



ECONOMY I. ECONOMIC GEOGRAPHY

ECONOMY

i. ECONOMIC GEOGRAPHY

The high plateau and its external relations.

The heartland of the Iranian world, encompassing both Persia and Afghanistan, is an arid high plateau, from which communication with the outside world is extraordinarily difficult. In the north there is an almost continuous barrier running from the [Caucasus](#) to the [Alborz](#) and thence to the mountains of Khorasan and the Hindu Kush; it can be crossed only through narrow gorges (like the Darband pass, the Safīdrūd valley, and the passes of the Kopet Dag and the Hindu Kush), and the difficulties are compounded by such obstacles as the [Caspian Sea](#) and the Kyzyl Kum and Kara Kum deserts, which lie beyond. In order to reach the Mediterranean in the west without making the very long crossing of the Anatolian plateau, it is necessary to descend from the river valleys of Azarbaijan via Erzurum and several difficult passes to the Black Sea. In the southwest the Zagros barrier complicates communications with the Mesopotamian basin. Despite the religious unity realized by Islam, it continues to mark a major cultural frontier between Persia and the Arab world. In the south, the Fārs escarpment slopes toward the Persian Gulf, imposing dangerous turns and switchbacks on caravans. The



route through the coastal deserts to India provides almost insurmountable obstacles, no less formidable than the narrow Khyber pass through the central mountains of Afghanistan somewhat farther north. Finally, passes across the Pamirs provide only very perilous means of communication with another large center of population and wealth, China.

Nevertheless, despite its isolation and inaccessibility, the Iranian world has been a center of advanced civilization and diversified activity since antiquity, the arena for numerous technical innovations and developments (Nayer-Nouri; Wulff, *Crafts*). It must therefore have maintained economic relations with the outside world. Because of the aforementioned unfavorable geographical conditions, however, such relations were traditionally limited, particularly to luxury objects. Persia, because of its geographic situation, also functioned as an intermediary between the Mediterranean cultural area and the Fertile Crescent, on one hand, and India and the Far East, on the other. Only in the modern period has the country been opened up, paving the way to full integration into the international economy and a general development on autonomous bases, though with resulting regional differences and inequalities that largely reflect orientation to foreign influences.

Long-term economic factors.

A certain number of geographical constants have determined the nature of traditional economic relations between the Iranian plateau and the outside world.

The Indian subcontinent. The tropical climate of India is in complete contrast to the climate of the Persian and Afghan highlands, which lie in the temperate and subtropical zones; the cold highland winters are almost totally absent in the warm lowlands. The peoples of the plateau have thus supplied agricultural products to the neighboring lowlands, particularly fruits and nuts (pistachios, grapes, apricots, etc.), which in dried form are still a major export from Persia and, chiefly, Afghanistan to India and Pakistan. Wine, which can hardly be manufactured at all in the tropical zone, is a more highly processed form of agricultural export. Several varieties of wine from Afghanistan were already known in India in the 5th-4th centuries B.C.E., and this commerce reappeared in the 1970s with the sale of wine from Kabul to Pakistan (de Planhol, 1977). Similarly, wine from Shiraz, at the southernmost region where good wine can be produced, has been shipped to India by European traders in the modern period, despite the difficulties of the route along the Fārs escarpment (de



Planhol, 1972). Animals, too, thrive in the salubrious highland climate but degenerate fairly rapidly in the tropics. Export of horses from the Iranian world to the Indian subcontinent has thus been continuous throughout history; the trade was particularly active in the time of Marco Polo (I, pp. 83, 86, index, s.vv.; cf. Heyd, II, pp. 134-36). Because of their health and strength, men from the plateau were also in demand in the tropical lowlands: slaves from Central Asia, who were always preferred on the Indian market, and mercenaries, especially Afghans, who were generally employed there until the period of British colonization (Balland, 1991). On the other hand, commodities imported from the tropics to the Iranian plateau consisted mainly of spices, dyestuffs, ivory, and precious stones, ranging from diamonds to pearls.

The Fertile Crescent and the Mediterranean world. In western Asia and Europe, both of which had been highly urbanized since antiquity, demand for consumer merchandise of all sorts was great. The Iranian world produced a broad range of both raw materials and goods processed by local artisans. Although commercial relations are traceable from the 3rd millennium B.C.E., when lapis lazuli was exported from Afghanistan to Mesopotamia, they became particularly important under the 'Abbasid caliphate, when large numbers of Persian merchants were established in Baghdad to handle the distribution of goods from their country. Judging by such toponyms as Morabba'at-al-Fors "Square of the Persians" and the nearby Dokkân-al-Abnâ' "Store of noble Persians" (Le Strange, p. 127), their community was already highly structured. This Persian trade was eventually extended to Europe. In the Mongol period Persia, beside functioning as entrepôt for spices and other products from India and the Far East, provided Europe with luxury textiles, including silks (notably from Yazd), and cottons (Heyd, II, p. 109). Later raw silk became the essential commodity in this trade; it was produced especially in Gīlān and exported to Europe either entirely overland or by sea across the Caspian and through Russia, the latter route used by British merchants from the 16th century onward (see [CASPIAN](#)).

The northern steppes. Trade with northern steppes, barbarous and coarse, was always fairly limited. It consisted mainly of the importation of furs, honey, and slaves in exchange for textiles.

China and the Far East. Under the 'Abbasid caliphate economic relations with the faraway eastern regions (Laufer, *Sino-Iranica*; Schafer) were conducted mainly via the Maritime route. Precious objects and curiosities of all sorts were traded for their exoticism and the prestige they conferred. From China



Persia imported mainly silk but also precious objects (e.g., porcelain, onyx) and occasionally drugs (e.g., rhubarb). In return it exported perfumes (e.g., storax, myrrh), woolens, brocades, precious stones, and gold and silver coins.

As has been mentioned, these traditional patterns of exchange remained limited, and, except for those with the Indian subcontinent, their impact on the economy of the Iranian plateau as a whole seems to have been slight. Nor were they of sufficient magnitude to engender regional differentiation in Persia.

The opening.

At the beginning of the 19th century Persia remained almost inaccessible. The French embassy of the Comte de Sercey, which left Toulon on 30 November 1839 and traveled via Trabzon and Tabrīz, did not arrive in Isfahan, where the court was staying, until 5 April 1840. That of the Comte de Gobineau, which left Marseilles on 12 February 1855 and followed the southern route via Būšehr and Isfahan, arrived in Tehran in July of the same year. The fastest route, the so-called “Tatar route” (Fraser), which crossed the whole of Anatolia by land from Constantinople and Smyrna, was hardly used, except for the post; it took nearly six months for caravans. Massive realignment with the international economy, a condition for development, presupposed a satisfactory opening up of the country.

Access routes. In fact, the points of entry to Persia were varied and changing, often shifting in response to foreign influences and the displacement of power centers, rather than as a function of Persian interests (de Planhol, 1993, pp. 557-63). It was through the Persian Gulf coast in the south that Persia was first opened up to international relations in the modern period, reflecting a political situation in which constant hostilities between the Ottoman empire and the Safavids paralyzed all direct land communications with Europe. [Bandar-e ‘Abbās](#), which had been established by Shah ‘Abbās I in 1622 but had fallen into decline by the beginning of the 18th century, was succeeded by [Būšehr](#), founded much nearer the head of the Persian Gulf by Nāder Shah in 1734; it became the principal Persian port when the Zand dynasty was established at Shiraz in 1760 and remained so until 1915. In the 19th and 20th centuries, however, new geopolitical factors favored more rapid routes to the north. The opening of the Black Sea to European fleets by the Ottoman government in the last decades of the 18th century had led the British to establish regular navigation lines to Trabzon, at one end of the difficult but



relatively short caravan route via Erzurum and Persia. Activity on the Trabzon-Tabrīz road reached a peak in 1850-60, when it accounted for about two-fifths of Persian foreign trade (Issawi, 1970). Tabrīz thus became by far the most flourishing and populous city in Persia, with an estimated population of 200,000 in 1873, approximately double that of Tehran at the time (Issawi, 1971, p. 112).

The Transcaucasian routes were opened next, from the Black Sea port of Poti to [Baku](#) by a railroad completed in 1883 and from Baku to the Persian coast of the Caspian. At first the terminus was [Bābolsar](#) in Māzandarān, where 12 percent of Persian customs receipts were collected in 1909; it was connected to the plateau by the Caspian Gates. After construction in 1899 of a more direct road to Tehran through the Safidrūd pass across the Alborz, [Anzali](#) and Rašt in Gīlān became the main termini. At the same time Russian colonization of lower Central Asia led to the establishment of a whole series of, often temporary, links with Khorasan as the conquest progressed. The port of [Bandar-e Gaz](#) southeast of the Caspian was the principal outlet for all of northeastern Persia and even Herat from 1867, when a Persian military post was established opposite the Russian base on the isle of [Āšūrāda](#), until 1881; after the submission of the Turkmens it was superseded by the passes through the Kopet Dag, especially the route from Ashkhabad to Qūčān, which was opened in 1888 and led to the development of the new frontier town of Bājgīrān. Except for the extension of the railroad from British Baluchistan to Zāhedān during World War I, it was also in the north that Persia was first linked to the international railroad network, when the route from Julfa to Tabrīz was opened in 1916.

Although subject to vicissitudes reflecting shifts in Russian fiscal policy, these northern routes remained the most active until World War I. Other attempts to gain access to the plateau from the head of the Persian Gulf had been undertaken, however, exploiting the possibilities of Mesopotamian river navigation. With the establishment of regular steamboat service on the Tigris between Baṣra and Baghdad in 1862 it became possible to open a commercial route from the latter city to Tehran via Kermānšāh. In 1888 the lower Kārūn was opened to international navigation as far as the [Ahvāz](#) rapids, providing a shorter route; Isfahan, 430 km away, lay within twenty to twenty-five days' journey with pack animals, and this distance was shortened still further when the section of the river situated above the rapids, between Ahvāz and Šūštar, became navigable. Nevertheless, in 1914 the route from [Korramšahr](#) to Tehran



still took three weeks to a month, and employees of the [Anglo-Persian Oil Co.](#) that was already operating in Kūzestān found it faster and more comfortable to travel to the capital by ship through the Suez Canal and the Bosphorus to the Russian port of Batum on the Black Sea, then by railroad to Baku and Russian steamship to Anzālī, and finally by road to Tehran. It was only after the British occupation of Baghdad in 1917 that construction of a motor route across the mountains of Kurdistan to Hamadān was undertaken. The road from Erbil in upper Mesopotamia across the mountains to Azarbaijan was not constructed until 1927-32 (Hamilton).

As for Afghanistan, until after World War I it remained totally closed to organized penetration by the modern world economy. ‘Abd-al-Raḥmān, the true founder of the Afghan state (1880-1901), had adopted a policy of excluding the rest of the world, which he considered the only possible way of preserving the independence of the country, at that time threatened by the two great powers, Russia and the British empire. In fact Afghanistan owed its existence to its function as a buffer state between them. Therefore, ‘Abd-al-Raḥmān particularly opposed any attempt to build a railroad, relying for the nation’s security on its strong natural defenses and the inaccessibility of the highlands (Gregorian, pp. 154-59). It is remarkable that the foreign trade of Afghanistan, both with the east and with the Russian empire, declined noticeably during the ten years of his reign (Gregorian, pp. 145-46). In that period heavy equipment could be transported to Kabul only on the backs of elephants. The machinery for the first modern tannery in Afghanistan, built in Kabul to manufacture boots for the soldiers of Ḥabīb-Allāh (1901-19), arrived in this way; so did the equipment for the first hydroelectric station, completed between 1910 and 1918 at Jabal Sarāj 60 km north of Kabul, in order to supply the court (Gregorian, pp. 191, 194). At that period it was still almost impossible to cross the Hindu Kush in winter.

Internal networks. The commercial routes described, none of which was totally predominant, primarily reflected the penetration of Persia by foreign interests. They were connected to the termini of a network of caravan routes and tracks that permitted fairly satisfactory communication among the large cities of the interior (Tomaschek; Stolze and Andras; Rausch von Traubenberg; Fürstenau; Gabriel; cf. the synthetic map in Ehlers, pp. 180-81); at the beginning of the 20th century, however, owing to the almost total absence of roads suitable for vehicular traffic, these routes still could not be used for rapid shipment. In 1900 it took forty to forty-five days to go from Tehran to



Shiraz, 130 to 180 days from Tabrīz to Mašhad. The construction of a network of roads that conformed to the geographic configuration of the countryside was an absolute prerequisite for any real economic integration. The Soviet Revolution, during and after which Persia's northern transit routes were subjected to serious obstacles, later led Reżā Shah (1304-20 Š./1925-41) to undertake the construction of a great railroad network, which was intended to serve as the communications axis of the country and to link its vital centers both to one another and to the outside world. Between 1927 and 1938 the Trans-Iranian Railroad was built from the head of the Persian Gulf to the new port of *Bandar-e Šāh* at the southeastern corner of the Caspian. The latter terminus turned out to be useless, however. Poor political relations with the countries to the north prevented all development, and the increasingly falling level of the Caspian never allowed more than minimal activity. The southwestern terminus, however, permitted convenient and regular access to the Persian interior, while delivering a decisive blow to the development of *Kūzestān*; these effects were reinforced by the opening of the ports at *Bandar-e Šāhpūr* and *Qorramšahr* during World War II. Gradually, this central trunk line was supplemented with smaller branch lines. The railroad reached Mašhad in 1957; Tabrīz in 1958, permitting the first direct rail connection between Persia and Europe; and Yazd and Kermān via Qom and Isfahan in the 1970s and 1980s respectively. A second direct link with Europe was established in 1971 when the Persian and Turkish rail networks were connected by ferry across Lake Van; though inconvenient, the opening of this route was necessitated by the uncertainty of relations with the Soviet Union. In addition to constructing the Trans-Iranian Railroad, in the 1930s the government of Reżā Shah also established a network of motor roads to serve the large centers of the country. Thereafter, Persia was able to function as a genuine economic unit and to initiate regional differentiation.

In Afghanistan the process of economic integration was slower; it rested exclusively on a network of roads constructed at the same time that the country opened to the outside world. In the 1930s construction of a road through the *Sībar* pass (elev. 2,936 m) north of *Bāmīān*, which is inaccessible during most of the winter, finally opened communication between the two slopes of the Hindu Kush. In addition, a ring consisting of more or less paved tracks facilitated the complete circumvention of the central and western mountains; it ran from Kabul to *Ġaznī*, *Qandahār*, *Herat*, *Mazār-e Šarīf*, *Qondūz*, and back to Kabul. Only in the mid-1950s did the surfacing of this circular route with asphalt or concrete begin, but the work was still unfinished



on the eve of the revolution in 1357 Š./1978 (see [COMMUNISM iv](#)); a long stretch in the northwestern quarter between [Dawlatābād](#) and Herat had still not been surfaced. Nevertheless satisfactory connections had been made with the road networks of Pakistan (from Kabul to Peshawar and from Qandahār to Quetta), Persia (from Herat to Mašhad), and the Soviet Union (from Herat, Mazār-e Šarīf, and Qondūz). The opening in 1964 of a direct route through the Sālang pass, with a tunnel north of Kabul at an elevation of 3,337 m, notably shortened the distance between the capital and Turkestan. Nevertheless, in 1358 Š./1979 Afghanistan still had only 2,730 km of asphalt and concrete roads and about 5,000 km of other stabilized roads, which were traversible by motor in all weather, plus a total of about 18,000 km of track (Grötzbach, 1990, p. 41).

Regional features and contrasts.

The diffusion of economic activity and regional specialization have been responses primarily to the opportunities provided by the new road networks, opportunities that have been exploited more or less fully, depending on the different processes and policies of development adopted by Persia and Afghanistan.

Persia. In Persia oil revenues provided substantial financial resources (Bobek) from 1908. Although they remained modest until 1950 (12 percent of the national budget and 4 percent of national revenue), the flow of revenues rose to 45-55 percent of the budget in the 1960s and 1970s and to 90 percent of Persian foreign-exchange revenues. This considerable infusion of capital was quickly harnessed to a policy of voluntaristic development, the fullest expression of which was Režā Shah's industrialization program before World War II, based on and aiming at self-sufficiency. Launched first by state initiatives, industrial development was subsequently mainly carried on in the private sector under the leadership of an entrepreneurial class that emerged vigorously in the 1960s. The most spectacular geographical manifestation was the rapid and organized diffusion of industry throughout most of the country. Starting in western Persia with the great refinery at [Ābādān](#), the process was extended by Režā Shah from Tehran to the Caspian littoral, while spreading spontaneously to the principal cities of the plateau, notably Isfahan. Until about 1960 industrial development continued to intensify without notable geographic expansion, except toward Khorasan, particularly Mašhad. Owing to the exponential growth of oil revenues, in subsequent years there was a general explosion of industrial installations, including those on the Turkmen steppe and in the Zagros; only the extreme eastern and southeastern regions



beyond the Dašt-e Kavīr and the Dašt-e Lūt (see [DESERT](#)) were not affected. Even there the establishment of professional schools, as at Zāhedān, foreshadowed imminent development (Korby). Parallel to these changes, a network of oil and gas pipelines was extended from the oilfields of the southwest throughout the country, thus ensuring energy supplies to fuel further progress. In the mid-1970s, several years before the Revolution of 1978-79, Persia appeared totally industrialized and functioned as a single developmental entity.

This degree of integration was expressed in the organization of agricultural markets, despite the immense distances involved, as well as in the types of commodities. Persian agriculture began to be industrialized. The expansion of the sugar-beet crop, notably in Khorasan and Azarbaijan, followed government establishment of sugar refineries in those areas. Cotton crops sufficient to supply the local textile industry and at the same time to provide an exportable surplus, were planted in Kūzestān, Fārs, and the Turkmen steppe. Sunflowers and other oil-producing crops spread over the vast expanses of the plateau. On the eve of the Revolution in 1357 Š./1978-79 the markets in the capital already attracted produce from the entire country; fruit, dates, and citrus from the distant Bam oasis and Narmāšīr arrived regularly (Fecharaki). The pastoral economy of the nomadic tribes, on the other hand, adapted itself to the necessity of feeding the great urban centers. In Azarbaijan the Šahseven thus developed a calendar that is unique in the Middle East, attesting to their effective integration into the economy of the sedentary populations among whom they live: Lambing does not take place in the spring, as in traditional nomadic societies, but in the autumn, in order to ensure winter milk supplies to urban areas (Schweizer, p. 129). As for meat, in the 1970s regions where few animals can be raised, like the Caspian littoral, were beginning to import animals from regions as far away as Kurdistan and Lorestān (Pour-Fickoui and Bazin, p. 113). The constitution of this vast, yet unified, economic territory had major repercussions on the way of life of nomadic populations, even in the remotest provinces; they, too, often found occasion to reorganize their strategies for subsistence. An example is the Šāhnavāzī, a Baluch tribe of the *sarḥadd* (high plateau region), which had traditionally lived from a combination of a self-sufficient pastoral system, the gathering of dates in their palm groves, and predatory raids on neighboring Persian agricultural communities. After having been reduced to a small size by government pacification in the 1930s, during which the raids were suppressed, in the late 1950s they discovered new resources. Workers began to



migrate to cities, whether nearby or farther away and even to other countries on the Persian Gulf, and in addition the tribe expanded its irrigated agriculture, based on deep wells, and its commerce, sometimes by contraband. The Šāhnavāzī have thus changed from an almost closed economic system to an economy based on multiple resources (Salzman, 1971; idem, 1972).

Traditional irrigated nuclei were not exempt from this broad economic integration. The old mountain villages, many of which had already expanded their cultivable land to the possible limits in the first decades of this century, found new resources through pastoral migrations and organization of a mountain life at alternating elevations, which permitted them to increase considerably the size of their flocks; they were also able to solve the problem of demographic growth, at least until temporary and then permanent migration of workers in the 1950s provided a different kind of response (de Planhol, 1960). Around Isfahan and other great oases on the plateau a middle and upper bourgeoisie, with control of substantial capital and large numbers of agricultural workers, was able to ensure the expansion of cultivation through irrigation by mechanized wells, reaching to the rather shallow water tables around the traditional nuclei (Cordonnier). The same was true in the high valleys, which received rainfall from the neighboring peaks, where hydrological conditions were analogous, for example, in the large Khorasan basin and the Marvdašt plain in Fārs (Kortum).

Finally, the increase in financial resources from oil revenues permitted the state to undertake large hydraulic projects (see [ĀB](#); [ĀBYĀRĪ](#)), which contributed substantially to the quantitative expansion of agricultural production, though the latter was still not sufficient to match the expansion of the population. Basic commodities, particularly grains, had increasingly to be imported during the last years of the Pahlavi regime. Government action had thus generally reoriented agriculture toward the most expensive and sought-after products, such as tea, sugar, and fruits, consumption of which was growing rapidly, for example; in these products the country attained or approached self-sufficiency and even exportable surpluses, reflecting the generally rising level of economic integration. Overall, in fact, Persia reached the level of rational use of regional possibilities within the framework of a larger market.

Afghanistan. Afghanistan remained far from open, though some links with the interior had been established and the circular road system had facilitated communication among the main urban centers. It is therefore not surprising



that in the general environment of poverty and archaism attempts at organized development remained essentially localized along the main roads: on the perimeter of the mountain regions or on the single axis that crossed them.

In the agricultural sphere state intervention was manifest particularly in large hydraulic installations on the piedmont, on the irrigated perimeters of the newly pashtunized regions around Qondūz, north of the Hindu Kush (Grötzbach, 1990, pp. 268-69, 272-73), Ġaznī and the Jalālābād plain, and especially the colossal Helmand-Arġandāb project (de Planhol, 1993, pp. 635-47) south of the great barrier. Those districts of the Afghan countryside that were more or less linked to the market economy through the cultivation of cotton, sugar beets for the refinery at Baġlān, and the raising of karakul sheep for the production of astrakhan wool (Balland, 1972) were also located on these piedmonts, especially in the north (Balland, 1973). But the immense mountainous expanses in the eastern or northeastern central highlands remained almost totally peripheral, hardly connected with the modern economy, except through migration of workers, which began early in the Hazārajāt, from which workers migrated to Kabul, and after the mid-20th century, to the entire northeastern Hindu Kush, whence they, once again, moved to the economically active regions on the northern and southern piedmonts (Grötzbach, 1972, pp. 120-25, 251-53).

The beginning of industrialization took place in a similar but even more limited, geographic framework. The natural constraints were in fact very stringent. Before construction of the Helmand and Arġandāb dams only the eastern Hindu Kush regions enjoyed both the energy supply required for industrialization and relatively abundant precipitation to feed the streams necessary for hydroelectric installations; they also contained the only small oil strata exploited in the country. The presence of the capital, the only major center of innovation, and of the great transverse artery linking India, on one hand, and Turkestan and Russia, on the other, ensured the concentration of industry in this sector. It was the needs of the army that stimulated the timid beginnings of Afghan industry (tanneries, shoe and arms factories, mints, etc.) at Kabul in the time of ‘Abd-al-Raḥmān. When in 1932 Bānk-e mellī (which was privately capitalized) began to finance industrial enterprises, its investments were concentrated along the Kabul-Bactria axis (Pol-e Kōmrī, Baġlān, Qondūz, etc.): plants for carding, spinning, and weaving cotton; refining sugar; and the like were built in proximity to the planned development of cotton and sugar-



beet crops. When state initiative became the dominant force in the 1950s, with progressive tightening of government controls on the industrial interests of the bank, new developments (notably cement works) were located in the same sector. It is still there, particularly at Kabul, that almost all the small consumer industries that have appeared since the 1967 law favoring private investment have been located (Balland, 1973a). The only other centers, punctual and quite secondary, are located at Qandahār and Herat. A single additional factor was the discovery of the oil and gas-bearing strata, which have brought an extension of industrialization toward Bactria (Mazār-e Šarīf). On the eve of the Revolution the concentration of industries in this narrow strip from Mazār-e Šarīf to Qondūz, Kabul, and Jalālābād reflected the dualism of the country and its still only very limited development.

BIBLIOGRAPHY

(For cited works not given in detail, see “Short References.”)

D. Balland, “Une spéculation originale. L’astrakhan en Afghanistan,” *Hannon* 7, 1972, pp. 89-113.

Idem, “Le coton en Afghanistan. Essai d’analyse géographique et économique d’une culture industrielle dans un pays sous-industrialisé,” *Revue Géographique de l’Est* 13, 1973, pp. 17-75.

Idem, “Une nouvelle génération d’industries en Afghanistan. Contribution à l’étude de l’industrialisation du Tiers Monde,” *Bulletin de la Société Langue-docienne de Géographie*, 1973a, pp. 93-113.

Idem, “Une tradition migratoire. Les mercenaires afghans en Inde” in R. Blanadet, ed., *Aspects du monde tropical et asiatique. Hommage à Jean Delvert*, Paris, 1991, pp. 17-28.

H. Bobek, *Iran. Probleme eines unterentwickelten Landes alter Kultur*, Frankfurt, 1962.



- J. C. Cordonnier, "Les tendances nouvelles de l'agriculture irriguée dans l'oasis d'Isfahan (Iran)," *Revue Géographique de l'Est* 4, 1964, pp. 387-92.
- E. Ehlers, *Iran. Grundzüge einer geographischen Landeskunde*, Darmstadt, 1980.
- P. Fecharaki, "Les oasis des plaines de la région de Bam et du Narmāchir (Lut méridional, Iran)," *Cahiers d'Outre-Mer*, 1976, pp. 70-101.
- J. B. Fraser, *A Winter's Journey (Tātar) from Constantinople to Tehran*, 2 vols., London, 1838.
- G. Fürstenau, *Das Verkehrswesen Irans*, doctoral. diss., Munich, 1935.
- A. Gabriel, *Marco Polo in Persien*, Vienna, 1963.
- A. Comte de Gobineau, *Trois ans en Asie*, Paris, 1859.
- V. Gregorian, *The Emergence of Modern Afghanistan. Politics of Reform and Modernization, 1880-1946*, Stanford, Calif., 1969.
- E. Grötzbach, *Kulturgeographischer Wandel in Nordost-Afghanistan seit dem 19 Jahrhundert*, Meisenheim am Glan, Germany, 1972.
- Idem, *Afghanistan, eine geographische Landeskunde*, Darmstadt, 1990.
- A. M. Hamilton, *Road through Kurdistan. The Narrative of an Engineer in Iraq*, London, 1958.
- W. Heyd, *Histoire du commerce du Levant au Moyen-Âge*, 2 vols., Leipzig, 1886.
- C. Issawi, "The Tabriz-Trabzon Trade, 1830-1900. Rise and Decline of a Route," *IJMES* 1, 1970, pp. 18-27.
- Idem, *The Economic History of Iran, 1800-1914*, Chicago, 1971.
- W. Korby, *Probleme der industriellen Entwicklung und Konzentration in Iran*, TAVO B 20, Wiesbaden, 1977.
- G. Kortum, *Die Marvdasht-Ebene in Fars. Grundlagen und Entwicklung einer alten Bewässerungslandschaft*, Kiel, 1976.
- G. Le Strange, *Baghdad during the Abbasid Caliphate*, Oxford, 1900.



A. H. Nayer-Nouri, *Iran's Contribution to the World Civilization*, 2 vols., Tehran, 1350 Š./1971.

X. de Planhol, "Un village de montagne de l'Azerbaïdjan iranien, Lighwan," *Revue de Géographie de Lyon* 35, 1960, pp. 395-418.

Idem, "Une rencontre de l'Europe et de l'Iran. Le vin de Shirāz," in D. Bogdanovic, ed., *Iran*, Paris, 1972, pp. 51-55.

Idem, "Le vin de l'Afghanistan et de l'Himalaya occidental," *Revue Géographique de l'Est* 17, 1977, pp. 3-26.

Idem, *Les nations du Prophète. Manuel géographique de politique musulmane*, Paris, 1993.

Marco Polo, *The Book of Ser Marco Polo*, ed., Y. Yule and H. Cordier, 3 vols., London, 1921.

A. Pour-Fickoui and M. Bazin, *Élevage et vie pastorale dans le Guilān (Iran septentrional)*, Paris, 1978. P. Rausch von Traubenberg, *Hauptverkehrswege Persiens*, Halle, 1890.

P. C. Salzman, "Movement and Resource Extraction among Pastoral Nomads. The Case of the Shah Nawazi Baluch," *Anthropological Quarterly* 44, 1971, pp. 185-97.

Idem, "Multi-Resource Nomadism in Iranian Baluchistan," in W. Irons and N. Dyson-Hudson, eds., *Perspectives on Nomadism*, Leiden, 1972, pp. 60-68.

E. H. Schafer, *The Golden Peaches of Samarkand. A Study of T'ang Exotics*, Berkeley and Los Angeles, 1963.

G. Schweizer, "Nordost-Azerbaidshan und Shah Sevan-Nomaden," in *Strukturwandlungen im nomadisch-bäuerlichen Lebensraum des Orients*, Geographische Zeitschrift, H 26, Wiesbaden, 1970, pp. 81-148.

F. E. Comte de Sercey, *Une ambassade extraordinaire en Perse en 1839-1840*, Paris, 1928.

F. Stolze and F. C. Andreas, *Die Handelsverhältnisse Persiens mit besonderer Berücksichtigung der deutschen Interessen*, Petermanns Mitteilungen, suppl. 77, Gotha, 1884-85.



W. Tomaschek, "Zur historischen Topographie von Persien," *Sb. der Phil.-hist. Kl. der Kaiserlichen Akademie der Wissenschaften zu Wien* 102, 1883, pp. 145-231; 108, 1885, pp. 561-652.