

# Potentials & Advantages

## **Geopolitics situation**

with unique geographical location at the heart of a cross-road linking the Middle East, Asia and Europe, empowered by inter and trans-regional trade, customs, tax and investment arrangements.

Despite the abundance of aviation, land and sea routes Iran plays super-strategic and crucial part in energy transformation and international commodities, the privileged strategic territory, road and maritime routes for oil and gas resources transit from exporting to consuming countries, in the Persian Gulf.

The Strait of Hormuz is a strategically important as it links the Persian Gulf with the Arabian Sea and the Gulf of Oman and one of the world's foremost chokepoints, which is as a sea route for the shipment of goods. The main product which move through the Strait Hormuz is oil from the Middle East.

The strait is only 21 to 60 miles (33 to 95 km) wide. Iran and Oman are the countries nearest to the Strait and share territorial rights over the waters. It is also 21 miles (33 km) wide at its narrowest point and 60 miles (95 km) at widest. However the width of the shipping lanes is much narrower i.e. about two miles wide in each direction (3 km) because the waters is not deep enough for oil tankers throughout the strait's width. Iran dominates a number of islands with a privileged strategic position in the Hormuz Strait and the Gulf. The six important islands that make up the Iranian ethnic defense chain include Hormuz, Lark, Qeshm, Hengameh, the Greater Tunb and Abu Musa, which are relatively close to

each other. Besides adding to the size of Iranian water, these strategic islands have long been of great value for controlling waterways and straits.

Being adjacent to the Persian Gulf oil-rich countries such as Iraq, Kuwait and Saudi Arabia and as the only transit path to cross fossil resources from the Hormuz Strait, is viewed as the main thoroughfare and the bottleneck of energy and can be assumed as a safe alternative for Russia and provide energy for Eastern Europe, Central Asia and even Western Europe through Turkey.

Iran is a reliable passageway of oil and gas transit for Turkmenistan and Kazakhstan and since being between Caspian Sea and the Persian Gulf, is the shortest route to transfer energy resources to the Caspian Sea. Facilitating oil export to Europe, Western countries, Japan, China and the Southeast Asia countries is another privilege of Iran.

### **Iran is the cheapest tourism destination in the world**

According to the Travel and Tourism Competitiveness report published by World Economic Forum (WEF), Iran was ranked as the most affordable foreign tourists' destination for the third time. This biennial report, which surveyed 136 countries in 14 categories, indicates how well these countries could deliver sustainable economic and social benefits through their tourism sector. The report states that Iran in terms of price competitiveness is ranked above main players of tourism industry such as Egypt, Malaysia, Russia, Turkey, Greece, Spain, the US, France and Italy. The report indicates how costly it is to travel or invest in countries. Costs relating to travel such as ticket prices, fuel rates and taxes as well as costs including accommodation and food prices are the indicators for "price competitiveness". Iran Global Competitiveness Index (GCI) is 6.66 and achieved the first global place in this field.

**Table 1-1 Travel & tourism price competitiveness index in 2017**

Index Component	Rank/136	Score
Price competitiveness	1	6.7
Ticket taxes and airport charges 0-100 (best)	13	92.9
Purchasing power parity PPP USD	10	0.3
Fuel price levels USD cents/liter	5	18.7

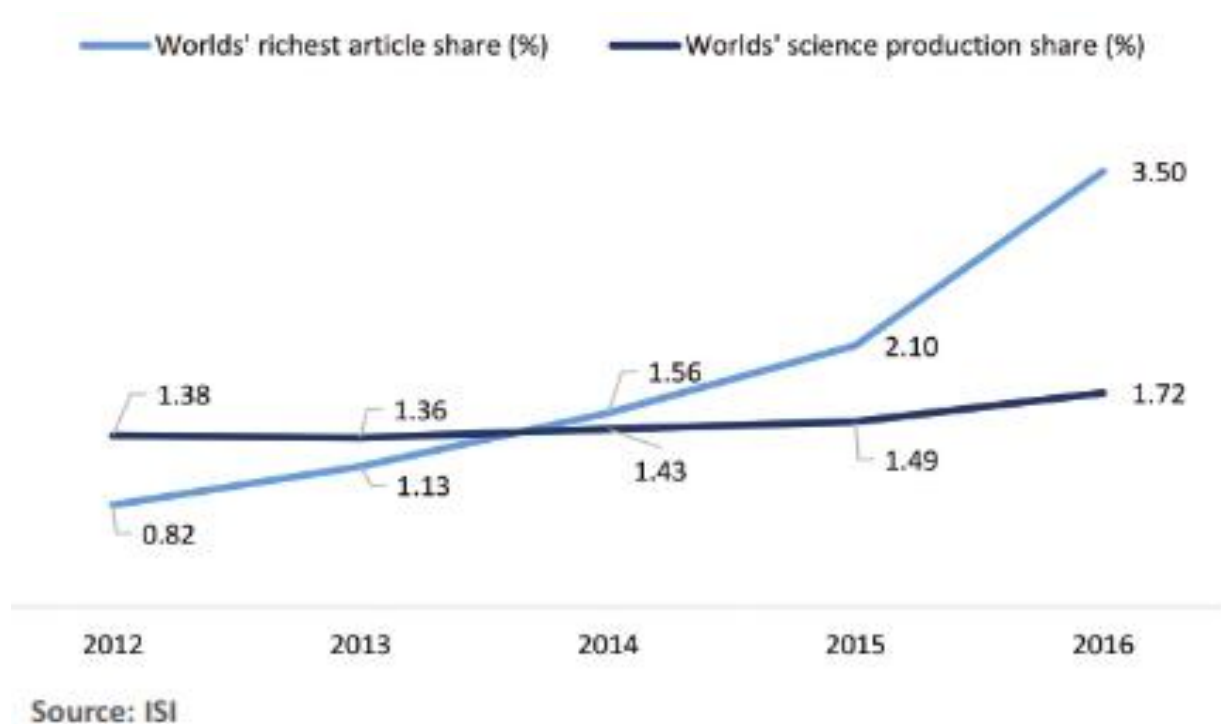
Source: World Economic Forum

### **Climatic characteristics**

Iran is one of the world's most unique countries, in terms of climate with four desirable seasons. There are many climate varieties in Iran and from the word 14 climate, Iran favors 11 climates. For instance, while it is snowing in Ardebil province in the north, the Persian Gulf residents may not experience snowfall for even many years in the south. On the other hand, when there is more than 1,800 mm raining in Bandar-e Anzali port in one year, Mirjaveh in Sistan and Baluchestan has less than 50 mm rainfall. This climate diversity has led to a variety of natural landscapes, which can hardly be seen in other countries. Iran has varied nature and climate contains abundant plants and animals which are amazing in both number and variety in comparison with other parts of the world. For example, there are 168 species of wild mammals which are equal to the total number of species in Europe; also, 8,000 plants, 174 fish, 20 amphibians, reptiles and 514 birds living in Iran. Iranian Vegetation diversity is more than twice the size of Europe continent and nearly equals the Indian subcontinent. Iran has the most versatile bulb plants and herbs, such as Lamiaceae, Umbelliferon.

### First rank in the quantity growth of world science production

In 2016, Iran scientific production increased by 18.9% and has had the highest rate in the last five years, which has the world's first scientific growth compared to the world's 25th large science producers. Iran's contribution to the world science-production quantity reached 1.72% in 2016. However, in 2015, Iran's share of the world's total science production was 1.49%. Iran attained 3.5% of the most valuable articles in the world compared to the previous year by 2.1%, in 2016. In terms of science-production quantity, Iran obtained the world 17th rank while 19th in 2015.



Iran also made significant progress and reached the 15th rank in stem cells technology in Islamic countries over the last few years. The first spark of nanotechnology began in 2000 when Nanodeveloped as a modern technology was

known to less than 10 university professors 16 years ago; now, ranked the world 6th in terms of producing Nano-science and standing above countries such as Japan and France and ranked 1st in the region and Islamic countries

### **The transit axis of the region**

Having common border on the north by the Caspian Sea and on the south by the Persian Gulf and the Oman Sea, has allowed Iran to access more than 5,800 km of coastal strip. Iran has a privileged position in transit, since having access to the Eurasian countries from the north, east to the Central Asian countries and from the West with a land border with Turkey and thus using a part of the Silk Road. The geographic location over the transatlantic crossroads has turned the country to the transit axis on the North-South and East-West corridors. Trans-boundary transit of Afghanistan and Central Asia through the eastern border i.e “Chabahar-Milk” the geographical location of Bandar-Chabahar to Afghanistan, numerous investments in various transportation sectors, especially the maritime, establishing facilities and transport infrastructures on eastern axis and government extensive supports have turned Chabahar into the transit hub of Afghanistan. Iran is located in the center of the ECO member states; therefore, this is an opportunity to play main role in establishing trade and economic relations between ECO members. Since the goods from China, Uzbekistan, Kyrgyzstan, Kazakhstan, Turkmenistan, Tajikistan have to cross Iran to reach the Arab countries like Oman, Qatar, Saudi Arabia, Kuwait and Iraq. Thus, Iran’s position among the three international unions is another advantage. Through Turkey, Azerbaijan and Georgia, connecting the Black Sea and the Mediterranean Sea to the European Union, the Eurasian countries and to the continent of Oceania create an intercontinental connection.

## **Rich natural resources**

Turkey's consumption potentials, Saudi Arabia's oil, Russia's gas and Australia's mining reserves, all are found in Iran, holding the world 4th and 1st rank in oil and natural gas reserves. Also, it has the 15th ranking in mineral resources with 68 types of various products with about 37 bn tons of proven and 57 bn tons of potential reserves. These resources include chrome, coal, copper, iron ore, lead, manganese, oil etc. In other words, Iran has the world over 7% mining resources of the world, while having 1% of world's population. Iran globally ranks as: the 4th in lead and zinc; the 9th in copper; 12th in iron 5th in strontium; Also, holding 1.2% sodium chloride and 3.7% baryte of the world, 2nd producer of gypsum by 9% after china and the world's oldest, finest and largest producer of Turquoise stone.



**Table 1-2 Iran mineral resources**

Mineral	Reserve (mn ton)	Mineral	Reserve (mn ton)
Oil	158.4 bbl	Kaolin, Fire	100
Gas	33.5 TCM	Lead & Zinc	11
Asbestos	120	Silica & Quartz	128
Barite	24	Turquoise	500
Bauxite and Aluminum	1200	Dimensional Stone	3,000
Phosphate Rock	16.5	Limestone	8,500
		Gold	340 ton
Chromium	8.5	Gypsum	1,600
Manganese	9.7	Iron Ore	2,700
Coal	2,800	Copper	4,200

Source: Ministry of Industry, Mine & Trade - USGS

### **Strong and widespread infrastructure in the economic sectors**

Iran has the largest and the most extended industries in MENA region, led to providing sufficient infrastructures in upstream, downstream and knowledge-based industries and provides most of the world market with an annual petrochemical production capacity equal to 60 mn tons. The pharmaceutical industry is one of the world and region medicinal poles with a wide range of raw materials for 70 years of experiences in producing medical products and holds Cement holds 4th ranking in the world and manufacturing over 1.2% automotive of the world vehicles and currently, is the greatest steel producer in the Middle East. Alongside with the various industries, Iran has a wide range of communication networks including over 214,000 km of road and almost 11,000 km of railway, with over 600 under operation dams and power plant capacity by 76,000 MW.



## Energy security

Compared to the oil and gas producing countries, Iran is ranked 2nd in total proven oil and gas reserves after Russia. This global position allows maximizing national security by providing appropriate strategies for energy security. Concerning accessibility, Iran claims 154.8 bn barrels about 9.3% of the world's proven crude reserves. Given the current production and will remain the world leading oil exporter for another 94 years and holds 33,500 BCM of gas, up to 18% of proven natural gas reserves, which will produce natural gas for another 165.5 years Iran is located in two energy-rich regions i.e. the Middle East and the Caspian Sea; so, is not affected by the policies of the major consumers. The West's efforts to reduce dependence on Middle Eastern oil and gas will result in the Caspian Sea's and Iran energy resources boost.

**Table 1-3 Comparison of reserves, production and life expectancy of Iran's oil and gas to the world in 2016**

	Oil			GAS		
	Reserves (bn bbl)	Production (000 bbl/d)	R/P	Reserves (TCM)	Production (BCM)	R/P
Iran	158.4	4,600	94.1	33.5	202.4	165.5
North America	227.5	19,270	32.3	11.1	948.4	11.7
S. & Cent. America	327.9	7,474	119.9	7.6	177.0	42.9
Europe & Eurasia	161.5	17,716	24.9	56.7	1,000	56.3
Middle East	813.5	31,789	69.9	79.4	637.8	124.5
Africa	128.0	7,892	44.3	14.3	208.3	68.4
Asia Pacific	48.4	8,010	16.5	17.5	579.9	30.2
Total World	1,706.8	92,151	50.6	186.6	3,551.4	52.5

Source: BP





## Young educated human resources

Having Young population is one of the advantages of Iran. The average age is 31.1 years, according to the year ended March 2017 census, more than 25.1% of the population is between the ages of 15 and 29. The working-age population (aged 15-64) reached from 52% in 1986 to 70% of the total population in 2016, providing a “demographic opportunity”.

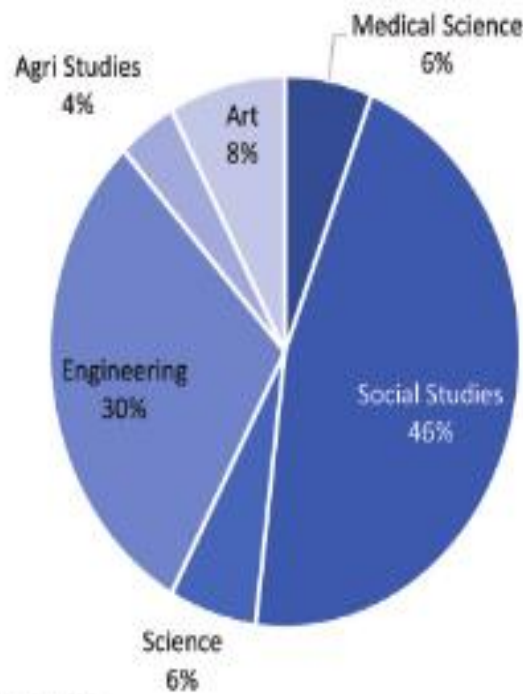
**Table 1-4 Total population by age group (%)**

	Yr. ended Mar 1997	Yr. ended Mar 2007	Yr. ended Mar 2012	Yr. ended Mar 2017
0-4	39.5	25.1	23.4	24.0
15-29	28.4	35.4	31.5	25.1
30-64	27.7	34.3	39.3	44.8
65	4.4	5.2	5.7	6.1

Source: Statistical center of Iran

With its young population and significant part of which are educated and knowledge-based, Iran has specific labor force conditions that are rarely seen in other countries. The literacy rate is 87.6 % and more than 11 mn people have university degree. With average more than 4.0 mn students enlisted in universities each year, Iran has doubled the number of university students over the past 10 years. Currently, there are more than 2,500 active universities and related institutions and is one of the top states in secondary school graduates attending universities. The students in the academic year of 2015-2016 were over 4.3 mn, which 46.1% and 53.9% are women and men, respectively.

Figure 1-2 Iranian students by major group

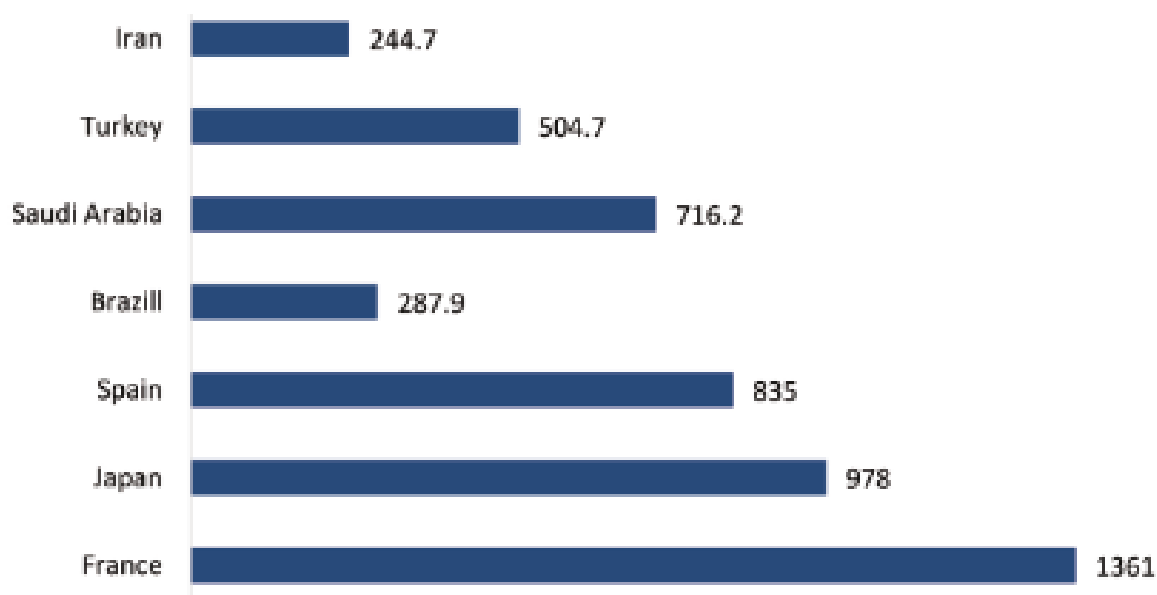


Source: Statistical Center of Iran

### **Low utility & production cost**

Despite the youngest and highest educated workforce, Iran has the lowest wage in the Middle East. Foreign investors can enjoy the benefits of highly trained workforce with the minimum monthly wage by 244 USD.

**Figure 1-3 Comparison of Iran minimum monthly wage with other countries (USD)**



Source: ILO

**Table 1-5 Infrastructure & Utility Cost**

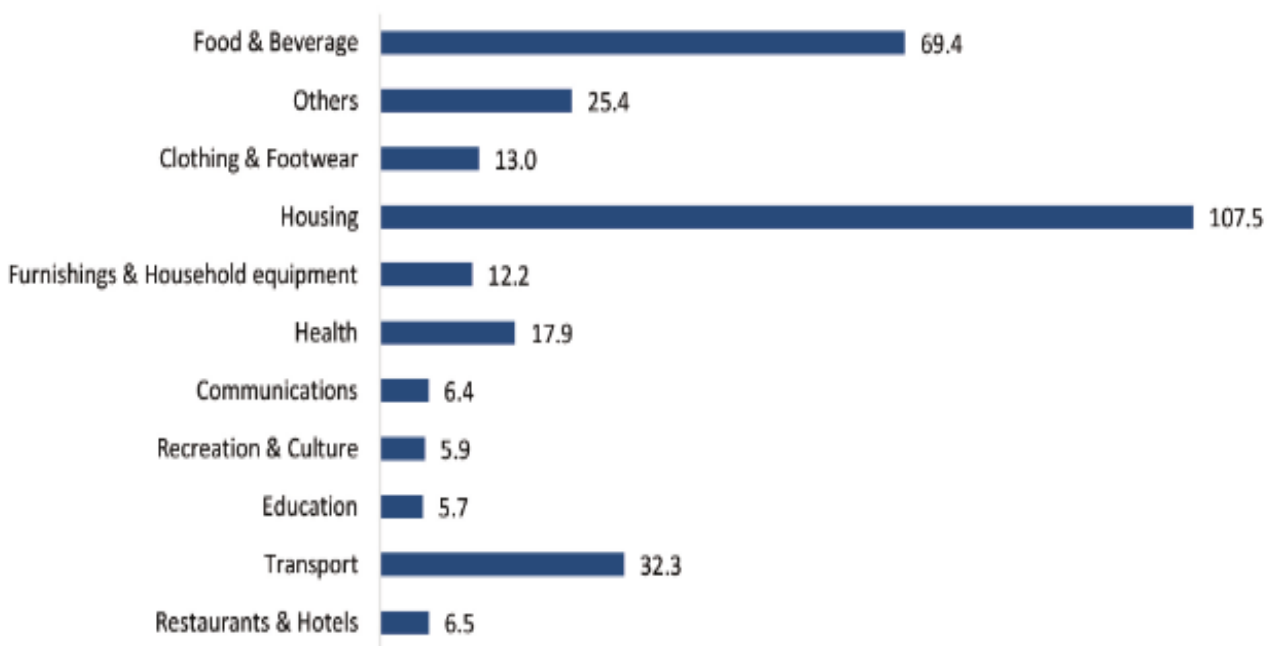
	Unit	Cost (IRR)
Gasoline	Liter	10,000
Gas oil	Liter	3,000
Fuel oil	Liter	3,000
Kerosene	Liter	1,500
Liquefied gas	kg	2,300
Cellphone /domestic	1 minute	499-929
Fixed phone/ domestic	1 minute	330-625
Cell/Fixed /international	1 minute	700-100,000
Electricity	kwh	700
CBI official exchange rate in the year ended March 2107		31,389

Source: CBI

## **Vast domestic market with a population of 80 mn growing steadily**

Iran ranks the world 17th with 80 mn population and is the most populous country in the Middle East after Egypt. There are large middle classes with increased income distribution equality and changing consumption patterns, with annual household net expenditure increasing rapidly.

**Figure 1-4 Iranian household's total expenditure in the year ended March 2017 (bn USD)**



Source: CBI

## **Regional market's hub**

Surrounded by the consuming countries, which lack the sufficient infrastructures for industrial development, Iran can hold the main part in importing required goods. Proximity to countries such as Azerbaijan, Turkmenistan and Armenia has opened a unique capacity to enter into 300 mn market of the Central Asia. Additionally, Iran plays a key role since being as a linking chain of North to South and East to West for the transit of goods, Swaps (oil swap) and connectivity to international electricity transmission networks.

## **Security & political stability**

Concerning the security aspects in the Middle East and West Asia, Iran is among safest countries in the region and even in the world, where the terrorism, ethnic conflicts and political groups are existing.



## **Iranian Top Rankings in the World**

### **The 18th largest economy in the world**

In 2016, Iran ranked 18th in GDP on PPP and the 2nd largest economy in the MENA region, after Saudi Arabia, with the diversified economy of 1,450 bn USD in value. In the past 25 years, five development plans completed and earned millions dollars of more than 50 countries.

**Table 1-6 GDP (PPP) ranking in 2016**

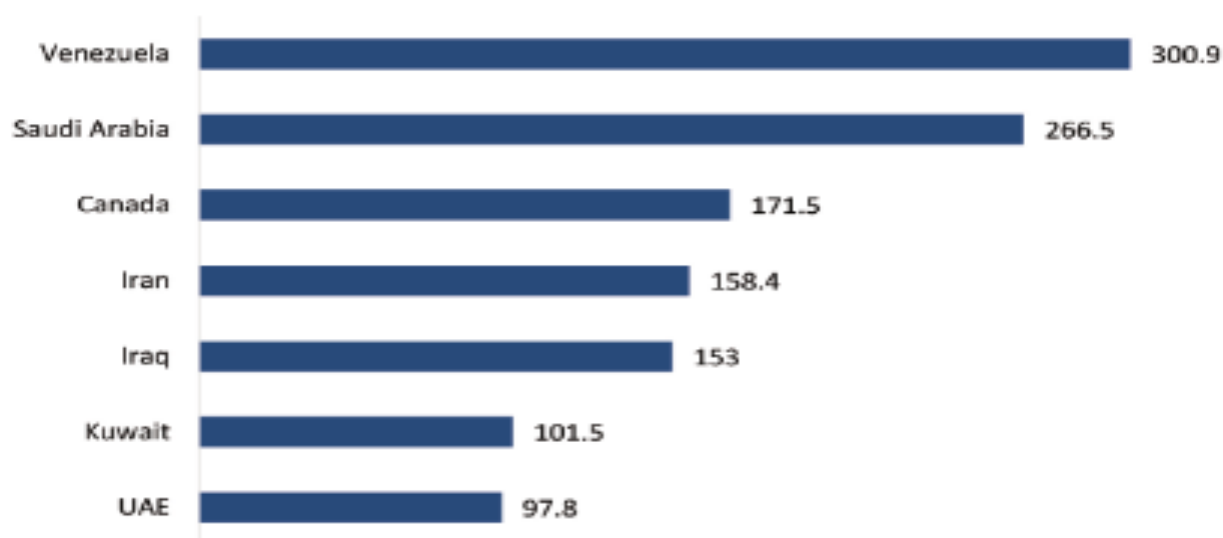
Rank	Country	GDP (PPP- bn Int.USD)	Share (%)	GDP per capita (PPP- Int. USD)	Rank
1	China	21,269.02	17.9	15,424	81
2	United States	18,561.93	15.6	57,294	13
3	India	8,720.51	7.32	6,658	126
4	Japan	4,931.88	4.14	38,894	30
5	Germany	3,979.08	3.34	48,190	19
17	Turkey	1,669.89	1.4	21,147	63
18	Iran	1,459.2	1.23	18,136	70
19	Australia	1,188.76	0.998	48,806	18
20	Thailand	1,161.33	0.975	16,835	77

Source: IMF

### **The world 4th rank in oil reserves**

Holding 9.3% of the world's oil reserves after the Venezuelan, Saudi and Canadian countries, Iran ranks 4th.

**Figure 1-5 The world's largest oil reserves in 2016 (bn barrels)**



Source: BP



### **The middle East 2nd largest producer of petrochemicals**

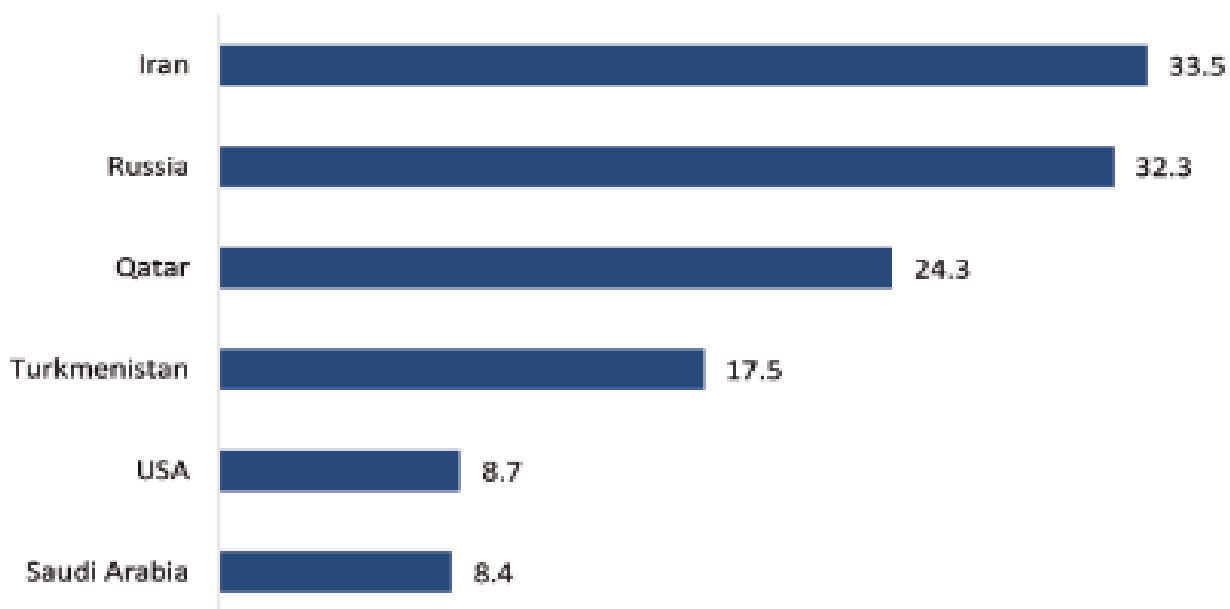
Iranian share of production capacity reached 13.66% in the year ended March 2016 in the Middle East compared to 22.21% in the year ended March 2013. This trend will carry on due to several petrochemical production projects. Iranian contribution to the globally production capacity of polymer and chemical products reached 2.54% and 2nd place of the Middle East by 50.6 mn tons, in the year ended March 2016.

### **1st place in natural gas reserves**

Holding about 18 % of global natural gas reserves, Iran owns the 1st rank.



**Figure 1-6 The largest natural gas reserves in 2016 (TCM)**



**Source: BP**

### **Iran as one of the top 10 countries in pharmaceuticals**

Iranian pharmaceuticals have gained self-sufficiency, due to significant progress in producing biological and Nano drugs and 20 items of 146 pharmaceutical and owns in domestic market. In generic drugs ranked the world 7th and 4th in biotechnology and generic drugs, respectively. Also, top 10 countries is enlisted in recombined drugs.

### **The world's 14 th largest steel producer**

Iran is the 1st producer of steel in the Middle East and the 14th in the world, with share by 1.1%, in 2016, higher than industrial countries such as France, Spain and Canada and grew by 10.8% in comparison with last year.

**Table 1-7 The world largest steel producing countries in 2016**

	Production (000 tons)	Share (%)
China	808,366	50.22
Japan	104,774	6.51
India	95,618	5.94
United States	78,475	4.88
Russia	70,808	4.4
South Korea	68,576	4.26
Germany	42,080	2.61
Turkey	33,163	2.06
Brazil	31,275	1.94
Ukraine	24,218	1.5
Italy	23,373	1.45
Taiwan, China	21,751	1.35
Mexico	18,809	1.17
Iran	17,895	1.11
France	14,413	0.9
Spain	13,624	0.85
Canada	12,646	0.79
Total World	1,609,703	100

**Source: World Steel Association**

### **Iran is 10th ranking in iron ore reserves & production**

With its rich reserves, Iran is one of the leading countries in iron ore reserves as estimated at 2.7 bn tons, accounting for 1.59 % of reserves and 10th rank. The average grade of Iranian iron ore is 56% versus the world 47%. Holding 156 iron ore mines. The average purity of iron ore is 56% and 47% in Iran and the world, respectively. The world's iron ore production was 2,230 mn tons by producing 36 mn tons of the world's largest iron ore in 2016. Iran stand in the 10th place and holds 1.61 % of world ore production.

**Table 1-8 The world richest iron ore reserves in 2016 (mn ton)**

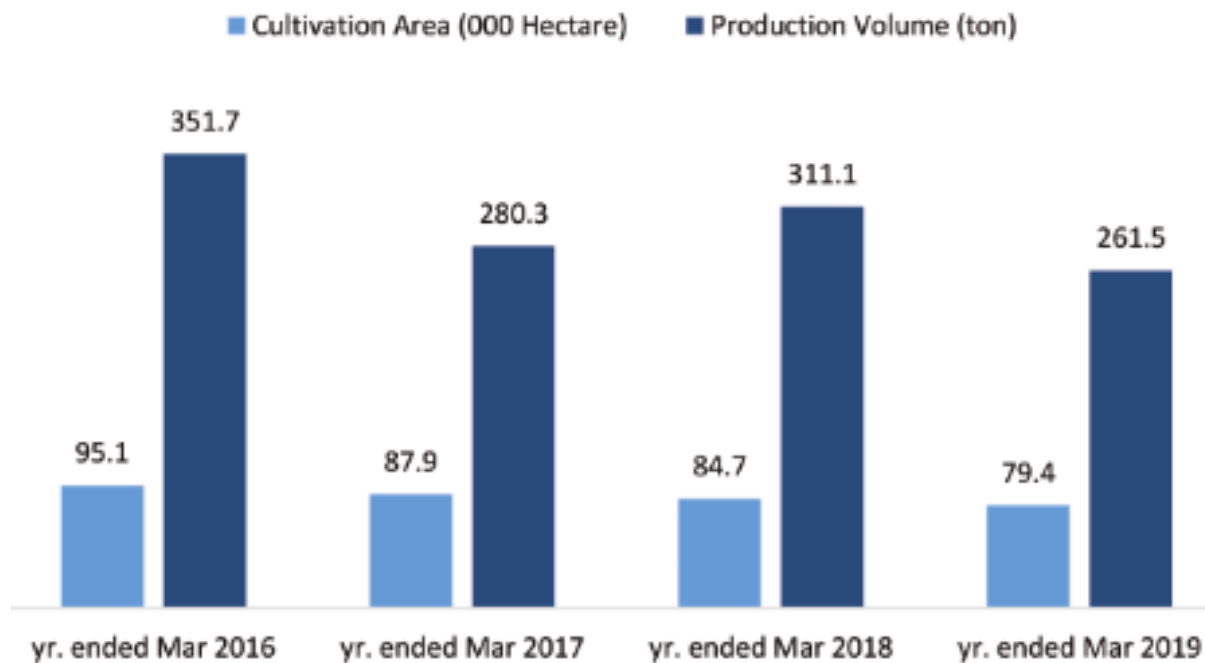
	Production (mn tons)	Share of world total production	Rank by production	Reserve (bn tons)	Share of world total reserve	Rank by reserve
Australia	852	38.2	1	52	30.6	1
Brazil	391	17.5	2	23	13.5	3
China	353	15.8	3	21	12.4	4
India	160	7.2	4	8.1	4.8	5
Russia	100	4.5	5	25	14.7	2
South Africa	60	2.7	6	1.2	0.7	12
Ukraine	58	2.6	7	6.5	3.8	6
Canada	48	2.2	8	6	3.5	7
America	41	1.8	9	3	1.8	9
Iran	36	1.6	10	2.7	1.6	10
Sweden	25	1.1	11	3.5	2.1	8
Kazakhstan	21	0.9	12	2.5	1.5	11
Others	85	3.8	-	18	10.6	-
World	2,230	100	-	170	100	-

Source: USGS

### **The world's largest saffron producer**

Iranian saffron called Red Gold, is known for its incomparable quality, glamorous fragrance and magical coloring strength and more than 90% is exported. Saffron or Zafferan is renowned for valuable spice and its high medical and impressive benefits. The Iranian saffron dates back over 3,000 years and accounts for the world 94% and the remaining 6% are produced in India, Greece, Morocco, Spain and recently Afghanistan. Despite the significant contribution to world production, the statistics indicate that the average yield of saffron is 2.3 kg/ha in Iran, which is significantly different from other countries.

**Figure 1-7 Iran saffron cultivation area and production**



Source: Ministry of Agriculture Jihad

### **Iran has the first rank on handicrafts in the world by variety**

With over 350 items, Iran handicrafts represent the taste, spirit, tact, historical background, lifestyle, geographic, social, economic and even political characteristics throughout the history. Naturalistic mood, social ups and downs, religious beliefs, purity and inner cordiality, humanism and hospitality are found in traditional and handicraft industries. Carpets, rugs and other traditional woven fabrics, metal fabrication, porcelain enamel, glassblowing, pottery, all reflect Iranians oriental spirit. Iranian handicrafts as indigenous and domestic industry are the most significant applied art and deeply rooted in rich and fertile culture. These varied and valuable crafts are witnessed by tourists who find the opportunity to meet handicrafts.

### **The world 6th ranking in nanotechnology**

Iranian researchers indexed 8,306 nano-technology articles in Web of Science (WoS) by 5.5% of Nano published articles and ranked the world 6th, in 2016. In 2001, only a few researchers and scientists were familiar with new technology, obtained 57th ranking in the world and 6th in the Middle East by publishing 10 articles.

**Table 1-9 Top 20 countries in publication of nanotechnology articles in 2016**

Rank	Country	Nano-articles	Share (%)	Rank	Country	Nano-articles	Share (%)
1	China	47,455	34.5	11	Russia	4,124	3
2	USA	22,337	16.3	12	Italy	3,901	2.8
3	India	11,066	8.1	13	Australia	3,406	2.5
4	South Korea	8,386	6.1	14	Canada	3,018	2.2
5	Germany	7,963	5.8	15	Taiwan	2,831	2.1
6	Iran	7,583	5.5	16	Saudi Arabia	2,489	1.8
7	Japan	6,952	5.1	17	Brazil	2,471	1.8
8	France	5,313	3.9	18	Poland	2,300	1.7
9	UK	5,038	3.7	19	Singapore	2,170	1.6
10	Spain	4,178	3.0	20	Turkey	2,056	1.5

Source: STATNANO

### **The 14th rank in installed power generation capacity**

Iran power industry in terms of installed power plant ranks 1st in the Middle East, 3rd in Asia and 14th in the world. The largest power generation is allocated to gas plants in Iran. The nominal capacity of power plants have increased to 76,637 MW, which 35 units have 5,750 capacity belonging to the thermal power plants

and 750 MW are produced in and 20 with a capacity of 3,260 MW (equivalent to 57%) were built by the private sector.

### **World 3rd ranking in agricultural products variety**

Biodiversity in Iran has provided a very significant capacity for producing various crops (livestock and garden); thus, resulted in gaining the world 3rd rank in agricultural production diversification index. Iran is among the world most traditional countries in agriculture and has the most important economic sectors (crops, horticulture, aquaculture, poultry, apiculture and livestock) in the world.

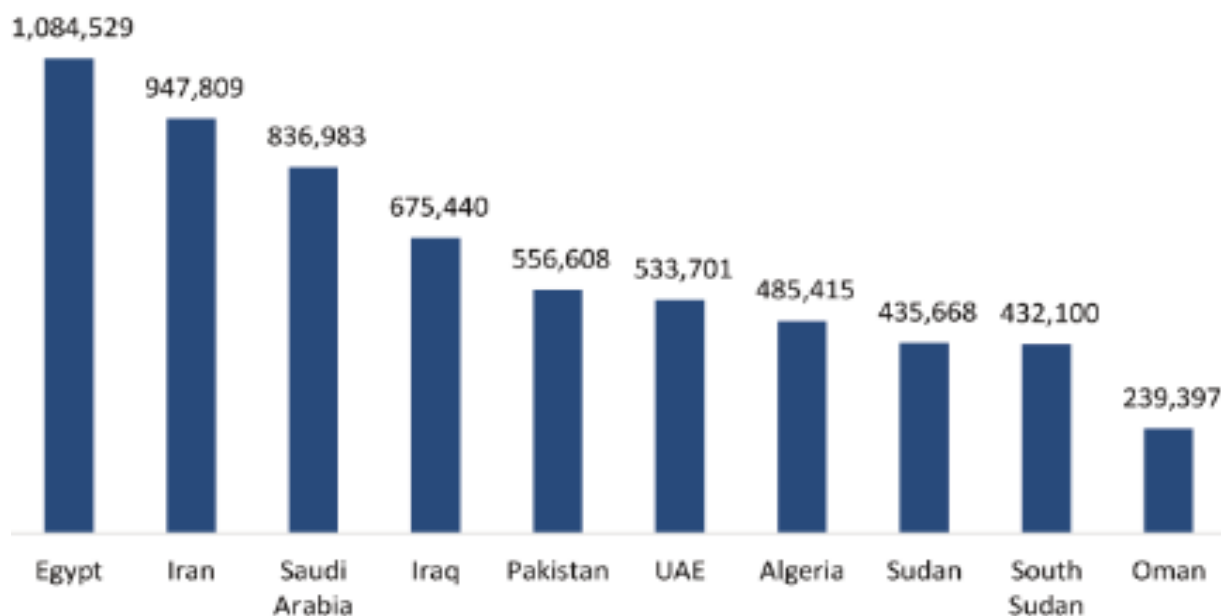
### **The Middle East most diverse capital market**

Tehran Stock Exchange is the most varied market in the Middle East and encompasses several industries. Given nearly 40 industries and about 500 companies, extensive infrastructure and institutionalized projects have resulted in expansion, deepening and diversification of the capital market. Moreover, stock exchange and commodity markets have a significant share in value and turnover.

### **The world's 2nd largest producer of dates**

Iran is 2nd producer of dates after Egypt in the world with 17% of the cultivated area and producing by 13% of the world.

**Figure 1-8 World leading countries growing fresh dates (tons)**



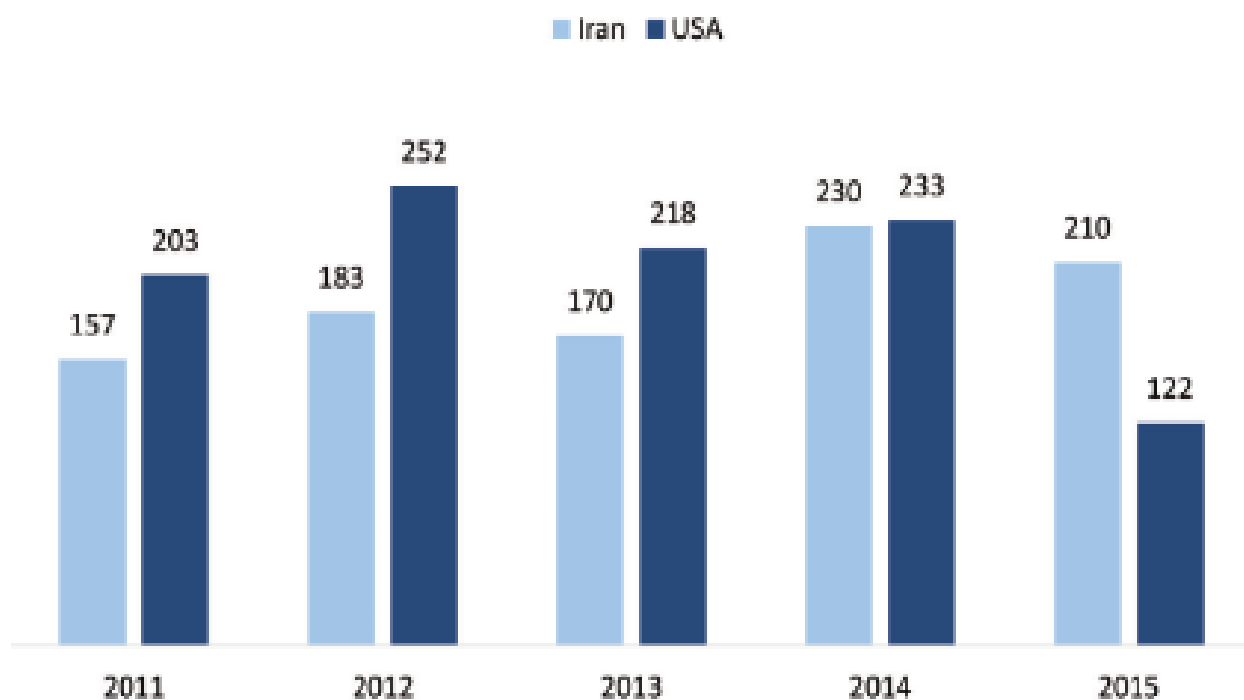
Source: World atlas

### **The world's largest pistachio producer**

Iran and the USA account for 70-80% of the world's pistachio production. The two countries have been vying for the top spot as producer and exporter over the past several years. After several years, Iran assigned the maximum world pistachio production in 2015. Approximately 70 % of pistachio production is exported to global markets. In 2015, Iran exported more than 126,000 tons of pistachios to more than 45 countries.



**Figure 1-9 Iran & USA pistachio production comparison**



Source: Iran pistachio

### **The world 3rd rank in dam construction**

Nowadays, Iran has achieved an important index for self-sufficiency in the dam construction industry, achieving new and complex technologies and has the ability to implement large dam constructions even for other countries. Iran has 1st rank in planning and implementing dam projects in the region and stands in the line of the world 1st class constructors of dam technology. At present, Iran is the world 3rd superior in dam construction, after China and Turkey and has built (under construction) the largest number of dams during last 30 years.



**Table 1-10 Iran dams specifications**

	Investigative	Operative	Utilizing	Total
Reservoir volume (mcm)	50,401	24,587	48,454	123,442
Cultivated land (Hectare)	1,006,542	894,956	2,457,095	4,358,593
Adjusted water level (mcm)	15,278	15,862	34,169	65,309
Dam quality on the border rivers	53	39	49	141
Dam quality on domestic rivers	484	107	598	1,189
Total dams	537	146	647	1,330

**Source: Iran Water Resources Management Company**

### **The world 7th rank in cement production**

The status of cement exporting countries indicates that in 2015, Iran was known as the 7th and accounted for 1.6% of the world's total cement production. Between 2005 and 2017, Iranian cement capacity have growth 156% from 32.6 mn tons to

83.5 mn tons. In addition, according to the vision 2024, non-metallic mineral products as the 3rd priority, were considered among the first 12 industrial priorities, focusing on the cement and ceramic and tile industry. The latest forecasts in the cement industry are:

- The growth rate of 4.9% cement consumption by 2018 or the increase consumption per capita from 539 to 640 kg
- Obtaining the world 3rd place with an annual production capacity of 120 mn tons
- Obtaining the 1st rank of export and production capacity in the region

**Table 1-11 Leading cement producers (mn tons)**

	Rank in 2015	2013	2014	2015	*2016
China	1	2,359	2,428	2,350	2,410
India	2	272	300	270	290
America	3	77	81	83.4	85.9
Brazil	4	71.9	72	73	60
Turkey	5	70.6	71.2	72.8	71.4
Russia	6	55.6	68.4	69	56
Iran	7	69.7	66.5	58.7	55.1
Japan	8	61.7	62	59.5	56
World	-	4,000	4,300	4,601.9	4,712.5

Source: The Global Cement Report

### **The world's largest caviar producer**

Iran holds the 93% of caviar stocks in the Caspian Sea and is in charge of caviar management, preservation, reproduction and release. The eastern beaches of the

Caspian Sea, especially the shores of the Turkmen port, are the most important source of caviar fishing and accounting for half of Iranian caviar.