



Vital Caspian Graphics 2

Opportunities, Aspirations and Challenges



Second edition



The Geneva-based **Zoï Environment network** is a new answer to some stubborn old questions. An international non-profit organization, Zoï's mission is to reveal, explain and communicate connections between the environment and society.
www.zoinet.org

GRID-Arendal is an environmental information centre located in Southern Norway. GRID-Arendal's mission is to provide environmental information, communications and capacity building services for information management and assessment. The centre's core focus is to facilitate the free access and exchange of information to support decision making and secure a sustainable future.
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For the purposes of this publication, the names Iran and Russia have been used to refer to the Islamic Republic of Iran and the Russian Federation, respectively.

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The Caspian Sea runs north and south, extending over 1 200 kilometres, with an average width of 320 kilometres, with 7 000 km coastline. It covers approximately 400 000 square kilometres (an area slightly larger than Germany). The population of the region is about 14 million, distributed over the coastal provinces of five countries: 6.5 million in Iran, 3.9 million in Russia, 2.2 million in Azerbaijan, 0.8 million in Kazakhstan and 0.4 million in Turkmenistan.

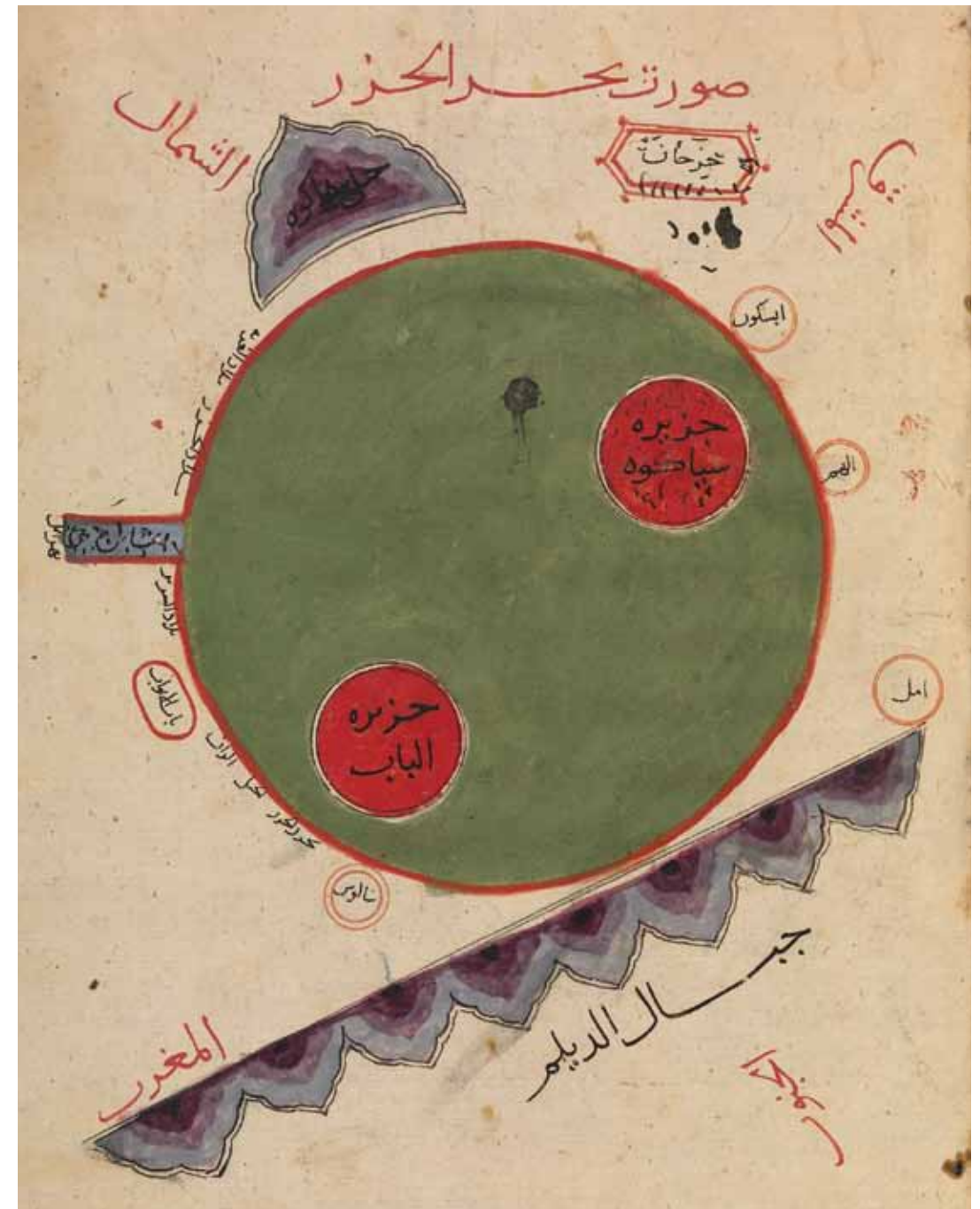


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The Caspian Sea region
represented in the
Catalan Atlas (1375)
(Bibliothèque Nationale
de France, Paris)



A medieval perception of the Caspian Sea or as it was named then Bahr al-Khazar, the Sea of Khazar. The North and the East appear empty, uncharted and unknown. In the South the Deylam Mountain Range, now named Elburz Range. In the West the worthy landmark is the Gate of the Gates (Ar. Bâb al-Abwâb), the present Derbent which was a wall separating and defending the Southern Caucasus from the invading northern tribes. Two big islands have caught the attention of the geographer, Siakoh and Albab, none of which of any importance today. Abu Zayd al-Balkhi the Persian scholar drew the map possibly based on the basis of travellers' tales mixed with fiction and mystery.

(Bodleian Library, Oxford, UK.)

Foreword



More than five years ago we published the first edition of Vital Caspian Graphics, which impressed readers with its abundance of new material presented in a synthesized and visually appealing format. Our goal that it be read in the streets of Astrakhan and Aktau may, however, have been too ambitious – or visionary – despite the numerous electronic tools that usually increase the circulation of our publications.

Undeterred, and flush with revolutionary spirit to create a better world, we decided to produce a second edition. The world is changing, including the region around the Caspian Sea, and we are determined to capture and report these changes. The adoption of a protocol on oil pollution and the presentation of the first State of the Environment report at the third Conference of the Parties in Aktau in August 2011 mark the further evolution of the Caspian Convention. These vital graphics are a reader friendly publication which present

lesser-known aspects of the region while covering the broader picture in an attractive format. One of the highlights are the photographic essays by Rena Effendi and Mila Teshaieva.

Our uncompromising attitude and our ambitions to reach out to communities beyond environmental professionals remain, and our inspiration from the first edition stays unchanged:

I wanted to write a book as purely geographical in character, as dry and uncompromising as a travel report, and no more attractive than a rough-and-ready map sketched out with a lump of coal on a piece of packing paper.

– Konstantin Paustovsky,
Story of a Life, vol 6, The Restless Years

Otto Simonett,
Geneva
February 29th, 2012



1 Sea of opportunities, aspirations and challenges

In recent years the Caspian Sea has been the focus of increased global attention. The world-wide decline in oil and gas reserves and the corresponding rise in the price of hydrocarbon derivatives have heightened interest in an area where there is still growth potential in oil and gas exploration. In addition, the region presents a wealth of opportunities in other areas, including bioresources, transport corridors, and not least tourism. These new ventures may bring increased prosperity, but they also put pressure on traditional rural communities and the environment.

The surge in the exploitation of hydrocarbons in the Caspian region has changed the rules for development and engagement in many sectors, in particular oil, land and sea transport, and services. National interests multiplied after the breakdown of the Soviet Union as Azerbaijan, Kazakhstan and Turkmenistan gained independence. Relationships between these states are being tested as the possibility of large profits emerges. Additionally, with China entering the game as an increasingly strong economic player, the centre of gravity is moving east, demanding that new transport and communication routes are considered across the region.

The Caspian Sea: neighbours and players

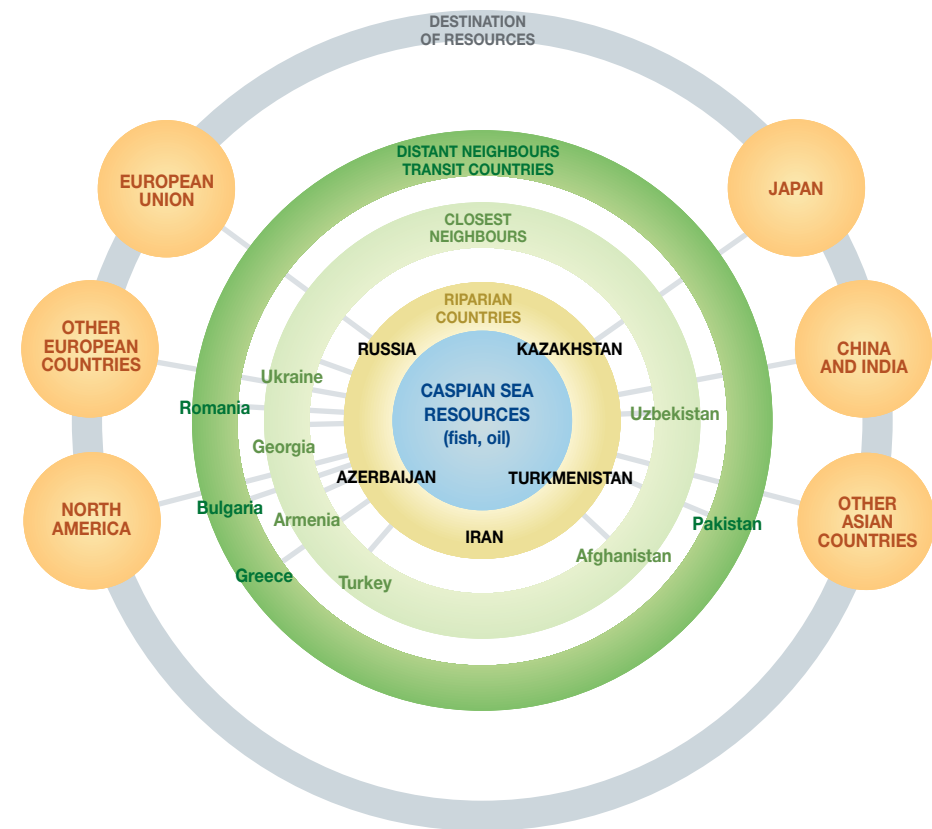
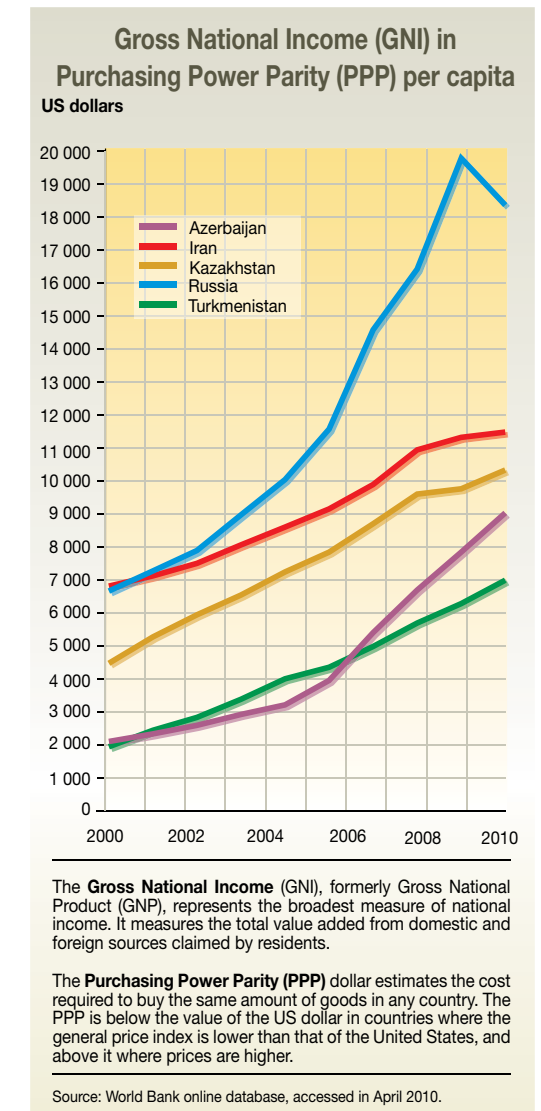


Figure: Composition of human development index. The characteristic feature in all four post-Soviet countries is a relatively high level of education in relation to national income and rather low life expectancy, indicating high levels of poverty and deficient healthcare. In contrast the level for all three indicators in Iran is fairly balanced.

Figure: Purchasing power parity (PPP) measures how much a currency can buy in terms of an international benchmark (usually dollars), since the cost of goods and services differs between countries. PPP is below the value of a US dollar in countries where the general price index is lower than in the US (as is the case for all five Caspian states, to varying extents), and above it where the prices are higher. A dollar thus buys much more in the Caspian countries than in the US, which only marginally compensates for the much lower income per person. These curves do not allow any conclusions on the wealth of individuals or income distribution among the population.



The Caspian Sea region once only played a minor role in world politics. Interest focused exclusively on the Absheron peninsula and Baku, where the oil industry started developing in the last quarter of the 19th century, providing the only significant economic growth in the region. Otherwise the region remained largely rural, on the margins of two vast states (Tsarist Russia and Persia, subsequently the Soviet Union and Iran) and well away from the centres of industry. It often lagged behind in terms of development and infrastructure. North-south trade between Moscow and Tehran was limited, particularly as both countries had other much more significant coastlines.

Since 2001 the economy has bottomed out of post-Soviet fatigue and started rising steadily in Azerbaijan, Kazakhstan, Russia and Turkmenistan.

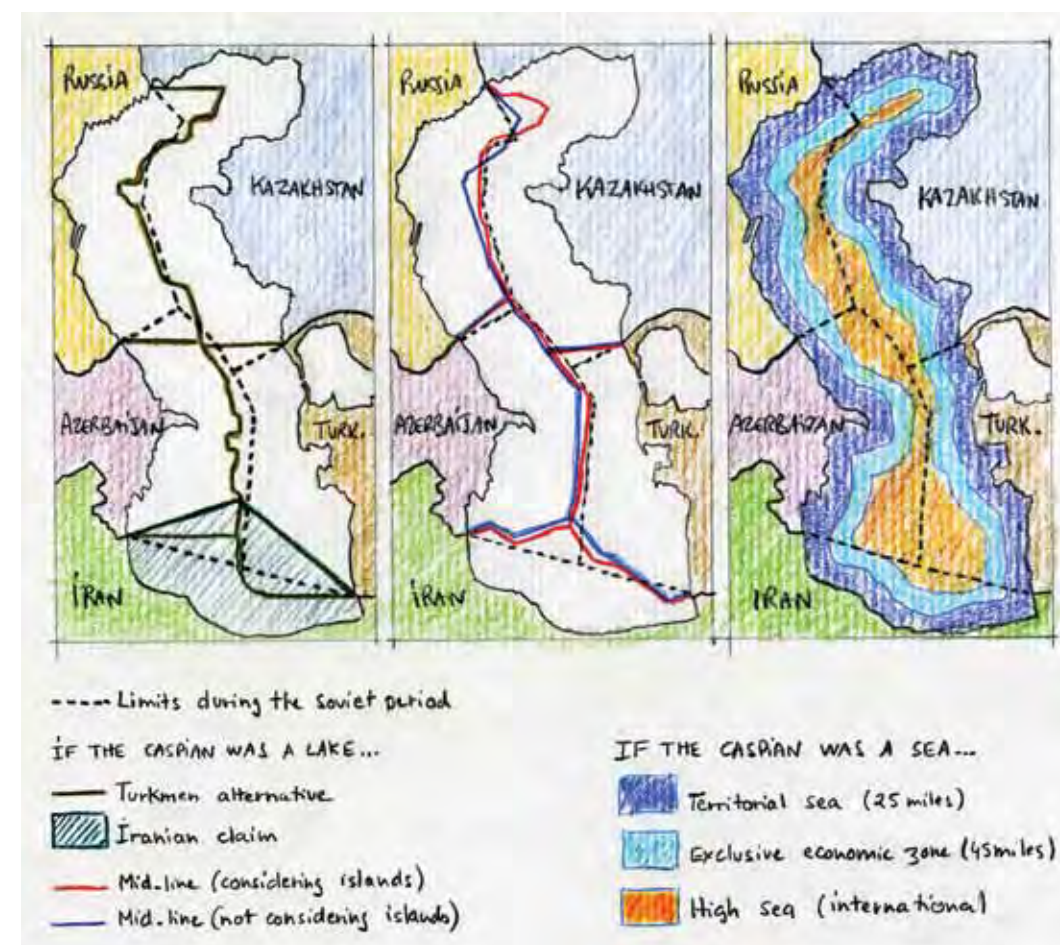
In 2005 regional oil production reached roughly 1.9 million barrels a day (EIA 2006), comparable to South America's second largest oil producer, Brazil. The BP Statistical Review of World Energy 2009 estimated the Caspian's share of oil and gas proved reserves in 2008 at 3.8 per cent¹ and 5.9 per cent, respectively, of the world total, with oil and gas production at 3.2 per cent and 3.6 per cent.

Despite the oil-related increase in national incomes, investment in the environment has not substantially increased. This reflects the national priorities for jobs, housing, education and health. The impact of the 2007-09 financial crisis is of equal importance, leaving its mark on all five countries. Almost everywhere the environment has been among the first sectors to feel the cuts in investment.

The Caspian region has plenty to choose from when exploring past and present civilizations and cultures, historical monuments and the beauty of its natural resources. With unspoilt beaches in the east and west, lush mountain forests in the south, and the majestic Volga in the north, coupled with a mosaic of ethnic origins and cultures, it has the potential to attract thousands of visitors. Yet, the travel trade faces major challenges in the Caspian region. Sustainable tourism is still an unexplored opportunity but inadequate infrastructure, including improper waste management or water facilities, and stress on residential areas hinder growth in this sector. The Iranian part of the Caspian Sea, with its verdant plain and high mountains, accommodates twice its 'normal' population in the summer when tourists from other parts of Iran flock to the area. Some residences are set back only a few metres from the water line. In 2007 Turkmenistan approved a contract for Avaza, a huge national tourist resort involving the construction of an island on the shore of Caspian. All these developments pay little attention to the rise in sea level, which continues to be a real threat to the coastal area. Some parts of the region, such as Dagestan, are subject to limitations for security reasons. With an arid or semi-arid climate and difficult accessibility, parts of Kazakhstan and Turkmenistan would also face problems in opening up for tourism.

The coastal regions of the Caspian Sea support various forms of agriculture. The dry steppe of the Russian part (northern Dagestan, Kalmukia) and the arid areas of Kazakhstan and Turkmenistan specialize in sheep farming. With rising demand for meat and wool, this reputedly difficult activity is increasingly attractive, particularly for enterprising stock raisers.

The shores of southern Dagestan, the plains of



The uncertain status of the Caspian Sea

The high economic expectations and the newfound quest for national identity partly explain the obstacles to agreement over the legal status of the Caspian Sea. Existing maritime agreements between Iran and the Soviet Union, formerly the only countries bordering the sea, needed re-negotiation as the three new republics of Azerbaijan, Kazakhstan and Turkmenistan emerged. Negotiations among the five countries are underway for a regional convention on the legal status of the Caspian Sea, but an over-arching agreement has yet to be reached on the division of the Caspian waters and – indirectly – its natural and mineral resources. But the northern states – Russia, Azerbaijan and Kazakhstan – signed a trilateral agreement in 2003 that allows them to proceed with the development of the hydrocarbon potential of the northern Caspian. The vital economic interests provide third parties and international stakeholders with a good reason to downplay the tensions between states bordering on the sea.

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