PHYSICAL CHARACTERISTICS OF IRAN

Iran is known by two names: Iran and Persia. The name Persia is of western origin and only in the Middle Ages began to be used for the regions occupying the Iranian plateau. It is derived from the Greek-Roman appellation "Persae" (=Persis) for the Achaemenids. Fars (=Pars) is the Muslim term for Persis and Farsi is the language of Fars (Pars) which is the Islamic form of the western term "Persian".

The form "Iran" is of Pahlavi origin and goes back to an earlier form "Ariana" originally an adjective meaning Aryan. Now it is the most common form. But the name of language is Farsi (Persian) and not Iranian which has a different connotation.

Iran has an area of 636,296 square miles and a population of about 57,799,204. It is bounded to the north by the U.S.S.R. and the Caspian Sea, and to the west

4. This is the modern boundary which had been at variance during the course of history.
by Turkey and Iraq, to the south by the Persian Gulf and the Gulf of Oman, and to the east by Pakistan and Afghanistan. More than 30 percent of its 4865 mile boundary is sea-coast. The capital is Tehran.

The Landscape

A series of massive, heavily eroded mountain ranges surrounds Iran's high interior basin. Most of the country is above 1500 feet, one-sixth of it over 6500 feet. In sharp contrast are the coastal regions outside the mountain ring. In the north, the 400 mile strip along the Caspian Sea, never more than 70 miles wide, falls sharply from the 10,000 feet summits to the marshy lake's edge, 90 feet below sea level.¹

The Zagros range stretches from the border with the Armenian Soviet Republic² in the northwest to the Persian Gulf and then eastward into Baluchistan. It is drained on the west by streams and water fertile valleys. The land is much rugged and populated largely by nomads.

1. Encyclopaedia Britannica, p. 821.
2. Various Republics in U.S.S.R. have declared their independence and the U.S.S.R. exists no more.
The Elbuz mountain chain runs along the south shore of the Caspian to meet the border range of Khurasan to the east. The highest peak is 18386-foot snow-clad mt. Demavend very significant in the Iranian history¹, and in Persian literature and culture.

The portion of the desert region - the arid interior plateau - known as Dasht (دشت) are covered by loose stones and sand merging into fertile soil on the hill sides. The most remarkable feature of the plateau is a salt waste 200 miles long and half as wide known as the Kavir² (کاری). Cut by channels of intermittent streams, it is virtually impenetrable. Its eastern portion is called Kavir-e-Lut (کاری لوت), the site of the legendary city of Lut mentioned in the Quran.

1. It is believed that the prehistoric Persian King Zahhak was imprisoned in this mountain.

2. A wide and unfertile sallish land (Farhang-i-Moin Vol-III p. 3119)

3. Lut was a contemporary and nephew of Abraham when the city of Sodom was distraied for its wickedness. he was saved as he was just (Quran, Surah VI, verse 86 note 906) For the Biblical verse, see Abdullah Yusuf Ali, Glorious Quran, Surah VII, verses 80-84, note 1040.
Drainage and Soil

There are three large rivers in Iran, the Karun, the Atrak and Safid. Of these only the Karun is navigable, the other two are too steep and irregular. All streams are seasonal and variable, spring floods do much damage, while in summer there is little water flow when streams disappear.

Soil patterns differ widely. The Caspian coastal region is rich in brown forest soil which helps growing abundant sub-tropical vegetation. Mountain soil are shallow layers over bed rock. Natural erosion moves the finer soils into the valleys. The semi-arid plateau lying above 3000 feet are covered with brown coloured soil in which grassy vegetation grows. The soil is slightly alkaline and contains some organic material and is infertile.

Climate

Iran has a complex climate. In winter a high-pressure belt moves west and south to the interior of the Iranian Plateau, while low pressure slashes over the Caspian, and the Persian Gulf. In summer lowest pressure prevails in the north. Low pressure in Pakistan generates
Bad-i-Shamal\textsuperscript{1} which blows from February to October north-westerly, and the "120 days" summer wind some time with velocities of 70 miles per hour in Sistan. Warm wind from the Arabian sea brings heavy moisture from the Persian Gulf resulting in unbearable heat and humidity.

Temperatures vary from a high of 123\textdegree F in Khuzistan as the head of Persian Gulf to a low of -35\textdegree F in Azerbaijan in the north-west. The annual average rainfall is 14 inches. Winter is generally the rainy season for the country as a whole. The Caspian plain is very fertile. It has luxuriant forests swamps and rice paddies and is densely populated. Temperatures may rise to 100\textdegree F and humidity to 98 percent\textsuperscript{2}.

Vegetation

About 11 percent of the country is covered with forest, most extensively in the Caspian region. In this region are found broad leafed vigorous trees, usually oak, beech, elm, walnut, hornbeam etc. Thorny shrubs also grow in this part.

1. It blows from the north direction; hence this name is given (see Farhang-i-Moin, Vol. II p. 2074).
2. Encyclopedædia of Britannica, p. 823.
The Zagros Mountains are covered with semihumid oak, forests along with walnut, pear, pistachio etc. Willow, polar and plane trees grow in the ravines together with several varieties of creepers. Almond, berberies and wild fruit trees grow in the dry plateau. Thorn shrubs grow in the steppes, while artemisia is found at medium elevations of the desert plains. Oases support polar, date palm, willow, plum, mulberry trees, vines etc. In swamp region reeds and grass grow abundantly.

People and Population

Iran is a multilingual and diverse culture society. About 48 to 50 percent speak Persian, 23 percent other languages of Indo-European dynasty. Iranians are the descendants of the Aryan tribes. The Kurds, a fierce nomadic people, live in the western region and have a separate language, and culture. The Kurds also inhabit the northern region of Iraq and the southern part of Turkey, and they have the same language and culture whether in Iran or in Iraq or Turkey. Also inhabiting the western mountain are the Lurs among them the Bakhtiyari tribes live in the

1. The author of the above says that the Kurds have a separate religious belief; but it is not true. They are mostly Sunnis; some are Shia as well.
Zagros Mountains west of Isfahan. Both the Lurs and the Bakhtiyari tribes speak Luri, a Persian dialect. The late Mohammad Reza Shah Pahlawi's father Reza Shah belonged to the Bakhtiyari tribe. The Baluch, the agrarian semi nomadic group reputed for their excellent horsemanship inhabit Baluchistan, the eastern part of which is Pakistani territory. The latter country has a separate province called Baluchistan. The Armenians with a different ethnic heritage have maintained their Indo-European linguistic identity and their concentration is in Isfahan, Tehran and Azarbijan. There are two important ethnic Turkish groups, one Qashqai in the Shiraz area and the other is Turkoman of Khurasan. They speak Turkish. The assyrians are concentrated in the northwest and the Arabs live in Persian Gulf islands and in Khuzistan. 1

Religions groups

The vast majority of Iranians are Muslims, mostly of the Shia sect. The Kurds, the Turkomans and Baluchs are mostly Sunnis. The religious minorities are Christians, Jews, and Zoroastrians. Christians constitute the largest

1. Ibid p. 2842
minority group. The Zoroastrians were concentrated in Yazd and Kirman. The Baha and Bahai, though ethnically Iranian have a different religious sect. After the recent revolution, the Babis and Bahais have left the country and settled in America and some other western countries. They speak Persian.

National Economy

In the early 1970s Iran had one of the highest

1. Their religious book is Avesta which was supposed to be revealed on Zoroaster, their prophet in the 7th century B.C. (see E.C. Browne, A literary History of Persian, vol. I p. 28) the extant books and religious formulas of the Avesta are divided into five sections, the Yasna, the Vispred, the Vendidad, the Yashts, and the Khurda Avesta (see Browne, Ibid pp. 99-101).

2. The rise of the Babi sect. which began in the later year of Mohammad Shah's reign was an event of the most far reaching significance, and forms the subject of an extensive literature not only in Persian and Arabic but in English, French, German and other European languages. Its founder was Syed Ali Mohammd of Shiraz who claimed to be the Bab (gate) of the twelfth Imam, Imam Mahdi. He was put to death in 1856. (For details see Browne, A Literary History of Persian, vol. 4, pp. 149-51, 153-54, 156-57 etc.

3. The founder of the sect which was an offshoot of the Babi religion, was Abbas Nuri a follower of Bab subsequently termed as Bahaullah. He was born in Tehran in 1892. His follower called themselves God and him the creator of God. One of his verses reads:

"Men say thou art God, and I am moved to anger,
Raise the veil, and submit no longer to the Shame of God head."

(E.C. Browne, A Literary History of Persian, vol. IV p. 151)
economic growth\(^1\) rate among the developing countries. Between 1965 and 1971 the gross national product increased at the average annual rate of ten percent because of vigorous industrialization. During this period the cost of living remained stable and the Iranian currency maintained parity with western currency.\(^2\) But after the Revolution the cost of living has gone so high that Tehran is considered to be the costliest city of the world. The official rate of Rial is almost the same as in 1971 but it has come down to such an extent that one U.S. Dollar fetches 130 to 140 Rials in the market.

Sources of National Income

Despite some structural changes,\(^3\) Iran is basically an agrarian economy. Although 25 percent of the total land is potentially arable, only one half of the arable land is under cultivation. Almost half of the active population is engaged in agricultural activities which provide 1/5 of the gross domestic product. In

2. In 1971 the official rate was 75.75 Rials per U.S. Dollar, and 183 Rials per sterling.
1971 about 17,500,000 acres were devoted to wheat, barley and rice, about 7,40,000 to Cotton, 50,000 to tobacco, 25,000 to sugar. Olive variety of fruits, tea, spices are also commercial crops.

Forest cover as much as agriculture. The largest and most valuable were in the Caspian region. Previously forest wood had been in use for fuel. In 1963 the Government nationalised the forest and now the use of wood fuel has been replaced by a fuel by oil and natural gas. Fishing is an important source of national income. This industry was producing about four thousand tons per annum from the Caspian sea only. The Persian Gulf is also important from the point of fishing industry.

Mineral resources

In 1970 Iran was the world's fourth largest producer of oil and the largest exporter of oil. Its reserves were about seventy thousand million barrels, 11 percent of the world total.

1. Ibid pp. 824-25
Production was concentrated in the south west but now oil has been discovered in Qum and the Kavir-i-Lut as well as under the offshore waters of the Persian Gulf. In 1971 National Iranian Oil Company had signed marketing agreements with more than 20 foreign countries and produced 10 percent of the country's petroleum. The industry's output was four million barrels a day. About 16 percent was processed in five refineries and the rest was exported in crude form.

Natural gas found in the south as well as in the Elburz mountains and in Khurasan is a valuable asset. Reserves estimated at 214,000,000,000,000 cubic feet were the sixth largest in the world. A 708 miles pipeline was completed in 1970 running from the southern oil field to the Soviet town of Astara on the Western shore of the Caspian.

Iran is rich in terms of the possession of mineral wealth which has not been properly utilized. Coal is found near Tehran and in Kerman totalled only 32,70,000 tons in 1969. Some 44,500 tons of Chromium was discovered near Bandar Abbas.
Lead in combination with Zinc and other minerals, is found widely scattered. Two major mines and process plants were in operation by 1970. Copper was obtained for centuries from small mines discovered in a belt extending from the Pakistani to the Soviet border. Iron ore mines near Yazd, Arak and Kirman feeds the 6,50,000 ton capacity steel plant in Isfahan opened in 1971. An Ahvaz factory was turning out 1,20,000 tons of steel pipe annually.

Cement production is centred in the provinces of Tehran, Fars, Khuzistan and Qazvin. It amounted to about 2,500,000 tons in 1970.

The petrochemical industry concentrated in the south has received set back due to Iraq-Iran war in which the southern region of Iran was the target of heavy bombing and shelling.

Hydroelectric and other power sources

The need to develop power resources, being essential to industrial development, was clearly recognised in Iran and by 1970 a national electrification network was in operation having 485 power stations including 1. The New Encyclopaedia Britannica, 1973-74, p. 825.
hydroelectric installations. The use of oil and gas in power plants was rapidly growing. The abundant supply of gas was the greatest potential power source. Atomic energy used for research purposes, was being produced on a small scale by the University of Tehran. The eight year war with Iraq disturbed the balance in every sphere of activities including power sources and now Iran has started building its economy etc. but still it is in the grip of rising prices and declining economy.

Foreign trade

Despite the efforts for self sufficiency the value of Iran's imports increased by eight percent over the preceding year 1969-70. The country imported machinery, iron, steel, chemicals and automobiles from West Germany and U.S.A. Export value was ten percent above the previous year. About 89 percent export trade was oil and petroleum products. Other exports included carpets, cotton and fruits.

Economic Planning

Economic planning was initiated in Iran in 1946.

1. Ibid. p. 825
2. Ibid. pp. 826-27.
Allocations for successive plans indicated the strengthening economy, growing from $65 crores for the 1st plan to $1100 crores for the 4th plan. The major items included in the development plan were agriculture, mines industries, power communications and social services.

**Taxation**

The tax structure\(^1\) included 10 percent income tax, corporation taxes, heavy tariffs on manufactured goods and excises on both manufactured products and utilities. The government received 53 percent of its income in 1970 from its taxes, exclusive of oil royalties. But since then the whole structures has changed.

**Transportation**

The adverse nature of geographical conditions has greatly restricted the growth of communication in Iran\(^2\). The country is very large in comparison to the size of its population. Its population is widely scattered. In the absence of navigable rivers, inadequate rail and air transportation, roads are of primary importance. In 1971

1. Ibid. pp. 826-27.
2. Ibid. p. 827
the country had about 27,000 miles of roadways of which about 7,000 miles paved, about 13,000 gravel and the rest undeveloped. A paved highway connecting Pakistan with Turkey could not be completed.

In 1971 the railway was linked with Europe via Turkey. An extension eastward to Singapore was projected under the auspices of United Nations Economic Commission for Asia and Far East-ECAFE- but it was not completed. However Iran's portion was completed as far as Meshhad in 1971.

There was also a connection with the Soviet trail system. But all the development plans were abandoned due to the eight year war with Iraq and the declining economy thereafter.

Port facilities

Iran's sea-trade was served by five ports on the Persian Gulf in addition to oil industry's outlet at Abadan and Kharg island, the latter being the world's largest terminal. Khurramshahr and Bandar Shapur handled 75 percent of non-oil import-export trade. The largest port, Bandar Abbas had inadequate land connections. The Bushahr J. Thid. p. 827.
shipyard served Iran's merchant marine company. But due to Iran-Iraq war all the ports have been heavy bombarded so as to become unfit for carrying on sea trade for a long time to come.

Air Transport

Almost all the major cities¹ of Iran are served by the country's 23 airports all of which are capable of handling jets. Tehran and Abadan were international airports but the latter was destroyed in the Iran-Iraq and is incapable of handling large craft.

Education

Compulsory education² laws were ratified in 1943 and until 1970 of the total population only 28 percent were literate and 58 percent of the elementary age group were enrolled in schools. A literacy corps was established in 1962, and by 1970 the corps enrolled 3,70,000 pupils of primary stage. The enrollment of high school was about 10,00,000.

¹. Ibid. p. 827.
². Ibid p. 827.
University. It was opened in 1934. By 1970 seven more universities, 44 more colleges and 100 technical schools were in operation. In the meantime a few more universities and colleges were opened and the number of university students about 76,000 in 1970 has been multiplied. In seventies the number of Iranian students studying abroad was 20,000. This number may have increased as a large of students studying in America have preferred to remain in America and some other western countries rather than returning Iran to serve their mother land.

Health

Although health facilities were inadequate even prior to Islamic Revolution, efforts are being made to increase health facilities so as to cope with the conditions available. Before the Revolution 40 percent of the entire medical doctors concentrated in Tehran at the cost of the rural and tribal areas. To meet the shortage of medical facilities in rural area 400 health units have been opened to offer treatment to almost half of Iran's 50,000 villages. After the revolution special attention has been paid to 1. Ibid. p. 827.
rural health service and even foreign doctors have been asked to serve in villages.

**Traditional Crafts**

The main centres of manufacturing of carpets are Keshan, Kirman and Isfahan. Some 4,00,000 workers were producing about 4,00,00,000 square feet of carpets and rug which are used locally as well as are exported. In hand woven cloth industry about 45,000 weavers were engaged in producing velvets, printed cotton, wool brocade, shawls and cloth-shoes. A wide range of articles are made of various metals whose centres are Tehran (gold); Shiraz, Isfahan and Yazd (silver); and Kashan (Copper). Decorative articles in wood are produced in Isfahan, Tehran, Shiraz, Rasht, Kizai etc. These articles are both for domestic use as well as for export purposes. Machine made ceramic tiles were produced in Isfahan but hand made tiles and mosaics, an ancient Persian art, richly designed and beautifully coloured, continued to supply a growing market.

**Fine Arts**

It has been rightly realised in Iran that an...
artificial imitation of Western styles in architecture has no relevance in the country's climate; so the Iranian styles modified to serve the modern needs are encouraged.

Since Islam does not encourage painting and sculpture, the Iranian artists devoted themselves to the other media like calligraphy, illumination, book-binding, miniature paintings, carpet-making etc. which resulted in the production of high class articles of art in Iran which were in great demand in the world market. A look in Pope's Book of Persian Art would show the impressive contribution of Iranians to art which in some cases remain unmatched. The European and American museums are flooded with most valuable art pieces produced in Iran during the course of history. The Moghul rulers in India continued the Persian traditions. They even patronised the painters as well with the result that a number of Indian painters produced high class art pieces including painting and miniature paintings which are preserved in western museum and libraries.

Race & Language

Iran has numerous ethnic groups. In the

1. Ibid. p. 826.
central plateau there occurs a sub-race termed as Irano-Afghan; in the mountain districts there are a number of smaller groups of separate racial composition. A number of nomads, including the Bakhtiare tribes, seem to be of Kurdish stock. Turki (Mongoloid) strains are apparent in Qashqai tribes and the same Turki influence is again apparent in the racial composition in eastern region specially around Mashhad. Smaller groups from the Caucasus (Georgians and Circassians) are represented in Azarbijan. The southern province of Khuzistan and adjoining area is dominated by the people who reckon their lineage from the Arabs; while the western part is inhabited by the Kurds who are of a different race.

With so many ethnic groups, it is not surprising that various languages and dialects are current in Iran. The Persian language which is called Farsi in Iran has the dominating position, being the lingua franca, as well as the language of belles lettres. The other dialects current in various parts are Kurdish, Turki, Luri, Baluchi, Armenian etc.