



Islamic Republic of Iran
Ministry of Industry,
Mine and Trade

A Brief List Of Opportunities For Investment On Mining Activities In Iran



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In The Name Of God

وَالأَرْضَ مَدَدْنَاهَا وَأَلْقَيْنَا فِيهَا رَوَاسِيَ وَأَنْبَتْنَا فِيهَا مِنْ كُلِّ شَيْءٍ مَّوْزُونٍ

we have spread out the earth and set upon it firm mountains. everything
we have caused to grow therein is justly weighed

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Introduction

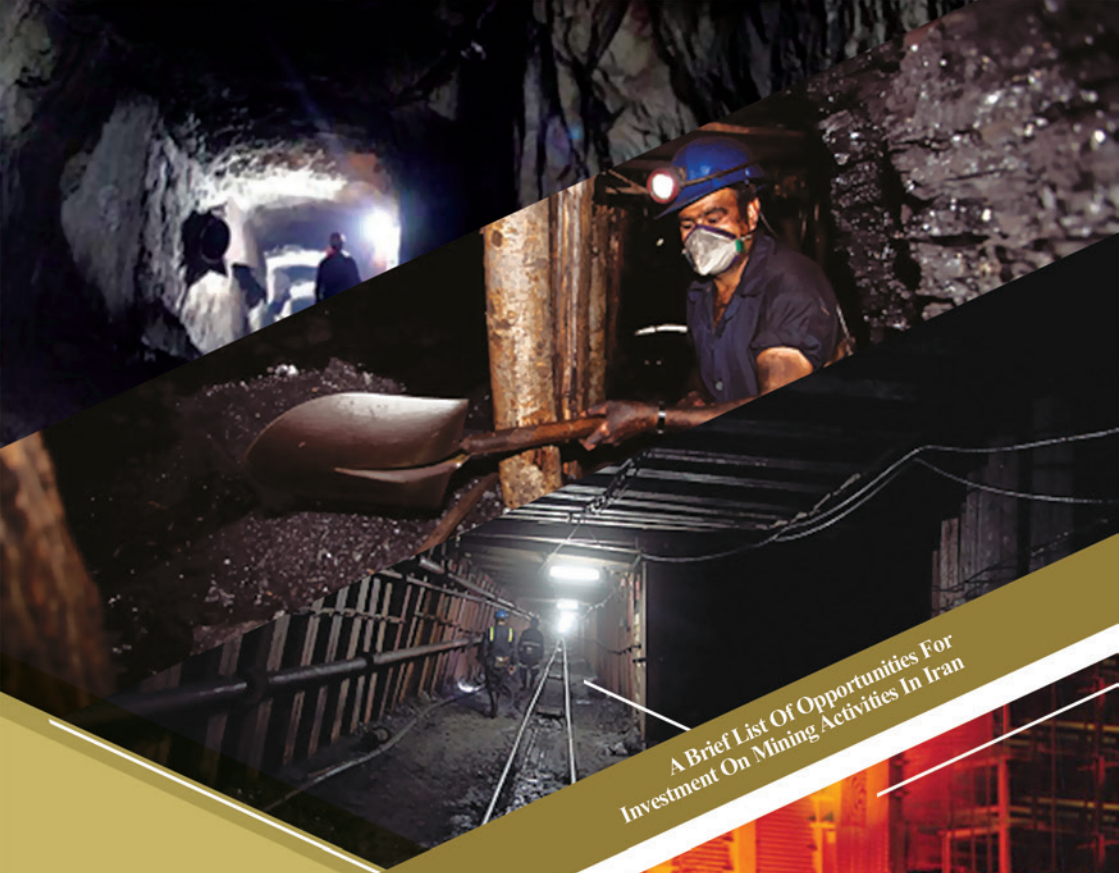
In the Name of God

Considering the changes and new policies that have been made in the Ministry of Industries and Businesses since 2013, in order to enhance the business environment and provide expert information to the applicants for mining industries facilities, the Bureau of Mining Industries has started investigations to identify investment advantages. It has conducted pre-feasibility studies of the development of mining industries in different provinces. This bureau works with the Department of Mines and Mining Industries of the Ministry of Industries and Businesses to identify investment opportunities and potentials in the development of mining industries and to improve productivity and the existing scientific approach.

In addition, in order to identify different products of mining industries and investment potentials of downstream industries, this bureau has conducted applied and strategic studies on products such as steel, copper, lead, zinc, chinaware, tile, ceramic, refractory products and gemstones. Titles of these studies, which were aimed to guide and inform investors of this field, are presented through the following table to the interested parties, practitioners and investors.

Titles of strategic studies and the research on the investment potentials of mining industries and downstream industries

#	Title
1	Research, strategy formulation, and preparation of action plans for the lead and zinc industry
2	Research, strategy formulation and preparation of action plans for the chinaware industry
3	Research for formulation of strategy and action plan for the gemstone and semiprecious stone industries in Iran
4	Research for formulation of strategy and action plan for ferroalloy industries
5	Research for formulation of strategy and action plan for the copper and downstream industries
6	Research for formulation of strategy and action plan for refractory materials industries in Iran
7	Applied research on the formation of new formations in mining industries lacking associations
8	Feasibility and applied studies on the formation of export holdings in mining industries
9	Applied studies on the development of economic and mathematical models of production and consumption for the mining industries
10	Formulation of scrap aluminum supply strategies for the country
11	Formulation of scrap copper supply strategies for the country
12	Formulation of scrap steel supply strategies for the country
13	Identification of energy-efficient production technologies and processes suitable for conditions after targeting mining industries and relevant technologic solution (steel industries, aluminum industries, copper, alloys, cement, brick, tile and ceramic, glass, lime and plaster)
14	<p>Studies of investment in the value chain of lead and zinc for providing a balance between the production and consumption of lead and zinc in the country:</p> <ul style="list-style-type: none"> - Preliminary technical and economic feasibility studies of production of rice products - Preliminary technical and economic feasibility studies of zinc dust and relevant colors - Preliminary technical and economic feasibility studies of chemical products of zinc and lead - Preliminary technical and economic feasibility studies of secondary lead and metallic lead products and artifacts (alloys, rolled and stretching zinc products and sections)



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#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement and white cement plants	Ardebil Province, which is located in the vicinity of Republic of Azerbaijan, hosts considerable reserves of lime and raw materials required for the production of white cement. This province also has links to the entire northwest of Iran as well as domestic and foreign markets. Therefore, it is generally possible to produce different mineral products of cement (especially special cement or white cement) in this province.
3	Silica processing (cup glass and glass products industries)	The existence of silica mines in the province or in the adjacent provinces, the economic and social potentials of the province, the imports of glass, the domestic need for glass products and the possibility of exports are the reasons calling for investments in this field.
4	Extraction and processing of basalt mineral	Due to the existence of basalt mineral resources and the significance and prevalent use of this mineral in mineral industries, investments in this sector are recommended. This rock is supplied in the form of rubble and crushed stone, which are used for construction purposes (e.g. in road infrastructure, column fills, etc.). This rock is incorporated as casts into electric insulations, linings, industrial paving, construction rocks, and abrasion-resistant materials. In addition, it is also used in tile and ceramic products with acid- and base-resistance and high abrasion resistance. It is also used in the linings of tanks, pipes, and mixers and pavements of industrial conduits.
5	Extraction and processing of perlite mineral	Ardebil Province has the second largest perlite mineral resource in Iran (2700 thousand tons), with East Azerbaijan Province hosting the largest perlite resource. Considering the numerous applications of this substance in various industries and the relatively high added value of processed perlite, it is possible to increase investments in this industry. Some of the applications of perlite include construction materials (e.g. precast components, conventional plasters, fill insulators, soundproof bricks, etc.), gardening (soil and grass enhancement, and growth of plants and seeds), industry (e.g. fills, thermal insulations, refractory materials, explosives, absorbents, precast products, drilling mud, filter aids and filters), chemical industry (e.g. production and treatment of sugar, pharmacy, production of drinks, water treatment) and agriculture (as fertilizer, pesticide, herbicide, and forage).
6	Light-weight construction materials	The existence of numerous shell, pozzolan, and perlite mines in the province and the high consumption of these light-weight materials explain investments in these minerals.

#	Investment	Cause Description
7	Antique artifacts and stone blocks made of wastes of decorative stone mines	A large volume of waste decorative rocks exist in the mines of the province. Processing of these rocks is accompanied by a very high level of added value. Moreover, in addition to the domestic market there is a possibility of exporting these products.
8	Upgrading iron minerals	The existence of iron mines in the Nir and Meshginshahr counties and the constant need for this ore explain the necessity of upgrading it.
9	Discovery of metal elements	Results of previous studies and the presence of metal indices explain the need for valuing investments in the discovery of these elements.
10	Production of treated pottery	The availability of raw materials required for the production of this brick and the possibility of exporting this product to the neighboring countries (including Azerbaijan) are appropriate reasons for encouraging investments in this field.
11	Extraction and processing of nepheline syenite mineral for producing alumina	Although Iran is among the top 20 countries by mineral reserves, it does not host a considerable bauxite reserve to be used in the production of aluminum. Hence, in order to prevent the growth of bauxite imports to Iran, it is necessary to use alumina powder in the production of this metal. The material required for the production of alumina is nepheline syenite, which fortunately has been recently discovered in Ardebil Province.
12	Extraction and processing of dolomite, bentonite, diatomite and alunite minerals	Recently, new resources of dolomite, bentonite, diatomite and alunite have been discovered in this province. These reserves can both be used in downstream industries and can be exported to other provinces. Therefore, investment in the processing and extraction of these minerals is explainable. These materials are of numerous uses in mineral industries including the following: - Dolomite: Metallurgical industries, refractory materials industries, glass industries, ceramic industries, paint industries, agriculture - Bentonite: Casting, well drilling, iron pelletizing, treatment and bleaching, detergents, pharmacy, hygroscopic (for the construction of artificial islands) - Diatomite: Filtration industries, paint industries, paper industries, abrasives, chinaware industries, refractory materials production, and insulation production. Alunite: It is the main ingredient of potash and is of particular use in the leather industries, paint industries, polish industries, and medical industries. It is one of the ingredients of blood coagulants. It is also used as a filler and filter in the production of some kinds of paper, chemical fertilizers, and white pigment in paints.



#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Considering the raw materials available in this province for the production of cement and the import of cement from neighboring provinces, it is possible to produce different types of cement (Portland, colored, etc.) in the province so as to supply domestic demands and export these products to Iraq and countries in the vicinity of Persian Gulf through shipments.
3	Production and exports of chinaware, tile, ceramic and mosaic products	Import of raw materials required for the production of chinaware, tile, ceramic and mosaic from neighboring provinces (especially Fars and Khuzestan provinces) provides for production of the aforementioned products with high quality using high technology. It also creates a chance for the export of these products to the neighboring countries and countries in the proximity of Persian Gulf.
4	Collection of aluminum and iron scraps	Considering the prevalent use of aluminum and iron in countries located in the Persian Gulf region and the abundance of aluminum and iron scraps, it is possible to take advantage of the proximity of sea transport routes to collect iron and aluminum scraps and transform them into ingots. It is also possible to send these scraps to the Markazi and Hormozgan provinces to be turned into ingots.
5	Minerals containing rare earth elements	One of the resources of rare earth elements in Bushehr Province is the mineral phosphate reserves. Therefore, it is possible to set the scene for the production of chemical fertilizer, phosphoric acid and matches by extracting and processing the contents of these mines.
6	Decorative and antique stones	Considering the number of construction rock factories in Bushehr Province and the resulting wastes (which are in the form of pebbles) it is possible to produce new attractive products by recycling these wastes and converting them into decorative and antique stones. The result of this process is an increase in employment and export of the resulting handicrafts. Decorative stones are of numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.



Chaharmahal & Bakhtiari PROVINCE

#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Considering the existence of lime reserves in the Chaharmahal and Bakhtiari Province, the location of this province (which is in the west of Iran), the links between this province and other parts of the country, and the access this province provides to the export target markets of Iraq, it is possible to produce different mineral products of cement (especially special cement) in this province.
3	Opening new chinaware and sanitary chinaware plants	The mineral reserves in the province or the adjacent provinces (which can supply the raw materials), the considerable imports of chinaware and sanitary chinaware, future domestic demands, and the possibility of exporting these products are the reasons explaining investments in this field.
4	Cup glass and glass products industries	The existence of silicon mines in the province or the proximity of this province to the silicon mines in the adjacent provinces, the economic and social potentials of the province, imports of glass, the nation's need for these products and the possibility of exporting these products explain these investments.
5	Decorative and antique stones	Considering the abundance of construction rock factories in the province and the great deal of wastes produced by these factories in the form of pebbles, it is possible to produce new and attractive products by recycling these wastes and transforming them into decorative and antique stones. Consequently, in addition to increased employment, the export of relevant handicrafts is also developed. Decorative stones are of numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
6	Ores containing rare earth elements	One of the rare earth elements available in the province is bitumen, which is found in mineral reserves. It is possible to take steps toward production of the drilling mud of oil wells by extracting and processing the bitumen extracted from these mines.
7	Copper industries	The copper mine reserves in this province, which are not extracted and processed yet provide for investments in this industry and its development.
8	Refractory materials production industries	The existence of raw materials required for the production of refractory materials (including argillite and bauxite) in the province and the ample need of the country for these products explain investments in this industry as well as its development.
9	Shale brick industries	Due to the existence of considerable resources of shale in the

#	Investment	Cause Description
		province as well as the high quality of these resources, it is recommended to make investments in the brick production industries. These investments are also economically explainable.
10	Processing of dolomite mineral reserves	The existence of satisfactory dolomite reserves in the province has set the scene for investments in industries operating in the field of production and grading of dolomite and dolomite firebricks.
11	Lime production industries	The existence of satisfactory mineral resources in the province has provided for investment in the production of different types of lime (especially micronized lime).



East Azerbaijan

PROVINCE

#	Investment	Cause Description
1	Production of alumina powder using nepheline syenite mineral	It is aimed to produce 1.5 million tons of aluminum in 2025 in Iran. In addition, Iran lacks mineral deposits of bauxite, which are imported to Iran through the required exchange funds. Hence, considering the existence of nepheline syenite mines all over East Azerbaijan Province, it is possible to provide for the production of aluminum first of all in this province and later in the adjacent provinces such as Zanjan and West Azerbaijan provinces. This is achieved by making the necessary investments, extracting and processing nepheline syenite mineral, and producing alumina powder.
2	Production of copper cathode using Sungun copper resources.	It is aimed to increase the annual production of copper cathode up to 260 thousand tons in Iran. In addition, about 18.7% of the sulfide ore demand of Iran is supplied by Soongoun copper resources. Hence, there is a good potential for the production of copper cathode in the copper mines of Soongoun in East Azerbaijan Province and adjacent provinces.
3	Production of different types of cement	Studies indicated that cement consumption is higher than cement production in East Azerbaijan Province and provinces adjacent to it. It is also not economic to import cement from other provinces due to the high transportation costs. Hence, considering the market, the existence of sources of lime in this province, and the possibility of exporting lime to the neighboring countries, establishment of cement plants is economically explainable.
4	Production of different types of tiles and ceramics	This province hosts tile and ceramic plants and the relevant production technologies. It is also adjacent to the Azerbaijan and Armenia as well as Nakhchivan Province. In addition, it is intended to provide for new investments or development of production of the existing plants, which are aimed at increasing exports to the aforementioned countries or other countries. Hence, this province is known as a potential source of improving the production of mineral industries operating in the field of tiles and ceramics.
5	Production of sanitary chinaware	The existence of mineral resources such as kaolin, special fire clay, and feldspar in the provinces as well as the presence of expert forces for the production of sanitary chinaware and exports of products to adjacent countries and other provinces have created the chance for investments in the development of production of chinaware in the province.
6	Production of decorative and antique stones and other productions associated with stone industries	Considering the existence of lime stone and mineral stone mines as well as mineral rock mines and stone industries (which are dependent on these mines), it is possible to use the wastes of stone industries (which come in the form of rubbles) to start the production of decorative and antique stones. These products are produced as handicrafts and with the aid of semi-skilled forces (especially female forces). In addition, the export of products to the adjacent countries and other provinces of Iran has also contributed to the increased employment and productions of mineral industries.

#	Investment	Cause Description
7	Production of alloy steel	In addition, due to the existence of iron mines in the province, the high stand of the province in the production of alloy steel (fourth stand) and the possibility of export of this product to the adjacent countries (and inside of the country), it is potentially possible to develop the production of alloy steel in the province.
8	Productions of mineral industries using industrial ores	There is a significant collection of industrial ores including barite, zeolite, antique stones, kaolin and talc. If, considering the various applications of these ores, they are turned into mineral and non-mineral relevant industries, the province gains a considerable amount of added value. In addition, this conversion increases employment and provides chances for exports to the countries of the region and the world as well as internal consumption. A detailed list of the mentioned mineral industries is included in the appendix.
9	Perlite processing	Processed perlite is of numerous uses in different industries. For example, it is used in the production of construction materials, agricultural products, abrasives, thermal insulations, refractory materials, etc. In addition, it has a relatively high added value. Hence, the existence of considerable resources of this substance in the province is a reason for increased investments in this product.





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1	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Since Fars Province possesses considerable reserves of lime, marl and gypsum and since it is located in the south of Iran near the ports of the south, it is possible to produce different mineral products of cement (especially special cement) and paper.
3	Opening new tile and ceramic plants	It is possible to produce tile and ceramic mineral products considering the considerable reserves of fire clay and industrial soil and other raw materials in the province (which supplies 90% of fire clay and industrial soil of the country), the location of this province (in the south) and its proximity to southern ports of Iran.
4	Gypsum	It is possible to produce high-quality construction materials as well as petrochemical products and plaster powder for export.
5	Decorative and antique stones and graded rock flour	Since Fars Province hosts stone cutting factories and since these factories produce a great deal of waste in the form of pebbles, it is possible to produce and present new and attractive products by recycling the wastes and turning them into decorative and antique stones. As a result, employment is increased and export of handicrafts is also escalated.
6	Industrial minerals	One kind of industrial mineral available in Fars Province is kaolin. It is possible to produce tile and ceramic products as well as chinaware and sanitary chinaware by extracting and processing these kaolin mines.
7	Table and industrial salt	There are considerable resources of salt and salt domes in the south of Fars province. These resources have created a potential for investments in the related industries and exports of domestic products.
8	Dolomite	Discovery of dolomite-rich reserves in Fars Province (especially in its southern part) can set the scene for investments in the production of raw materials of steel industries (firebrick), magnesium ingots, etc.
9	Extraction and processing of iron ore	The potential and actual reserves of iron ore in the province and the need of iron and steel factories for iron ore explain investments in this sector. It is recommended to invest in this field first to discover, extract and process iron ore and then to open iron and steel ingot product units if possible.
10	Extraction and processing of manganese	This province hosts mineral reserves of manganese, which is of many uses in different industries (including steel and metallurgy industries, ferroalloy production, battery production, chemical industries, paint industries, etc.). In addition, processing of this mineral brings

#	Investment	Cause Description
11	Chromite	about a relatively high added value. Hence, it explains further economic investments in this industry. Fars Province is among the provinces that play a significant role in the production of chromite. Currently, all of the high-karat chromite production of this province is exported. Hence, establishment and operation of metallurgical industries feeding on chromite will lead to a high economic value. In addition, the country and this province lack chromite processing units.
12	Nickel and associated alloy industries	The discovery of new and large reserves of nickel in the province and operation of nickel alloy steel industries can promise the development and flourishing of steel and associated industries.
13	Hydrated lime	The abundant resources of pure calcium carbonate and lime in Fars Province can provide the production and export of hydrated lime. This material is of use in building, steel and other industries.
14	Refractory material and thermal insulation industries	It is recommended to invest in this field due to the existence of satisfactory resources of mineral raw materials used in the production of refractory products (e.g. fire clay, kaolin, feldspar, etc.), the nation's need for these products, and the possibility of export of these products.



#	Investment	Cause Description
1	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	It is generally possible to produce mineral products of cement (especially special cement) and paper in Gilan Province because of the considerable reserves of lime in the province, the geographical location of the province (in the north), and the waterways between this province and other countries.
3	Opening new tile and ceramic plants	This province and neighboring provinces host resources of industrial soil and other raw materials. In addition, Gilan is located in the north of Iran and has waterways to other countries. Therefore, it is possible to produce mineral products of tile and ceramic in this province.
4	Opening iron and steel basic products manufacturing plants	Although this province lacks mineral reserves used as raw material in this industry, it seems reasonable to open new units considering the geographical position of the province (in the north) and its accesses to ports and means of sea export.
5	Cup glass and glass products industries	The following reasons explain investments in these industries: silica mines in the province or adjacent provinces; economic and social potentials; imports of glass; country's demand for glass products; and chances of export.
6	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
7	Access to water transport and seaports	In general, the seaports and free economic zones (e.g. Anzali) in the province have created a good potential for investments in this province.
8	Extraction and processing of mica mineral reserves	The mineral reserves in the province and the demand of the electronic and electric industries for this mineral have provided for further investments in the extraction and processing of this mineral.



#	Investment	Cause Description
1	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Golestan Province embraces considerable reserves of lime. This province is located in the north of Iran and has a common border with Turkmenistan. It also provides accesses to ports and seas and has links to other parts of Iran. Therefore, it is possible to produce different mineral products of cement (especially special cement) in this province.
3	Extraction and processing of iodine	The mineral reserves in this province (which supply the required raw materials), future demands of the country, and the possibility of exporting this mineral to foreign countries have provided for further investments. Applications of iodine include the following: foods (14%); chemical industries (photography; 19%); and production of disinfectants (20%). Forty-seven percent of iodine reserves is also used in other industries for the production of catalysts, medical products (antimicrobial agents), herbicides, bioxet [bioxide?, bauxite?], X-ray, etc.
4	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
5	Availability of ports, accesses to sea transport, and proximity to Turkmenistan	Among the most important potential of this province are its accesses to the sea and its common border with Turkmenistan. In addition, since Golestan and Turkmenistan have common and similar cultures, it is possible to export products to this country and increase investments in this province.
6	Extraction and processing of sand and gravel	Golestan Province has rich reserves of sand and gravel. Moreover, due to the climatic conditions of this province, concrete is widely used as a construction material, which is prepared using ample amounts of sand and gravel. Therefore, investment in this region is a top priority.
7	Extraction and processing of coal	Considering the mineral reserves of this province (which supply the required raw materials) and the future demands of domestic mineral industries (especially iron and steel ingot production industries), formation of new unit in the province is an investment priority.

Hamedan

PROVINCE

#	Investment	Cause Description
1	Opening new iron and steel plants considering raw materials mines	This province hosts mineral reserves of iron ore. The country also needs iron and steel products as well as ferroalloys (such as ferrosilicon). In addition, this province is capable of producing more of the aforementioned products. Therefore, it is necessary to increase investments in these industries so to develop and expand them.
2	Opening new tile and ceramic plants	There are considerable reserves of feldspar and dolomite in Hamedan Province, which is located in the west of country. There are also links between this province and the western and central parts of Iran. Therefore, it is possible to produce mineral products of tile and ceramic in this province.
3	Opening new chinaware and sanitary chinaware plants	There are significant reserves of minerals in this province. Therefore, considering the considerable imports of chinaware and sanitary chinaware as well as the future demands of the country and chances of exports, it is recommended to invest in this field.
4	Cup glass and glass products industries	There are silica mines in this province or adjacent provinces. This province has also economic potentials. Therefore, it is recommended to invest in this field considering the country's needs and possibility of exports and productions.
5	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present peripheral products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
6	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace non-standard or low-standard imports with domestic products and to export domestic products to the region's states.
7	Production of magnesium from dolomite	It is possible to open a new magnesium production unit in this province considering the rich and high-quality reserves of dolomite in the south of Hamedan Province.
8	Production of metallic silicon	It is possible to open a silicon and metal production unit considering the high-quality silicon reserves in the province.



Hormozgan PROVINCE

#	Investment	Cause Description
1	Collection of domestic and imported aluminum scrap to turn it into secondary aluminum	Al-Mahdi and Hormozal companies, which are equipped with the technology of turning aluminum scrap to secondary aluminum, are located in Hormozgan Province. In addition, since the country also needs aluminum ingots, this investment is necessary.
2	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement plants	There are considerable reserves of lime in Hormozgan Province, which is located near sea and provides access to the free ports and economic zones of the country. It also has links to other parts of Iran. Therefore, it is possible to produce mineral products of cement (especially special cement) in this province.
4	Opening new tile and ceramic plants considering the reserves of raw materials	There are reserves of lime and other raw materials in Hormozgan Province which is located near sea and provides accesses to ports and free economic zones of the country. It also has links to other regions of the country. Hence, it is possible to produce mineral products of tile and ceramic in this province.
5	Investment in mineral industries of the Persian Gulf	Hormozgan Province is the most important port and export terminal of the country. It has a great potential for the production and export of mineral industries products (such as iron, steel, aluminum, copper, cement, glass, lead, zinc, chinaware, tile, ceramic, ferroalloys, refractory materials) to the Persian Gulf countries, region's states, southeast Asia and even the world.
6	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased. Decorative stones have numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
7	Industrial minerals	There are different mineral reserves in the province. Therefore, it is possible to extract and process minerals from these mines to produce ignition stone, abrasive compounds, glass industries arches, and ceramic.

Ilam PROVINCE

#	Investment	Cause Description
1	Opening new cement and lime plants	Considering the existence of considerable resources of lime in Ilam Province, the location of this province (which is at the heart of Iran), and the links between this province and other parts of Iran, it is generally possible to produce mineral products of different types of cement (especially special cement) and paper.
2	Opening plaster plants	The existence of considerable resources of gypsum in Ilam Province, the proximity of this province to Iraq, and the links between other regions of Iran and national borders have provided for production of mineral plaster product.
3	Extraction and processing of shale minerals	Considering the mineral resources available in Ilam Province and the fact that only two provinces in Iran (i.e. Isfahan and Ilam) host shale mines, it is possible to turn this province into the hub for production of this mineral through proper investments.
4	Silica sand industries	Only the silica sand mines in Ilam and Kerman provinces are the priorities for investments in this field.
5	Bitumen processing	One type of mineral available in Ilam Province is bitumen. It is available in the form of mineral mines that can be extracted and processed for the purpose of production of refined bitumen.





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#	Investment	Cause Description
1	Production of high-tech high-quality construction rocks	Imports of high technology and ability of expert human forces to produce high-quality and high-standard construction rocks as a substitute for construction rocks imported from abroad to the region.
2	Opening new cement plants	The existence of considerable reserves of lime in Isfahan Province, the adjacency of the province at the heart of the country, and the links between this province and all other regions of Iran have provided the chance for the production of mineral products of cement (especially special cement) and paper.
3	Opening new feldspar processing plants	Most of the feldspar resources in the province cannot be introduced into the market due to their hardness and high iron contents. Seemingly, the establishment of one or several process units with the ability to micronize and remove iron from feldspar can provide a chance to the aforementioned mines to flourish. It can also set the scene for the exports of products.
4	Opening new chinaware and sanitary chinaware factories	The mineral reserves in Isfahan Province, as the source of raw materials and considerable imports of chinaware and sanitary chinaware, provide a suitable chance of investment. These reserves not only supply future domestic demands but also set the scene for the exports of these products.
5	Ferromolybdenum production industries	Considering the discovery of the new two indices of porphyry copper-molybdenum in the province, it seems possible to process copper and produce molybdenum in order to produce ferromolybdenum ferroalloys.
6	Mineral industries in the Salafchegan special free economic zone	Considering the numerous facilities predicted for the Salafchegan special free economic zone and adjacency of this region to Isfahan Province, a part of new investments aimed for Isfahan Province shall be dedicated to this region.
7	Decorative and antique stones	Considering the abundance of construction rock plants in Isfahan Province and the high amount of wastes, which are in the form of pebbles, it is possible to recycle the wastes and convert them to decorative and antique rocks with an aim to produce new and attractive products. Consequently, in addition to an increase in employment, a chance is created for the export of handicrafts. Decorative rocks are of numerous uses in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
8	Existence of iron and steel production plants	Considering the presence of the Mobarakeh Steel Company and Isfahan Iron Company in this province as well as the fact that Isfahan has the highest share of steel and iron productions, it is economically rational to invest and develop this industry in the province.
9	Extraction and processing of metals other than iron, copper and aluminum	Due to the existence of considerable resources of gold in the province and the need of the country for this product, it is necessary to make more investments in this field. Other metals are also available in this province in addition to gold, such as tungsten; this poses a higher potential for further investment and planning.

#	Investment	Cause Description
10	Presence of industrial soil indices	Given that only 7, out of 12, industrial soil indices are extracted and processed in the province, it is necessary to concern, invest in, and extract the other 5 indices.
11	Industrial ores	Two types of industrial ores available in this province include potash and kaolin. It is, therefore, possible to take actions for the production of tile, ceramic, chinaware and sanitary chinaware as well as the production of agricultural and food products by extracting/processing these mines.
12	Opening new iron ore unit	It is possible to make investments in order to collect the iron ore in the region and the adjacent regions by establishing a central process unit composed of ore dressing and pelletizing units next to the Isfahan Iron Company and Mobarakeh Steel Company and by purchasing low-karat iron ore of the province at a price comparable to foreign markets. These investments can prevent the export of mineral raw materials from the country.
13	Discovery of new iron ore reserves in the province	Since the current iron ore reserves of the province do not meet the demands, it is necessary to conduct new studies and discoveries with the aid of the Geology Organization and the private sector so as to find hidden reserves and assess them as new opportunities for the province.
14	Government support instead of government intervention with the market of minerals especially construction rocks and decorative stones	The government shall avoid direct interventions with the market of minerals and it is recommended to use its regulatory power instead of its support power. Government support can prevent the exports of raw decorative stones by providing special facilities to the owners of rock industries for participating in international exhibits. This is aimed to make these industries familiar with high technology. It is also possible to present units that use these technologies with awards



Kerman PROVINCE

#	Investment	Cause Description
1	Copper production and copper products industries	The largest copper mine is in Kerman province and it hosts copper production and copper products industries. In addition, the most important industry in this province is currently the copper industry. Hence, further investments and development of this industry is the first priority.
2	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement and paper plants	It is possible to produce different mineral products of cement (especially special cement) considering the availability of considerable reserves of lime in the province, adjacency of this province to Hormozgan and Sistan and Baluchestan provinces, accesses to the Persian Gulf ports, and links from this province to other parts of Iran.
4	Opening new iron, steel and ferroalloy plants	Kerman Province embraces considerable reserves of iron ore and coal as the raw materials for the production of steel and iron products. In addition, there are mines of chrome, chromite and other raw materials used in the production of ferroalloys. This province also provides access to the Persian Gulf ports for exports. Hence, it is economic to make investments in this industry.
5	Opening new Chinese stone processing plants	Considering the mineral reserves available in the province (which supply raw materials), significant imports of chinaware and sanitary chinaware, future demands of the country and the possibility of exports, it is necessary to extract and process more Chinese stone in the country.
6	Accessing Persian Gulf ports especially Bandar Abbas	It is economically explainable to invest in mineral industries due to the presence of ports near this province. This is achieved by opening new factors in the vicinity of these ports and accessing free waters to benefit from easy exports.
7	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased. Decorative stones have numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
8	Industrial minerals	One of the industrial minerals available in the province is bentonite. It is possible to produce iron pelletizing products, artificial islands, casting products, and drilling mud by extracting and processing bentonite from these mines.

Kermanshah PROVINCE

#	Investment	Cause Description
1	Collection of aluminum scrap produced in the country and exporting it to foreign countries where it is turned into secondary aluminum	Due to the presence of production units of aluminum in Kermanshah Province, the province's possession of the technology for producing these products (especially cable), and the country's need for aluminum products, it is necessary to make this investment.
2	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement plants	There are considerable resources of lime in Kermanshah Province, which is located in the west of Iran and provides access to the target export markets in Iraq. Therefore, it is possible to produce different mineral products of cement (especially special cement) in this province.
4	Opening new tile and ceramic plants	It is possible to produce mineral products of tile and ceramic as there are resources of lime and other raw materials in the province, which is located in the west of Iran and provides access to the export markets of Iraq.
5	Opening new chinaware and sanitary chinaware	Considering the reserves of lime and other raw materials in the province, the location of this province (at the heart of Iran), the proximity of this province to Tehran Province (as the largest domestic market), and the links from this province to other parts of Iran, it is possible to produce tile and ceramic mineral products in this province.
6	Cup glass and glass products industries	Due to the presence of silica mines in this province or adjacent provinces, the economic and social potential of this province, the imports of glass, the demand of this country for glass and the possibility of exports, it is economic to invest in this industry.
7	Industrial minerals	One of the rare earth elements available in his province is bitumen. It is possible to take steps toward the production of refined bitumen by extracting and processing the corresponding mines of bitumen.
8	Iron and steel production industries	Due to the following factors this province is the top priority for investments among other provinces: distance from the nearest sea border (port); the number of iron mines; distance from the nearest province; distance from the nearest unit; population (production of steel scraps); and the capacity of the province for production of alloy steel.
9	Plaster production industries	Considering the mineral reserves of the province (which supply raw materials), future domestic demands and possibility of exports, it is economic to invest in this province.
10	Extraction and processing of dolomite	It is necessary to invest in this industry due to the presence of mineral reserves of dolomite as well as numerous applications of

#	Investment	Cause Description
11	Production of natural bitumen	<p>dolomite. Dolomite contains high levels of MgO and therefore is among the most important refractory raw materials. It is of high importance to the steel and iron industry and production of alkaline refractory products. Other applications include tile and ceramic production, paint industry, glazing industry, chinaware production, tier production, etc.</p> <p>Considering the capacity and potential of this province for the production of natural bitumen, the availability of raw materials, and the facilities for the production of natural bitumen, it is recommended to invest in this sector.</p>



#	Investment	Cause Description
1	Production of high-tech and high-quality construction rocks	The existence of satisfactory resources of different types of construction rocks, imports of high technologies, and ability of expert human forces to produce high-quality and high-standard rocks explain investments in this industry with an aim to replace imported construction rocks with domestic products and to export these products to foreign countries.
2	Opening new cement plants	The existence of considerable reserves of lime in Khuzestan Province, the location of this province (in the south of Iran), and the links between this province and all of the Persian Gulf countries have provided for general production of mineral products of cement (especially special cement and oil well cement).
3	Opening new tile and ceramic plants	Considering the existence of considerable reserves of lime and other raw materials in the province or in the adjacent provinces, the location of Khuzestan Province (in the south of Iran), and the links between this province and all other countries in the Persian Gulf region, it is possible to produce mineral products of tile and ceramic with an aim to export domestic products.
4	Opening plants for production of different types of sand and gravel	Considering the mineral reserves in this province (which supply the required raw materials) and the vast domestic and foreign target markets, it is possible to develop and advance this industry in this province.
5	Iron and steel industries	Due to the existence of the iron and steel ingot production plant in Khuzestan Province and the province's possession of a production hub in this country, it is economically possible to further investments and develop current activities regarding the target market.
6	Decorative and antique stones	Considering the existence of construction rock factors in Khuzestan or adjacent provinces and the resulting wastes, it is possible to produce new and attractive products by recycling and turning the wastes into decorative and antique stones. Therefore, employment grows and a chance is created for the export of relevant handicrafts.
7	Ores containing rare earth elements	One of the rare earth elements available in Khuzestan Province is phosphate. It is, therefore, possible to extract and process phosphate from corresponding mines with an aim to take and step toward the product of phosphoric acid, agricultural crops, food, and insecticide.
8	Existence of ports and waterfronts	Assuming that shipping is the cheapest and most suitable way of transport, the existence of ports and waterfronts as well as the water boundary of this province with the Persian Gulf countries create one of the most important chances for this province to export its products and those of other provinces.

Kohgiluyeh & Boyer-Ahmad

PROVINCE

#	Investment	Cause Description
1	Investment in aluminum and basic products industries	This investment is necessary due to the presence of aluminum industries in the province, the presence of bauxite mineral reserves, and the need of production units for alumina.
2	Production high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement plants	Due to the considerable reserves of lime in the province, the location of this province (at the heart of Iran), the links between this province and other parts of Iran, and the possibility of exporting products to Iraq, it is possible to produce mineral products of cement (especially special cement).
4	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
5	Industrial minerals	One of the rare earth elements available in this province is celestine. It is possible to extract and process celestine mines to produce the steel used in airplane body and TV CRT.
6	Extraction and processing of phosphate	Since this province has satisfactory mineral reserves of phosphate and the country needs this mineral it is necessary to further investments in this industry.
7	Extraction and processing of Celestine mineral	Certain reserves of celestine are present in this province (app. 40 thousand tons). Celestine is among the rare mineral with extremely high added value. It has numerous uses, but not great deals of celestine concentrate or clog is directly used in the industry. Almost all of the celestine produced in the world is originally in the form of strontium carbonate which is later used in the following industries: 1) color TV CRT and monitors; 2) production of industrial magnets, electroceramics, and ceramic ferrite; 3) production of strontium nitrate used in fireworks, flares, and tracer bullets. It is also used for refining and producing highly pure zinc ingots as well as crystallization. This mineral is also of use in aluminum pigment alloy industries, production of dehydrants and medical purposes.
8	Opening construction plaster and lime factories and brick production plants	Considering the plaster and limestone reserves in the province and the need of the construction sector in Iran for these construction materials, it is economic to make investment in this sector and consider it a priority. The aim of these investments is to produce plaster products (e.g. plaster panels), various forms of construction, medical, and industrial plaster powder, different types of lime

#	Investment	Cause Description
		(e.g. hydrated lime and precipitated calcium carbonate), and different kinds of graded powders and rigs. In addition to the aforementioned products, it is also possible to take steps toward production of different types of treated pottery and fire brick.





*A Brief List Of Opportunities For
Investment On Mining Activities In Iran*



#	Investment	Cause Description
1	Production of high-tech high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Considering the considerable reserves of lime in this province, the proximity of this province to Iraq, and the links between this province and west of Iran, it is possible to produce and export different mineral products of cement (especially special cement).
3	Opening new iron and steel plants	Kurdistan Province hosts considerable resources of iron ore and other raw materials. In addition, it is located in the vicinity of Iraq and has links to the west of Iran. Therefore, it is suitable for the production of basic iron and steel products.
4	Opening new ferroalloy production factories	The availability of mineral reserves in this province (which supply raw materials), the considerable imports of ferroalloys, future demands of the country for these products, and the possibility of exports explain investments in this sector.
5	Pumice production industries	Future investments in this province are generally explained by the considerable reserves of pumice in the province, the economic and social potentials of this province, the possibility of export and national demands.
6	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
7	Opening AAC concrete production plants	It is recommended to invest in this sector considering the silica reserves in the province.
8	Opening gold plants and downstream industries	It is recommended to invest in this sector due to the availability of gold reserves in Saqqez-Baneh and Qorveh regions.

Lorestan PROVINCE

#	Investment	Cause Description
1	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Lorestan Province embraces considerable reserves of lime. It is located in the west of Iran and has links to other parts of Iran. Moreover, this province is near Iraq which is an export market for additional products. Therefore, it is generally possible to produce different mineral products of cement (especially white cement) in this province.
3	Opening new chinaware and sanitary chinaware plants	Considering the mineral reserves available in the province (which supply the required raw materials), the considerable imports of chinaware and sanitary chinaware, future demands of the country and possibility of exports, investments in this industry are recommended.
4	Investment in decorative and antique stones	About 25% of decorative stone mines of the country are situated in Lorestan Province. This has created an exceptional chance and potential for development of natural resources of this region. This province owns about one fourth of decorative stone reserves of the country and thus has the first rank among other provinces. Lorestan produces 22% of Iran's and 3% of the world's stone products.
5	Investment in rare earth elements	One type of rare earth element available in the province is tungsten. It is possible to extract and process the existing tungsten mines to produce stainless steel products, construction architecture and different kinds of appliances.
6	Extraction and processing of talc	Lorestan Province owns relatively satisfactory talc reserves. Talc is a mineral with diverse application in different industries. For example, it is used in agriculture, animal husbandry, roofing industries, asphalt fillers, etc. In addition, it is a relatively rare mineral with high added value.
7	Extraction and processing of dolomite	About 5200 thousand tons of dolomite is available in Lorestan Province. This mineral is of use in the production of steel as well as calcite dolomite. It is also used in metallurgical industries (ferrous and non-ferrous), agriculture (as fertilizer and soil regulators), extraction of magnesium from seawater, refractory materials industries (fireclay brick, cement, etc.), glass industry, construction (tile production, cast concrete, etc.), tier fills production, polish production, ceramic production, etc.
8	Opening new plaster plants	Lorestan Province owns considerable reserves of plaster (34897 thousand tons), which is of numerous uses. It is for example used as a construction material or an input in cement production plants. It is recommended to advance investments in this sector considering the exports of products to target markets, especially the Iraqi market.

#	Investment	Cause Description
1	Collection of aluminum scrap inside the country or import of aluminum scrap from abroad for turning it into secondary aluminum	This investment is necessary as IRALCO (the Iranian Aluminum Company), which is equipped with the technology of transforming aluminum scrap to secondary aluminum, is located in Markazi Province and the country is in need of aluminum ingots.
2	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement and paper plants considering the considerable reserves of lime mines	Markazi Province, which is located at the heart of Iran, embraces considerable reserves of lime. This province is also linked to other parts of Iran. Therefore, it is generally possible to produce different mineral products of cement (especially special cement) and paper.
4	Opening new tile and ceramic plants considering the considerable reserves of raw materials in the province	Markazi Province, which is located at the heart of Iran, embraces considerable reserves of lime. This province is also linked to other parts of Iran. Therefore, it is generally possible to produce different mineral products of tile and ceramic.
5	Opening new chinaware and sanitary chinaware plants	There are mineral resources in Markazi Province which can be used as raw materials for production industries. In addition, considerable amounts of chinaware and sanitary chinaware are imported to Iran to meet its domestic needs. There is also the possibility of exporting products to other regions and thus it is economic to make investments in this sector.
6	Cup glass and glass products industries	This investment is totally explained considering the silica mines in the province or adjacent provinces, the social and economic potentials of the province, the imports of glass, country's demand for glass products, and chances of exporting such products.
7	Mineral industries in the Salafchegan special free economic zone	Considering the numerous facilities planned for Salafchegan special free economic zone and the proximity of this area to Marakzi Province, it is necessary to dedicate part of new investments in this province to Salafchegan.
8	Decorative and antique stones	Considering the presence of construction rock factories in the province (with Mahallat County as its capital) and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased. Decorative stones have numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
9	Industrial minerals	Tungsten is among the industrial minerals available in the mines of this province. Hence, it is possible to extract and process the tungsten from these mines so as to produce stainless steel, construction

#	Investment	Cause Description
		architecture and appliances of various kinds.
10	Extraction and processing of gold	Due to the extremely high added value and price of gold, it is economically explainable and possible to invest in this sector.
11	Manganese mines	Due to the extremely high price of processed manganese, extraction and processing of manganese (from the region's mines) will bring about high added values and revenues.



Mazandaran PROVINCE

#	Investment	Cause Description
1	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	This province, which is located in the north of Iran, possesses considerable resources of lime. It also provides access to the region's ports and seawaters. Therefore, it is possible to produce different products of cement (especially special cement) in this province.
3	Opening plants for extraction and production of coal	Mazandaran Province, which is located in the north of Iran, embraces considerable reserves of coal. It also provides access to ports and seawaters. Therefore, it is possible to produce coal, which is of use in important industries such as iron and steel industries.
4	Opening new chinaware and sanitary chinaware factories	This province owns considerable mineral resources, which supply the required raw materials. In addition, considerable amounts of chinaware and sanitary chinaware are imported into the country. Therefore, considering the future demands of the country and the possibility of exporting these products, investment in this industry is recommended.
5	Cup glass and glass products industries	There are silica mines in Mazandaran Province or adjacent provinces which add to the economic and social potential of the region. Therefore, considering the imports of glass, country's demands for these products, and possibility of exports, investment in this industry is explainable.
6	Fluorine processing	It is possible and recommended to further investments in the extraction and processing of fluorine considering the fluorine reserves of the province and the severe need of the country for this mineral, which is used in the production of refractory materials and production of iron and steel.
7	Construction products especially roof tiles	It is explainable and possible to open new units in this sector due to the availability of proper domestic markets, the required raw materials, upstream industries, and chances of export.
8	Industrial minerals	One kind of rare earth element found in Mazandaran Province is barite. It is possible to produce cable, high-quality paper, tier and plastic by extracting and processing the barite mines present in this province.
9	Province's possession of several seaports and waterfronts	The significant potential of the province for the development of mineral industries is the access it provides to the Caspian Sea as well as its ports and coasts. Another advantage of this province is its common sea border with the Central Asia countries, especially Turkmenistan and Kyrgyzstan. Therefore, it is possible to use these potentials to produce mineral products (e.g. cement, tile, ceramic, mosaic, glass, etc.) and to export them to the neighboring countries.

North Khorasan

PROVINCE

#	Investment	Cause Description
1	Aluminum industries	The presence of Iran Alumina Company in this province, the company's possession of the technology of converting and processing bauxite into alumina, and the country's need for alumina and aluminum ingot necessitate this kind of investment.
2	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement and paper plants	The existence of considerable resources of lime in Markazi Province, the province's locations (which is on the border of Iran), and the links between this province and adjacent countries have provided for the general production of mineral products of cement (especially special cements such as alumina cement, oil well cement, etc.).
4	Decorative and antique stones	Considering the existence of construction rock plants in the province and the significant amount of wastes produced in the form of pebbles by these plants, it is possible to produce new and attractive products by recycling and converting the wastes into decorative and antique rocks. The result is not only an increase in employment but also the growth of exports of relevant handicrafts. Decorative stones are of numerous uses in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
5	Ores containing rare earth elements	One of the ores containing rare earth elements in North Khorasan Province is tungsten. It is, therefore, possible to extract and process tungsten from these mines to advance in the field of producing stainless steel, construction architecture, and appliances.
6	Collection of scrap aluminum from northern provinces and neighboring countries and turning the scraps into aluminum ingot	Due to the future need of the country for aluminum ingot and the use of this material in downstream industries, it is possible to invest in the collection of aluminum scraps from the north and northeastern provinces as well as Afghanistan, Turkmenistan, and the Central Asia countries and convert the scraps into aluminum ingot. Hence, these scraps are considered a potential for investments in the province.
7	Processing and extraction of calcite and barite	1889 and 45 thousand tons of calcite and barite are available in this province, respectively. However, it is worth mentioning that new reserves of these minerals have been spotted in the province, but their exact amount is not yet known. Barite is of numerous uses in different industries. It usually appears with quartz and calcite and is mainly used as filler in the production of drilling mud, tier, high-quality paper, cables, plastics, processed caoutchouc, paint, ceramic, transparent glasses, chinaware, cosmetics, white ink, correction fluid, insulator clothes, brakes, spark plugs, vacuum tubes, fireworks, explosives, alloys, radiation shield, fluorescent lamps, nuclear reactors, medicine, etc. Calcite is considerably used in cement

#	Investment	Cause Description
		industries and lime-cooking factories in the form of lime stone. In chemical industries (such as sugar factories), smelting companies, paint industries, and leather industries, calcite is used for treatment/removal of phosphate compounds and organic acids, as a flux, as a filler, and as a means of separating hair from wool.



#	Investment	Cause Description
1	Extraction and processing of bauxite mineral reserves	Since this province possesses bauxite mineral reserves and since aluminum production factories need alumina to produce aluminum ingots, it is necessary to increase investments in the extraction and processing of bauxite mineral reserves.
2	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement plants	Production of mineral products of cement (especially special cement) is a possibility due to the presence of considerable reserves of lime in Qazvin Province and the links between this province and other parts of the country.
4	Opening new tile and ceramic plants	It is possible to produce mineral products of tile and ceramic considering the considerable reserves of lime and raw materials in the province, the location of this province (at the heart of Iran) and the links between this province and other parts of Iran.
5	Opening chinaware and sanitary chinaware plants	Considering the mineral reserves of the province (which supply the required raw materials), the considerable imports of chinaware and sanitary chinaware to Iran, future domestic demand and possibility of exports, it is necessary to increase investments in the field so as to develop and expand the existing units and open new production units.
6	Investment in cup glass and glass products industries	The silica mines in this province, highly satisfactory mineral reserves of the province, the economic and social potential of the province, imports of glass, domestic demands and possibility of exports are the reasons that explain this investment.
7	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
8	Extraction and processing of alunite	Discovery of new and suitable reserves of alunite around Takestan and Tarom Sofla districts (Qazvin Province) and the numerous applications of this mineral in the production of alumina (as the input for aluminum and cement production factories) explain investments in this sector.
9	Lead and zinc industry	This province embraces satisfactory resources of lead and zinc which can be found in Zeh Abad, Lak, Jotan, and Changoreh mines. In addition, although the country and its different industries need this mineral, the imports of lead and zinc have decreased. Hence, it is

#	Investment	Cause Description
		possible to increase investments in these mines to extract and process zinc and lead and turn the resulting substances into zinc and lead ingots.
10	Copper industry	The Chizeh mine, which is located in Qazvin Province, hosts suitable reserves of copper. In addition, the country and its various industries need this mineral. Therefore, it is possible to first of all process copper and then produce copper ingot by increasing investments in these mines.
11	Extraction and processing of dolomite	Considering investments in the extraction and processing of dolomite is a necessity as this mineral can be used in the downstream industries of the province. It is also possible to export dolomite to other provinces. This mineral is of diverse uses in the following industries: metallurgy, refractory materials industries, glass industries, ceramic industries, paint industries, and agriculture.
12	Extraction and processing of bentonite	Investment in the extraction and processing of bentonite is a priority. This mineral not only is of use in downstream industries but also can be exported to other provinces and countries. Bentonite is widely used in the following industries: casting, well drilling, iron pelletizing, treatment and bleaching, production of detergents and medicine, and production of artificial islands (as absorbent).
13	Mountain sand and gravel mines	The mountain sand and gravel mineral reserves in this province and the need of mineral industries for this mineral (especially for the production of concrete and other cement- and concrete-based products) explain investments in this industry.
14	Industrial minerals	The barium and potash mineral reserves in the province provide the chance of producing agricultural crops, food, paper, tier and plastic by extracting and processing the corresponding mines.





*A Brief List Of Opportunities For
Investment On Mining Activities In Iran*



#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	It is possible to produce different mineral products of cement (especially special cement) considering the lime reserves available in Qom Province, the suitable geographical location of this province, the links between this province and other parts of Iran, and the need of this province for cement.
3	Opening chinaware and sanitary chinaware plants	Due to the availability of lime reserves and other raw materials in the province, the geographical position of the province, the proximity of this province to Tehran Province (as the major domestic market), and the links between this province and other parts of Iran, it is generally possible to produce tile and ceramic mineral products in this province.
4	Investment in mineral industries in the vicinity of Salafchegan special free economic zone	Due to the numerous facilities planned for Salafchegan special free economic zone and proximity of this region to Qom Province, it is necessary to invest in this region as part of the new investments in Qom.
5	Investment in decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased. Decorative stones have numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
6	Industrial minerals	Barite is one of the industrial minerals available in this province. It is possible to produce tiers, plastic, paper, and drilling mud by extracting and processing the barite mines in this province.
7	Plaster production industries	Due to the existence of rich reserves of gypsum in the province, this region is known as one of the plaster production hubs in the country.
8	Copper industries	Considering the mineral reserves of copper in Qom Province and the high demand of the country for copper ingots and products, it is necessary to consider this sector as a top priority for investments.
9	Extraction and processing of dolomite mineral	The satisfactory mineral reserves in the province and numerous applications of dolomite in mineral industries necessitate investment in this industry. Since dolomite contains significant amounts of MgO, it is known as one of the most important superalloys. This superalloy is of numerous uses in the steel, iron, and alkaline refractory products. Other applications of this mineral include production of tile and ceramic, paint industry, glazing industry, chinaware production, tier production, etc.

Razavi Khorasan

PROVINCE

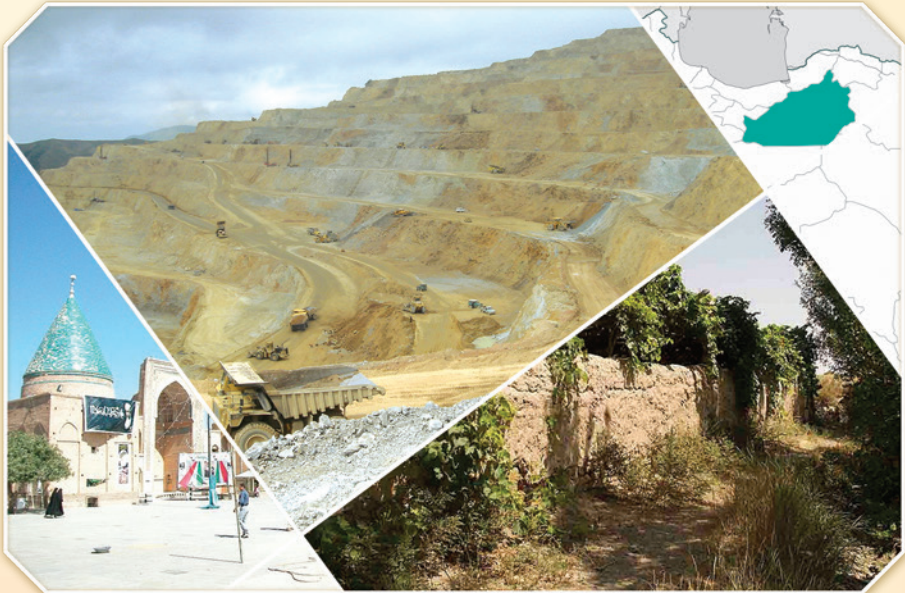
#	Investment	Cause Description
1	Aluminum and basic products production industries	The existence of aluminum industries in the province, the need of the country for this product, and the availability of bauxite-rich mines in Razavi Khorasan Province have set the scene for the growth and development of this industry in this province.
2	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement and paper plants regarding the considerable reserves of lime mines	The existence of considerable resources of lime in Razavi Khorasan Province, adjacency of this province to Afghanistan and Turkmenistan, and the links between this province and other parts of Iran have all paved the way for the general production of different mineral products of cement (especially special cement) and paper.
4	Opening new tile and ceramic factories regarding the considerable resources of raw material mines	Due to the existence of considerable lime resources and other raw materials in the province, the proximity of this province to Afghanistan and Turkmenistan, and the links between this province and other parts of Iran, it is possible to produce and develop tile and ceramic mineral products.
5	Opening new chinaware and sanitary chinaware plants	Considering the mineral resources available in the province (as the sources of raw materials), significant imports of chinaware and sanitary chinaware, future demands of the country, and the possibility of export of these products, further investments seems necessary with an aim to develop and advocate the existing units and to create new production units.
6	Cup glass and glass product industries	The existence of silica mines in the province, the adjacency of this province to the silica mines of adjacent provinces, the social and economic potentials of the province, imports of glass, the country's demand for glass, and the possibility of export of glass to the foreign countries totally explain this investment.
7	The advantage of having common borders with neighboring countries	Establishment of a special industrial zone hosting common-border mineral industries for boundary mines not only ensures the security of borders but also bring about employment for residents of borders. In addition, it also sets the scene for the processing of materials, emergence of added values, and a reduction in the costs of transportation of products. Undoubtedly, this calls for satisfactory government-produced infrastructure and will create chances for investments by the domestic and foreign private sectors.
8	Decorative and antique stones	Considering the abundance of construction rock plants in the province and the great deal of resulting wastes, which are obtained in the form of pebbles, it is possible to produce new and attractive products by recycling these wastes and turning them into decorative and antique stones. As a result, employment is increased and

#	Investment	Cause Description
		export of relevant handicraft is advanced. Decorative rocks are of numerous uses in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
9	Ores containing rare earth elements	Tungsten is among the ores containing rare earth elements in the Razavi Khorasan Province. It is possible to extract and process tungsten from the corresponding mines to develop the productions of stainless steel, construction architecture, and appliances.
10	Iron and steel and primary products industries	The existence of highly considerable reserves of iron ore in the province and the urgent need of Iran for iron and steel ingot as well as iron and steel products necessitate an increase in the investments in this industry with an aim to develop the existing units and establish new units.
11	Precious metals and gemstones production industries	The existence of mineral reserves of gold and gemstones (e.g. turquoise and onyx) in the province has provided a chance for investments in this field.
12	Copper and copper products industries	The existence of mineral reserves of copper in the province and the need of this country for copper ingot and copper products necessitate an increase in the investments in this industry. The investments are aimed at developing and advancing the existing units and establishing new units.
13	Refractory materials and thermal insulation industries	Considering the existence of the technical knowledge and ability of producing industrial and engineering ceramics as well as thermal insulator and refractory ceramics in the provinces along with the country's need for these products and their abundance imports, it is necessary to conduct proper and continuous investments and planning so as to contribute to the scientific growth and advancement of production activities in the province.



#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Due to the existence of considerable resources of lime in Semnan Province, the location of this province (at the heart of Iran), and the links between this province and other parts of Iran, it is generally possible to produce various mineral products of cement (especially special cement).
3	Opening new tile and ceramic industries	Considering the existence of significant reserves of lime and other raw materials (e.g. kaolin) in this province, the location of this province (at the heart of Iran) and the links between this province and other parts of Iran, it is possible to produce diverse tile and ceramic mineral products.
4	Opening new iron and steel factories and iron and steel products manufacturing plants	The existence of adequate mineral reserves in this province (which can supply raw materials), the considerable imports of iron and steel products and ingots, future demands of the country and the possibility of exporting domestic products explain investments in this industry.
5	Cup glass and glass products industries	The existence of silica mines in the province, the vicinity of the province to the silica mines of adjacent provinces, the economic and social potentials of this province, the glass products imports, the need of the country for these products and the possibility of exporting products all totally explain these investments.
6	Ferroalloys	Considering the presence of ferroalloy production factories in the province, the possibility of expanding and developing this industry in the province, the high demands of the country for these products, it is possible to make more economic investments.
7	Brine salt ores (potash)	One type of brine minerals available in the province is potash. Extraction and processing of potash minerals from the corresponding mines help produce agricultural crops, glass products, and ceramic products.
8	Copper and copper products industries	Copper mineral reserves and copper veins, which have the required potentials and are neither currently utilized nor processed, explain further investments in this field.
9	Metals other than iron, copper and aluminum	Considering the mineral reserves in the province (which supply raw materials such as gold, lead, manganese, etc.), the considerable imports of these products, future national demands, and the possibility of exports to other countries, development of the aforementioned industries is economically explainable.
	Gypsum industries	Semnan Province is the major producer of gypsum in the country

#	Investment	Cause Description
10		and thus is a top priority for investments. This province has a mineral reserve of 112 million tons and is capable of producing 45% of the gypsum demand of the country. It not only meets domestic needs but also can be considered in planning on the exports of the aforementioned products.
11	Extraction and processing of celestin mineral	This province accommodates 1071 thousand tons of celestine reserves. However, the possible amount of celestine reserves in the province is estimated to be more. Celestine is among rare minerals with extremely high added value. Semnan Province has the largest share of mineral reserves of celestine in Iran. Finally, celestine is of numerous uses in mineral industries.
12	Extraction and processing of zeolite mineral	This province embraces 2068 thousand tons of zeolite, which is of numerous uses in different industries. There is also a need for this mineral in Iran. Hence, it is necessary to increase investments in this field. Semnan Province owns the largest mines and reserves of zeolite in Iran. Some of the most important applications of different types of zeolite include the following: as a catalyst in oil and petrochemical industries; firefighting industries; agricultural industries; removal of harmful pollutants from urban, industrial and nuclear wastewater; absorption and desorption of gas, etc.



Sistan & Baluchestan

PROVINCE

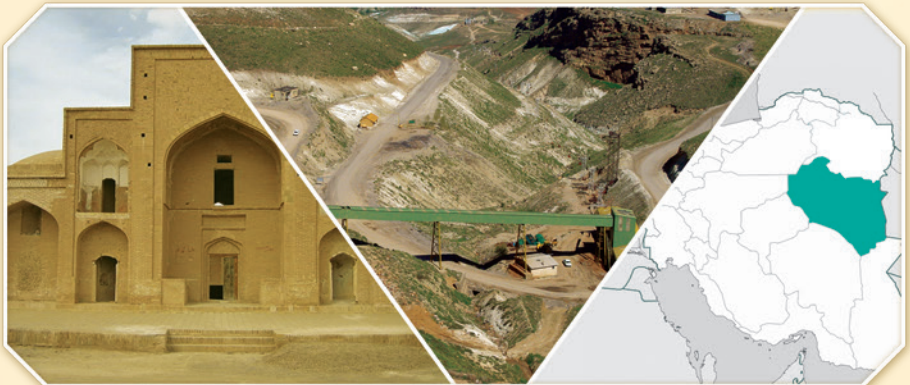
#	Investment	Cause Description
1	Copper industries	Considering the considerable resources of copper in the province, it is economically explainable to open extraction/processing units and to produce copper products and ingots in the province.
2	Antimony processing	Due to the presence of adequate reserves of this mineral in the north of the province as well as the numerous potentials of the province
3	Titanium	Due to the presence of prepared reserves of this mineral in the south of the province (Fanuj and in areas of discovery)
4	Iron ore and iron placer	Due to the existence of considerable reserves of this mineral in the province and the possibility of opening iron-dependent industries
5	Production of high-tech and high-quality construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
6	Decorative and antique stones	There are a number of construction rock plants in the province, which produce wastes in the form of rubbles. Therefore, it is necessary to recycle the stones and turn them into decorative and antique stone so as to produce new attractive products. The result of this effort is increased employment and exports of relevant handicrafts.
7	Cup glass and glass products industries	It is economic to invest in this industry as this province and adjacent provinces (e.g. Yazd and South Khorasan) host silica mines and there are accesses from this province to domestic free economic zones and ports.
8	Investment in mineral industries of Chabahar free economic zone	It is necessary to invest in Chabahar free economic zone as part of the new wave of investments in the province due to the following reasons: abundant facilities predicted for Chabahar port and special and free economic zone; and proximity of the region to the Persian Gulf and international waters.
10	Ores containing rare earth elements	One kind of rare earth element available in the province is potash. Therefore, it is possible to produce chemical fertilizer, agricultural crops, food products, and drilling mud by extracting and processing potash obtained from the corresponding mines.
11	Refractory materials industries	Due to the province's adequate reserves of magnesia chromite and dolomite
12	Tile and ceramic	Due to the province's adequate reserves of industrial soils, feldspar and silica
13	Extraction and processing of magnesia	Due to the existence of magnesia reserves in the province
14	Extraction of minerals from seawater	Due to the considerable level of the karat of evaporite minerals (e.g. magnesia, potassium, etc.) and establishment of a unit for extraction of minerals from seawater

South Khorasan

PROVINCE

#	Investment	Cause Description
1	Opening new copper concentrate production	The existence of concentrate production plants along with the mineral reserves available in the province provide for further investments in this industry.
2	Production of high-quality and high-tech construction rocks	Considering the mineral resources of construction rocks in the province and the ability of the expert human forces to produce high-quality and high-tech construction rocks, it is recommended to increase investments in this industry so as to replace imports of construction rocks from abroad with domestic products and to export domestic products to countries of the region.
3	Opening new cement plants	The existence of considerable reserves of lime in the province, the proximity of this province to Pakistan and Afghanistan, and the links between this province and other regions of Iran have provided for the general production of mineral products of different types of cement (especially special cement and alumina cement).
4	Opening new tile and ceramic plants	Considering the existence of considerable reserves of lime and other raw materials in the province, the vicinity of this province to Pakistan and Afghanistan, and the links between this province and other parts of Iran, it is possible to produce mineral products of ceramic and tile.
5	Opening new chinaware and sanitary chinaware factories	Considering the mineral resources available in the province or adjacent provinces (which supply the required raw materials), significant imports of chinaware and sanitary chinaware, future domestic demands, and the possibility of exports to foreign countries, it is recommended to make investments in this field.
6	Decorative and antique stones	Considering the plentitude of construction rock factories in the province and the great amount of wastes produced in the form of pebbles, it is possible to produce new and attractive products by recycling the wastes and turning them into decorative and antique stones. As a result employment is increased and a chance is created for the export of relevant handicrafts. Decorative stones are of numerous uses in residential and office buildings, restaurants, theaters, etc. inside and outside of Iran.
7	Ores containing rare earth elements	Tungsten mineral reserves in South Khorasan Province are among ores containing rare earth elements. It is possible to take measures for the production of stainless steel, construction architecture and different appliances by extracting and processing the products of the aforementioned mines.
8	Extraction and processing of bentonite soil	Considering the considerable mineral reserves of bentonite in the province as well as the extremely high added value brought about by the extraction and processing of this soil, it is necessary to make proper investments and plan on the processing of this soil. The goal of the investments and plans is to prevent the exports of raw bentonite soil and export processed bentonite soil to other countries.
9	Cup glass and glass production industries	The existence of silica mines in the province or the vicinity of this province to the silica mines of the adjacent provinces, the social

#	Investment	Cause Description
		and economic potential of the province, glass imports, domestic need for these products, and the possibility of exporting glass products to other countries are the reasons explaining investments in this industry.
10	Extraction and processing of dolomite mineral	The presence of satisfactory mineral reserves in the province and the numerous uses of these reserves in mineral industries call for investments in this industry. Since dolomite contains large volumes of MgO, it is considered among the most important refractory raw materials. It is of great importance to the steel and iron industry as well as production of alkaline refractory materials. Other applications of this material include tile, ceramic, paint production, glazing, chinaware production, tier production, etc.
11	Extraction and processing of the magnesia mineral	The existence of proper mineral reserves of magnesia in the province and the numerous applications of this mineral in mineral industries explain the necessity of investing in this industry. Magnesia is of highest use in the production of refractory materials and thermal insulations.
12	Extraction and processing of wollastonite	The existence of suitable mineral reserves of wollastonite in the province and numerous applications of these reserves in mineral industries highlight the necessity of investing in this industry.



Tehran & Alborz PROVINCES

#	Investment	Cause Description
1	Collection of domestic or imported aluminum scrap to turn it into secondary aluminum	There are bauxite mineral reserves in Tehran Province, which can be extracted and processed to produce alumina cement. In addition, the Iranian aluminum industry needs aluminum scrap to produce aluminum ingots. Accordingly, since Tehran is among the most active provinces in the field of aluminum scrap, it is recommended to invest in this sector.
2	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction rocks in the province as well as the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
3	Opening new cement plants	There are considerable reserves of lime in Tehran and Alborz provinces. In addition, Tehran is at the center and the capital of Iran and thus has links to all the other parts of Iran. Hence, it is generally possible to produce different mineral products of cement (especially special cement).
4	Opening new plants for producing iron and steel basic products	Since Tehran Province is located at the heart of Iran and has links to other parts of Iran and also since this province hosts the largest domestic market in Iran, it is generally possible to produce iron mineral products in this province.
5	Opening new chinaware and sanitary chinaware plants	There are mineral reserves in Tehran Province which supply the required raw materials. Moreover, the considerable imports of chinaware and sanitary chinaware have created a suitable chance for further investments, which not only help meet future domestic needs for these products, but also provide for the exports of these products.
6	Cup glass and glass products industries	These two provinces either embrace silica mines or are situated near the silica mines of other provinces. They have also economic and social potentials that together with the imports of glass, domestic needs for glass products and the possibility of exports of these products explain this investment.
7	Decorative and antique stones	Considering the presence of construction rock factories in Tehran and Alborz provinces and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased. Decorative stones have numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
8	Industrial ores containing rare earth elements	The rare elements available in this province include phosphate, celestine, etc. It is possible to extract and process minerals from the corresponding mines to produce chemical fertilizers, phosphoric acid and matches.
9	Extraction and processing of basalt	It is recommended to invest in this sector due to the availability of

#	Investment	Cause Description
		basalt mineral reserves in the two provinces and the significance and numerous applications of this mineral in mineral industries. This ore is supplied in the form of rubble and crushed stone that can be used in buildings, road infrastructure, columns (as fills), etc. This ore is as casting in electric insulations, linings, industrial paving, buildings, and abrasion-resistant materials. In addition, it is used in tile and ceramic products with high abrasion resistance to increase resistance to acids and bases. It is also used inner lining of tanks, pipes, mixers, industrial conduits pavements, etc.
10	Extraction and processing of zeolite	This province embraces 750 thousand tons of zeolite mineral reserves. This mineral is of numerous uses in different industries. Therefore, considering the domestic need for zeolite, further investments in this sector are recommended. The most important applications of different kinds of zeolite include the following: as a catalyst in oil and petrochemical industries; in firefighting industries; in agriculture; in urban, industrial, and nuclear wastewater treatment; for absorption and desorption of gas; and such.
11	Extraction and processing of dolomite	It is possible to invest in the processing and extraction of dolomite, which can be used in downstream industries and can be exported to other provinces. This mineral has plenty of uses in mineral industries some of which include the following: metallurgy; refractory materials industries; glass production; ceramic production; paint production; and agriculture.



West Azerbaijan PROVINCES

#	Investment	Cause Description
1	Gold extraction and processing	The existence of satisfactory gold reserves in the province and the significant need for gold ingot in the country necessitate an increase in investments, development of this industry and establishment of downstream industrial units.
2	Production of high-tech and high-quality construction rocks	The following reasons explain investments in the production of high-tech and high-quality construction rock: the import of advanced technologies; the ability of expert human forces to produce high-quality and high-standard constructions rocks (with an aim to replace the construction rocks imported from abroad with domestic products and export Iranian products to the countries of the region); and the existence of satisfactory and high-quality unique mineral reserves in the province.
3	Establishment of white cement units	It is cost-effective to establish white cement units in the province due to the existence of rich amorphous silicon and kaolin mines, which supply the major ingredients of white cement.
4	Extraction of magnesium from dolomite	The presence of magnesium-containing dolomite reserves in the province has provided for investment in the extraction of this metal (magnesium) from dolomite.
5	Production of fire-brick	Considering the abundance and high quality of reserves, it is economic to operate in the field of production of fire-brick in this province.
6	Establishment of steel upstream industries	The high-karat iron ore reserves in the north and south of the province can contribute to the supply of the raw materials for steel upstream industries in this province.
7	Establishment of new cement plants	Considering the existence of considerable resources of lime in the province, the adjacency of this province to Iraq, Armenia, and Azerbaijan, and the links between this province and the central and western parts of Iran, it is generally possible to produce and export mineral products of cement (especially special cement) and paper.
8	Establishment of new tile and ceramic plants	Considering the existence of considerable resources of lime and other raw materials in the province, the adjacency of this province to Iraq, Armenia, and Azerbaijan, and the links from between province and the central and western parts of Iran, it is generally possible to produce and export mineral products of tile and ceramic. It is worth mentioning that production and investment activities are to be mainly aimed at development of exports.
9	Establishment of chinaware and sanitary chinaware	Since this province hosts mineral resources (as raw materials of future) and provides access to suitable export target markets (such as markets in Iraq, Turkey and Azerbaijan) as well as access to native expert forces, it is economic to produce export products.
10	Cup glass and glass products industries	The existence of silica mines in this province, the proximity of this province to the silica mines of adjacent provinces, the economic and social potentials of this province, the imports of glass and the need/ability of the country to export glass explain the aforementioned investments.

#	Investment	Cause Description
11	Establishment and development of an industry for production of iron, steel and raw materials	Considering the existence of iron ore reserves, the ease of access to national borders, and the adjacency of the West Azerbaijan Province to Iraq, as the chief target export market, this province is the first option for investments in the iron and steel production industry in Iran.
12	Stone artifacts	Considering the abundance of construction rock factories in this province and the enormous amounts of waste produced in the form of pebbles, it is possible to recycle the waste and turn it into decorative and antique stones so as to manufacture newer and more attractive products. Consequently, in addition to an increase in employment, it will be possible to develop the exports of handicrafts in this field. Decorative stones are of numerous applications in residential and office buildings, restaurants, theaters, etc. inside and outside of the country.
13	Extraction and processing of ornament mineral resources	The existence of mineral resources in the province and the need of the jewelry industries as well as health and beauty industries for this mineral have set the scene for an increase in investments in the extraction and processing of this mineral.
14	Non-metallic minerals	The province hosts diverse resources of non-metallic minerals (such as talc, feldspar, barite, etc.). Hence, it is possible to extract the aforementioned minerals and use them in the production of different mineral powders, hydrated lime, processed industrial soils, micronized powders, etc.
15	Extraction and processing of mica mineral resources	The existence of mineral resources in the province and the need of the electronic and electric industries for this mineral explain increased investment in the extraction and processing of mica.
16	Extraction of rare earth elements by processing mineral reserves of granite rocks and deposits of ferrous manganese	Mishoo and Ghouschi zirconium-rich (Zr) granite rocks, nepheline syenite rocks rich with gallium (Ga), niobium (Nb), and tantalum (Ta), and ferrous manganese deposits on top of pillow lavas in the Khoy ophiolite demonstrate vanadium anomalies. Hence, by extraction and processing of the aforementioned mineral products, it is possible to supply the raw materials required for domestic uses (which are aimed to contribute to the production of the products of mineral industries).



#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new construction plants	This province, which is located at the heart of Iran, hosts considerable reserves of lime. It also has links to other regions of Iran. Hence, it is generally possible to produce mineral products of cement (especially special cement) and paper.
3	Opening new tile and ceramic plants	This province, which is located at the heart of Iran, hosts considerable reserves of lime. It also has links to other regions of Iran. Hence, it is generally possible to produce mineral products of tile and ceramic.
4	Opening new chinaware and sanitary chinaware plants	It is possible to invest in this field considering the mineral reserves of the province (which provide raw materials), the considerable imports of chinaware and sanitary chinaware, future demands of the country and possibility of exports.
5	Cup glass and glass products industries	The silica mines in the province or in the neighboring provinces, the economic and social potentials of province, imports of glass, domestic needs and possibility of exports explain investments in this field.
6	Iron and steel production and secondary products industries	The highly satisfactory mineral reserves of iron ore and coal in the province and availability of the technology of production of iron and steel ingots in the province have created an exceptional chance of investment and development of this industry.
7	Decorative and antique stones	Considering the presence of construction rock factories in the province and the resulting wastes (which are obtained in the form of pebbles), it is possible to produce and present new and attractive products by recycling and turning wastes into decorative and antique stones. As a result, employment and exports of handicrafts are increased.
8	Industrial minerals	The huntite mineral reserves in the province have created an opportunity for the extraction and processing of huntite mines to produce cosmetics, drilling mud and paint.
9	Copper industry	It is possible to make investments, open new production units and develop the existing units considering the considerable reserves of copper and corresponding deposits in the region.
10	Lead and zinc industry	It is possible to make investments, open new production units and develop the existing units considering the considerable reserves of lead and zinc and corresponding deposits in this province.
11	Extraction and processing of zirconium	The definite and significant mineral reserves of zirconium, which are precisely measured, call for investments in the extraction and

#	Investment	Cause Description
		processing of zirconium from the corresponding mines.
12	Extraction and processing of vanadium	The iron deposits found in Sechahoon, Lakkeh Siah, Chah Gaz, Mishdovan, South Posht Bam, and Chaqart demonstrate a high concentration of vanadium. The most important points of concentration of vanadium are found in Chah Gaz (800-1931 ppm), Sechahoon (1377-1632 ppm), and South Posht Bam (1150 ppm) iron deposits.
13	Studies on the extraction and processing of monazite and the included gold particles	Results of studies on heavy minerals which are presented in Zarrin and Kharanaq papers at the scale of 1:100000 reflect the high concentration of the heavy mineral monazite on waterway deposits. Accordingly, further studies based on samples obtained from denser networks and using these papers are recommended. In addition, the significant results of studies using these papers showed the presence of gold particles. Therefore, more comprehensive studies are recommended.
14	Extraction and processing of phosphate	It is recommended to invest in this field considering the satisfactory reserves of phosphate in the province and numerous applications of this mineral which include the following: production of phosphate ore; production of phosphoric acid; production of different types of chemical fertilizers; preparation of foods; and production of detergents, insecticides, and matches.
15	Extraction and processing of barite	It is recommended to invest in this sector considering the satisfactory reserves of barite in this province as well as numerous applications of this element in different industries. This element is of use in the drilling (to increase the bulk density of drilling mud) and paint industries and thus investment in this sector is a priority.



#	Investment	Cause Description
1	Production of high-quality and high-tech construction rocks	Considering the mineral reserves of different construction and non-construction rocks in the province as well as the imports of high technologies and the ability of expert human forces to produce high-quality and high-standard construction rocks, investments in this industry are recommended so as to replace imports with domestic products and to export domestic products to the region's states.
2	Opening new cement plants	Considering the existence of lime reserves in Zanjan Province and adjacent provinces and the links between this province and all the other parts of Iran, it is generally possible to produce different mineral products of cement (especially special cement).
3	Opening new chinaware and sanitary chinaware plants	Considering the mineral reserves of the province (which supply the required raw materials), considerable imports of chinaware and sanitary chinaware, the future demands of the country, and the possibility of exporting products, it is necessary to further investments so as to develop the existing units and establish new product units for this sector.
4	Cup glass and glass products industries	Due to the existence of considerable and satisfactory resources of silicon in this province, the economic and social potential of the province, imports of glass, domestic need for glass, and the possibility of exporting glass this investment is economically explainable.
5	Decorative and antique stones	Considering the existence of construction rock plants in Zanjan Province and the significant amount of wastes produced by these plants in the form of pebbles, it is possible to produce new and attractive products by recycling and turning the wastes into decorative and antique stones. The result is an increase in employment and exports of relevant handicrafts.
6	Ores containing rare earth elements	One of the ores containing rare earth elements in Zanjan Province is zinc. By extracting and processing zinc from these mines it is possible to take steps toward the production of appliances, kitchenware, dentistry, steel cover, tooth paste tube, etc.
7	Lead and zinc industries	Considering the satisfactory and considerable mineral reserves of the province (which supply the required raw materials), imports zinc and lead ingots, future demands of the country, the possibility of exporting domestic products, and the stand of the province (as the first production hub for lead and zinc ingots and products, it is necessary and economically explainable to continue investments and development of this industry.
8	Metal casting industries	It is aimed at making investments in the following industries operating in Zanjan Province: metal components manufacturing industries using the precision-forging technique; high-tech auto parts casting; manufacture of aluminum components using the die-cast method; industrial components heat treating; iron and steel parts casting; galvanization; metal medical equipment; recycle of zinc wastes (in the form of nickel, cobalt, silver, etc.); production of

#	Investment	Cause Description
		alumina from aluminite; production of aluminum-silicon alloy, ferrosilicon alloy, lead, copper and zinc alloys; upstream and downstream industries of zinc; and production of ferromanganese alloy.
9	Basic iron and steel products industries	This province lacks alloy steel units. In addition, it is the prior choice for investments considering the following criteria: the distance from the nearest water boundary (port) or land border (customs office), the number of iron ores in the province, distance from the nearest coal mines, distance from the nearest consumer industrial province, distance from the nearest ferroalloy unit and the population producing iron scraps. Seemingly, establishment of alloy steel units with a capacity of higher than 100 thousand tons with an aim to export products of this province will be profitable in spite of the increased cost of energy carriers.
10	Gold extraction and processing	Considering the mineral reserves of gold in the province as well as the need of the province and the country for these products, it is economically explainable to invest in the extraction and processing of gold.
11	Extraction and processing of alunite	Since the largest mineral resources of alunite are located in Zanjan Province and this mineral is of use in aluminum industries, investment in this industry is of extremely high priority.
12	Extraction and processing of perlite	The presence of mineral reserves of perlite in the province, the numerous applications of this mineral in different industries, and the relatively high added value resulting from the processing of this mineral explain more investments in this industry.
13	Extraction and processing of industrial soil	Due to the existence of satisfactory reserves of different industrial soils and their numerous uses in different industries, investment in the added value and processing of these soils is a priority for this province.





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