

6

Mining and Quarrying



Introduction

Survey of mines-related activities and continuous dissemination of its results began by the then Ministry of Industry, Mine and Trade in the year 1333. Related statistics were published annually in the attachment of the publication "Statistics on Manufacturing Activities" until the year 1339, but they have appeared in a separate publication ever since under the title of "Statistics on Mineral Activities of Iran". The first census of mines of the country was carried out in the month of Azar in the year 1342 by the Ministry of Economy. Statistical Bureau of the Ministry of Economy gathered and published statistics on mines-related activities annually from the year 1342 to the year 1353, using statistics from nationwide mines registers and records. The second census of authorized mines of the country was conducted by the cooperation of the SCI and the Ministry of Industry, Mine and Trade in the year 1353. The SCI used to conduct a survey of a selected number of mines annually from the year 1353 to the year 1357. This economic sector suffered from a lack of statistics during the year 1357 to the year 1363, because in the interim neither statistical surveys were implemented nor comprehensive registers were available. The SCI conducted a survey of mines, covered by the public sector in the years 1364 and 1365, and also carried out the third census of mines of the country in the year 1366. Survey of mines has been conducted every year from the year 1367 to the year 1385 except for the years 1370 and 1384.

The data presented in this chapter are from the aforementioned censuses and surveys as well as data from the mineral cooperatives companies reported by the Ministry of Cooperatives, Labor and Social Welfare .

It should be noted that:

(1) in the survey of the operating mines of the country, statistics on oil and gas, radioactive materials, and clay were not collected. However, due to the special importance of oil and gas statistics, the related information is separately presented in chapter 6.

(2) in the survey of operating mines, sand and gravel mines are enumerated by a sample survey, and other mines by a census.

(3) the ISIC Rev.4 is followed with appropriate modifications for the classification of activities in this sector.

Definitions and concepts

Mine: collection of (cost-effective) mineral deposits, machinery, and facilities established for exploring, equipping, and exploiting and dressing of minerals. Dressing refers to all physical and chemical operations for separating some of waste materials from ores or separating ores from one another.

Operating mine: any mine with exploitation license from the Ministry of Industry, Mine and Trade (for mines other than sand and gravel) or from municipalities and governors offices (for sand and gravel) that has been under extraction (in some cases with dressing activities) for at least 30 successive or non successive days to produce marketable ores during the year of the enumeration.

Private management: management exercised by individuals or private institutions.

Public management: management exercised by the ministries, government organizations, Islamic Revolution Foundations, banks, municipalities and other public institutions.

Workers: all the individuals working full-time or part-time in mine-related activities inside or outside of the mine. The employed persons are divided into two groups: production line workers (skilled and unskilled) and other workers (administrative, financial and service) according to their duties.

Production line skilled workers: employed persons capable of performing a part of technical activities related to production line due to their know-how and experience. Engineers, technicians, craftsmen, foremen, skilled labourers, fitters, and drivers, are some examples.

Production line unskilled workers: persons working in production line whose jobs do not require any specific training or experience; such as labourers and porters.

Other workers (administrative, financial and service): employed persons engaged in clerical, administrative, financial and services activities in mines or their central offices but not engaged directly in extraction and production activities.

In presentation of statistics on employed persons, it is noteworthy that the method of "average number of employed persons" has been employed in the calculation.

Compensation of employees: see Chapter 5, Definitions and concepts.

Mineral production: all minerals obtained from a series of extraction activities which make them marketable. It should be mentioned that in some mining activities, minerals are supplied to the market without undergoing dressing process, whereas in others, minerals are supplied to the market after a series of physical and/or chemical treatments for separating some of the waste from ores, separating ores from one another, or increasing fineness of raw material. In addition, in one industry, several minerals may be produced. For example, copper ore mining activity includes minerals of copper ore and copper and molybdenum concentrates production.

Value of products: value of extracted ores and value of saleable mineral waste products at producer's prices; that is, the price of sale to customers at the mine.

Capital formation(changes in the value of capital goods): see Chapter 5, Definitions and concepts.

Value added: value of receipts (outputs) less the value of payments (inputs).

Value of receipts (outputs): value of mineral products, value of saleable mineral waste products, manufacture and major repairs of capital goods by mine workers and other receipts of the mine including receipts from contracts, minor repairs of buildings and office equipment, minor repairs of machinery, laboratory, etc.

Value of payments (inputs): value of purchased materials and non-durable tools and instruments, fuel consumed, water and electricity, and other payments including payments on contracts, minor repairs of building and office equipment, minor repairs of machinery, laboratory, etc.

Cooperative: see Chapter 5, Definitions and concepts.

Mines cooperative: a cooperative company engaged in excavation, exploitation, and sales of minerals obtained from operating mines

Selected information

On the basis of the country's operating mines survey results in the year 1391, there were 5316 operating mines. The results show that a total of 84922 persons were working in these mines and the number of workers increased by 0.4 percent in contrast to the year 1390.

In the year 1391, the value of mines products amounted to 101209 billion rials. Iron ore, copper ore and decorative stones with 51536, 21674 and 5935 bln. rials had the highest annual production value, respectively.

In the year 1391, the value added of the nation's operating mine amounted to 79164 million rials. Iron ore, copper ore, and decorative stones with 38740, 18761 and 4673 million rials had the highest value added, respectively. These three accounted for more than 78% of the sector's total value added.

Moreover, Kerman, Yazd and East Azerbaijan with 34056, 24500 and 3201 million rials had the highest value added of the country's operating mines among the provinces.

In the year 1391, over 8606 million rials of fresh investments were accomplished that over 71% relates to machinery, durable tools and administrative equipment and 17% goes to the construction and land.

6. 1. NUMBER OF MINES, WORKERS, COMPENSATION OF EMPLOYEES AND VALUE OF PRODUCTION IN OPERATING MINES⁽¹⁾ BY OSTAN (mln rials)

Year and Ostan	Number of mines			Number of workers			Compensation of employees	Value of production ⁽³⁾	
	Total	Type of management		Total ⁽²⁾	Production line				Other (administrative, financial and service)
		Private	Public		Skilled	Unskilled			
1375	2704	2137	567	53046	23259	16372	13415	480155	1941600
1380.....	2892	2548	344	55560	28013	14939	12608	899382	5675787
1385.....	3582	3301	281	60062	31107	16146	12810	2307840	22642408
1387.....	4116	3870	246	75458	40031	21146	14281	4348255	35567776
1388.....	4426	4181	245	76854	41229	19297	16328	5518477	35586170
1389.....	4974	4756	218	81293	46336	17357	17599	6403153	50147576
1390	5246	5036	209	84528	45159	21280	18089	7316839	65442497
1391... ..	5316	5124	192	84922	46721	20261	17941	8857564	101209836
East Azarbayejan	272	266	6	4737	2288	1670	780	373712	3966326
West Azarbayejan.....	394	372	21	2759	1320	470	969	200308	1097511
Ardebil	111	110	1	588	271	110	206	35830	185129
Esfahan	387	383	4	6017	3372	1343	1302	639243	3348169
Alborz.....	17	17	0	356	160	124	73	33414	135155
Ilam.....	42	42	0	445	180	120	144	31139	297113
Bushehr.....	153	151	2	1149	591	228	330	70176	263314
Tehran.....	102	100	1	2056	805	833	417	196442	793867
Chaharmahal& Bakhtiyari	89	84	5	468	293	35	139	25431	206281
South Khorasan.....	197	191	6	2048	1528	244	276	170915	790218
Khorasan-e-Razavi..	433	426	7	4140	2090	1115	935	272257	2417775
North Khorasan.....	75	71	5	1009	636	299	74	35291	482459
Khuzestan	141	138	3	1440	769	296	376	116278	786525
Zanjan	142	136	6	1469	905	251	314	134829	1604938
Semnan.....	260	245	15	3546	2463	522	561	264413	747824
Sistan&Baluchestan.....	109	108	1	1366	889	345	132	107533	691900
Fars	186	178	9	3972	2443	883	646	320226	1795998
Qazvin	158	157	2	755	449	176	130	55948	272385
Qom	94	93	1	1014	600	150	265	71863	434053
Kordestan	147	136	10	1028	629	144	256	71838	609012
Kerman	400	392	8	15732	8234	3704	3794	2384539	42334665
Kermanshah.....	144	142	2	1418	634	249	535	147666	391669
Kohgiluyeh&Boyerahmad.	97	86	11	764	441	144	179	78016	246596
Golestan	97	91	7	2410	1157	768	485	240305	740501
Gilan	74	61	14	1400	805	251	344	127782	323911
Lorestan.....	132	122	10	1749	996	497	256	97474	992550
Mazandaran	98	82	15	2526	1415	696	416	225157	723959
Markazi	300	289	11	2942	1968	382	592	314653	2728184
Hormozgan	60	60	0	1159	552	416	190	119831	527326
Hamedan	136	136	0	802	400	202	200	54019	371587
Yazd	265	258	8	13656	7438	3593	2625	1841037	30902936

1. Statistics for sand and gravel mines obtained from sample surveys were generalized to the total country and caused some differences between the total and sum of parts in some cases.

2. Excluding the workers of mines whose extraction activities were entrusted to others under a contract, in the year 1387 and before .

3. Including the value of mineral and other products

Source: Statistical Centre of Iran.

6.2. NUMBER OF MINES, WORKERS, COMPENSATION OF EMPLOYEES AND VALUE OF PRODUCTION IN OPERATING MINES BY TYPE OF ACTIVITY, THE YEAR 1391
(mln.rials)

Activity	Number of mines			Number of workers			Compensation of employees	Value of production	
	Total	Type of management		Total	Production line				
		Private	Public		Skilled	Unskilled			
Total⁽¹⁾	5316	5124	192	84922	46721	20261	17941	8857564	101209836
Mining of coal	96	82	14	12175	6454	3356	2365	1420734	3867558
Mining of iron ore	122	117	5	15297	8119	3558	3620	2198066	51536843
Mining of lead and zinc	28	23	5	1748	1022	417	309	231484	2444549
Mining of gold ore	5	5	000	451	279	91	81	42533	289385
Mining of copper ore.....	23	22	1	6631	3691	1743	1197	1067168	21674794
Mining of chromite	37	36	1	1677	769	697	211	225611	1840803
Mining of manganese....	19	19	000	566	313	95	158	45694	400403
Mining of bauxite.....	8	6	2	558	446	74	38	7280	326656
Mining of cobalt, antimony and titanium.....	1	1	000	20	5	15	000	2620	9600
Mining of gravel and sand	1600	1518	83	12371	6550	2804	3016	915487	3758876
Mining of decorative stones	797	787	10	11664	7008	2500	2156	1057993	5935942
Mining of rubble stone..	777	758	19	4790	2505	1073	1212	279729	1306149
Mining of ballast.....	4	2	2	35	23	3	9	3777	15833
Mining of lime stone	686	651	35	8057	4777	1669	1611	680875	3926086
Mining of gypsum.....	286	282	4	2056	1175	420	461	121781	721476
Mining of kaolin and fireclay	187	187	000	1612	765	499	348	154415	914756
Mining of dolomite	32	32	000	255	137	63	55	52944	58084
Mining of bentonite's and fuller's earth	58	58	000	261	170	28	63	12589	63039
Mining of magnesite and whiting	16	16	000	150	124	13	13	13680	65458
Mining of sodium sulphate	9	5	4	83	50	16	17	8605	45370
Mining of barite , limonite and ferrous oxide	67	67	000	482	235	138	109	39827	195222
Mining of fluorine.....	15	15	000	241	126	93	22	13814	88456
Mining of strontium sulphate& boron.....	9	9	000	92	64	8	20	7103	61322
Mining of orpiment phosphate & iodine	3	1	2	330	146	139	45	31794	256377
Mining of salt	87	86	1	843	471	201	171	53917	326761
Mining of silica	108	108	000	830	425	199	206	56802	410614
Mining of ores slag	97	96	1	652	359	105	188	43741	206446
Mining of feldspar.....	59	58	1	275	166	55	54	15739	94940
Mining of talcum.....	19	19	000	116	53	29	34	6051	27161
Mining of shell & mica .	13	12	1	68	32	14	22	2527	15297
Other precious and semi-precious stones.....	4	4	000	114	35	52	27	9429	23570

1. Statistics for some sand and gravel mines, obtained from sample surveys were generalized to the total country and caused differences between the total and sum of parts in some cases.

Source: Statistical Centre of Iran.

6. 3. QUANTITY OF MINERALS PRODUCTION IN OPERATING MINES⁽¹⁾ BY TYPE OF ACTIVITY (1000 tons)

Activity	1375	1380	1385	1387	1388	1389	1390	1391
	66961	92649	138334	178905	203328	224943	360688	340461
<i>Total</i>	⁽²⁾ 55428	⁽²⁾ 47775	⁽²⁾ 77394	⁽²⁾ 70708	⁽²⁾ 73691	⁽²⁾ 82986	⁽³⁾ ×	⁽³⁾ ×
Mining of coal	1211	1380	2413	2636	2181	2324	2327	2820
Mining of iron ore	5236	11441	20648	28474	27617	30992	35843	39873
Mining of lead and zinc.....	322	579	1072	571	626	1436	955	1459
Mining of gold ore	152	352	742	668	1256	1178	1077	1699
Mining of copper ore	370	453	790	1115	1031	1580	2094	2022
Mining of chromite	322	174	269	269	275	394	440	412
Mining of manganese	83	140	94	116	126	125	227	205
Mining of bauxite	230	65	1395	715	522	687	847	892
Mining of cobalt.....	0	0	0	⁽⁴⁾ 4	⁽⁴⁾ 4	⊖	7	0
Mining of antimony	×	0	0	⊖	⊖	1	×	×
Mining of titanium.....	×	×	4	⊖	⊖	×	×	×
Mining of gravel and sand.	⁽²⁾ 53869	⁽²⁾ 46147	⁽²⁾ 76102	⁽²⁾ 68708	71321	80241	⁽²⁾ 126386	94618
Mining of decorative stones.....	6120	10325	9908	13104	13839	15738	14327	14277
Mining of rubble stone	7683	9359	16441	16265	20456	21990	25622	23325
Mining of ballast	⁽²⁾ 959	⁽²⁾ 802	⁽²⁾ 394	⁽²⁾ 686	⁽²⁾ 626	⁽²⁾ 398	⁽²⁾ 525	342
Mining of lime stone	31961	43498	62959	89926	107373	114639	115269	123116
Mining of gypsum	7696	8347	11878	12566	13616	13672	15353	14179
Mining of kaolin and fireclay	1437	1660	2716	4685	4326	9355	6943	6660
Mining of dolomite	219	281	514	696	1132	1251	968	1052

6. 3. QUANTITY OF MINERALS PRODUCTION IN OPERATING MINES⁽¹⁾ BY TYPE OF ACTIVITY(continued) (1000 tons)

Activity	1375	1380	1385	1387	1388	1389	1390	1391
Mining of bentonite and fullers's earth.....	85	175	186	376	387	355	422	427
Mining of magnesite and whiting	111	115	189	116	131	136	173	143
Mining of sodium sulphate	464	369	280	738	679	858	1225	1417
Mining of barite	159	238	226	⁽⁵⁾ 227	365	320	407	393
Mining of limonite and ferrous oxide.....	28	76	//	⊙	⊙	12	×	×
Mining of fluorine	19	34	63	66	71	76	58	80
Mining of strontium sulphate.....	8	0	17	⁽⁶⁾ 22	⁽⁶⁾ 16	15	76	191
Mining of boron.....	3	3	2	⊙	⊙	1	×	×
Mining of orpiment	//	//	//	⁽⁷⁾ 62	⁽⁷⁾ 61	×	98	101
Mining of alum.....	×	1	0	×	×	×	0	0
Mining of phosphate.....	10	33	67	⊙	⊙	62	×	×
Mining of salt.....	1411	1538	2618	2301	2816	3257	2776	2962
Mining of silica	1244	1687	2252	2508	3643	3637	3133	4001
Mining of ores slag.....	⁽²⁾ 600	⁽²⁾ 826	⁽²⁾ 898	⁽²⁾ 1314	⁽²⁾ 1743	⁽²⁾ 2145	⁽²⁾ 2270	2419
Mining of feldspar	122	157	418	505	637	648	670	1110
Mining of talcum	27	66	69	90	67	79	80	116
Mining of asbestos.....	2	4	0	0	×	×	×	×
Mining of sea shell.....	219	96	99	⁽⁸⁾ 83	⁽⁸⁾ 70	68	89	95
Mining of mica	5	5	2	⊙	⊙	3	×	×
Mining of turquoise	//	//	//	⊙	⊙	0	3	×
Mining of opal	×	×	//	⊙	⊙	0	×	×
Other precious and semi-precious stones....	×	×	×	⁽⁹⁾ 2	⁽⁹⁾ 4	5	×	21

1. Statistics for some sand and gravel mines, obtained from sample surveys, were generalized to the total country and caused differences between the total and sum of parts in some cases

2. In thousand cubic meters.

3. Since the year 1390, the above statistics were collected in thousand tons.

4. Including antimony and titanium production

5. Including limonite and ferrous oxide production.

6. Including boron production.

7. Including phosphate production.

8. Including mica production.

9. Including turquoise and opal production.

Source: Statistical Centre of Iran.

6. 4. VALUE OF MINERALS PRODUCTION IN OPERATING MINES BY TYPE OF ACTIVITY
(mln rials)

Activity	1375	1380	1385	1387	1388	1389	1390	1391
Total	1941600	5675787	22642408	35567776	⁽¹⁾ 35586170	⁽¹⁾ 50147576	⁽¹⁾ 65442497	⁽¹⁾ 101209836
Mining of coal	357943	570566	1077642	1937905	1649041	1808708	2180822	3867558
Mining of iron ore	231205	947000	5483754	12942090	11125450	17321420	27277137	51536843
Mining of lead and zinc	92546	195458	1855364	629212	735735	1200521	1524035	2444549
Mining of gold ore	3042	9415	113156	167949	219709	215820	138088	289385
Mining of copper ore	269038	1145592	7500248	8639421	9167938	13400520	15442228	21674794
Mining of chromite	80024	70388	297223	407529	395224	851529	1159852	1840803
Mining of manganese	9344	31023	51383	129941	122647	121374	213050	400403
Mining of bauxite	13194	4253	153928	137812	107891	173306	220154	326656
Mining of cobalt	0	0	0	⁽²⁾ 6309	⁽²⁾ 6184	3300	2800	9600
Mining of antimony	×	0	0	⊙	⊙	⊙	×	×
Mining of titanium	×	×	4800	⊙	⊙	⊙	×	×
Mining of gravel and sand	277148	543928	1548204	2393425	2783149	3288391	4347035	3758876
Mining of decorative stones	238796	1013763	1916393	3847756	4169838	5344709	5392055	5935942
Mining of rubble stone	57910	309179	487803	634662	954698	959031	1297833	1306149
Mining of ballast	8457	17147	19448	46507	65214	45160	35428	15833
Mining of lime stone	124664	363066	1079502	2023836	2305669	3234097	3506766	3926086
Mining of gypsum	37036	87085	236511	336973	412816	510808	654609	721476
Mining of kaolin and fireclay	36169	98729	236033	395615	288648	437908	464923	914756
Mining of dolomite	6493	14337	29395	43748	65697	93419	82230	58084
Mining of bentonite and fuller's earth	1490	7123	12382	31837	45474	37087	42421	63039
Mining of magnesite and whiting	10716	21069	46722	38143	52238	58698	70630	65458
Mining of sodium sulphate	7729	7622	14306	67828	62821	19358	45370	45370
Mining of barite	8351	24215	39997	⁽³⁾ 69023	⁽³⁾ 86653	⁽³⁾ 97241	⁽³⁾ 139921	⁽³⁾ 195222
Mining of limonite and ferrous oxide	2317	6181	41	⊙	⊙	⊙	⊙	⊙
Mining of fluorine	4448	11118	53959	56526	94959	81750	94388	88456
Mining of strontium sulphate	380	0	1932	⁽⁴⁾ 7552	⁽⁴⁾ 1937	⁽⁴⁾ 7410	22089	61322
Mining of boron	2235	2312	3328	⊙	⊙	⊙	⊙	×
Mining of orpiment	144	879	180	⁽⁵⁾ 116851	⁽⁵⁾ 78127	⁽⁵⁾ 95376	⁽⁵⁾ 190526	⁽⁵⁾ 256377

6. 4. VALUE OF MINERALS PRODUCTION IN OPERATING MINES BY TYPE OF ACTIVITY (continued)
(mln rials)

Activity	1375	1380	1385	1387	1388	1389	1390	1391
Mining of alum	×	144	0	×	×	×	×	×
Mining of phosphate	600	39484	31018	⊖	⊖	⊖	⊖	×
Mining of iodine.....	×	×	×	⊖	⊖	⊖	⊖	⊖
Mining of salt	26390	38076	109273	134040	212121	236712	224582	326761
Mining of silica	18314	49152	148891	177793	216142	236691	359019	410614
Mining of ores slag	3672	10147	24926	70668	69320	122238	178277	206446
Mining of feldspar	3158	9474	32814	36936	50997	109955	65794	94940
Mining of talcum	1635	11491	6959	6639	7349	8022	11749	27161
Mining of asbestos	1978	3450	0	×	×	×	×	×
Mining of sea shell	3415	7674	12786	⁽⁶⁾ 21049	⁽⁶⁾ 18220	⁽⁶⁾ 11906	⁽⁶⁾ 10951	⁽⁶⁾ 15297
Mining of mica	1294	4293	4405	⊖	⊖	⊖	⊖	⊖
Mining of turquoise	325	954	7625	⊖	⊖	⊖	×	×
Mining of opal	×	×	78	⊖	⊖	⊖	×	×
Other precious and semi-precious stones.....	×	×	×	⁽⁷⁾ 12200	⁽⁷⁾ 14264	⁽⁷⁾ 15110	⁽⁷⁾ 47733	⁽⁷⁾ 23570

1. Statistics for some sand and gravel mines, obtained from sample surveys, were generalized to the total country and caused differences between the total and sum of parts in some cases

2. Including antimony and titanium production value.

3. Including production value of limonite and ferrous oxide.

4. Including production value of boron.

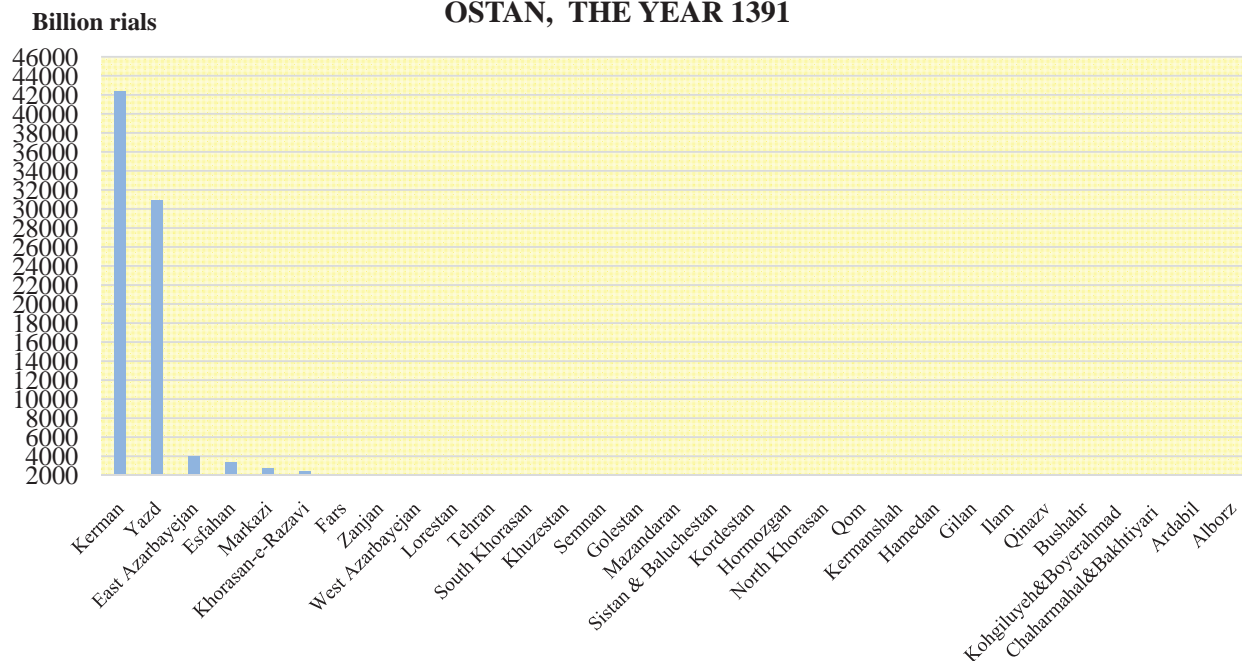
5. Including production value of phosphate.

6. Including production value of mica.

7. Including production value of opal and turquoise.

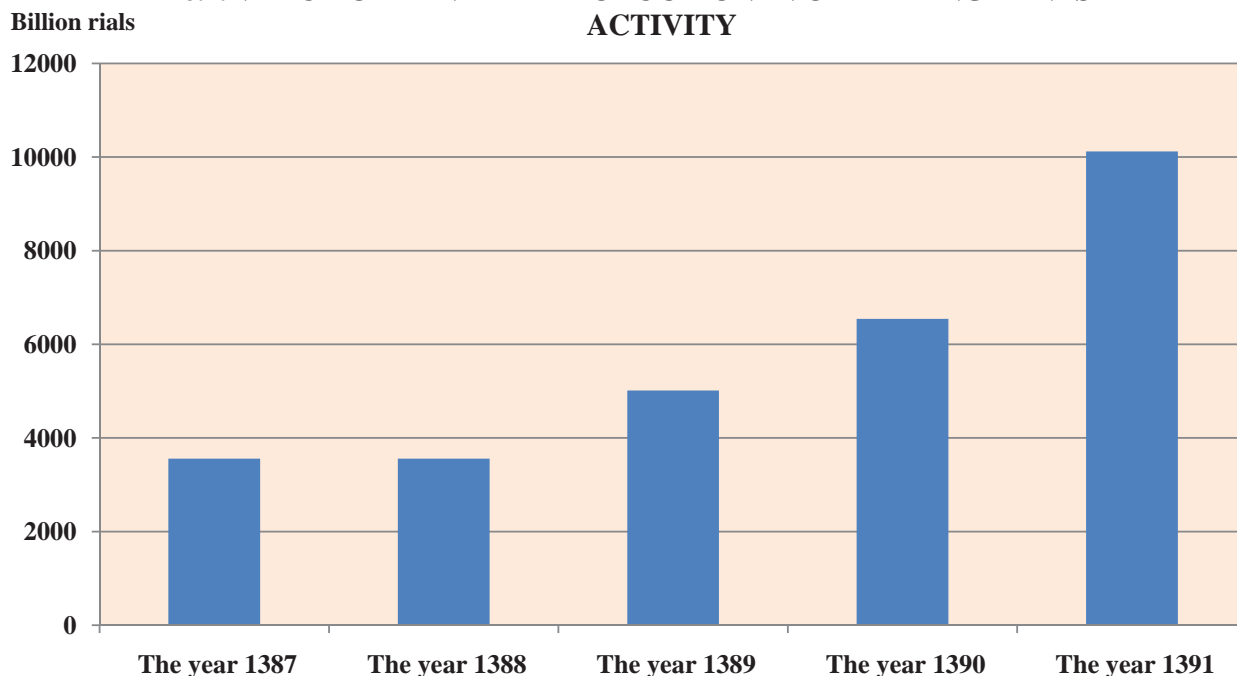
Source: Statistical Centre of Iran.

6. 1. VALUE OF MINERAL PRODUCTS OF OPERATING MINES BY OSPAN, THE YEAR 1391



For data see Table 6-1.

6.2. VALUE OF MINERAL PRODUCTION IN OPERATING MINES BY ACTIVITY

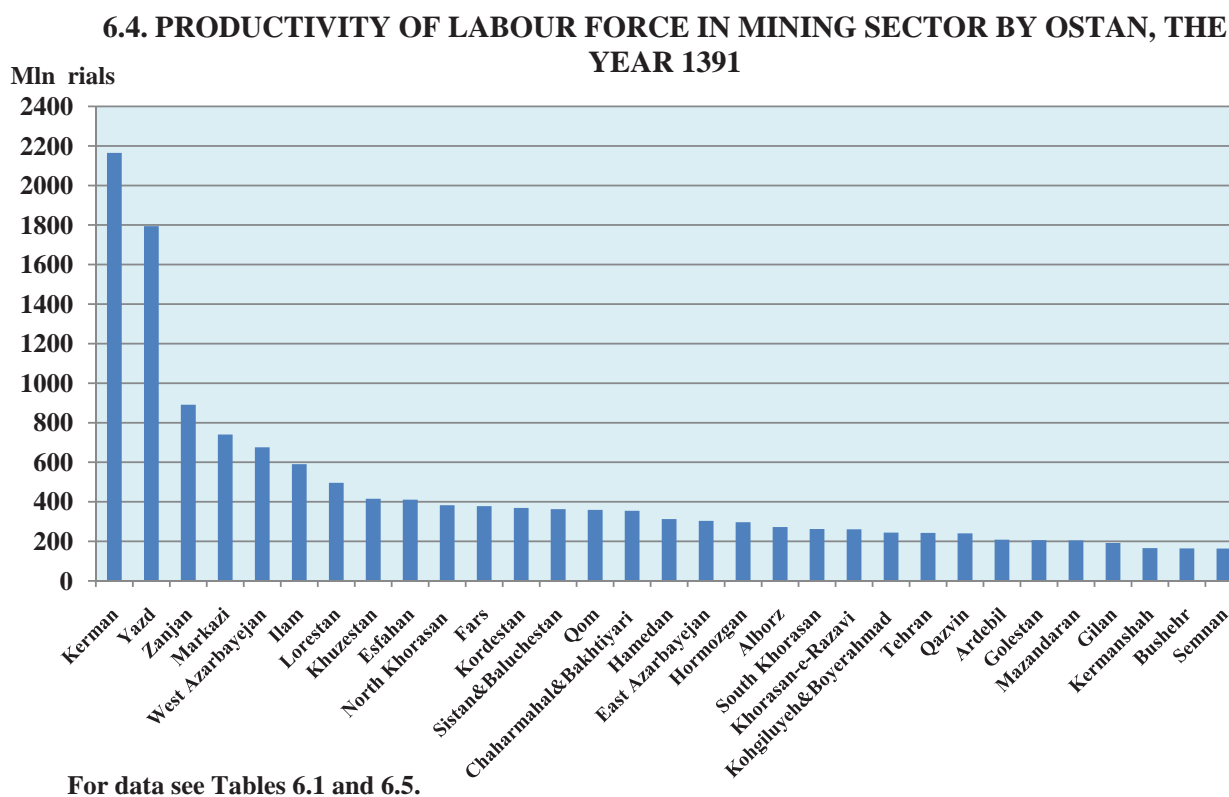
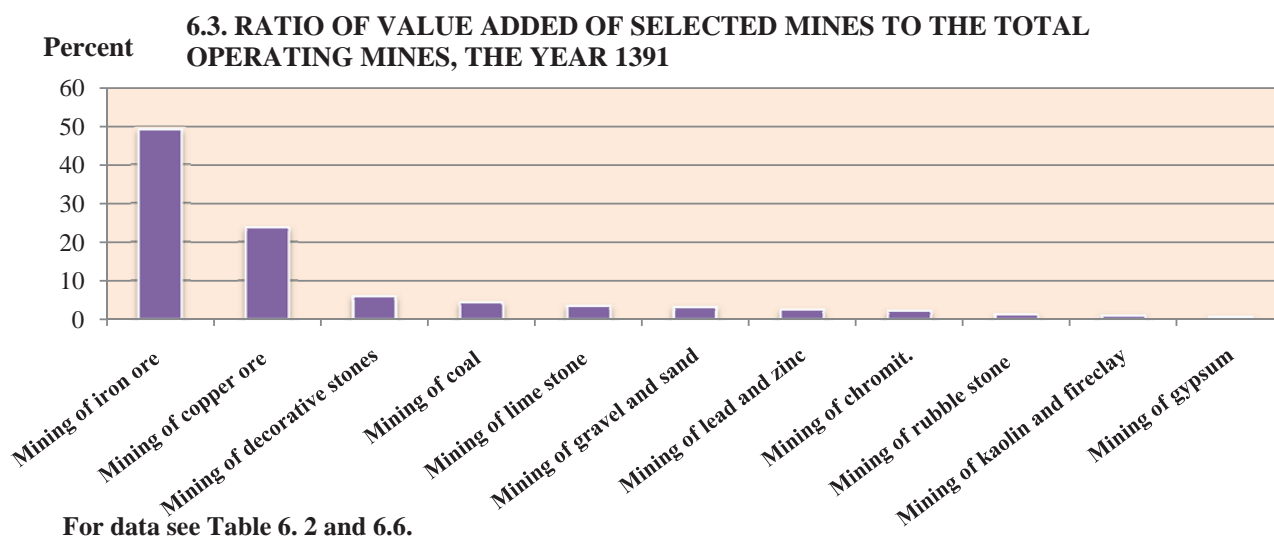


For data see Table 6-4.

6. 5. VALUE ADDED, INPUTS AND OUTPUTS VALUE OF OPERATING MINES BY OSTAN
(mln rials)

Year and Ostan	Value added	Payments (inputs)	Receipts(outputs)
1375.....	1421533	621369	2042902
1380.....	4618050	1254791	5872841
1385.....	16666060	6345035	23011095
1387.....	27754400	8632025	36386424
1388.....	26662764	9926427	36589191
1389.....	38736873	12234125	50970998
1390.....	47826873	19100952	66927825
1391.....	79163479	23217922	102381401
East Azerbayejan.....	3201482	786848	3988330
West Azarbayejan	837846	316965	1154811
Ardebil	122489	75120	197610
Esfahan	2471916	988812	3460728
Alborz.....	96900	50781	147682
Ilam.....	262911	46405	309316
Bushehr	189282	100493	289775
Tehran.....	499547	312877	812425
Chaharmahal&Bakhtiyari	166009	47115	213123
South Khorasan	537180	281934	819114
Khorasan-e-Razavi	1079384	1390843	2470227
North Khorasan	386103	106009	492112
Khuzestan	597738	215281	813019
Zanjan	1308469	354430	1662899
Semnan.....	579246	201391	780637
Sistan&Baluchestan	495630	220056	715686
Fars.....	1502304	363001	1865305
Qazvin	181440	99276	280716
Qom.....	364180	73966	438145
Kordestan.....	379274	271381	650656
Kerman.....	34056261	8388581	42444842
Kermanshah.....	235420	181055	416475
Kohgiluyeh&Boyerahmad	186661	71947	258608
Golestan.....	497349	307378	804727
Gilan	267932	66535	334466
Lorestan.....	868165	148805	1016970
Mazandaran.....	517821	262706	780527
Markazi.....	2178704	604384	2783089
Hormozgan.....	344168	205184	549352
Hamedan	250704	136918	387622
Yazd	24500961	6541446	31042407

Source: Statistical Centre of Iran.



6.6.VALUE ADDED, INPUTS AND OUTPUTS VALUE OF OPERATING MINES BY TYPE OF ACTIVITY, THE YEAR 1391 (mln rials)

Activity	Value added	Payments (inputs)	Receipts (outputs)
Total⁽¹⁾	79163479	23217922	102381401
Mining of coal	3317656	679702	3997358
Mining of iron ore	38740685	12954776	51695461
Mining of lead and zinc	1901352	597606	2498959
Mining of gold ore	235199	87569	322768
Mining of copper ore	18761014	2936314	21697328
Mining of chromites	1696983	153973	1850956
Mining of manganese	355888	45697	401585
Mining of bauxite	279933	54085	334017
Mining of cobalt, antimony and titanium.....	8378	1306	9684
Mining of gravel and sand	2552627	1413846	3966473
Mining of decorative stones	4673172	1474935	6148107
Mining of rubble stone	928346	439427	1367773
Mining of ballast	7686	8146	15833
Mining of lime stone	2712945	1359662	4072607
Mining of gypsum	499170	250139	749309
Mining of kaolin and fireclay	777625	162467	940092
Mining of dolomite	33936	26661	60597
Mining of bentonite and fuller's earth	45895	19211	65106
Mining of magnesite and whiting	33960	33324	67285
Mining of sodium sulphate	32670	13907	46577
Mining of barite, limonite and ferrous oxide	154428	48444	202872
Mining of fluorine	75570	14210	89780
Mining of strontium sulphate and boron.....	52592	10044	62636
Mining of orpiment , phosphate & iodine....	182457	78272	260730
Mining of salt	270416	68977	339393
Mining of silica	318615	100259	418874
Mining of ores slag	137153	87723	224876
Mining of feldspar	65323	33832	99155
Mining of talcum	21433	6961	28394
Mining of shell & mica	11105	4299	15404
Other precious and semi-precious stones.....	21020	2649	23669

1.Statistics for some sand and gravel mines, obtained from sample surveys, were generalized to the total country and caused differences between the total and sum of parts in some cases

Source: Statistical Centre of Iran.

6. 7. INVESTMENT (CHANGES IN THE VALUE OF CAPITAL GOODS) IN OPERATING MINES BY TYPE OF CAPITAL PROPERTIES AND OSTAN

(mln rials)

Year and Ostan	Total investment	Machinery and stable equipment and administrative facilities	Vehicles	Building and equipment (without land)	Access road	Exploration and development	Computer software	Other
1375.....	294962	190265	17435	35261	9849	5755	-	36397
1380.....	667897	537418	40533	47788	26187	10327	1204	4439
1385.....	1737226	1328153	87357	99032	42720	174966	-620	5618
1387.....	3302300	2297218	274103	393270	71629	250577	4177	11326
1388.....	3631020	2807301	171402	238032	136137	233012	3136	42000
1389.....	6340513	5459792	217754	323145	66188	216726	3116	44792
1390.....	6149346	2957585	251308	411553	124038	246425	3112	2155326
1391.....	8606538	6115720	473711	1528769	112297	316678	20128	39235
East Azarbayejan	1322172	484871	18498	795662	13328	4557	437	4820
West Azarbayejan.....	298376	193014	80157	8160	15579	700	478	289
Ardebil	20438	18121	275	206	1707	92	35	000
Esfahan.....	396105	315436	35492	30440	9385	2872	670	1810
Alborz	54627	49254	4954	368	000	000	51	000
Ilam	27756	19561	4380	2055	1259	500	1	000
Bushehr	16514	10839	1179	1246	3240	000	10	000
Tehran	90536	68235	7903	13796	189	53	147	214
Chaharmahal&Bakhtiyari	31202	28301	665	64	2171	000	0	000
South Khorasan.....	129706	118355	9442	1750	154	000	5	000
Khorasan-e-Razavi	458189	375222	42392	26195	5613	7728	816	223
North Khorasan.....	16853	8368	8061	86	284	000	54	000
Khuzestan	97521	78363	2768	8566	7748	28	49	000
Zanjan	125520	104504	7971	9053	3765	111	62	54
Semnan	75397	56066	5756	4812	4170	4570	23	000
Sistan&Baluchestan.....	233186	205392	5456	15018	3235	3735	22	329
Fars	120762	104670	11663	3727	371	000	330	000
Qazvin	49287	38828	6925	702	2138	604	90	000
Qom	18534	15254	598	361	1948	370	3	000
Kordestan	126214	114826	2052	5462	616	3430	17	-190
Kerman	2994478	2347688	91564	494580	4611	40013	-2323	18343
Kermanshah	89038	71965	2434	5916	8522	000	201	000
Kohgiluyeh&Boyerahmad.	4357	3762	113	000	214	268	000	000
Golestan	41986	46624	2610	-4988	188	000	111	-2561
Gilan	37594	32476	920	3917	268	000	13	000
Lorestan	67018	56006	4807	4964	1242	000	000	000
Mazandaran	91252	71069	8941	3852	2756	4316	76	242
Markazi	240521	219062	6234	6938	5103	1235	534	1414
Hormozgan	17064	8975	6017	1154	331	445	141	000
Hamedan	56593	42336	1214	4264	7734	396	650	000
Yazd	1257745	808273	92271	80442	4431	240655	17425	14248

Source: Statistical Centre of Iran.

6. 8. INVESTMENT (CHANGES IN THE VALUE OF CAPITAL GOODS) IN OPERATING MINES BY TYPE OF CAPITAL PROPERTIES AND TYPE OF ACTIVITY, THE YEAR 1391
(mln rials)

Activity	Total investment	Machinery and stable equipment and administrative facilities	Vehicles	Building without land	Access road	Exploration and development	Computer software	Other
Total⁽¹⁾	8606538	6115720	473711	1528769	112297	316678	20128	39235
Mining of coal	352102	95945	8939	32529	4361	209481	25	822
Mining of iron ore	3671719	2921617	105713	555172	20937	22212	15535	30533
Mining of lead and zinc	217591	136030	9586	5667	116	63763	000	2428
Mining of gold ore	47622	34674	11641	1307	000	000	000	000
Mining of copper ore	1333651	452936	79326	789581	11098	246	395	69
Mining of chromite	18315	15004	1250	423	846	694	21	76
Mining of manganese	205901	201148	1605	1550	507	933	10	147
Mining of bauxite ..	8214	833	6687	439	254	000	000	000
Mining of cobalt, antimony and titanium.....	5032	2532	500	000	000	2000	000	000
Mining of gravel and sand	703392	587901	55768	48951	11204	1088	1054	-2573
Mining of decorative stones..	897287	792616	59563	25968	14071	3398	1290	381
Mining of rubble stone.....	166960	133820	12793	7228	10364	1782	759	214
Mining of ballast	11	1	10	000	000	000	000	000
Mining of lime stone.....	494579	352605	89376	34675	12497	3494	254	1677
Mining of gypsum	61270	52246	4250	1979	2675	82	000	38
Mining of kaolin and fireclay..	90813	71912	8562	3412	1359	523	127	4918
Mining of dolomite	8717	7456	536	-4	707	000	000	22
Mining of bentonite and fuller's earth	3486	2320	309	21	802	000	33	000
Mining of magnesite and whiting	2557	2207	000	227	102	000	22	000
Mining of sodium sulphate ...	54591	45701	4195	1401	2769	166	358	1
Mining of barite, limonite and ferrous oxide	5123	2562	146	378	1932	98	7	000
Mining of fluorine	310	301	4	000	5	000	000	000
Mining of strontium sulphate..	7759	5886	655	566	32	619	000	000
Mining of orpiment phosphate & iodine.....	14495	12908	1271	316	000	000	000	000
Mining of salt	000	000	000	000	000	000	000	000
Mining of silica	26111	14816	2207	3190	5731	160	7	000
Mining of ores slag	16187	11158	941	967	3042	80	000	000
Mining of feldspar ...	82518	63947	4677	7285	1602	4399	127	000
Mining of talcum	83351	73124	2467	3548	3124	1044	46	000
Mining of shell & mica.....	17817	14024	574	1425	1431	323	39	000
Other precious and semi-precious stones.....	2116	1385	78	330	304	000	20	000

1. Statistics for some sand and gravel mines, obtained from sample surveys, were generalized to the total country and caused differences between the total and sum of parts in some cases
Source: Statistical Centre of Iran.

6. 9. GENERAL CHARACTERISTICS OF MINES COOPERATIVES AT THE END OF THE YEAR (mln rials)

Description	Number	Members	Workers	Capital
<i>Registered cooperatives⁽¹⁾</i>				
1375.....	1306	14022	8910	71572
1380.....	1691	21373	12146	106325
1385.....	1952	27271	15263	162032
1388.....	2242	35288	18244	206103
1389.....	2303	32970	19000	185112
1390.....	2413	35997	21180	224856
1391.....	2534	70359	22337	273966
1392.....	2666	78958	25189	297803
<i>Cooperatives under establishment</i>				
1375.....	20	182	82	2008
1380.....	56	972	342	3502
1385.....	137	2277	1251	20253
1388.....	316	5721	3317	50585
1389.....	219	4098	2292	9087
1390.....	252	5359	3514	16018
1391.....	332	6240	4277	33733
1392.....	301	5169	5321	34862
<i>Cooperatives in operation</i>				
1375.....	634	8231	5681	52365
1380.....	841	12029	7555	77835
1385.....	966	16074	9045	112456
1388.....	1073	20630	9887	126010
1389.....	918	14021	8917	118580
1390.....	896	46355	8961	144001
1391.....	876	46459	8811	176791
1392.....	940	55064	9990	192635

6. 9. GENERAL CHARACTERISTICS OF MINES COOPERATIVES AT THE END OF THE YEAR (continued) (mln rials)

Description	Number	Members	Workers	Capital
East Azarbayejan	40	668	478	7307
West Azarbayejan	11	113	148	7280
Ardebil	11	99	119	698
Esfahan	38	321	424	12344
Alborz	8	82	65	4111
Ilam	3	28	11	1903
Bushehr	30	232	285	16072
Tehran	58	1253	1151	22389
Chaharmahal&Bakhtiari	8	56	58	1031
South Khorasan	16	250	193	3716
Khorasan-e-Razavi	185	3535	1791	16771
North Khorasan	5	142	53	39
Khuzestan	11	92	134	238
Zanjan	16	374	200	3687
Semnan	35	293	425	9699
Sistan&Bluchestan	5	36	74	43
Fars	45	43152	720	32733
Qazvin	8	66	78	7316
Qom	18	162	130	1901
Kordestan	9	150	75	129
Kerman	60	535	428	9484
Kermanshah	16	112	117	311
Kohgiluyeh&Boyerahmad	16	136	129	768
Golestan	4	31	21	16
Gilan	15	159	121	530
Lorestan	124	1170	1001	3060
Mazandaran	44	978	587	6890
Markazi	41	367	500	5645
Hormozgan	36	258	302	3452
Hamedan	5	43	42	1984
Yazd	19	171	130	11088

1. Including cooperatives in operation, out of operation and under establishment.

Source: Ministry of Cooperatives, Labor and Social Welfare.