

# The return of Iranian ports: the post-sanction era



Mehdi Rastegary, *Head of Research and Development Affairs, Sina Marine and Ports Services, Iran*

## The Iranian economy at a glance

The Islamic Republic of Iran is a unique country in terms of geo-economics and geo-politics. As the largest nation in the Middle East and Central Asia, Iran is an economic powerhouse in terms of international trade, industry and agriculture, energy and natural resources, science and technology, and tourism and logistics. In spite of all unprecedented global pressures in the past three decades, Iran is a land

of resources and opportunity. Among the many features of Iranian economy, we can point to:

- A population of 80 million with progressive improvement of human development (HDI reported to be 0.749 in 2014)[1]
- Highly developed human capital in the form of a young educated workforce
- Second globally in terms of natural

gas reservoirs (34,020 billion cubic metres) and third in terms of production (1.626 trillion cubic metres in 2013)[2,3]

- Fourth global place in terms of proven oil reservoirs (157,530 million barrels) and fifth in terms of production (3.4 million barrels per day of petroleum and other liquids in 2014) [2,4]
- 7% share of mineral reserves in the world (Aluminum, Copper, Zinc,

| No. | Bordering Position | Economy              | GDP(millions of US dollars) | Population  | Area (m <sup>2</sup> ) |
|-----|--------------------|----------------------|-----------------------------|-------------|------------------------|
| 1   | Mainland           | Iran, Islamic Rep.   | 415,339                     | 78470222    | 1,648,188              |
| 2   | N                  | Iraq                 | 220,506                     | 34768761    | 438,319                |
| 3   | N                  | United Arab Emirates | 401,647                     | 9445624     | 83,600                 |
| 4   | N                  | Afghanistan          | 20,842                      | 31280518    | 652,085                |
| 5   | NL                 | Turkmenistan         | 47,932                      | 5307171     | 488,105                |
| 6   | N                  | Turkey               | 799,535                     | 75837020    | 783,562                |
| 7   | NNL                | Tajikistan           | 9,242                       | 8408947     | 143,099                |
| 8   | NN                 | Georgia              | 16,530                      | 4322842     | 69,700                 |
| 9   | NNL                | Uzbekistan           | 62,644                      | 2932492     | 447,401                |
| 10  | N                  | Russian Federation   | 1860597/923                 | 142467651   | 17,076,310             |
| 11  | NL                 | Armenia              | 10881/60506                 | 2983990     | 29,800                 |
| 12  | N                  | Pakistan             | 246,876                     | 185132926   | 796,096                |
| 13  | N                  | Oman                 | 81796/61899                 | 3926492     | 309,489                |
| 14  | NL                 | Azerbaijan           | 75198/01097                 | 9514887     | 86,600                 |
| 15  | NN                 | Syrian Arab Republic | ..                          | 21986615    | 185,180                |
| 16  | NNL                | Kyrgyz Republic      | 7404/41271                  | 5625015     | 199,901                |
| 17  | N                  | Kazakhstan           | 212,248                     | 16606878    | 2,725,119              |
| 19  | N                  | Qatar                | 211,817                     | 2267916     | 11,000                 |
| 20  | N                  | Kuwait               | 175,827                     | 3479371     | 17,818                 |
| 21  | N                  | Bahrain              | 33,869                      | 1344111     | 694                    |
| 22  | N                  | Saudi Arabia         | 746,249                     | 29369428    | 2,149,717              |
|     |                    | TOTAL                | 5,656,979                   | 675,478,877 | 28,341,783             |

Table 1 - Iran's Peripheral Economies and Markets in 2014 [14,15]

Notes:

a) The order of states in this table is arranged arbitrarily by the author to represent the potential of trade between them and Iran

b) Abbreviations denote: N-Neighbor; NN- Neighbor-to-Neighbor; NL- Neighbor Landlocked; NNL- Neighbor-to-Neighbor Landlocked

Magnesium, Chrome, Lead, Sulfur, talc, Gypsum, Phosphates, cement, silica, Gold, Uranium, Titanium, Gem Stones, and many more)[5,6]

- Significant industrial production in more than 40 industries including metals, alloys, automotive, petrochemicals, petroleum refinery, defense, chemicals, food and drinks, pharmaceutical and healthcare, construction, transport, tourism, retail, shipbuilding, power, telecommunication, electronics, and so forth
- Great agricultural production (classified among the top 40 countries in 12 categories out of 13 categories in agricultural products) with an estimate of US\$47.3 billion agricultural production in 2015 [7,8]
- Foreign trade including \$32,495 million non-oil exports, \$53,652 million petroleum exports and \$51,560 million imports[4,9]

Many of the above mentioned figures, though still significant in stature, reflect the induced contraction in Iranian economy within the duration of globally-enforced economic sanctions.

Indeed, the real capacities and capabilities of the Iranian economy are far beyond this projection. This is the main reason for the rush in global economic players to Iranian markets in the advent of the post-sanctions era. The opening of Iran's mega-market to foreign investment can provide new investment opportunities with estimated value of \$600-800 billion within the next decade [10, 11, and 12].

It is a fact that Iran's role in global economy cannot be overlooked: the world needs Iran as much as Iran needs the world. The time has come for the world to deal with Iran as a global player and regional partner that is willing to contribute to peace, stability and development. In this paper we review the status of the Iranian ports sector and the benefits that it can offer to world trade. We will focus more on container ports that are capable of serving various supply chains than specialised ports.

### Iran: at the crossroads of trade

Iran is geographically located at the intersection of the Middle East and Central and South Asia. It borders 16 countries by land, water and sea. Iran has 890kms of coastline in the north that covers the entire southern bottom of Caspian Sea, and 4,900kms of coastline in her south that covers the entire northern expanse of the Oman Sea and Persian Gulf. The Oman Sea is connected to the Indian Ocean, the most strategic ocean in the world. Associated with a total 2.5 billion population in her littoral states, the Indian

| Demand     | 2015  | 2020  | 2025  |
|------------|-------|-------|-------|
| Gateway    | 16.83 | 22.14 | 27.36 |
| T'shipment | 13.02 | 17.39 | 22.04 |
| Total      | 29.86 | 39.53 | 49.4  |

Table 2 - Container Port Demand in Persian Gulf (Million T.E.U.)

Source: SISI-2014 [16]

Ocean provides access to emerging and booming economies of the new millennium and their markets.

Accordingly, the Indian Ocean has evolved into the greatest maritime highway for transport of energy and trade that attracts half of the containerships, two thirds of the oil tankers, and one third of the bulk carriers in the world. The linkage of the Persian Gulf and the Sea of Oman to the Indian Ocean provides a connection between Central Asia and the Middle East to the global maritime transport network.

Indeed all of the northern, western and eastern neighbours of Iran can be accounted as potential hinterlands: Afghanistan, Turkmenistan, Azerbaijan, Armenia, Nakhchivan, and Kazakhstan are landlocked and do not have access to open seas. There are also landlocked states that are not direct neighbors of Iran, but border her neighbour states: these include Tajikistan, Kyrgyzstan, and Uzbekistan.

In spite of access to open seas, states like Iraq, Pakistan and Syria not only have serious issues in terms of the availability of port facilities and infrastructure, but also face serious national security issues. As the most politically stable and logistically capable country in the region, Iran is the best choice to serve trade to these states.

Iran is also the best route for the transit of trade flows from South Asia (and the Far East) to states like Georgia, Turkey, westbound Russia, Ukraine, and even Eastern EU states. The potential transit capability is usually recognised as proposed transport corridor concepts. Iran is incorporated in several other proposed corridors, including the North-South Corridor, and the Europe-Caucasus-Asia Corridor. In 2014, the total GDP and population of the 17 hinterland states of Iranian ports in Eurasia and Central Asia have been \$3,600 billion and 547 million people, respectively.

In the south, Iran borders with six countries of the (Persian) Gulf Council, and Iraq by sea. These are emerging markets and Iran not only has good ties with them but also has substantial trade with the UAE, and Iraq. The Persian Gulf Council states are mostly oil-driven economies with total GDP of \$1.6 trillion and an aggregate population of 50 million people (excluding Iraq).

### Iranian ports: a natural choice

Shanghai International Shipping Institute has forecast that within the coming ten years, the demand for container ports in the Persian Gulf will grow by 65.44% to 49.4 million TEU. According to this report, we can estimate that the transshipment / gateway traffic ratio will rise from 77.36% in 2015 to 80.55% in 2025. This is on the contrary to the natural tendency of shipping and supply chains towards an increase of gateway traffic in ports.

Indeed, aside from a few instances, ports are normally driven by gateway traffic all around the world, and a/m ratio is usually near 43% (accounting 30% share for transshipment in total port traffic). This natural tendency has been extravagantly breached in the Persian Gulf. Instead of directing the supply chains to gateway ports to minimise cost, time, and unwanted externalities (including the pollution, and natural resource depletion) in the delivery of goods to customers in the markets, the industry has switched into transshipment of goods from remote ports on the west side of Hormuz Strait at extra-heavy costs.

For a better understanding, let's consider two scenarios: in the first scenario, a shipping line sends a 12,000 TEU ship to Jebel Ali in a Middle East Service, and a big part of cargo is transshipped to Bandar Abbas by two smaller 4,500 TEU Ships. In the second scenario, the shipping line sends the 12,000 TEU ship directly to Bandar Abbas. By comparing of costs and externalities of these scenarios, we find that scenario number one will require and entail consumption of 1134.2 tons of more fuel, with an emission of 3534.3 tons of CO<sub>2</sub>, several days of delay in delivery of goods to customers, thousands of dollars of additional cost per delivery of each container, and hundreds of thousands of dollars for deployment of ships per voyage.

This is absolute diseconomy in management of supply chains. These costs and externalities could be pragmatically avoided if the 12,000 TEU vessel was sent directly to Bandar Abbas according to scenario number two. Unfortunately, what has been put into practice for decades is scenario number one.

At present, the Iranian ports sector is capable of channeling one-third of the



| Category  | IFY | 1388<br>(2009-10) | 1389<br>(2010-11) | 1390<br>(2011-12) | 1391<br>(2012-13) | 1392<br>(2013-14) | 1393<br>(2014-15) |
|---|-----|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Nominal Capacity of Ports<br>(Million Tons per annum)                 |     | 150               | 163               | 172               | 184               | 190               | 200               |
| Ports Container Capacity<br>(Million TEU per annum)                   |     | 4.4               | 5/0               | 5.1               | 5.3               | 5.34              | 5.34              |
| Passenger Capacity<br>(Million People per annum)                      |     | 6                 | 7.7               | 13                | 14                | 16                | 17.5              |
| Non-oil Maritime Fleet Capacity<br>-IRISL (Million Tons per<br>annum) |     | 4.5               | 5.5               | 5.7               | 5.8               | 5.34              | 5.2               |
| Oil Tanker Fleet Capacity<br>(Million Tons per annum)                 |     | 7.1               | 11                | 9.7               | 13.7              | 15                | 15                |

Table 3 - Capabilities of Iranian Ports and Maritime Sector within IFY 1388-1393 [21]

Note: Iranian Fiscal Year begins on 21st March of each Gregorian year and ends on 20th March of next Gregorian year ( e.g. IFY 1388 began on 21st March 2009 and ended on 20th March 2010).

prevailing gateway container demand in Persian Gulf region. Among the 22 container ports in Persian Gulf and Sea of Oman, Iran has 6 globally renowned ports, namely Chabahar, Shahid Rajaei Port, Bushehr Port, Imam Khomeini Port, Port Assaluyeh and Khoramshahr. These ports are connected to a network of about 85,893kms of roads, 10,407kms of railway, 60 airports, and supported by great transport fleets that can channel and distribute the cargo to inbound and peripheral outbound markets [17, and 18].

Moreover, on the northern borders, Iran has three major ports that cover the entire southern coastline of Caspian Sea:

these are Anzali, Amirabad, and Noshahr. These ports can act as forelands for other Caspian Sea ports (i.e. Baku, Astrakhan, Aktau, Turkmenbashi). Table 2 indicates the capabilities of the Iranian ports and maritime sector within March, 2009 and March, 2015.

Many Iranian ports are involved in development and capacity extension plans: Shahid Rajaei Port is meant to extend her capacity to 8 million TEU and 150 million tons in few years. Chabahar port has absorbed foreign investment to serve the Southern Asia-Central Asia trade in very near future. Bushehr Port is developing a 600,000 TEU container terminal in Negin

Island, and there are similar developments in BIK, Khoramshahr, Anzali, Amirabad, and Noshahr. Many infrastructure development projects are getting completed to enhance the connectivity in Iranian transport network: these consist of 11,584kms of roads, 586kms of freeways, and 4,371kms of railways. Many of these projects are meant to serve as parts of transport corridors that cross Iran, including Qazvin-Rasht-Astara railways, Arak-Kermanshah-Khosravi railways, Anzali-Rasht-Ramsar Freeway, Tabriz-Bazargan Freeway, Astara-Rezvanshahr highway, and many more[22].

The Iranian territory includes the

Strait of Hormuz. The strait not only accounts for passage of 35% of oil traded by sea, but also facilitates the crossing of around 85,500 vessels per year. This provides the best opportunities for the development of maritime business clusters in Iranian territory. The cluster may include such businesses as bunkering, maritime insurance, ship repair, salvage, ship chandlery, and many more businesses. The best instance of such businesses is bunkering: according to vicinity to maritime routes, economic supply of oil products, and the availability of infrastructure and equipment, Iran is among the best choices to build a stable bunkering market.

Iran has been working actively to enhance her trade and business environment. Many Iranian ports have been transformed into free zones and special economic zones. Several exemptions, discounts, and facilitations are in place to support the transit from Iranian land. The Iranian state is an influential member of many economic blocs such as the Economic Cooperation Organization (ECO), GECF and OPEC. Iran is also invited to join the Eurasian Economic Union (EAEU), Shanghai Cooperation Organization (SCO), and bidding to join the WTO as well.

In a nutshell, Iran is moving speedily to gain her merited position as a global participant in economy, international trade, and logistics in the post-sanction era. This can be a turning point in the history of the Middle East. Expanded from the heart of the heartland to the edge of the rim-lands, Iran is the natural choice of ports and terminals in the Middle East. This preference is strongly substantiated by political stability, industrial development, human development, size of accessible markets, transport facilitation, and opportunities for cooperation and investment. The time has come for the world and Iran to recognise the interests of one and another and organise their joint efforts to consolidate them.

## Reference

- 1) UNDP, Human Development Report 2014, 1 UN Plaza, New York, NY 10017, USA
- 2) Iran International Energy Data and Information, US Energy Information Administration, June 19, 2015
- 3) Akhundzada, E.; Özkan, S.; Iran Energy Outlook, Caspian Strategy Institute, December 2014
- 4) OPEC, Annual Statistical Bulletin, 2015
- 5) Mobbs, P.M.; 2010 Minerals Yearbook: Iran; U.S. Geological Survey; August 2012
- 6) <http://www.payeshpress.ir/News/112.html>
- 7) FAO, Statistical Yearbook- 2013
- 8) Business Monitor International, Iran Agribusiness Report, May 2015
- 9) Trade Promotion of Iran Organization; Iran Trade Statistics in Brief (Year 2014)
- 10) Fitch, A.; Post-Sanctions Iran Could Be A Turkey-Size Win for Investors. Wall Street Journal, March 12, 2014
- 11) DeRosa, D.A., Hufbauer, G.C.; (U.S.) National Foreign Trade Council. 21st November 2008
- 12) Solomon, J.; Oil, Auto Companies Make Plans to Invest in Iran if Sanctions Ease; Wall Street Journal; 1st July 2014
- 13) Iranian Ports and Maritime Organization Website (<http://transit.pmo.ir/fa/eco31a9/eco31a5>)
- 14) World Bank; Gross Domestic Product of Nations in 2014 (online WB databank)
- 15) World Population by Country : Elaboration of data by United Nations, Department of Economic and Social Affairs, Population Division. World Population Prospects: The 2012 Revision. (Medium-fertility variant) (<http://www.worldometers.info>)
- 16) Shanghai International Development Report, Global Port Development Report, 2nd quarter 2014
- 17) Yearbook of Iranian Roads Maintenance and Transport Organization, IFY 1393.
- 18) Iranian Railways Yearbook, IFY 1392
- 19) Vincent Andersen, I.M.; Emissions from Ship Machinery (notes from lectures); Technical University of Denmark; April 2012
- 20) Sisson, M.; Vessel Size vs. Cost; North Carolina Maritime Strategy; May 2012
- 21) PMO Yearbooks between IFYs 1388-1393 (with some modifications due to enquiries from resources in PMO)
- 22) Construction & Development of Transportation Infrastructures Company, Iranian Ministry of Roads and Urban Development



## About the author

Mehdi Rastegary has 12 years of experience working in the Iranian ports sector. He is presently the head of Research and Development Affairs in SPM Co., and an affiliate Researcher and Trainer of the Iranian Ports and Maritime Organization.

## About the organisation



Sina Ports and Marine Co. (SPMCO), an affiliate company of Bonyad Mostafazan Foundation (BMF), is the largest port operator in Islamic Republic of Iran. With two decades of activity in Iranian ports sector, SPMCO currently operates four major Iranian ports, and is among the largest companies listed in Tehran Stock Exchange. SPMCO's portfolio includes container terminals, oil terminals, dry bulk terminals, general cargo terminals, and port logistics. SPMCO acts as your global partner in Iranian ports.

## Enquiries

<https://ir.linkedin.com/in/mehdirastegary19790909>