



Country Report : The Islamic Republic of Iran On Disaster Risk Management



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In The Name of God

Basic Information

Iran is a county in southwest Asian, country of mountains and deserts. Eastern Iran is dominated by a high plateau, with large salt flats and vast sand deserts. The plateau is surrounded by even higher mountains, including the Zagros to the west and the Elburz to the north. Its neighbors are Turkmenistan, Azerbaijan and Armenia on the north, Afghanistan and Pakistan on the east, and Turkey and Iraq on the west.

Tehran is the capital, the country's largest city and the political, cultural, commercial and industrial center of the nation. Iran is a regional power, and holds an important position in international energy security and world economy as a result of its large reserves of petroleum and natural gas. [1]



Iran at a glance

Capital (and largest city)	Tehran 35°41'N 51°25'E / 35.683°N 51.417°E / 35.683; 51.417
Official language(s)	Persian (Farsi)
Spoken languages	Persian, Azeri, Kurdish, Lori, Balochi, Gilaki, Arabic, Turkmen, Armenian, Assyrian Neo-Aramaic
Government	Islamic republic
Supreme Leader	Ayatullah Al-Uzma Seyed Ali Khamenei
President	Hassan Rohani
Legislature	Islamic Consultative Assembly
Unification	Median Empire 625 BC - Safavid Empire 1501 - Islamic Republic 1 April 1979 - Current constitution 24 October 1979
Area	Total 1,648,195 km ² (18th) 636,372 sq mi - Water (%) 0.7
Population	2013 estimate 77,163,154 (17th)

	- 2010 census 74,700,000 - Density 45/km2 (163rd) 116.6/sq mi
Currency	Rial (ریال) (IRR)
Time zone	IRST (UTC+3:30) - Summer (DST) Iran Daylight Time (IRDT) (UTC+4:30)
Internet TLD	.ir
Calling code	98

[1], [10],[11]

Geography

Iran is located in southwest Asia and borders the Gulf of Oman, Persian Gulf, and Caspian Sea. Its mountains have helped to shape both the political and the economic history of the country for several centuries. The mountains enclose several broad basins, or plateaus, on which major agricultural and urban settlements are located. Until the 20th century, when major highways and railroads were constructed through the mountains to connect the population centers, these basins tended to be relatively isolated from one another.

Typically, one major town dominated each basin, and there were complex economic relationships between the town and the hundreds of villages that surrounded it. In the higher elevations of the mountains rimming the basins, tribally organized groups practiced transhumance, moving with their herds of sheep and goats between traditionally established summer and winter pastures. There are no major river systems in the country, and historically transportation was by means of caravans that followed routes traversing gaps and passes in the mountains. The mountains also impeded easy access to the Persian Gulf and the Caspian Sea.

With an area of 1,648,000 square kilometers (636,000 sq mi), Iran ranks eighteenth in size among the countries of the world.

Iran shares its northern borders with three post-Soviet states: Armenia, Azerbaijan, and Turkmenistan. These borders extend for more than 2,000 kilometers (1,200 mi), including nearly 650 kilometers (400 mi) of water along the southern shore of the Caspian Sea. Iran's western borders are with Turkey in the north and Iraq in the south, terminating at the Shatt al-Arab, which Iranians call the Arvand Rud.

The Persian Gulf and Gulf of Oman littorals form the entire 1,770 kilometers (1,100 mi) southern border. To the east lie Afghanistan on the north and Pakistan on the south. Iran's diagonal distance from Azerbaijan in the northwest to Sistan and Baluchestan Province in the southeast is approximately 2,333 kilometers (1,450 mi) [1].

Resources and land use

Natural resources: petroleum, natural gas, coal, chromium, copper, iron ore, lead, manganese, zinc, sulfur

Arable land: 10%

Permanent crops: 1%

Permanent pastures: 27%

Forests and woodlands: 13%

Other: 49% (1998 est.)

Irrigated land: 94,000 km² (36,000 sq mi) (1993 est.)^[1]

Climate

Iran's climate ranges from arid or semiarid, to subtropical along the Caspian coast and the northern forests. On the northern edge of the country (the Caspian coastal plain) temperatures rarely fall below freezing and the area remains humid for the rest of the year. Summer temperatures rarely exceed 29 °C (84.2 °F). Annual precipitation is 680 mm (26.8 in) in the eastern part of the plain and more than 1,700 mm (66.9 in) in the western part.

To the west, settlements in the Zagros basin experience lower temperatures, severe winters with below zero average daily temperatures and heavy snowfall. The eastern and central basins are arid, with less than 200 mm (7.9 in) of rain, and have occasional deserts. Average summer temperatures exceed 38 °C (100.4 °F). The coastal plains of the Persian Gulf and Gulf of Oman in southern Iran have mild winters, and very humid and hot summers. The annual precipitation ranges from 135 to 355 mm (5.3 to 14.0 in) [1].

History

Recent archaeological studies indicate that as early as 10,000 BC, people lived on the southern shores of the Caspian, one of the few regions of the world which according to scientists escaped the Ice Age. They were probably the first men in the history of mankind to engage in agriculture and animal husbandry.

Though the history of Iran is long and complex, its shape is determined by the rise and fall of successive dynasties - with intervals of chaos and confusion.

The Persian Empire, the Medes, the Assyrian Kingdom, the Macedonians, the Huns, the Sassanians, the Arabs, the Seljuks and Mongols, the Timurids and the Safavids, all held sway here at one time or another.

In the 6th century BC Cyrus the Great founded the Persian Empire, which was destroyed in 330 BC by Alexander the Great. In succeeding centuries, Persia was invaded by the Parthians, the Arabs, the Mongols and various Turkish dynasties.

Persia continued to be overrun by foreign powers for another thousand years. The Seljuk arrived in the 11th century, followed by the Mongols in the 13th century and Tamoriane in the 14th century. The Safavids took control in the 16th century, only to be ousted by the Qajar, in the 18th century.

In 1921 Reza Khan, an army officer, came to power. He was subsequently elected hereditary Shah, thus ending the Qajar dynasty and founding the new Pahlavi dynasty.

In 1963 Iran's most important religious nation-wide uprising led by Ayatollah Khomeini, took place in protest to the so-called White Revolution.

After the victory of the Islamic Revolution of 1979 the shah was overthrown and Iran, officially renamed the Islamic Republic of Iran. The Constitution of 1979 designated Ayatollah Khomeini as the pious jurist or faqih. April 1, 1979 became the Islamic Republic Day [1].



Elam's woman(2200BC)



Cyrus Cylinder(6th century BC) oldest known charter of universal human rights



Parsi's Soldier (250BC)



Tak tok(6th century BC)



(100 -250 BC)



Salt Man- (1700 BC)



(400-800BC)

Religion

Based on the Constitution of the Islamic Republic of Iran, Article 12, the official religion of Iran is Islam and the Twelver Ja'fari School, and this principle will remain eternally immutable. Other Islamic schools are to be accorded full respect, and their followers are free to act in accordance with their own jurisprudence in performing their religious rites. These schools enjoy official status in matters pertaining to religious education, affairs of personal status (marriage, divorce, inheritance, and wills) and related litigation in courts of law. In regions of the country where Muslims following any one of these schools constitute the majority, local regulations, within the bounds of the jurisdiction of local councils, are to be in accordance with the respective school, without infringing upon the rights of the followers of other schools.

Article 13 the Constitution of the Islamic Republic of Iran address Zoroastrian, Jewish, and Christian Iranians are the only recognized religious minorities, who, within the limits of the law, are free to perform their religious rites and ceremonies, and to act according to their own canon in matters of personal affairs and religious education.

Pilgrimage to the shrines of Imams is a specific Shia custom. The most important shrines in Iran are those for the Eighth Imam in Mashhad and for his sister Fatima in Qom. There are also important secondary shrines for other relatives of the Eighth Imam in Rey, adjacent to south Tehran, and in Shiraz. In virtually all towns and in many villages there are numerous shrines, known as imamzadehs. The shrines in Iraq at Karbala and An Najaf are also revered by Shias [5].



Iran's Attraction

Iran is one of the few countries that have all four distinguished seasons. And at any time of the year, in each section of the country, one of the four seasons is visible. Iran's variety in terms of temperature, humidity and rainfall differs from place to place and season to season. Length of the seasons differs in different regions. One of the world's most mountainous countries, the mountain Damavand (5671 m above sea level) is the highest peak in Asia west of the Himalayas. The well-known deserts of Iran are at two major regions: 1) Dasht-e-Kavir, and 2) Kavir-e-Lut. They are both some of the most arid and maybe hottest areas of their kinds in the world. There is a vastly extended network of rivers in Iran most of which seasonally are filled with water. Some permanent rivers run from the Alborz or the Zagros to the Caspian Sea, Persian Gulf and Oman Sea. Some temporary rivers either run into a body of water or get dried before reaching any watershed [1].

		
<p>33pol- Esfahan</p>	<p>Golestan Palace –Tehran</p>	<p>Persepolis- Fars -Shiraz</p>
		
<p>Arg e Bam- Kerman Province</p>	<p>Masule village- Gilan Province</p>	<p>Bazar –Tabriz province</p>
		
<p>Falak al aflak-Lorestan Province</p>	<p>Biston – Kermansha Province</p>	<p>Saad abad Palace-Tehran</p>
		
<p>Water Structures –shoshtar –khozestan</p>	<p>Ahvaz bridge- Khozestan</p>	<p>Shire sangi(stone-lione)-Hamadan</p>

Nature



Southwest of Iran.



Tehran-the Damavanf Mountain



North of Iran,



Center & South East of Iran



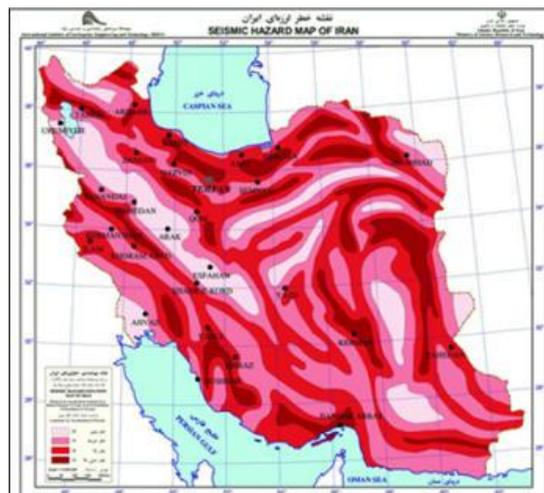
South of Iran



West of Iran

Natural Hazards and Disaster Risk Management, Strategy and Implementation mechanisms in Iran

Iran has a high level of exposure to multiple disaster risks. Situated in one of the most arid regions of the world, it suffers from frequent, droughts. Moreover, floods, forest fires and sand and dust storms increasingly affect different parts of the country. Iran's main concern however continues to be seismic risk. Due to its particular location in the Alpine-Himalayan mountain system, Iran is also highly vulnerable to numerous and often severe earthquakes. The Bam earthquake at 1:56 AM UTC (5:26 AM local Time) on Friday, December 26, 2003 (magnitude of 6.6 Mw) was one of several deadly tremors that have repeatedly struck Iran's towns and villages throughout its modern and ancient history. 13 years before other devastating earthquakes with a magnitude of 7.7 on the Richter scale hit the North of Iran at 00:30:09 on June 21, 1990 (21:00:09 June 20, 1990 UTC). The disaster estimated left 40,000 dead, more than 400,000 homeless, 60,000 or more injured. Around 100,000 homes and commercial building damaged and hundreds of towns and villages destroyed. Seismic Hazard Map of Iran is illustrated as below:



Seismic Hazard Map of Iran. Source: www.IIEES.ac.ir

Iran has developed an effective and internationally recognized disaster preparedness and response capacity at the national and local levels, but disaster prevention and risk reduction are areas that will require extensive longer-term efforts as well as multi-sectoral and multi-stakeholder planning in development sectors such as health, education and urban planning. At the same time, comprehensive concepts and standards of risk reduction – which include social dimensions as well as physical aspects of disaster prevention – can be further improved [3], [4] and [6].

Iran has significant experience and capacity in relief and emergency response as well as in some technical areas of disaster risk management, such as hazard mapping, earthquake engineering and

reconstruction planning. In terms of disaster preparedness and response, Iran has strong technical institutions and institutional arrangements for disaster management at the national level.

In the last two decades, the Government of the Islamic Republic of Iran took a number of steps to enhance its national disaster management capacity. This has resulted in strong disaster preparedness and emergency response capabilities at national and local levels.

The 5th National Development Plan of the Islamic Republic of Iran (2011-2015) addresses the issue of disaster risk reduction and management in several areas, including enhancement of disaster preparedness and response, upgrading building and construction codes and standards and earthquake prevention measures, improving safety in rural settlements, and importantly, allocation of 2% of annual national budget to disaster risk reduction and management [3].

Iran had developed a fruitful cooperation with other countries, International Institutes and UN agencies. In 2011 the NDMO was joint Asian Disaster reduction Center (ADRC). Cooperation with UNDP in the field of disaster management following the Manjil earthquake of 1990 Iran in the area of seismic hazard mapping was more Strength. Over the years, this cooperation has gradually expanded through the implementation of several programmes for strengthening national capacities in disaster risk reduction and preparedness.

The United Nations Development Assistance Framework (UNDAF) for 2012-2016 in the Islamic Republic of Iran was signed in September 2011. Disaster Risk Management is one of the 5 priority areas in the new UNDAF and reflects the determination of the Government of Iran to deal with the risk of disasters triggered by natural hazards through long term, foundational and comprehensive solutions. The Disaster Risk Management component of new UNDAF set the key areas for cooperation on disaster risk management through the following outcomes:

- (1) Disaster Risk Reduction (DRR) and management concepts and standards are integrated into national development policies/programmes, and institutional, operational and coordination capacities for effective DRR and response are strengthened;
- (2) National and local capacities are enhanced to ensure systematic monitoring and multi-hazard early warning of disaster risks ;
- 3) All communities, particularly those most at risk, have enhanced abilities to prevent, prepare for, respond to, and recover from disasters

In 2008 the National Disaster Management Organization (NDMO) is formed in order to utilize the national, regional and local capacities to confront the natural and unexpected disasters as well as creating an integrated management system for policy making, planning, coordinating research and executive activities in a cohesive manner, concentrated information dissemination and supervision over

different phases of disaster management as well as rehabilitation and reconstruction of disaster stricken areas[3].

In order to coordinate the activities of the organizations and institutions affiliated to the three State governing branches, the Armed Forces and the other institutes and agencies under the auspices of the Supreme Leader (with regard to delegation of authority by His Honor) as well as for enacting of regulations and standards governing the four phases of disaster management, the High Council of the National Disaster Management Organization (hereinafter referred to as the High Council) is formed. The High Council is chaired by the President and its membership will include relevant Ministers, Mayor of Tehran, Commander of Armed Forces, one of the deputies of the Speaker of the Islamic Consultative Assembly, First deputy of the Judiciary, Heads of Management and Planning Organization, the Islamic Republic of Iran Broadcasting Corporation, Head of Red Crescent Society of the Islamic Republic of Iran, care taker of the Imam Khomeini Relief Committee, Head of State Meteorological Organization, Head of Housing Foundation of the Islamic Revolution, as well as the Head of the Organization.

Disaster Management Coordination Council has been formed under the chairmanship of the National Disaster Management Organization Head and membership of the plenipotentiary representatives deputizing the related organizations and organs in order to coordinate activities.

Disaster Management Coordination Council in the provinces is formed under the chairmanship of Governor Generals and Governors in the provinces and cities respectively. Its membership includes the entire related organizations.

The NDMO is affiliated to the Ministry of Interior and the Head will be appointed on the proposal made by the Minister of Interior, endorsed by the High Council and the decree given by the Minister of Interior

The functions of the organization are as follows:

- 1- Development of policies and plans of action related to the four phases of disaster management, and planning for provision or making possible use of the potential & capacities pertaining to the governmental, non- Governmental organizations and the Armed forces during the preparedness and response operations, in order to be presented to the Cabinet of Ministers for approval.
- 2- Facilitate coordination and create cohesion among the various organizations in the country regarding the four phases of disaster management.
- 3- Arrange for review and develop policies and comprehensive plans on culture, research, training, and propagation, dissemination of information, as well as rehearsal and testing activities in the four phases of disaster management in order to be proposed to the High Council.
- 4- Strengthen regional and international cooperation, exchange of views and make use of experiences and the know- how of countries and international organizations in relation with the

- four phases of disaster management, as well as representation of the country in the international communities with coordination and collaboration of related organizations.
- 5- Documentation of disasters, the measures taken and the analysis made in this regard.
 - 6- Planning and coordinating the organization and training of the entire people- centered organizations including non-governmental institutions, Basij forces and volunteers in the four phases of the disaster management.
 - 7- Follow up to the ratifications and decisions of the High Council
 - 8- Coordination and supervision over development and expansion of effective prevention systems, retrofitting and seismic improvement of constructions, infrastructures, buildings and crucial and important lifelines as well as reconstruction and improvement of the old textures, development of reinsurance and compensatory methods including different insurances, financial support and encouraging mechanisms in cooperation with the related organizations.
 - 9- Supporting the development and expansion of active scientific and consultative institutes and benefiting from their collaboration for the purpose of standardization and safety control of products, services, building and infrastructural facilities, as well as supervision of approved standards that should be taken into account.
 - 10- Develop the system of national work division for enhancing the culture of safety for each member of the community with cooperation of the Ministries, organizations, institutions and the organs related to disaster management in order to be presented to the Cabinet of Ministers for approval.
 - 11- Develop directives on determining the level of disasters as being of national, regional or local significance, including emergency situations and the methods by which the crises resulting from unexpected disasters are announced.
 - 12- Provide directives to related organizations on procedures of the emergency and contingency plans that can be executed in the event of or likely occurrence of a disaster.
 - 13- Coordinate deployment of the entire potentials and capacities of both governmental or non – governmental organizations and the Armed forces which are required by the disaster management during the disaster response phase.
 - 14- Develop appropriate rules and regulations concerning the investigation of violations and breach of approvals and orders of the High Council and the organization as well as negligence in performance of duties by officials in the entire related organizations, public non- governmental organizations, the Armed forces and the organizations under the auspices of the Supreme Leader during the disaster response phase with cooperation of the Judiciary and the Armed forces general staff to be submitted to the Cabinet of Ministers for approval and the consequent implementation and follow – up.
 - 15- Develop draft on rules and regulations concerning the pre-emptive measures to address abusers, rioters and plunderers during the disaster with cooperation of the Judiciary and the Armed forces

General staff to be submitted to the cabinet of ministers for approval, the consequent follow up and monitoring the implementation.

- 16- Develop operating procedures and guidelines with cooperation of related organizations on receiving and distribution of national, international and foreign aids to be submitted to the Cabinet of Ministers for approval and the subsequent follow – up.
- 17- Develop a comprehensive information management system assisted by information networks of the scientific and research centers and the responsible executive organizations as well as establishing the Disaster Information Management Center in the organization in order to provide timely warning before occurrence of the likely disaster together with sound dissemination of information to the authorities and the public at the time of disaster.
- 18- Overseeing at the highest level and evaluating the activities of the related organizations on the four phases of disaster management (particularly preparedness and response) in order to be reported to the High Council.

The Iranian Emergency Response System:

Disasters are categorized as being of National, Regional or local significance. Depending on the classification of disasters, the respective authorities take control to direct relief efforts. During the disaster, the entire relevant organizations are obliged to participate in the response operations upon the call of the Head of the High Council in accordance with pre-planned programs. A report will be presented to the organization accordingly. The cessation and termination of the response operations will be announced by the Head of the High Council.

Specialized Working groups

14 Specialized Working groups under the overall supervision of the Ministry of Interior and headed by their ministries are responsible for managing, coordinating, administrating all activities related to Natural Hazards in their Organizations. The Specialized Working groups are as follows:

- 1- Communications
- 2- Health and medical care
- 3- Droughts, Vegetation diseases and cold
- 4- Transportation, lifelines and weather disasters
- 5- NGO's
- 6- Recovery , Hazardous material, Insurance, Firefighting
- 7- Security
- 8- Flood, power, sanitations and sea level rise
- 9- Fuel and oil supply
- 10- Earthquake and landslide
- 11- Reconstruction
- 12- Environment hazards
- 13- Media and public Awareness
- 14- Rescue and relief and public Training

These working groups are at three levels: Local, national and provincial.

Regional (Provincial) and Local (District) Structures

The national structure of the Ministry of Interior is mirrored at provincial level. The provincial and township sub- units formed under the supervision of Governor Generals and Governors respectively.

The deputy Governor General for development affairs and the deputy Governor will respectively substitute the Governor Generals and Governors in the Disaster Management Coordination Council in provinces and cities, who will be obliged to play their role as coordinator and reporting to the organization.

Implementation of Hyogo Framework for Action (HFA)

The Government of Iran was one of the first countries to establish an Executive Secretariat to follow up on the implementation of Hyogo Framework for Action (HFA) at the national level.

As a signatory of the HFA 2005–2015, Iran, along with another 167 nations and multilateral institutions, is formally committed to mainstreaming DRR into national/sectoral development. This ten-year framework resolves to reduce disaster losses and is centered on the more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

The Executive Secretariat works under the supervision of the National Disaster Management Organization (NDMO) hosted by an academic Center (Building and Housing Research Center (BHRC)) [4].

Academic programmes

The majority of universities in Iran offer courses related to Disasters including Earthquake, Civil, Water Science, Agriculture Science, geology, Environment Science and etc. The following universities and institutes offers Course directly related to DRM:

1) University of Tehran, Institute of geophysics

Level: Doctorate & Masters in geophysics

Web: <http://geophysics.ut.ac.ir>

2) University of Tehran, Graduate Faculty Environment

Level: Masters in Disaster management

Web: <http://env.ut.ac.ir>

3) University of Tehran, Medical Sciences

Level: PHD & Masters in Disaster and Emergency health

Geographical coverage: Global

Language: Farsi, but if there is international interest, English as well

Web: <http://nihr.tums.ac.ir>

4) Iran University of Medical Sciences (IUMS)

Level: PHD in Disaster and Emergency health

Geographical coverage: Global

Language: Persian (Farsi) but English language students can apply after coordination

Web: <http://shmis.iums.ac.ir>

5) International Institute of Earthquake Engineering & Seismology (IIEES)

Level: PHD & Masters in geophysics, Masters in Disaster Risk Reduction

Web: <http://www.iiees.ac.ir>

6) Shahid Beheshti University (SBU)

Level: Masters in Disaster management and masters in Reconstruction after Disasters.

Web: <http://www.sbu.ac.ir>

7) Shahid Bahonar University of Kerman

Web: <http://www.uk.ac.ir>

8) Iranian National Institute for Oceanography and Atmospheric Science (INIOAS)

Web: <http://www.inio.ac.ir>

9) Natural disaster Institute

Web: www.ndri.ir

10) Applied and science university, Natural disaster Institute branch

Level: Masters in Disaster management, bachelor in Disaster management, bachelor in relief and rescue.

Web: www.ndri.ir

11) Iran Helal Institute of Applied-Science & Technology

Level: Masters in Disaster management, bachelor in Disaster management, bachelor in relief and rescue.

Web: <http://www.helal-uast.ac.ir>

ADRC Counterpart

Ministry of Interior, National Disaster management Organization (NDMO)

Address: 16th floor, Ministry of Interior Building, Fatemi sq, Tehran, Iran.

Tel :(+98)21848661-63

Web: www.ndmo.ir

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