and conversion and complementary industries are 100% exempt from taxes
- Agriculture and animal husbandry provide the best opportunity to invest in Iran, because about 120 million tons of crops and livestock exist by volume, in addition to quality, and unique diversity in the 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 variety, meaning the best agricultural and livestock products.
- The proximity to the countries of Iraq and Afghanistan, and Persian 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 receiving investment profits in foreign currencies.
- Agricultural export in non-oil sector have been important during the recent years, as raw and unprocessed products constitute the major part.
- The Complementary and processing industry has a great influence on the agricultural sector. Considering the lack of significant development of complementary and processing industries in the agricultural sector and the policy of the Ministry of Agriculture-Jahad toward processed of agricultural products, complementary and processing industries can be considered as one of the significant investment opportunities.
- ♦ Iran is known as a unique and unrivaled producer of saffron in the world markets, and significant capacities are available, but unfortunately, these products are traditionally exported with the least value-added. Thanks to modern technologies, Spain cultivates the product at 6.5 kilograms per hectare, while this figure in Iran is 3.8 kilograms per hectare meaning less value-added than the rivals, due to the sale of raw materials. Therefore, applying modern technologies and packaging as well as processing technologies could be good opportunities for foreigners.

### **Investment Opportunities**

### Crops

- Production of hybrid maize
- Cultivation of oily 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 industries
- Production of edible mushrooms and processing industry
- Horticultural mechanization machinery
- Pre-cooling device for grapes and strawberries
- Pistachio automatic sorting machine and pasteurization equipment

#### Livestock

- Furnishing and optimization of dairy centers
- Optimization of dairy cattle breeding equipment
- Production of milking machinery and equipment
- ♦ Laboratory analysis of milk equipment projects
- ♦ Sperm production center projects (AI)
- ♦ Ranch Farming equipment (broilers and layers)
- Incubator equipment
- Broilers slaughtering equipment
- ♦Livestock and poultry feed equipment
- ♦ Dairy cattle nourishment
- Animal husbandry centers
- Production of veterinary drugs

# Complementary & Processing Industries

- Rating, drying, packaging, processing, freezing, fruits dry powder
- Pistachio, nuts and raisin processing pasteurization and sterilization projects
- ♦ Dairy products equipment includes sterilized milk, ice cream, milk powder and cheese
- The equipment project of industrial poultry and livestock slaughterhouse (Advanced)
- ♦ The equipment project of aquatic canned with modern processing and packaging, e.g. sardines, shrimp etc.
- New technology industry of fish oil and powder projects
- Modern industry of aqua feed processing projects
- Olive-oil projects
- Leather production
- Dairy
- Pharmaceuticals process of fish oil
- Essence and aromatic substances production by using effective medicinal plants
- Production of extraction from medicinal plants
- Sorting, grading and packaging of saffron
- ♦ Two-circuit cooling

### Aquaculture

- ♦ Aquaculture nourishing
- Construction and equipping caviar centers to produce meat and caviar
- ♦ The construction and equipping marine fishery
- Aqua feed and its raw materials projects
- The construction of fishing ships and equipment





### Overview

ivestock farms are important in the agricultural sector, producing milk, dairy products, meat, fertilizer, etc. Livestock are among the major products in the agricultural sector and play an important role in the human food chainand growth of population and demand in further production.

### Livestock **Population**

The population of calf and cattle was 8,089,000 and categorized into 1,202,000 head purebred, 4,616,000 head crossbred, 2,271,000 head native in the year ended March 2018. Provinces including Tehran with 214,000 head of purebred, Mazandaran with 386,000 head of crossbred and 269,000 head of native cattle holding the first rank in calf and cattle livestock. The population of sheep and lamb was estimated at 45,622,000 while the population of goat and kid was 18,112,000. Provinces, including Razavi Khorasan, had a volume of 5,996,000 of sheep and lamb and Fars 2,523,000 of goat and kid ranked 1st in sheep farming.

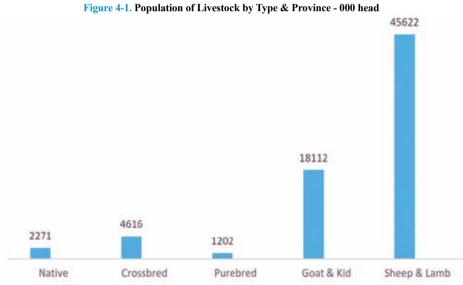




Table 4-1. Population of Livestock Classified by Type & Province - 000 head

	Sheep &	Goat & -	Calf & Cattel		tel	
	Lamb	Kid	Crossbred	Purebred	Native	Total
East Azerbaijan	3,019	530	287	32	181	500
West Azerbaijan	3,559	387	253	13	164	431
Ardabil	1,720	312	132	23	146	302
Isfahan	1,398	494	357	194	18	570
Alborz	323	42	75	75	0	150
Ilam	1,243	505	29	12	39	81
Bushehr	390	596	25	1	17	43
Tehran	882	123	213	214	8	436
Chaharmahal & Bakhtiari	1,177	390	133	32	26	190
South Khorasan	836	938	58	10	10	78
Razavi Khorasan	5,996	861	335	126	25	486
North Khorasan	1,702	310	54	11	14	79
Khuzestan	2,295	1,118	185	17	146	349
Zanjan	858	184	48	15	89	152
Semnan	1,317	352	56	25	3	84
Sistan & Baluchestan	973	1,798	17	2	95	114
Fars	3,250	2,523	242	81	85	407
Qazvin	817	118	177	72	106	355
Qom	274	63	55	28	26	110
Kurdistan	1,188	308	47	5	182	234
Kerman	1,226	1,279	79	33	18	131
Kermanshah	1,473	292	127	19	83	228
Kohgiluyeh &	565	909	34	5	28	67
Boyer-Ahmad						
Golestan	1,406	188	280	27	29	336
Gilan	708	98	96	4	251	351
Lorestan	1,825	798	182	11	54	247
Mazandaran	1,350	108	386	17	269	672
Markazi	1,356	221	219	27	17	263
Hormozgan	170	939	5	4/0	19	25
Hamedan	1,266	108	310	18	51	380
Yazd	398	397	89	50	17	156
South of Kerman	660	823	28	1	55	84
Total	45,622	18,112	4,616	1,202	2,271	8,089
Source: A gricultural Di	d					



### Livestock Production

Livestock production is categorized into red meat and milk. The total of red meat production reached 829,500 tons with a 0.67% decline, evaluated by distribution of mutton at 265,320 tons, purebred cattle at 80,900 tons, crossbred cattle at 255,980 tons, and native cattle with 126,950 tons, in the year ended March 2019.

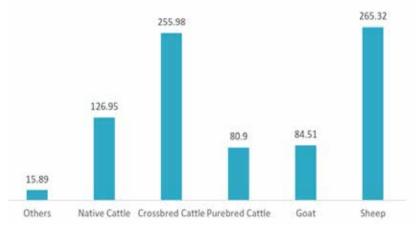
Total milk production reached 10,588.6 with a 3.8% growth which is evaluated by distribution of milk production' categorized into sheep 252,810 tons, goat 296,290 tons, purebred cattle 4,354,710 tons, crossbred cattle 4,920,970 tons, and native cattle 614,120 tons.

Table 4-2. Red Meat & Milk Production by Livestock - 000 tons

	Red Meat	Milk
Sheep	265.32	252.81
Goat	84.51	296.29
Purebred Cattle	80.90	4,354.71
Crossbred Cattle	255.98	4,920.97
Native Cattle	126.95	514.12
Others	15.89	149.66
Total	829.55	10,588.56

Source: Agricultural Production Report

Figure 4-2. Red Meat & Milk Production by Livestock - 000 tons



4920.97 4354.71 614.12 296.29 252.81 149.66 Others Native Cattle Crossbred Cattle Purebred Cattle Goat Sheep

Figure 4-3. Milk Production by Livestock - 000 tons

Isfahan and Razavi Khorasan took the first ranks of protein products with 71,330 tons of red meat and 1,308,870 tons of milk, respectively.

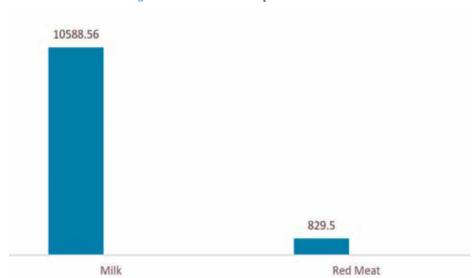


Figure 4-4. Protein Products by Province -000 tons



Table 4-3. Protein Products by Province - 000 tons

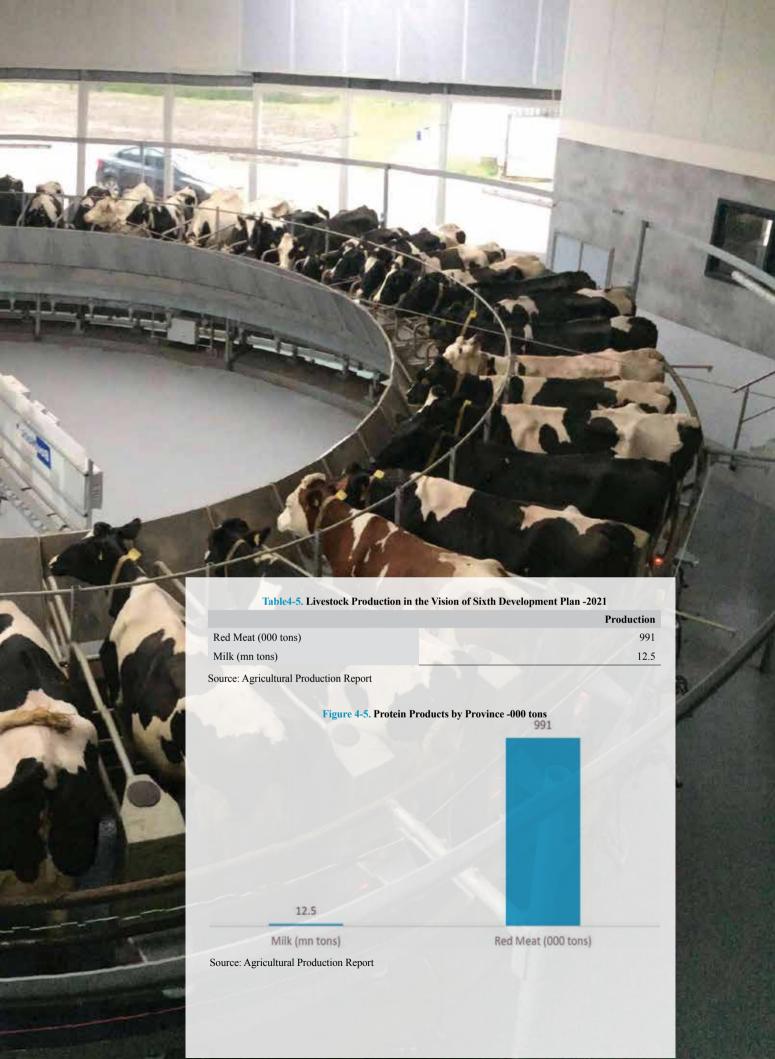
Table 10	Table 4-3. Hotelin Floures by Flovince - 000 tons			
	Milk	Red meat		
East Azerbaijan	535.42	50.53		
West Azerbaijan	380.96	46.29		
Ardabil	269.39	29.25		
Isfahan	1308.87	45.34		
Alborz	391.37	10.84		
Ilam	89.77	15.11		
Bushehr	40.04	7.79		
Tehran	1167.28	31.94		
Chaharmahal & Bakhtiari	258.75	20.98		
South Khorasan	112.74	13.71		
Razavi Khorasan	1019.28	71.33		
North Khorasan	101.12	15.24		
Khuzestan	332.68	41.38		
Zanjan	147.58	14.3		
Semnan	159.42	13.45		
Sistan & Baluchestan	72.88	20.29		
Fars	610.54	60.26		
Qazvin	548.82	25.78		
Qom	137.80	8.32		
Kurdistan	117.91	20.95		
Kerman	216.97	21.14		
Kermanshah	221.91	23.27		
Kohgiluyeh & Boyer-Ahmad	74.39	10.91		
Golestan	368.84	27.67		
Gilan	181.44	24.31		
Lorestan	243.42	27.81		
Mazandaran	493	46.43		
Markazi	290.69	23.21		
Hormozgan	25.78	6.74		
Hamedan	369.84	28.79		
Yazd	244.78	14.03		
South of Kerman	54.88	12.24		
Total	10,588.56	829.5		
		77		

 $\mathbf{I}^{n}$  the year endedMarch 2018, Iran held the world  $22^{nd}$ ,  $26^{th}$  and  $23^{th}$  ranks in meat, red meat and milk production, respectively.

Table 4-4. Ranking in Agricultural Products

	Rank
Meat	22
Red Meat	26
Milk	23

Source: FAO



# Products

Products Consumption Per Capita

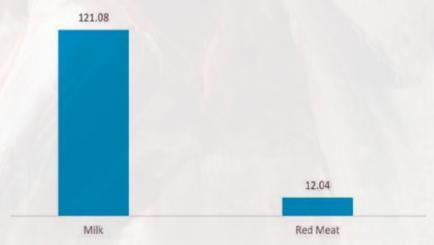
Total of livestock product consumption per capita was 133.12 Kilograms and the consumption of red meat reached 12.04 Kilograms with 0.6% decrease and milk was 121.08 Kilograms with an increase of 5.4% in the year ended March 2019.

Table 4-6. Livestock Consumption -Kg

	Consumption
Red Meat	12.04
Milk	121.08
Total	133.12

Source: Agricultural Production Report

Figure 4-6. Livestock Consumption -Kg



Source: Agricultural Production Report

Livestock Production in the Vision of the Sixth Development Plan

Livestock production in the vision of the sixth development plan (2021) is anticipated at 991,000 tons and 12,500 tons of red meat and milk, respectively.



## Overview

Industrial poultry breeding has 140 years of history and many efforts have been made to develop poultry industrial production in terms of genetic improvement, genetic selection, treatment and veterinary.

Iran poultry industry has experienced considerable growth in terms of quality and quantity in the past 60 years ranking 11<sup>th</sup> and 19<sup>th</sup> globally in chicken and egg production, respectively. Per capita consumption of chicken and egg was 28.21 Kilograms and 11.08 Kilograms with 4.4% and 0.9% growth, respectively showing the industry's importance and rankings in the Iranian food supply chain.

### Poultry Farming Capacity

The capacity of 18,459 broiler farms is 378,447,000 chickens, 1,811 farms of which are active in Isfahan with the capacity of 36,590 chickens. In Iran, a total of 1,791 layer chicken farms are active with the capacity of 98,232,000 chickens, of which 293 farms belong to Khorasan Razavi Province with capacity of 11,181,000 chickens. A total of 722 broiler breeder farms are active with the capacity of 25,494,000 chickens, of which 193 farms belong to Mazandaran Province with capacity of 4,723,000 chickens. A Total of 23 layer breeder farms are active with

capacity of 1,289,000 chickens, of which 5 farms belong to East Azarbaijan and Khorasan Razavi Provinces with capacities of 242,000 and 204,000 chickens. Also, 3 farms belong to Qazvin Province with capacity of 304,000 chickens,.

Layer pullet farms are divided in to two categories of independent and dependent pullets, a total of 264 independent pullet farms are active with capacity of 17,570,000 chickens, of which 77 farms belong to Qom Province with the capacity of 3,777,000 chickens. Also, a total of 113 dependent pullet farms have the capacity of 7,200,000 chickens, of which 18 farms belongs to South Khorasan Province with capacity of 668,000 chickens and 9 farms with capacity of 1,273,000 chickens to Qazvin Province.

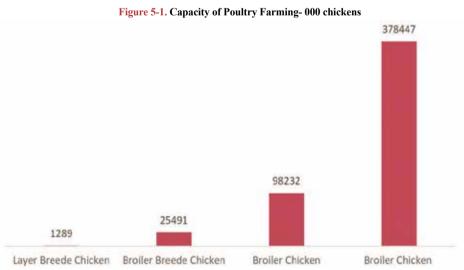


Table 5-1. Capacity of Poultry Farming - 000 chickens

	cupacity of Four	ry rariiing - 000 cm	ckens	
	Layer Breeder Chicken	Broiler Breeder Chicken	Layer Chicken	Broiler Chicken
East Azerbaijan	242	1,737	9,138	9,974
West Azerbaijan	0	2,074	112	15,603
Ardabil	0	1,799	675	6,859
Isfahan	33	692	10,561	36,590
Alborz	104	299	9,095	4,570
Ilam	0	0	160	7,209
Bushehr	0	0	40	6,547
Tehran	0	1,009	13,635	10,843
Chaharmahal & Bakhtiari	0	160	212	4,594
South Khorasan	59	276	1,960	9,730
Razavi Khorasan	204	826	11,181	26,005
North Khorasan	0	0	69	2,249
Khuzestan	0	248	470	14,631
Zanjan	80	811	1,005	654
Semnan	70	266	2,393	9,792
Sistan & Baluchestan	0	47	599	5,846
Fars	0	410	3,900	27,000
Qazvin	304	1,713	8,527	10,525
Qom	60	143	8,943	5,194
Kurdistan	0	435	585	14,698
Kerman	0	466	1,442	7,690
Kermanshah	0	398	1,165	10,229
Kohgiluyeh & Boyer-Ahmad	0	0	160	2,640
Golestan	0	1,965	2,205	27,323
Gilan	99	3,238	90	18,232
Lorestan	0	288	80	12,667
Mazandaran	0	4,723	966	31,208
Markazi	0	785	3,887	11,828
Hormozgan	0	60	10	7,221
Hamedan	35	445	1,623	9,455
Yazd	0	179	2,145	10,511
South of Kerman	0	0	100	330
Total	1,289	25,491	98,232	378,447

### Chicken & Egg Production

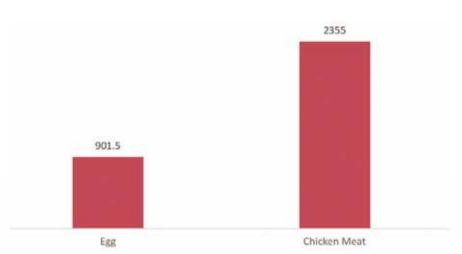
The poultry production industry is divided into two categories of chicken and egg. The total of chicken meat production reached 2,355,000 tons with 5.3 % increase in the year ended March 2019. In addition, the total egg production reached 887,700 tons with 1.5 % increase.

Table 5-2. Chicken Meat & Egg Production-000 tons

	Production
Chicken Meat	2,355
Egg	901.5

Source: Agricultural Production Report

Figure 5-2. Chicken Meat & Egg Production-000 tons





# Chicken & Egg Production in the Vision of the Sixth Development Plan

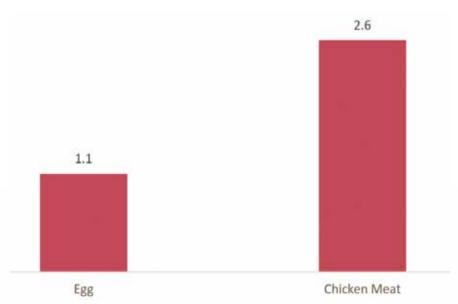
The volume of chicken and egg production, in the vision of sixth development plan, is predicted at 2.6 million tons and 1.1 million tons respectively.

Table 5-3. Chicken & Egg Production in Vision of Sixth Development Plan-mn tons

	Production
Chicken meat	2.6
Egg	1.1

Source: Agricultural Production Report

Figure 5-3. Chicken & Egg Production in Vision of Sixth Development Plan-mn tons





### Products Consumption Per Capita

The total chicken and egg consumption per capita reached 28.21 kilograms with a 4.4 % rise and egg consumption per capita reached 11.08 kilograms with a 0.9 % rise in the year ended March 2019.

Table 5-4. Chicken Meat & Egg Consumption Per Capita-kg

	Consumption
Chicken meat	28.21
Egg	11.08
Total	93.92

Source: Agricultural Production Report

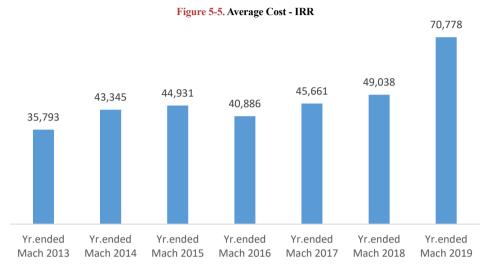
Figure 5-4. Chicken Meat & Egg Consumption Per Capita-kg





### Day-Old Chick

In the year ended March 2019, price of a day-old chick had an 8% decrease in comparison to the previous year and experienced an annual average growth of 15% in the period ended March 2013-2019.



Source: ITP

### Brooding at Broiler Breeder Farms

The Unsteady and unstable trend of brooding at broiler breeder farms entered a period of restrictions and rationing from the year ended March 2015, after which in recent years the trend became more stable, with a 2% annual increase in productivity. Brooding on Broiler Breeder Farms has been one of the most significant statistics of the industry and has direct and specific effect on the production of chicken and day-old chicks.

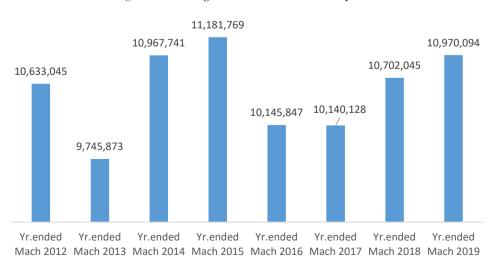


Figure 5-6. Brooding at Broiler Breeder Farms - Day-old chick

Source: ITP

### **Export**

In the year ended March 2018, the predictions for export were 60-70 thousand tons of chicken, but due to disease and domestic demand the figure stood at 500 tons.

### **Brooding**

In 2018, brooding at various stages was at a greater rate than usual due to the eradication of layer breeders. A total of 43,902,262 chicks were bred, of which 1,512,433 were imported as fertilized eggs.

Figure 5-7. Export by Destination-tons 27,880 12,678 7,608 1,662 1,780 56 Source: ITP

In the year ended March 2019, a total of 1,330,000,000 chicks were bred and Mazandaran province gained the top rank in breeding with 133,000,000 chicks and Golestan, Isfahan, and Razavi Khorasan followed it.

Table 5-5. Brooding by Province- Yr. ended Mar. 2019

Province	000 Chicks
East Azerbaijan	37,240
West Azerbaijan	50,540
Ardabil	21,280
Isfahan	117,040
Alborz	7,980
Ilam	22,610
Bushehr	17,290
Tehran	22,610
Chaharmahal & Bakhtiari	15,960
South Khorasan	33,250
Razavi Khorasan	109,060
North Khorasan	5,320
Khuzestan	55,860
Zanjan	22,610
Semnan	29,260
Sistan & Baluchestan	10,640
Fars	95,760
Qazvin	35,910
Qom	29,260
Kurdistan	42,560
Kerman	29,260
Kermanshah	30,590
Kohgiluyeh & Boyer Ahmad	6,650
Golestan	122,360
Gilan	70,490
Lorestan	30,590
Mazandaran	133,000
Markazi	37,240
Hormozgan	33,250
Hamedan	18,620
Yazd	35,910
Total	1,330,000

Source: ITP

Figure 5-7. Brooding by Province- Yr. ended Mar. 2019 140,000 120,000 100,000 80,000 60,000 40,000 20,000 Isfahan Hamedan Qazvin Bushehr Alborz Sistan & Baluchestan Zanjan Ardabil West Azerbaijan East Azerbaijan Markazi Mazandaran Lorestan Kohgiluyeh & Boyer Ahmad Kermanshah Semnan North Khorasan Razavi Khorasan South Khorasan Chaharmahal & Bakhtiari Golestan Kurdistan Khuzestan

Export of Day-Old Chick

Source: ITP

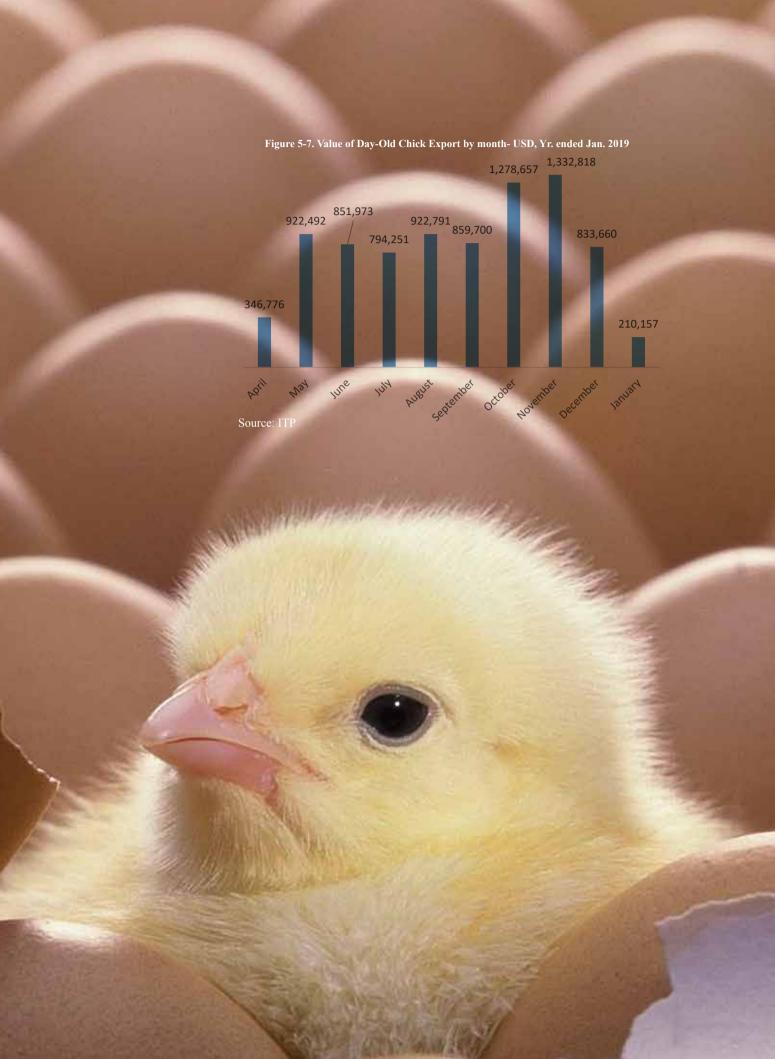
On January 2019, 27,712,649 day-old chicks at 1,330,207 kilograms weight and 8,371,275 USD value were exported to Armenia, Afghanistan, Turkmenistan, Iraq, Azerbaijan, Azerbaijan, Armenia, Afghanistan, and Turkmenistan had the highest export value at 1,332,818 USD. Afghanistan had the highest export value of day-old chicks among the export destinations.



Table 5-6. Value & Volume of Day-Old Chick Export- Apr. 2018 - Jan. 2019

Table 5-6. Value & Volume of Day-Old Chick Export- Apr. 2018 - Jan. 2019				
Month	Export Destination	Value (USD)	No.	Weight (kg)
=	Armenia	116,376	364,792	17,510
April	Afghanistan	215,400	716,146	34,375
	Turkmenistan	33,000	102,292	4,910
	Sum	364,776	1,183,230	56,795
	Armenia	136,776	424,833	20,392
May	Afghanistan	465,366	1,562,479	74,999
Σ	Turkmenistan	107,370	365,625	17,550
	Iraq	212,980	935,042	44,882
	Sum	922,492	3,287,979	157,823
	Armenia	107,965	391,208	18,778
June	Afghanistan	525,288	1,862,396	89,395
Ju	Turkmenistan	205,920	637,917	30,620
	Iraq	12,800	31,625	1,518
	Sum	851,973	2,923,146	140,311
	Armenia	134,661	440,583	21,148
July	Afghanistan	459,940	1,785,063	85,683
	Turkmenistan	199,650	657,875	31,578
	Sum	794,251	2,883,521	138,409
ta ta	Armenia	130,212	474,417	22,772
August	Afghanistan	491,859	1,610,771	77,317
	Turkmenistan	300,720	977,333	46,912
	Sum	922,791	3,062,521	147,001
li li	Azerbaijan	13,950	50,000	2,400
September	Armenia	107,418	334,458	16,054
epte	Afghanistan	430,862	1,439,646	69,103
	Turkmenistan	307,470	992,688	47,649
	Sum	859,700	2,816,792	135,206
	Azerbaijan	11,880	41,667	2,000
October	Armenia	158,087	518,125	24,870
Oct	Afghanistan	683,130	2,223,292	106,718
	Turkmenistan	425,560	1,248,833	59,944
	Sum	1,278,657	4,031,917	193,532
h h	Azerbaijan	155,774	482,042	23,138
mbe	Armenia	162,889	517,104	24,821
November	Afghanistan	674,839	2,348,354	112,721
	Turkmenistan	339,316	1,032,708	49,570
	Sum	1,332,818	4,380,208	210,250
u u	Azerbaijan	74,478	229,063	10,995
mbe	Armenia	91,412	285,104	13,685
December	Afghanistan	529,302	1,582,188	75,945
	Turkmenistan	138,468	419,375	20,130
	Sum	833,660	2,515,730	120,755
>	Armenia	46,081	133,792	6,422
January	Afghanistan	118,470	360,063	17,283
Jai	Turkmenistan	45,606	133,750	6,420
	Sum	210,157	627,605	30,125
	Total	8,371,275	27,712,649	1,330,207

Source: ITP









# FISHERY SECTOR





The Fishery sector has an important share in both providing food for society and in balancing The Fishery sector has all important share in ooth providing rock.

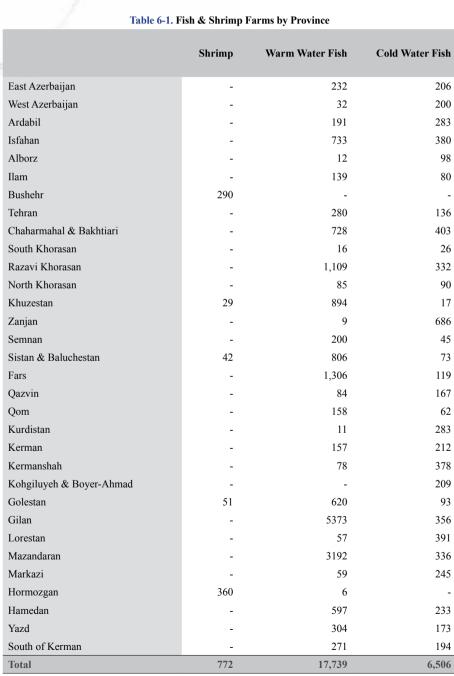
the ecosystem. The Food and Agriculture Organization (FAO) has defined a significant role for aquaculture in the future in terms of food supply, employment, foreign currency gains and rural development.

## Shrimp & Fish Farms Status

Warm-water fish farms reached a total of 17,739 (1.1% rise) units with production reduced to 190,238 tons (4.22% reduction) in the year ended March 2018. Cold-water fish farms stood at 6,506 (0.7% reduction)units, the production volume reaching 47,859 tons (0.5% rise). The highest number of warm-water fish farms was 5,373 (an area of 11793.7 hectares) in Gilan Province, 378 cold-water fish farms in Kermanshah Province (220,539 hectares) and 360 shrimp farms (4286.2 hectares) in Hormozgan Province.

Figure 6-1. Fish & Shrimp Farms 17,739 6,506 772 Warm-water Fish Cold-water Fish





### **Aquaculture Production**

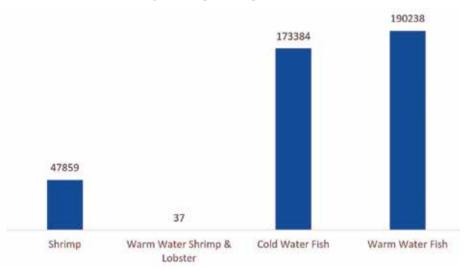
The total amount of fish production was 489,205 tons, including 190,238 tons warm-water fish, 173,384 tons cold-water fish, 37 tons fresh-water shrimps and lobsters, as well as 47,859 tons shrimps in the year ended March 2018. Mazandaran, Lorestan, Kermanshah, and Bushehr ranked 1st with 60,939 tons warm-water fish, 197,60 tons cold-water fish, 25 tons fresh-water shrimps, and 21,000 tons shrimp production, respectively.

Table 6-2. Aquaculture Production-tons

	Production
Warm water fish	190,238
Cold water fish	173,384
Warm water shrimp & lobster	37
Shrimp	47,859
Total	489,205

Source: Agricultural Production Report

Figure 6-2. Aquaculture production-tons



Fish & Shrimp Production

Source: Agricultural Production Report

In the year ended March 2019, fish and shrimp production reached 1,182,000 and 56,600 tons with 0.02% and 56.6% growth, respectively.

Table 6-3. Fish & Shrimp Production-000 tons

	Production
Fish	1,182
Shrimp	56.6

1182 56.6 Shrimp Fish

Figure 6-3. Fish & Shrimp Production-000 tons

## **Products** Consumption Per Capita

 $\mathbf{I}^{\mathrm{n}}$  the year ended March 2019, the total of consumption per capita of aquatic products was 11.3 kilograms (0.06% increase), and aquatic protein consumption increased 6.04 grams per day.

Table 6-4. Aquatic Products & Protein Consumption Per Capita

	Consumption
Consumption Per Capita (kg p/y)	11.3
Protein (g p/d)	6.04

Source: Agricultural Production

Figure 6-4. Aquatic Products & Protein Consumption Per Capita

