

THE CHALLENGES AND BARRIERS OF DEVELOPING MINERAL INDUSTRIES IN SOUTHEAST OF IRAN FROM STRATEGIC PLANNING VIEW (CASE STUDY: KERMAN)

Sancholi A.^{1*}, and Shahraki A.R.¹

¹Department of Engineering, Faculty of Industrial Engineering Islamic Azad University, Zahedan Branch, Zahedan, Iran

*(Corresponding Author)

ABSTRACT

As the mines can provide raw materials for industries, they can be considered as the infrastructure of development of each region and they motivate other economic sectors. Kerman province with metal and non-metal mineral resource is one of the rich mineral provinces in Iran and it is also called the heaven of miners. However, it couldn't take benefit of its capacities until now and it has various challenges. The present study aimed to identify the most important barriers and challenges of mine development of Kerman province and present some solutions to improve this part from strategic planning. The study method is analytic-descriptive. The data collection was done by library studies and structured interview with the experts of industries and mine. The study population is 30 experts being selected by snow ball method. The results were analyzed by SWOT method. The most important capabilities, barriers and challenges of mineral industries of province were also analyzed. The study findings showed that diversification strategies (ST) should be on priority of planning. Improving effective infrastructures in developing mines, the policy of stopping raw material selling, creating and developing additional industries of copper, encouraging policies of government, developing holding big companies, reviewing and modification of rules and formulating comprehensive program of mineral industries development of province are the solutions of this strategy.

KEYWORDS: Human Science, Kerman province, Mineral industries, Strategic planning, SWOT method.

INTRODUCTION

Mine as one of the infrastructures is one of the main and most important industries in development process providing major materials of industries. Based on its nature, it is extended in the world. The development of various industries, development of all economic sectors, absorbing and employing human resources and increasing per capita income are the most important performances of mines development (Emami, 2005). The industrialization of various countries and strength of new economies caused that international demand for mineral materials is increased considerably. Numerical value of mineral productions is increased four times during 2002-2010. It can be said that now mine sector is one of the main economic sectors (Pourmajd, 2013).

Iran is one of the countries in the world with abundant resources. Mineral resources, oil and gas caused that Iran has specific position in the world in terms of mineral and underground reservoir. Mineral industries need three main factors for development: 1- Technology, 2- Cheap energy, 3- Mineral materials. The important point is that Iran has three benefits. First, it is active four 40 years in this sector and now it has one of the strongest Iranian contractors beside great state companies and it can organize projects at international level and it is located beside strip 2400km of Persian gulf coasts and Oman sea and it can sell by sending cheap energy from all over the world. Third, Iran is one of the 10 great countries in the world in terms of mineral reservoir and it is not dependent upon great mineral countries including America, Canada, Australia and Brazil (Ghafuri, 2007). Based on the importance of mine and mineral industries of Iran, this sector is the most important factor in releasing the country from oil-dependent economy and achieving sustainable development.

Based on perspective 20-year document, Iran is a developed country with the first economic, scientific and technological position in the region with Islamic and revolutionary identity in Islam world and effective interaction in international relations. The general perspective of industry and mine in perspective 20 year is achieving first economic and industrial position with development on advanced, innovative and futuristic technology, self-efficacy in providing strategic goods, export-based and providing considerable part of foreign exchange need of the country, balanced in various regions based on regional benefits can use the available resources and also it can be consistent with the networks, clusters and chains and in accordance to standards of regional and international markets (Management and planning organization, 2003). Kerman province has the first rank in terms of mines diversity and it has considerable

share of recognized reservoir of metal and non-metal mines. This province is one of the greatest producers of mineral materials with more than 100 active mines and extracting more than 32 million Ton mineral materials. Copper, coal, iron, lead, zinc, chromite, Manganese, Titanium mines and different ornamental and construction stones made Kerman province as one of the richest mineral provinces in Iran. Despite the progresses in recent years, this province is far from achieving its real position as global average value from mineral materials and relevant industries aspects. The results of the investigation of the number of operating mines in provinces of Iran showed that Isfahan, AzarbayjanGharbi, KhorasanRazavi and Semnan have the greatest number of operating mines. However, Kerman province is in 10th rank with abundant mineral reservoirs (Hosseinidana and Gudarzi, 2011). The main question is “What are the most important challenges, barriers and facilities of southeast of Iran namely Kerman province to achieve sustainable development in mineral industries? To achieve this purpose, which policies and plans are required in this region? To answer these questions, it is required to have pathological view to challenges, barriers and facilities of mineral industrial development of southeast of Iran with emphasis on Kerman province and we can have efficient planning and present consistent solutions with regional conditions based on strategic planning basics.

Study purpose

The purpose of the study is evaluating the challenges and barriers of mineral industry development in the southeast of Iran from strategic planning view.

Study questions

- 1- What are the most important strengths, weaknesses, opportunities and threats of mineral industry development of Kerman province?
- 2- Which solutions are suitable to develop this sector in Kerman province?

Review of Literature

Most of the local researches in mine and mineral industries are regarding identification of mineral potentials of regions and a few researches have been conducted in strategic planning to improve mine and mineral industry sector. Some of the researches are as follow:

Moradzade (2012) in a study evaluated and prioritized the main barriers and challenges of business management in mine sector in Sitan and Baluchistan province. The results of the study showed that strict rules, the lack of competitive power of productions in province compared to other productions of other provinces, the shortage of skillful human resources, heavy costs of extraction and ethnical disputes are the major barriers of mine sector in the province. In a study, Ghiasvand investigated the strengths, weakness, opportunity and threats of mine and mineral industry sector in Iran. Uniformity of rules and regulations of mine, privatization, policy making and research and development in organizations relevant with mine and mineral industries, investment in earth sciences, extraction and improvement of operation capabilities and production in mine and mineral industries are the necessary strategies to eliminate the existing challenges. Shahraki (2013) investigated and ranked the barriers of industry development and presented development solutions in Sistan and Baluchistan province. The results of the study showed that four types of barriers are effective on industry and mine of province as financial and foreign exchange credit, technology, specialized human resources and providing raw materials and they are divided into some subsets.

Alam Tabriz *et al.*, (2013) evaluated stability of mine industry by balanced scorecard and hierarchy analysis. The results showed that under current conditions, Iranian organizations should consider the economic and financial dimensions of their organization in short-term and by considering the required balance among the dimensions of sustainable development in long-term. Also, the results of Barzani *et al.*, (2011) study, the effect of industrial facilities on private sector investment in industry and mine is not similar in various provinces.

Some of the foreign researches are as followings:

Azapagic (2003) in a paper developed a framework for sustainable development indices in mine sector. These indices are presented in economic, social and environmental sectors and finally present a model to evaluate sustainability of mine and relevant industries. The results of the study of Chengzhi (2013) regarding the evaluation of industry and relevant policies in China showed that China improved its industry in various sections. Also, they mostly considered Europe development and modeled Europe and US industry.

Theoretical basics of the study

- 1- **Mineral industry:** Mineral industries are those related to raw mineral materials and they are presented to consumption market as processed. These industries are classified in four major groups of steel, cement, copper and Aluminum.
- 2- **Extracting industries:** The first and the most important aspect in using mineral capability of each region are establishing extracting industries to obtain existing economic mines. Extracting industry (except fossil fuel) has five main subsets: Mineral equipment and services, façade stone, industrial mines, gravel and sand and construction stones and metal mines (Ericsson, 2002). Establishing extracting industries based on local resources and size, quality and saving of transportation reduction can be considered. These industries are heavy (big) industries based on common classification and they produce raw materials for other industries (Rahimi, 2004).
- 3- **Strategic planning:** Strategic planning (strategic) is a management process creating logical balance between the goals, resources, valid and unstable situations of products and its aim is creating or changing the work and product to achieve satisfactory profit and growth. Using strategic planning in the form of strategic development process and strategic management and thought can be successful in this regard and provides a systematic method to establish coherence among priority measurements by considering the weaknesses and strengths and opportunities and threats (Hosseini *et al.*, 2013).
- 4- **SWOT method:** This method clarifies the ambiguous existing aspects and it is a basis to regulate organizing and development strategies and also it leads to the regulation of operational projects and plans (Kahraman *et al.*, 2007). SWOT analysis has systematic approach and is based on recognizing internal and external environments of each system. Like any other systematic phenomenon, mineral industry development has internal and external environment. After identification of these two environments, strengths and weaknesses in internal environment, opportunities and threats in external environment are studied.

MATERIALS AND METHODS

This study is applied in terms of purpose and descriptive-analytical in terms of method. After collection of theoretical basics and framework of the study, the initial information regarding the features of mines and relevant industries in Kerman province including natural and geographical features, statistics and information were collected by library method. The library study includes books, journals, internet and data of Iran statistics center. Regarding the findings, the data analysis was done based on SWOT and interview method. The study population is the experts familiar with the study topic. The study sample is 30 experts selected by snow ball method. The people familiar with study topic in development and renovation of mines and mineral industries of Iran were asked to introduce experienced and expert people for interview. Thus, the introduced people were classified and interviewed at three levels:

- a. The experts of development and innovation of mines and mineral industry in Iran (10 questionnaires), b: The experts of industry, mine and trading of Kerman province (10 questionnaires), c) The managers of industry and mine bank of Kerman province (10 questionnaires) and they are also classified and interviews as totally 30 people. The results of this questionnaire with the other data are used for analysis of the most important effective factors on mineral industry development of Kerman province in SWOT matrix.

Study area

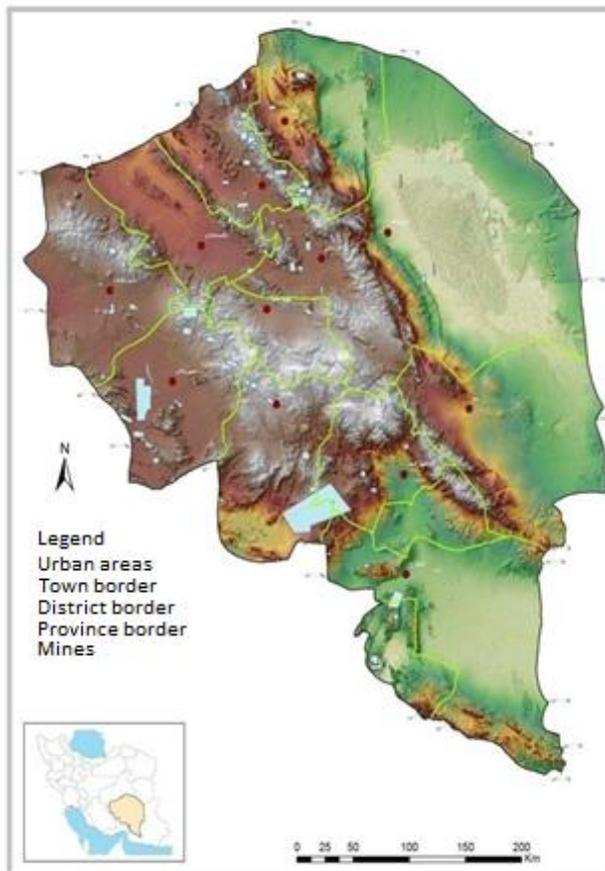
The study area is Kerman province. Kerman province is located in the southeast of central plateaus $53^{\circ}, 26$ to $59^{\circ}, 29$ eastern longitude and $25^{\circ}, 55$ to 32° northern latitude. This province is bounded on north to Khorasan Jonubi province, on east to Sistan and Baluchestan, on west to Yazd and Fars and on south to Hormozgan. The area of province is 181714 km² and it is the second big province in Iran (Wikipedia, 2014). Based on the latest country division, Kerman has 23 towns, 57 cities, 45 small cities and 142 rural districts (Butorabi, 2012).

Mineral industries of province and its features

Generally, all parts of Kerman province have many small and big mines and we can not know the distribution of these mines restricted to specific areas of province. The major operating mines are mostly in northern, southwestern and north west areas of province. Based on the management method of operating mines of Kerman province, 136 private mines and 14 mines are managed as generally (Hosseindana and Gudarzi, 2011:47). The mineral reservoir of the province is 3.5 billion ton mineral materials. The major mineral materials in the province include Granite, Chromite, rubble trench, Manganese, lime, marble, copper, Magnesite and Titanium and etc. Each of them is introduced as:

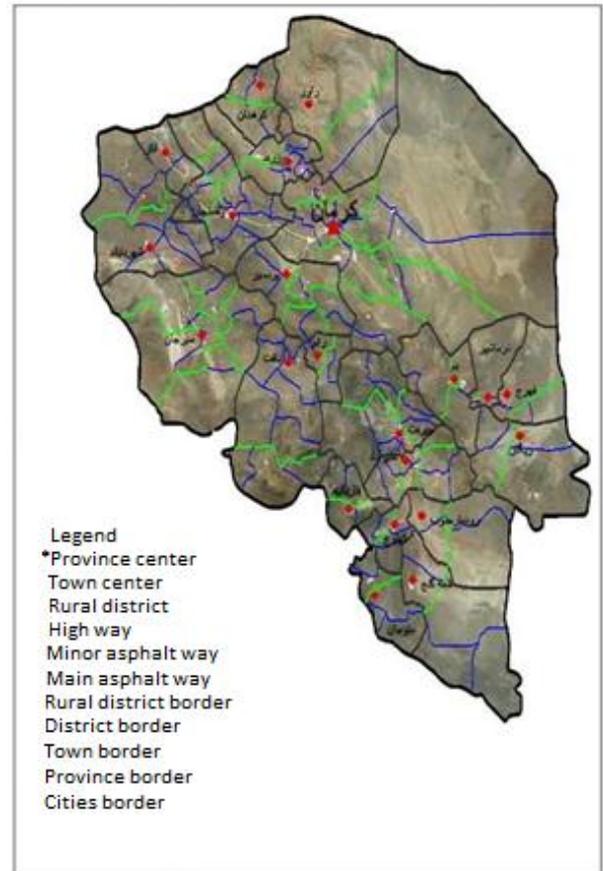
- 1- Copper: The most important copper mines of Kerman province are copper of Sarcheshme, Meidook copper, Darezar, Chargonbad, Darealo, Sargazkooch and their reservoir is one billion and seven hundred million tons and they are active and some of them are in preparation stage.
- 2- Iron: This metal is focused in two belts as Sirjan belt as the most important and high quality iron mines of Iran. Golgohar iron mine with the 1 billion ton reservoir, its exploration is finished and 700 million is considered and it is extracted. The second belt is Bafgh-Kerman belt and its absolute reservoir is 180 million Ton.
- 3- Kahnooj Titanium: Titanium of Kahnooj with the reservoir 500 million Ton and average alloy 3.5% Titan is one of the most important mines of country and with exploration operation the volume 200 million Ton alluvial reservoir of this mine with average alloy 4% is proved.
- 4- Chromite mines: It is located in Baft and Kahnooj region and its reservoir is 16 million Ton.
- 5- Construction stone mines: The processing capacity of mines is more than 2 million Tons.
- 6- Coal: Most of the mines are located in Zarand and its suburb. The reservoir is about 120 million Ton.
- 7-

Map 2- Distribution of mines in Kerman province



Source: The national basis of earth sciences data, 2013

Map 1- The political division of Kerman province



Source:Butorabi 2012

From industrial aspects, Kerman province has many potentials and facilities and based on the latest statistics of industrial townships of province, 18 industrial towns, 6 new industrial regions, 3 workshop and service complexes (in Kerman townships1, Bam and Sirjan 1) and 10 rural industrial regions from Jihad Keshavarzi started their industrial activities in province (Industrial townships of Kerman province, 2014).

By reviewing the mineral industrials of Kerman province, we can understand that as Kerman province is located in a deprived region and is close to Sistan and Baluchistan province, it has some weaknesses in this regard. For example, cement production shows that region 7 including Kerman and Sistan and Baluchistan provinces has the lowest cement

production compared to other regions (Sarmadi and Hosseini, 2013). As shown in the following chart, Kerman and Sistan provinces achieve the last rank of cement production during 2001 to 2011. The same is true about other industries.

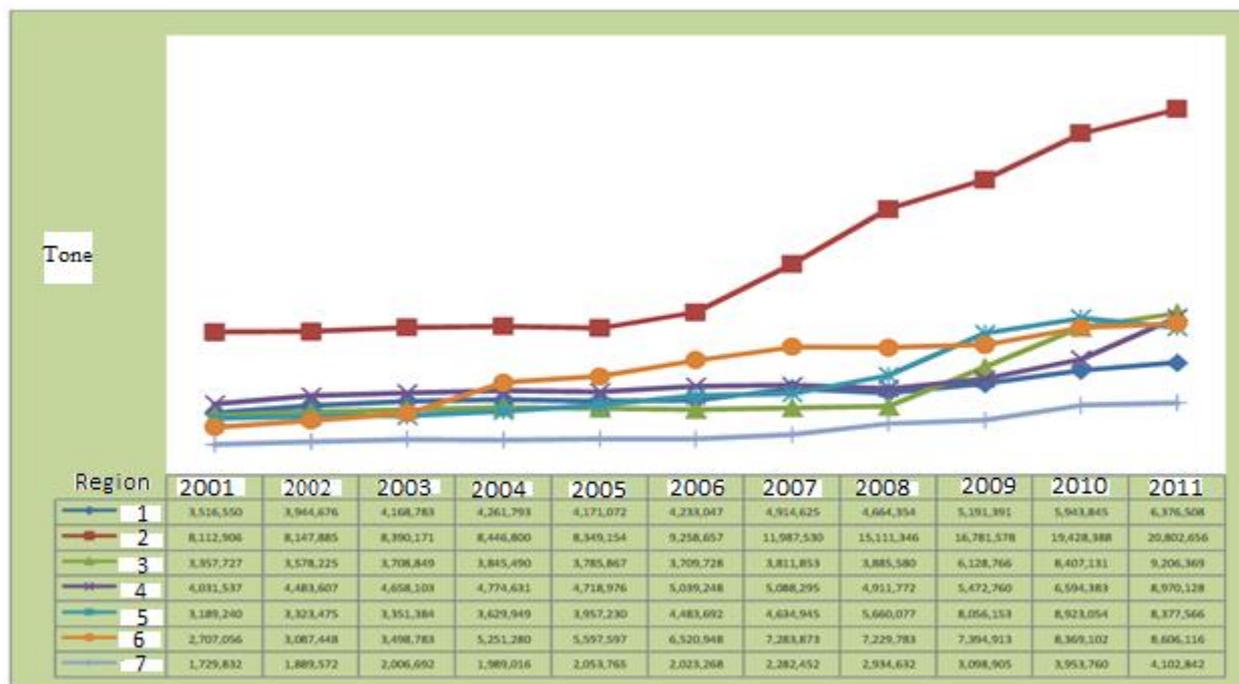


Figure 1- The real production trend of cement in various Geographical regions during 2001-2011
Source: Sarmadi and Hosseini, 2013:179

RESULTS AND DISCUSSION

Strategic planning of developing mineral industries in Kerman province

As it was said in study methodology, the present study analyzes information by the results of internal factors evaluation matrix and external factors evaluation matrix and SWOT matrix. The mentioned matrices are completed based on the comments of 30 experts familiar with the mineral industries development in mines development and mineral industries in Iran, industry, mine and trading of Kerman province and managers of industry and mine bank of Kerman province. The figures in the table are evaluation of internal and external factors and the proposed average presented by interviewees.

The stages of IFE and EFE are including:

- 1- Determining the weaknesses and strengths, opportunities and threats regarding the development of mineral industries of Kerman achieved by the information of the authorities questionnaire.
- 2- Dedicating weight coefficient ranging zero (unimportant) to 1 (very important) to each factor and the sum of weight coefficients is equal to 1 via normalization of weight coefficients. As each of experts dedicated different coefficient to each factor, averaging mean is used to calculate the final coefficient. All the dedicated numbers to each factor are added with each other and they are divided by the number of respondents as 30.
- 3- Determining the existing condition of each factor as rank with the score ranging 1 to 4 based on the following criteria:
For opportunities and strengths: 3, 4
Threats and weaknesses: 1, 2
Averaging method is also used in calculating the weights.
- 4- The calculation of weighted score via multiplication of score of each row of factors in normalized weight and writing it in the new column.

- 5- The calculation of the sum of weighted scores with minimum 1, maximum 4 and mean 2.5. If the final score of matrix is less than 2.5, the region is weak in terms of internal and external factors and if the final score is more than 2.5, the study area is with good condition in terms of internal and external factors. IFE and EFE matrices are shown in Table 1, 2.

Internal factor evaluation (IFE)

As shown in the table, the sum of final score of internal factors is 2.56 and it shows that the system is above average in terms of internal effective factors (2.5).

Table 1- Internal Factors Evaluation Matrix (IFE)

Internal factors		Weight	Rank	Final score
Strength	Potential mineral aspects and great reservoir and mines registered including copper :S1	0.07	4	0.28
	Considerable variety of mineral materials namely in the south of province :S2	.043	4	0.172
	The highest number of academic specialized people compared to other provinces :S3	0.028	3	0.084
	Geology, mineral and tourism attractions of geology in the province. :S4	.028	3	0.084
	Effective infrastructures in industrial development including the energy supply network, transportation network (land, air and rail) and telephone communication network and gas supply :S5	.043	4	0.172
	The academic, scientific and vocational and technical institutions :S6	.029	3	0.087
	Local investors in province :S7	.043	4	.172
	Specific commercial regions in province (specific region, free zone of Sirjan and specific economic region of ArgeJadid Bam) :S8	.07	4	0.28
	The active industrial townships namely in deprived regions of province :S9	.058	3	0.174
	S10 :The only area in Iran its mineral materials can be used in Ferrochrome and refractory	0.07	4	0.28
Weakness	Traditional and non-expert methods for mines exploration :W1	.043	2	0.086
	The lack of converting industries and incomplete production chain of mine-related industries :W2	0.058	1	0.058
	Fine aggregate of some of mineral stones of province and due to low technology, it is processing is not possible. :W3	0.058	2	0.116
	The lack of liquidity and low capital of industry and mine bank of province :W4	0.07	2	0.14
	The administrative barriers and inconsistency in relation with industrial and mineral units of province :W5	0.029	2	0.058
	The lack of consistency of databank of geology, mineral of province with other global standards. :W6	0.043	1	0.043
	Inadequate consideration of providing and updating basic geology information, geochemical and mineral potential of province :W7	.043	1	0.043
	Inter-organizational inconsistency in mine exploration (explorative activities by geology organization and mineral exploration in country, development and renovation organization of mines, industry, mine and trading organization of province and ministry of oil and Atomic energy organization. :W8	0.058	2	0.116
	Old equipment and machinery and the lack of importing them.:W9	0.058	1	.058
	Environmental problems of mineral industrial pollutants including costs. :W10	0.058	1	.058
Sum				2.56

Source: Study results, 2014

As shown in Table 1, the most important strengths of developing mineral industries of Kerman province with final score 0.28 is the potential of mineral aspects and global registered mines as copper, the specific commercial regions in province and exclusive mines in the region to be used in refractory industries.

Table 2- The External Factor Evaluation Matrix

External factors		Weight	Rank	Final score
Opportunities	Suitable position of province and proximity to southern ports in transit way. :O1	0.07	4	0.28
	Specific commercial regions in country :O2	0.055	3	0.165
	11 th government policy regarding stopping raw material selling in mineral industry field :O3	.07	4	0.28
	Extensive relationship and memorandum of understanding with Asian, European, African and Southern Africa countries regarding geology, exploration and creating databases of earth sciences :O4	.055	3	0.165
	Long-term growth of the demand of processes mineral products in Middle East, south of Asia and China :O5	0.04	3	0.12
	Improving non-state sector of exploitation of mineral materials via training and giving technical-engineering aids by geology organization and mineral exploration. :O6	0.04	3	0.12
	Improving the mines law and notification of executive regulation and eliminating the unnecessary instructions in mineral activities :O7	0.04	4	0.16
	The design capacities, installing the equipment and industrial and mineral machineries :O8	0.027	3	0.081
	The law of maximum use of the internal manufacturers' capability as directing the demand of public sector to internal capacities of materials and basic mediatory mineral products. :O9	0.04	4	0.16
	Development of new technologies and new materials production industries and metal, non-metal advanced materials, composites and etc. as driving force of developing upstream mines. :O10	0.027	3	0.081
Threats	Difficulty of access to financial and technological resources due to sanctions and political tensions :T1	0.055	2	0.11
	The rules of tax on income in mine sector :T2	0.07	2	0.14
	The lack of organized planning and perspective in exploration, extraction and processing :T3	0.055	1	.055
	mines privatizationChallenges of:T4	0.07	2	0.14
	Increasing the production and development of mineral industries of the countries in Persian gulf :T5	0.04	2	0.08
	Ambiguity in rules of foreign investment sector :T6	0.07	1	0.07
	The weakness of planning and policy making of government namely in using uniform commercial and industrial policy for sustainable industrial and mineral development. :T7	.055	1	0.055
	Limitation of water resources of the country and the lack of metal and non-metalmineral industry :T8	0.04	2	0.08
	The lack of actual great private holdings in mineral industries as guaranteeing for financing companies :T9	0.04	1	0.04
	Financial crisis of industrial world and its chain effects on demand for mineral industry products :T10	0.04	1	0.04
Sum		1		2.42

Source: Study findings, 2014

The most important weakness of mineral industry of Kerman province is with final score 0.14 as the lack of liquidity and low capital of mine and industry bank of province and the second and third weakness with final score 0.116 is the fine aggregate of some of mineral stones of province and inter-organizational inconsistency in mine exploration. It can be said that, during interview with the Delphi group experts, all emphasized on the fact that the most important challenge of mineral industries development of Kerman province ignoring the scores of model is the lack of liquidity and low capital of mine and industry bank of province and it is the greatest challenge of industrial and production units in province.

External Factor Evaluation (EFE)

The sum of final score of EFE is 2.42 for the studied system and it shows that the study area is lower than average in terms of external factors. As shown in Table 2, the suitable location of province and proximity to southern ports and its location in transit way and the policy of 11th government regarding stopping raw material selling in mineral industry with final score 0.28 is the most important opportunity of Kerman province for good development of mineral industries. Also, the most important threats are the rules of tax on income in mine and the challenges of mines privatization and each with final score 0.14 are the most serious threats of mineral industries development. According to the experts, the rules of tax on income in mine sector had some outcomes of mineral industries. This policy as resistive economy policies leads to the raw mineral material export without any processing and production on it. This issue is more serious in recent years that country is faced with various sanctions. Also, mines privatization challenges include: The lack of inclination of government to give strategic industries as copper and steel to private sector, the inclination of private sector operators to raw material selling and the lack of inclination to invest in processing field.

After calculation of final scores, to determine the suitable strategies for organizing mineral industry of Kerman province, the sum of final scores of IFE on axle X and the sum of final scores of EFE on axle y of main chart of SWOT is shown. The intersection of EFE and IFE determines the suitable executive strategy for management of industrial development of study area. Generally, there are four types of strategies in this regard as aggressive (SO), Diversification (ST), Turn around or conservatism (WO) and defensive strategies (WT)(Wang and Hong, 2011: 282;2011, David, 2009:364-366; Nori et al., 2006, 30; Eftekhari and Mahdavi, 2006, 9; Golkar, 2005, 53; Harrison and Karun, 2003, 192) are shown in Figure 2.

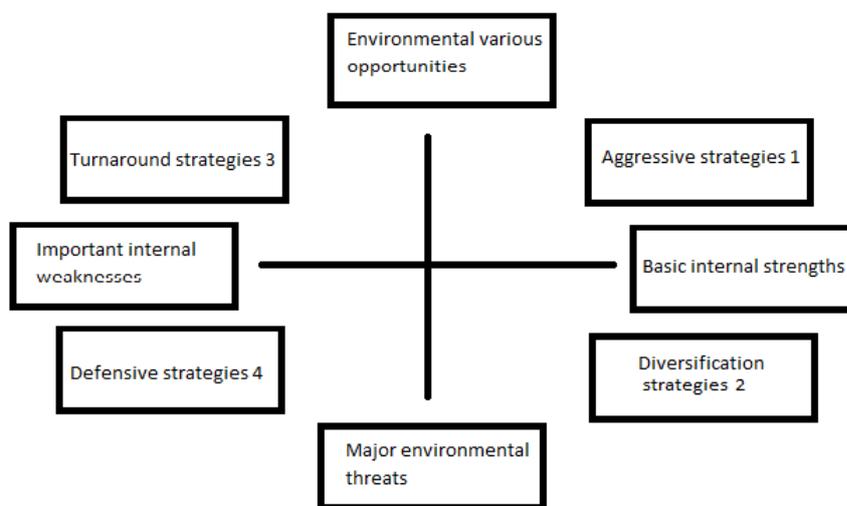


Figure 2- SWOT matrix and determining method of strategies

SO strategy: It is including the strategies of maximum use of environment opportunities by using strengths of the system. Any system is interested to be in this situation to have maximum use of internal strengths of opportunities and external events (David, 2009).

ST strategy: Using strengths to cope up with the threats by which the system by its internal strengths avoids the negative effect of external threats.

WO strategy: Its aim is minimizing the weaknesses and maximizing the opportunities. Indeed, as the required system cannot use the opportunities, this strategy is used.

WT strategy: It is used to minimize the harms of threats and weaknesses. The system with more factors in this block has no suitable condition and they are in risky condition. The aim of executing this strategy is lowering the internal weaknesses and avoiding external threats (Golkar, 2005).

As shown in Figure 3, suitable strategy to improve mineral industries is diversification strategy. In other words, the following Figure indicates that if mineral industry management can move to sustainable development, implementation of ST strategies should be on priority. It means that by internal strengths of system, we can cope up with the external threats.

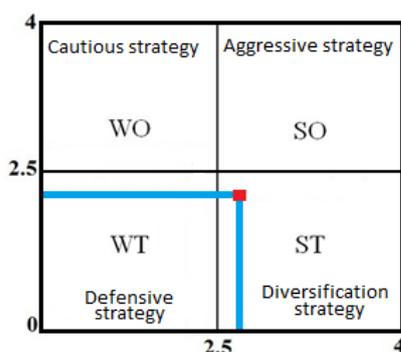


Figure 3- Dominant strategy for organizing the development of mineral industry of Kerman

Determining WO strategies to develop mineral industry of Kerman province

In the next stage, based on internal and external matrices and the views of experts, we can determine the solutions for required system. By the result in the previous stage (Figure 3) recommending diversification strategy, the solutions of this strategy are shown in Table 3.

Table 3- The solutions of ST group to organize the mineral industry development of Kerman province

Solutions	Factors
ST1 :Improving effective infrastructures in developing the mines via state investment and absorbing local capitals	S3-S5-S6-S7-S8-) (T1-T4
Observing preference policies, more processing of raw products in the country to :ST2 export	S1-S2-S5-T2-T3-) (T4-T7
ST3: Using the potential of townships and industrial regions via encouraging policies of government to improve motivation of private sector for investment.	(S7-S9-T4-T7)
Modification of exploration areas and creating a mineral system under the :ST4 supervision of policy making and planning of mine sector	S1-S2-S10-T3-) (-T5
Creating and developing additional industries of copper in industrial townships of :ST5 province (different types of copper pipes, copper parts and connections,Feromolibdenand copper forging and other relevant copper industries)	(S1-S9-T1-T1-T5)
in mine chain and mineral industriesDeveloping great private Holding companies:ST6	(T4-T9-T10)
Developing absorbing foreign investment and common investment in exploration, :ST7 operation and processing activities to absorb new technology and resources.	S1-S2-S10-T1-) (T3-T5-T10
Reviewing the rules of export, investment and processing :ST8	(S7-S9-T2-T4-T6)
Formulating comprehensive plan of mineral industries development of Iran :ST9 consistent with perspective 20-year	S1-S2-S4-S10-) (T3-T7

Source: Study results, 2014

Other strategies outside the model

Besides the presented solutions in the previous section as ST strategy, to achieve good development of mineral industry of province, other solutions can be considered outside of model. Using SWOT strategies needs a type of judgment with vision and it is assumed that managers have required knowledge, the solutions of the model are not the best solutions and strategic planning for mineral industry development needs wide studies. Some solutions outside of model can be referred as:

Table 4. Other strategies outside the model for organizing the mineral industries development of Kerman province

Solutions	Field
Eliminating the barriers and rapid execution of article 44 constitution policies to change in mine and mineral industries.	Policy making
Developing more coverage of risk taking of private sector investment by governments by continual increase of the capital of investment insurance of mineral activities by 3000 billion Rls. in fifth plan.	Financial
Playing the role of development and renovation of mines and mineral industries of Iran as developing organization and fulfilling the content of article 44 policies in mine and mineral industries sector.	
Creating required conditions for investment security and motivations of private sector investors via state encouragement of investment as tax exemption for a long term and investment with the participation of development and renovation of Iran industries.	Financial
Marketing and absorbing internal and external investors with the presence in fair, conferences, book publication and brochures.	Advertisement
Eliminating liquidity problem via legal deposits of people, using national development fund, specific deposit certificate and increasing capital of state banks.	Financial
Reducing tariff of legal exemptions of importing mineral machineries as Loader, Bulldozer, and Wagon, Drilling machineries and extraction and the equipment and machineries enterprises.	Technology

Source: Study findings, 2014

CONCLUSION

Strategic planning of mineral industry development of Kerman province is defined based on SWOT analysis. The results of analysis showed that strategies of ST solution should be on first priority of planning. According to the results of analysis, one of the major challenging issues is mineral industries development in the country generally and in Kerman province specifically as the shortage of liquidity and capital. Other important challenges are the lack of inclination of investors of private sector to investment in processing of mineral products. As activity in mine sector has high costs and risk and we cannot encourage private sector to enter the mine section by promise and the required resources are not provided for private sector. The solution of this problem is as industry, mine and commerce ministry, introduce the miners to receive exploration loan to bank system and the parliament dedicates budget in this regard. Another important challenge is taking export policy of raw mineral materials in ninth and tenth government and in the form of tax on income supports raw export to production. This factor is not effective on the lack of motivation of private sector to use production and processing. By raw material selling or semi-processing export of mineral materials, the real fulfilling of mine position in economy is not possible. Mineral export as raw and semi-processing under sanction emergency conditions or with import of machineries can be justified but its continuing in long-term is not for the benefit of county. Fortunately, the eleventh government policy regarding the stopping of raw material can bring positive results.

REFERENCE

- Alamtabriz Akbar et. al., (2013).** Evaluation of sustainability of mine industry with approach of balanced scorecard approach-hierarchy analysis (BSC-AHP). *Scientific Res. J. Industrial Management Studies*. Year 11, NO. 28. pages 21-40.
- Azapagic A (2004).** Developing a framework for sustainable development indicators for the mining and minerals industry. *J. Cleaner Production*. 12:639-662.

- Barzani, Mohammad Vaez. (2011).** The effect of industrial facilities on investment in private sector in mine and industry (in all provinces). *Economic Res.* Year 11(1):97-129.
- Butorabi Mehdi (2012).** Divisions of Kerman province in 2011. Available at <http://kalutekariman.persianblog.ir/post/1/>
- Chengzhi L. (2013).** The Chinese GNSS System development and policy analysis. *Space Policy.* 29(1):9-19.
- David Fred. R. (2009).** Strategic management. Translated by Parsayian, Ali and Arabi, Seyed Mohammad. Fourteenth edition. Tehran. Cultural research office.
- Eftekhari AbdolrezaRoknoldin and Mahdavi Davood. (2006).** The solutions of developing rural tourism by SWOT model of rural district of Lavasan Kuchak. *J. Lecturer Human Sci.* 2(10):1-30.
- Emami Mehdi (1935).** Iran mines (active and passive to the end of first half 1935). Shiraz. *Regional Library Sci. Tech.*
- Ericsson M (2002).** Summary Socio-Economic Impacts of The Finish Extractive Industries. Raw Materials Group, Stockholm.
- Ghafuri Ali. (2007).** Mineral industries the way of approaching sustainable development by Iran. Development and renovation of mines and mineral industries organization. Available at <http://www.imidro.org/services/article/thumbnaill/1432/standalone/1/>.
- Ghiasvand, Alireza. (2013).** The evaluation of strengths, weaknesses, opportunities and threats of mine and mineral industries of Iran and development strategies proposition. *Geology.* Year 22. NO. 87. p. 197-204.
- Golkar Kurush. (2005).** Suitable analytic technique of SWOT. Application in urban designs. *Safe J. Period* 2.(41):44-65.
- Harrison Jefry and Karun John. (2003).** Strategic management. Translated by BehroozGhasemi. First edition. Tehran. Board publications.
- Hosseini Dana and Gudarzi. (2011).** The investigation of mine and mineral industry of Kerman province with emphasis on the goals of economic collective effort. Research center of TV and Radio organization of Islamic Republic of Iran.
- Hosseini Ali et al., (2013).** Presenting the strategies of organizing wear-out texture of Gheitarietownship by QSPM. Baghnazar. Year 110. No. 24.
- Industrial townships company of Kerman province (2014).** Townships and industrial regions of Kerman province. Available at <http://iec.kr.ir/index.php/fa/1388-12-02-05-15-39>.
- Kahraman C. et. al., (2007).** Prioritization of E-Government Strategies Using a SWOT-AHP Analysis: The Case of Turkey. *European J. Info. Systems.* 16:284-298.
- Management and planning organization. 2003. Perspective document of Islamic Republic of Iran in horizon 2025. General policies of fourth development plan. Notification of our leader.
- Mine world (2014).** Mines and security of investment. Available at <http://www.donyayemadan.ir/view/22373/>.
- Moradzade Abdolbaset (2012).** The analytic investigation and prioritization of the major barriers and challenges of business management in Sistan and Baluchistan (case study: Mine sector). *Nat. Con. Entrepreneurship Knowledge-based Business Management.*
- National basis of geology data of country (2013).** A review of geology condition, Mineral potential and natural risks of Kerman province. Available at <http://nigc.conference.gsi.ir/fa/reportPublish/16/Pn4//84/>
- Nuri Jafar et al., (2006).** Environmental evaluation of strategic policies of industrial development of Iran by SWOT strategic factors analysis. *Environ. Tech. Sci.* 8:25-38.
- Pourmajd (2013).** Opportunities and barriers of growth of mine, available at <http://www.taajeraan.com/index.php/78-business/327-2013-05-15-13-35-55>
- Rahimi Abas (2004).** Determining the features of converting industries of agriculture sector and rural industries. Tehran. Community-based publication.
- Sarmadi Hadi., Hosseini SeyedAbas (2013).** The reference of cement industry in a decade 2001-2011. First edition. Tehran. Zharf publication.
- Shahraki Alireza (2013).** The investigation and ranking the barriers of industry development and presenting its development solutions in Sistan and Baluchestan. *Scientific J. Management Improvement.* Year 7. 4(22):67-82.
- Wikipedia. (2014).** Kerman province. Available at http://fa.wikipedia.org/wiki/Kerman_province.
- Wang K. J. and Hong W.C (2011).** Competitive advantage analysis and strategyformulation of airport city development - The case of Taiwan. *Transport Policy.* 8(1):276-288.