

Statistics Report

No. BITC 1/2556

Mineral Statistics of Thailand
2008 - 2012

Statistics Group

Bureau of Information Technology and Communication

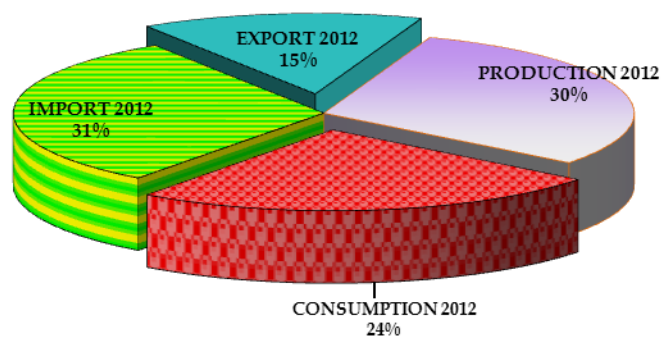
Department of Primary Industries and Mines

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A N D E S I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Phetchabun	396,086	410,259	447,104	307,040	395,904
Uttaradit	604,906	520,396	761,131	638,547	464,435
Northeastern Region					
Loei	-	-	1,000	-	-
Central Region					
Sara Buri	-	-	-	-	149,351
Total Production	1,000,992	930,655	1,209,235	945,587	1,009,690
Value (Million Baht)	114.2	125.6	163.2	127.7	136.3
<u>Consumption</u>					
Total Consumption	980,541	765,806	1,230,985	799,192	918,429
Value (Million Baht)	112.2	103.4	166.2	107.9	123.9

ANHYDRITE

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Phichit	-	-	-	-	-
Nakhon Sawan	-	120	860	3,240	1,000
Southern Region					
Nakhon Si Thammarat	47,340	-	28,700	49,530	36,000
Surat Thani	441,341	633,700	506,560	561,378	820,172
Total Production	488,681	633,820	536,120	614,148	857,172
Value (Million Baht)	221.2	350.2	279.3	304.0	424.3
<u>Export</u>					
1. Ground					
Asia					
Japan	460	160	200	120	300
Total Export	460	160	200	120	300
Value (Million Baht)	1.5	0.5	0.6	0.4	1.1
2. Unground					
Asia					
China	-	-	4,070	-	-
India	38,020	-	37,650	45,000	33,950
Indonesia	-	-	-	8,000	-
Japan	212,949	317,720	344,010	383,100	437,785
Korea, South	240,205	169,100	140,160	195,300	231,116
Malaysia	79,540	47,000	57,100	49,650	72,055
Philippines	18,513	-	-	-	-
Vietnam	-	-	18,000	23,500	14,000
Total Export	589,227	533,820	600,990	704,550	788,906
Value (Million Baht)	276.4	291.2	308.7	344.0	401.3

	Tonnes				
	2008	2009	2010	2011	2012
<u>Consumption</u>					
Total Consumption	13,748	-	32,634	3,290	25,150
Value (Million Baht)	6.1	-	16.5	1.6	12.4
<u>Import</u>¹					
Total Import	0**	4	25	0**	0**
Value (Million Baht)	0.0*	0.0*	0.7	0.0*	0.0*

0** denoting the amount of less than 0.1 tonnes

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

A N T H R A C I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Import</u>¹					
Total Import	242,197	677,522	367,817	210,701	138,064
Value (Million Baht)	1,280.4	2,209.5	1,539.6	1,407.3	808.1

1 data from 'www.customs.go.th'

ANTIMONY

Tonnes

		2008	2009	2010	2011	2012
<u>Production</u>						
Southern Region						
Satun	Ore	-	35	738	56	-
	Low grade	-	-	-	172	43
Total Production	Ore	-	35	738	56	-
	Low grade	-	-	-	172	43
Value (Million Baht)	Ore	-	1.0	21.3	1.6	-
	Low grade	-	-	-	n.a.	n.a.
<u>Export</u>						
Ore						
Asia						
China		253	400	1,310	5,323	5,130
Hong Kong		-	98	404	1,884	1,000
India		-	41	-	-	-
Korea, South		-	-	-	100	-
Laos		-	-	34	-	-
Malaysia		-	-	-	24	50
Taiwan		-	-	-	50	23
Vietnam		-	-	-	-	65
Total Export		253	539	1,748	7,381	6,268
Value (Million Baht)		5.1	7.5	32.8	142.4	124.3
<u>Consumption</u>						
Total Consumption		-	-	56	-	-
Value (Million Baht)		-	-	1.2	-	-
<u>Import</u>¹						
Total Import		1,218	1,496	4,356	8,803	6,649
Value (Million Baht)		22.0	23.8	134.6	263.1	145.2

1 data from 'www.customs.go.th'

BALL CLAY

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Chiang Rai	3,780	7,350	34,595	3,600	5,480
Lampang	1,447,753	2,251,495	1,397,969	346,435	364,055
Central Region					
Prachin Buri	1,474	260	363	203	2,703
Sara Buri	31,250	52,520	80,840	74,120	74,900
Southern Region					
Nakhon Si Thammarat	15,736	1,000	-	690	210
Total Production	1,499,993	2,312,625	1,513,767	425,048	447,348
Value (Million Baht)	824.9	1,271.9	832.6	233.8	246.0
<u>Export</u>					
Asia					
Bangladesh	-	-	1	300	300
China	4,120	3,373	1,638	2,400	745
India	1,000	469	989	1,000	1,593
Indonesia	11,839	7,892	12,480	1,614	-
Korea, South	480	700	704	160	-
Malaysia	8,254	9,525	9,335	5,015	5,234
Philippines	356	264	600	128	344
Sri Lanka	2	-	-	-	-
Taiwan	384	264	288	-	-
Vietnam	3,337	3,256	4,280	4,588	5,375
Europe					
Germany	-	-	1	-	-
Total Export	29,772	25,743	30,316	15,205	13,591
Value (Million Baht)	111.7	122.5	146.3	68.6	67.0

Tonnes

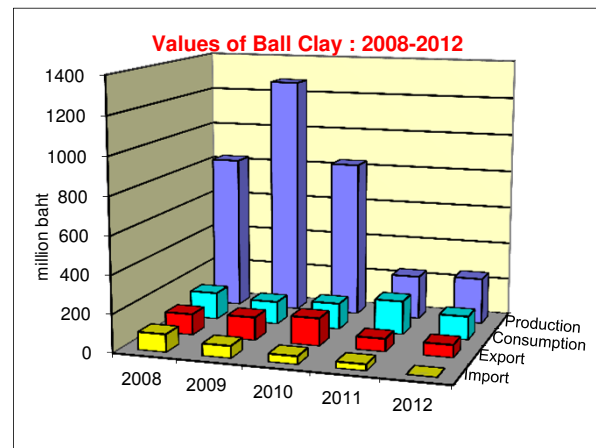
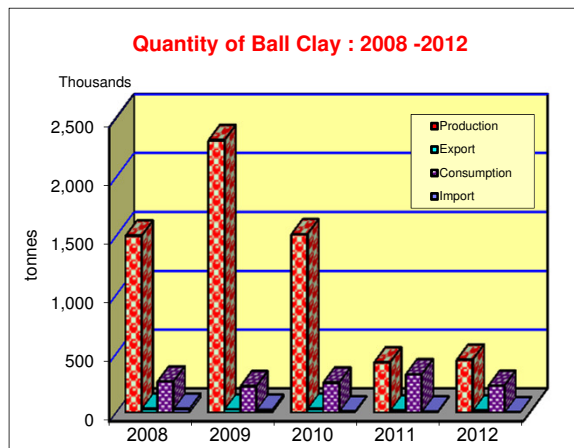
	2008	2009	2010	2011	2012
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Consumption

Total Consumption	262,598	221,472	253,292	324,283	227,150
Value (Million Baht)	144.4	121.8	139.3	178.4	124.9

Import¹

Total Import	28,981	20,508	6,592	5,463	-
Value (Million Baht)	94.3	64.2	42.4	33.8	-



1 data from 'www.customs.go.th'

B A R I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Ground (Chemical grade)					
Northeastern Region					
Loei	2,480	1,985	3,865	2,403	3,301
Total Production	2,480	1,985	3,865	2,403	3,301
Value (Million Baht)	14.5	11.6	22.6	14.1	19.3
2. Ground (Drilling Mud grade)					
Northern Region					
Phrae	-	-	-	-	14,200
Total Production	-	-	-	-	14,200
Value (Million Baht)	-	-	-	-	55.3
3. Unground					
Northern Region					
Phayao	-	1,000	1,800	-	-
Northeastern Region					
Loei	300	-	-	-	-
Udon Thani	-	-	-	45,000	-
Southern Region					
Nakhon Si Thammarat	6,400	48,910	27,800	20,300	46,998
Total Production	6,700	49,910	29,600	65,300	46,998
Value (Million Baht)	9.9	74.1	44.0	97.0	69.8

	Tonnes				
	2008	2009	2010	2011	2012
<u>Export</u>					
1. Ground (Chemical grade)					
Africa					
Mauritius	-	-	-	25	-
South Africa	21	-	-	21	84
Asia					
Hong Kong	40	-	-	40	60
Indonesia	-	-	-	68	245
Japan	299	-	-	935	530
Jordan	-	-	-	20	-
Korea, South	126	-	-	175	272
Malaysia	5,722	17,008	12	338	670
Singapore	260	-	-	105	250
Taiwan	315	-	-	357	281
U.A.E.	-	-	-	-	87
Vietnam	-	-	-	200	557
Australia / Oceania					
Australia	218	-	-	624	1,032
New Zealand	22	-	-	44	-
Europe					
Netherlands	-	-	-	-	24
Total Export	7,023	17,008	12	2,952	4,092
Value (Million Baht)	31.2	34.4	0.1	24.0	39.9
<u>Consumption</u>					
1. Ground (Chemical)					
	-	49	-	-	-
Value (Million Baht)	-	0.3	-	-	-
2. Ground (Drilling mud)					
	-	-	-	-	13,956
Value (Million Baht)	-	-	-	-	54.4
3. Unground					
	6,210	10,420	9,334	21,229	-
Value (Million Baht)	9.2	15.5	13.9	31.5	-
<u>Import</u>¹					
Total Import	96,433	57,452	78,862	94,650	104,668
Value (Million Baht)	391.6	178.7	274.1	399.2	509.8

1 data from 'www.customs.go.th'

B A S A L T

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northeastern Region					
Buri Ram	2,713,393	3,712,789	4,322,951	4,310,095	4,160,688
Nakhon Ratchasima	1,190,985	1,299,552	1,373,600	1,286,013	1,318,488
Si Sa Ket	182,981	221,414	438,856	133,072	-
Surin	3,107,404	3,706,377	4,480,852	3,826,236	3,289,275
Ubon Ratchathani	1,661,830	1,580,624	1,871,741	1,762,796	1,944,372
Central Region					
Trat	20,959	1,200	1,200	-	-
Total Production	8,877,552	10,521,955	12,489,201	11,318,212	10,712,823
Value (Million Baht)	1,026.9	1,420.5	1,686.0	1,528.0	1,446.2
<u>Consumption</u>					
Total Consumption	8,736,654	10,878,292	12,164,953	10,985,713	10,450,773
Value (Million Baht)	1,010.7	1,468.6	1,642.3	1,483.1	1,410.9
<u>Import</u>¹					
Total Import	20,857	17,091	268,767	57,184	-
Value (Million Baht)	112.4	98.8	102.3	103.5	-

1 data from 'www.customs.go.th'

BENTONITE

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Lop Buri	210	110	130	55,220	141,000
Total Production	210	110	130	55,220	141,000
Value (Million Baht)	0.1	0.1	0.1	33.1	84.6
<u>Consumption</u>					
Total Consumption	-	10,000	10,000	40,000	30,000
Value (Million Baht)	-	6.0	6.0	24.0	18.0
<u>Import</u>¹					
Total Import	54,345	42,429	65,096	103,555	83,377
Value (Million Baht)	378.4	272.5	408.2	505.9	555.1

1 data from 'www.customs.go.th'

CALCITE

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Lamphun	-	25	-	-	-
Tak	686	-	-	-	-
Uttaradit	4,300	3,160	10,330	3,200	-
Central Region					
Lop Buri	818,720	540,834	683,424	783,050	865,800
Total Production	823,706	544,019	693,754	786,250	865,800
Value (Million Baht)	162.3	107.2	136.7	154.9	170.6
<u>Consumption</u>					
Total Consumption	817,801	477,732	578,500	439,759	803,377
Value (Million Baht)	161.1	94.1	113.9	86.6	158.3
<u>Import</u>¹					
Total Import	1,109	-	-	-	-
Value (Million Baht)	3.5	-	-	-	-

1 data from 'www.customs.go.th'

CEMENT CLAY

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Lampang	97,677	74,224	443,966	143,475	-
Nakhon Sawan	375,600	-	76,525	34,699	-
Northeastern Region					
Nakhon Ratchasima	418,453	695,256	2,709,729	272,360	58,406
Central Region					
Lop Buri	169,761	236,511	226,014	962,414	-
Prachin Buri	205,000	232,377	1,093,728	431,000	-
Ratcha Buri	11,500	15,000	-	-	-
Sara Buri	1,246,219	2,629,811	2,849,061	4,130,813	5,948,633
Sing Buri	-	-	10,000	-	-
Southern Region					
Krabi	-	-	-	219,087	-
Nakhon Si Thammarat	1,229,407	1,011,150	841,800	2,378,036	-
Total Production	3,753,617	4,894,329	8,250,823	8,571,884	6,007,039
Value (Million Baht)	337.8	440.5	742.6	771.5	540.6
<u>Consumption</u>					
Total Consumption	3,692,042	4,876,744	6,833,705	6,525,005	1,622,039
Value (Million Baht)	332.3	438.9	615.0	587.3	145.9

CERAMIC CLAY

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Chiang Rai	600	9,113	12,044	37,173	-
Lampang	5,067	4,651	9,148	164,076	-
Northeastern Region					
Chaiyaphum	-	111,700	547,000	-	-
Nakhon Ratchasima	-	-	-	180,956	-
Central Region					
Nakhon Nayok	185,960	-	-	-	-
Sara Buri	114,500	128,500	188,470	21,924	60,327
Sing Buri	35,100	18,500	172,500	-	-
Total Production	341,227	272,464	929,162	404,129	60,327
Value (Million Baht)	187.7	149.9	511.0	222.3	33.2
<u>Consumption</u>					
Total Consumption	135,241	226,849	233,286	276,466	67,847
Value (Million Baht)	74.4	124.8	128.3	152.1	37.3

0.0* denoting the amount of less than 0.05 million baht

C O P P E R

Tonnes

	2008	2009	2010	2011	2012
<u>Production (metal)</u>					
Northeastern Region					
Loei	0.5	0.2	723	525	721
Total Production	0.5	0.2	723	525	721
Value (Million Baht)	0.1	0.0*	168.5	146.4	186.5
<u>Export</u>					
1. Metal					
Asia					
Hong Kong	0.5	0.2	723	525	721
Total Export	0.5	0.2	723	525	721
Value (Million Baht)	0.1	0.0*	168.5	146.4	186.5
2. Dross					
Europe					
Belgium	-	86	44	-	-
Total Export	-	86	44	-	-
Value (Million Baht)	-	14.6	14.7	-	-
3. Powder					
Europe					
U.K	-	-	4	2	-
Total Export	-	-	4	2	-
Value (Million Baht)	-	-	1.2	0.7	-
<u>Consumption (metal)</u>					
Total Consumption	419	441	833	1,824	1,128
Value (Million Baht)	109.6	76.9	193.5	515.3	289.9
<u>Import (ore)¹</u>					
Total Import	16	25	374	352	1,735
Value (Million Baht)	0.2	0.6	4.9	4.1	7.4

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

D I A T O M I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Lampang	4,075	5,600	7,100	38,130	8,500
Total Production	4,075	5,600	7,100	38,130	8,500
Value (Million Baht)	3.7	5.0	6.4	34.3	7.7
<u>Consumption</u>					
Total Consumption	4,400	5,730	7,625	11,300	27,060
Value (Million Baht)	4.0	5.2	6.9	10.2	24.4

D O L O M I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Phetchabun	11,000	12,200	9,700	9,710	12,430
Phrae	4,805	4,800	4,800	2,380	3,873
Central Region					
Kanchanaburi	246,450	247,050	330,750	588,047	150,400
Southern Region					
Krabi	120,500	88,047	80,000	102,000	120,000
Phangnga	184,498	134,582	121,679	98,593	123,898
Songkhla	-	-	-	-	25,724
Surat Thani	735,890	1,414,313	1,838,467	1,752,370	1,938,937
Trang	50,620	63,418	66,594	3,665	233,485
Total Production	1,353,763	1,964,410	2,451,990	2,556,765	2,608,747
Value (Million Baht)	473.8	587.5	858.2	894.9	913.1
<u>Export</u>					
1. Ground					
Asia					
Bangladesh	12	-	6	30	30
Japan	1,000	80	-	-	-
Laos	-	3	6	-	-
Malaysia	596	78	-	-	-
Myanmar	22	1400	-	-	-
Philippines	-	84	90	59	135
Total Export	1,630	1,644	102	89	165
Value (Million Baht)	4.3	1.4	0.5	0.4	0.7
2. Underground					
Asia					
India	-	278,500	572,130	452,620	167,110
Japan	701,070	561,580	789,140	728,640	836,050
Malaysia	1,176	128	128	-	-
Philippines	300	-	-	-	-
Vietnam	-	-	6,800	-	-
Total Export	702,546	840,208	1,368,198	1,181,260	1,003,160
Value (Million Baht)	201.6	264.5	410.9	343.8	313.0

Tonnes

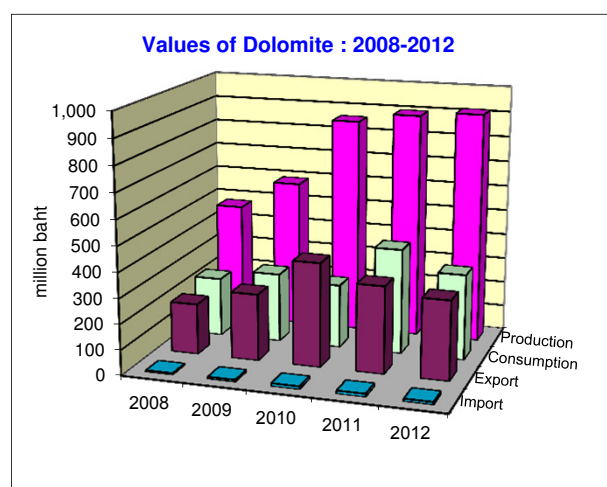
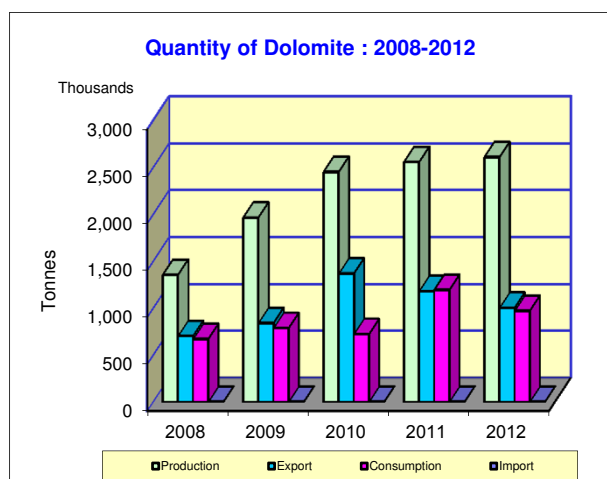
	2008	2009	2010	2011	2012
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Consumption

Total Consumption	669,702	786,973	722,216	1,194,362	970,750
Value (Million Baht)	234.4	275.4	252.8	418.0	339.8

Import¹

Total Import	502	595	977	1,224	940
Value (Million Baht)	6.3	8.5	11.6	12.2	10.5



1 data from 'www.customs.go.th'

F E L D S P A R

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Potassium Feldspar (Ground)					
Northern Region					
Tak	123	120	-	-	-
Total Production	123	120	-	-	-
Value (Million Baht)	0.3	0.3	-	-	-
2. Potassium Feldspar (Unground)					
Central Region					
Kanchanaburi	330	9,630	8,920	138,500	2,000
Prachuap Khiri Khan	93	142	140	169	210
Southern Region					
Nakhon Si Thammarat	-	-	-	500	3,500
Total Production	423	9,772	9,060	139,169	5,710
Value (Million Baht)	0.7	16.6	15.4	236.6	9.7
3. Sodium Feldspar (Ground)					
Northern Region					
Tak	3,191	65	120	-	-
Total Production	3,191	65	120	-	-
Value (Million Bath)	4.5	0.1	0.2	-	-
4. Sodium Feldspar (Unground)					
Northern Region					
Tak	144,006	162,648	164,047	132,493	204,930
Central Region					
Kanchanaburi	-	1,260	920	640	630
Ratchaburi	41,300	67,300	90,900	98,350	71,253
Southern Region					
Nakhon Si Thammarat	481,575	477,527	376,853	670,500	818,200
Total Production	666,881	708,735	632,720	901,983	1,095,013
Value (Million Bath)	466.8	496.1	442.9	631.4	766.5

Tonnes

	2008	2009	2010	2011	2012
Export					
1. Potassium Feldspar (Ground)					
Asia					
Vietnam	-	-	-	72	-
Total Export	-	-	-	72	-
Value (Million Baht)	-	-	-	0.2	-
2. Sodium Feldspar (Ground)					
Asia					
Bangladesh	8,810	12,400	23,300	24,700	84,240
China	54,750	-	-	-	-
Hong Kong	-	-	62,900	-	-
India	-	6,300	15,800	56,800	57,200
Indonesia	41,791	38,852	60,452	71,189	114,008
Kuwait	28,599	-	-	-	-
Malaysia	56,158	66,998	108,732	186,903	191,130
Myanmar	10	-	-	14	-
U.A.E.	170,300	159,600	87,537	243,874	212,770
Vietnam	53,496	40,453	24,461	24,817	37,217
Europe					
U.K	-	51,400	-	-	-
North America					
Grenada	-	-	-	-	21,000
Total Export	413,914	376,003	383,181	608,297	717,565
Value (Million Baht)	330.8	289.1	317.6	449.0	603.0
3. Sodium Feldspar (Unground)					
Asia					
Bangladesh	19,358	-	-	-	-
India	-	-	-	8,200	-
Indonesia	-	-	17,500	-	-
Malaysia	15,116	-	17,300	-	-
U.A.E.	101,164	-	31,500	-	-
Vietnam	20,933	-	-	-	-
Total Export	156,571	-	66,300	8,200	-
Value (Million Baht)	106.2	-	50.9	3.6	-

Tonnes

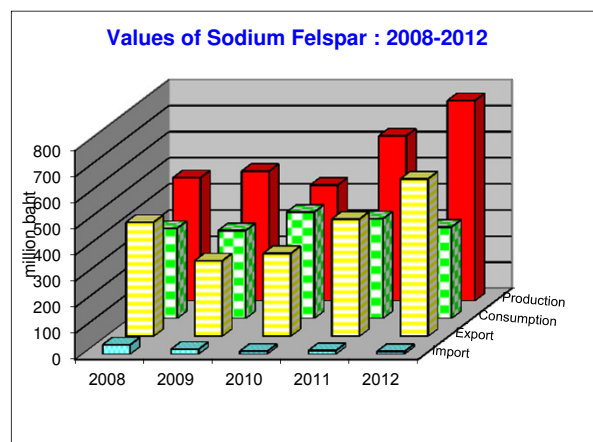
	2008	2009	2010	2011	2012
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Consumption

1. Potassium Feldspar - ground	45	52	-	-	-
Value (Million Baht)	0.1	0.1	-	-	-
2. Potassium Feldspar - Unground	1,004	2,906	3,330	13,935	2,618
Value (Million Baht)	1.7	4.9	5.7	23.7	4.5
3. Sodium Feldspar - ground	201,745	170,723	171,233	165,403	162,716
Value (Million Baht)	282.4	239.0	239.7	231.6	227.8
4. Sodium Feldspar - Unground	90,205	139,750	239,877	214,211	175,272
Value (Million Baht)	63.1	97.8	167.9	150.0	122.7

Import¹

1. Potassium Feldspar	32,446	28,996	25,928	33,342	35,505
Value (Million Baht)	100.9	89.5	81.4	104.6	115.1
2. Sodium Feldspar	16,592	7,850	3,010	3,772	2,140
Value (Million Baht)	35.8	19.0	11.1	13.8	10.4
3. Other Feldspar	14,339	3,590	3,891	3,935	3,900
Value (Million Baht)	49.4	22.3	24.0	22.1	28.0



1 data from 'www.customs.go.th'

F L U O R I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Lamphun	16,079	81,670	694	4,393	7,602
Mae Hong Son	10,039	3,775	1,465	-	-
Phrae	-	-	63	700	2,000
Central Region					
Kanchanaburi	-	920	-	-	-
Total Production	26,118	86,365	2,222	5,093	9,602
Value (Million Baht)	106.2	351.1	9.0	20.7	50.8
<u>Export</u>					
Asia					
India	-	-	-	-	6
Japan	-	-	-	-	20
Total Export	-	-	-	-	26
Value (Million Baht)	-	-	-	-	0.2
<u>Consumption</u>					
Total Consumption	19,756	7,622	1,412	2,832	1,423
Value (Million Baht)	80.3	30.9	5.7	11.5	5.9
<u>Import</u>¹					
Total Import	841	472	508	1022	555
Value (Million Baht)	11.2	10.8	9.8	18.0	12.1

1 data from 'www.customs.go.th'

G A R N E T

	Tonnes				
	2008	2009	2010	2011	2012
<u>Export</u>					
Europe					
Ukraine	-	-	-	-	23
Total Export	-	-	-	-	23
Value (Million Baht)	-	-	-	-	0.1

G E M S T O N E

Gram

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Kanchanaburi	6,381	570	240	-	-
Total Production	6,381	570	240	-	-
Value (Million Baht)	n.a.	n.a.	n.a.	-	-
<u>Consumption</u>					
Total Consumption	6,378	610	240	-	-
Value (Million Baht)	n.a.	n.a.	n.a.	-	-

GLASS SAND

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Cha Choeng Sao	-	-	-	-	30,000
Chanthaburi	220,278	193,485	108,790	117,470	107,600
Rayong	273,470	162,050	215,195	102,851	295,294
Trat	2,100	2,050	-	-	-
Southern Region					
Chumphon	-	-	-	1,400	1,200
Total Production	495,848	357,585	323,985	221,721	434,094
Value (Million Baht)	173.5	125.2	113.4	77.6	151.9
<u>Consumption</u>					
Total Consumption	486,790	355,133	364,215	196,778	393,269
Value (Million Baht)	170.4	124.3	127.5	68.9	137.6
<u>Import</u>¹					
Total Import	66,685	31,013	28,195	27,943	51,698
Value (Million Baht)	258.3	106.2	94.6	120.3	192.5

1 data from 'www.customs.go.th'

G N E I S S

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Prachuap Khiri Khan	-	-	-	60	140
Total Production	-	-	-	60	140
Value (Million Baht)	-	-	-	0.2	0.6
<u>Consumption</u>					
Total Consumption	109	46	100	60	40
Value (Million Baht)	0.4	0.2	0.4	0.2	0.2

G O L D

Gram

	2008	2009	2010	2011	2012
<u>Production (Metal)</u>					
Northern Region					
Phetchabun	283,190	1,747,780	1,236,195	1,197,788	3,486,881
Phichit	1,434,150	2,776,730	2,117,256	1,072,040	821,347
Northeastern Region					
Loei	1,003,806	341,623	692,116	590,401	586,793
Total Production	2,721,146	4,866,133	4,045,567	2,860,229	4,895,021
Value (Million Baht)	2,541.1	5,235.0	5,023.0	4,425.4	8,119.9
<u>Export (Metal)</u>					
Asia					
Hong Kong	2,721,146	4,866,133	4,045,567	2,860,229	4,895,021
Total Export	2,721,146	4,866,133	4,045,567	2,860,229	4,895,021
Value (Million Baht)	2,541.1	5,235.0	5,023.0	4,425.4	8,119.9

G R A N I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Dimension Stone*					
Northern Region					
Kamphaeng Phet	30	-	-	-	-
Nakhon Sawan	484	267	250	189	27
Phichit	10	15	66	50	5
Tak	6,148	4,780	4,303	4,164	4,000
Northeastern Region					
Loei	2,000	-	-	-	-
Central Region					
Cha Choeng Sao	503	500	500	450	459
Nakhon Nayok	20	-	40	20	-
Phetchaburi	500	-	-	-	-
Prachuap Khiri Khan	704	790	965	395	1,015
Ratchaburi	180	-	-	-	-
Total Production	10,579	6,352	6,124	5,268	5,506
Value (Million Baht)	54.0	32.4	31.2	26.9	28.1
2. Industrial Rock					
Northern Region					
Nakhon Sawan	-	22,000	-	-	-
Tak	116,500	66,900	116,800	106,200	97,100
Central Region					
Cha Chaeng Sao	158,720	88,580	81,640	131,240	108,600
Chon Buri	2,302,282	2,192,347	2,441,590	2,360,071	2,362,516
Kanchanaburi	-	4,000	-	-	6,000
Prachuap Khiri Khan	31,551	49,215	73,389	17,904	19,189
Rayong	1,265,476	1,427,747	975,723	1,285,870	1,909,800
Southern Region					
Nakhon Si Thammarat	16,030	20,000	-	-	-
Narathiwat	436,681	518,912	637,715	700,555	679,464
Phangnga	371,013	353,914	461,069	502,678	508,958
Songkhla	491,576	466,689	470,683	543,941	655,129
Total Production	5,189,829	5,210,304	5,258,609	5,648,459	6,346,756
Value (Million Baht)	614.1	703.4	709.9	762.5	856.8

* unit : cubic meter

Tonnes

	2008	2009	2010	2011	2012
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Export**Industrial Rock****Asia**

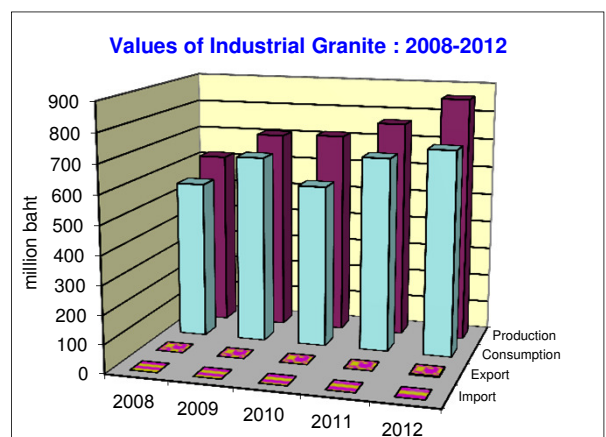
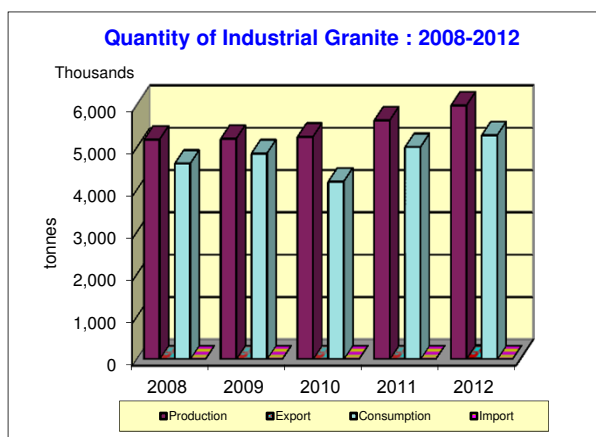
Singapore	-	-	-	-	8,500
Total Export	-	-	-	-	8,500
Value (Million Baht)	-	-	-	-	4.0

Consumption

1. Dimension Stone *	7,628	6,102	6,053	6,069	5,383
Value (Million Baht)	38.9	31.1	30.9	30.9	27.5
2. Industrial Rock	4,620,994	4,865,279	4,199,593	5,013,445	5,293,829
Value (Million Baht)	551.5	656.8	566.9	676.8	714.7

Import (Dimension Stone)¹

Total Import	138,162	137,656	138,476	136,495	136,741
Value (Million Baht)	538.7	553.7	476.9	482.9	491.3



* unit : cubic meter

1 data from 'www.customs.go.th'

GRAVEL

Tonnes

	2008	2009	2010	2011	2012
Export (Industrial Rock)					
Asia					
Malaysia	248	271	314	349	129
Singapore	584	650	624	336	360
Total Export	832	921	938	685	489
Value (Million Baht)	3.3	3.6	2.9	2.0	1.9

G R A Y W A C K E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u> (Industrial Rock)					
Central Region					
Chanthaburi	270,067	319,757	416,059	430,267	269,637
Trat	478,506	410,840	552,631	536,550	467,984
Total Production	748,573	730,597	968,690	966,817	737,621
Value (Million Baht)	65.1	76.7	101.7	101.5	77.5
<u>Consumption</u> (Industrial Rock)					
Total Consumption	719,682	765,450	914,307	934,171	810,849
Value (Million Baht)	61.8	80.4	96.0	91.1	85.1

G Y P S U M

Tonnes

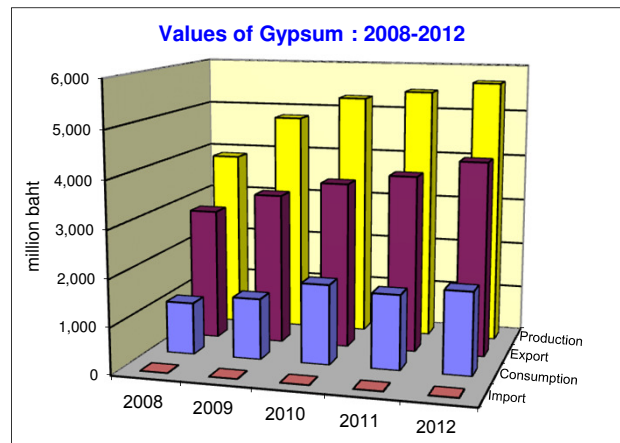
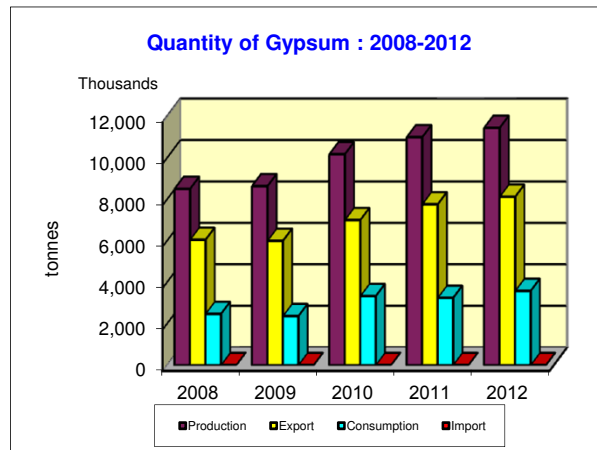
	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Nakhon Sawan	2,136,914	2,080,437	2,192,970	2,500,980	3,272,585
Phichit	332,730	246,847	455,466	424,874	22,308
Southern Region					
Nakhon Si Thammarat	2,192,358	1,695,715	1,602,656	1,730,224	1,946,534
Surat Thani	3,838,399	4,608,798	5,921,537	6,337,996	6,205,772
Total Production	8,500,401	8,631,797	10,172,629	10,994,074	11,447,199
Value (Million Baht)	3,861.3	4,788.3	5,270.4	5,442.1	5,666.4
<u>Export</u>					
1. Ground					
Asia					
Bangladesh	105	-	-	-	-
Japan	1,898	1,478	1,340	1,520	2,080
Malaysia	6,934	-	-	-	-
Myanmar	-	-	80	408	120
Taiwan	185	280	913	210	378
Australia / Oceania					
Australia	528	-	-	-	-
New Zealand	24	-	-	-	-
Total Export	9,674	1,758	2,333	2,138	2,578
Value (Million Baht)	15.5	6.3	6.9	7.9	10.3

	Tonnes				
	2008	2009	2010	2011	2012
2. Unground					
Asia					
Bangladesh	394,326	481,300	467,148	474,649	642,955
Brunei	14,000	15,650	15,950	15,400	15,700
Cambodia	36,600	36,500	36,000	56,000	86,780
China	11,000	6,020	6,020	11,400	26,028
India	572,112	935,845	1,186,080	1,303,811	865,895
Indonesia	1,261,382	1,193,925	1,357,778	1,611,060	1,879,282
Japan	794,083	706,336	572,500	997,701	929,600
Korea,South	66,480	46,500	65,600	92,860	108,500
Malaysia	1,127,599	967,168	1,070,470	1,165,757	1,284,704
Philippines	308,800	125,560	282,635	280,896	372,270
Singapore	5,000	4,100	4,500	11,000	5,000
Sri Lanka	103,750	50,470	92,720	118,350	137,020
Taiwan	209,600	99,200	184,100	58,300	-
Vietnam	1,083,460	1,295,070	1,587,766	1,528,624	1,602,887
Africa					
Cote d'Ivoire (Ivory Cote)	-	17,000	-	-	-
Madagascar	8,000	-	5,000	10,000	-
Reunion (La Reunion)	18,000	9,400	18,000	11,000	10,000
Tanzania	-	-	41,353	-	-
Australia / Oceania					
Australia	19,030	356	-	6,220	150,500
Total Export	6,033,222	5,990,400	6,993,620	7,753,028	8,117,121
Value(Million Baht)	2,820.5	3,252.3	3,572.8	3,791.7	4,151.4
<u>Consumption</u>					
Total Consumption	2,467,276	2,363,350	3,327,023	3,240,627	3,577,011
Value (Million Baht)	1,121.7	1,312.2	1,713.8	1,604.1	1,770.6
<u>Import</u>¹					
Total Import	470	452	522	614	659
Value (Million Baht)	7.2	8.5	9.0	9.9	11.4

1 data from 'www.customs.go.th'

Tonnes

2008 2009 2010 2011 2012



I L M E N I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	850	210	-	4,278	970
India	-	-	-	46	-
Indonesia	-	-	-	-	10
Korea,South	10,053	-	-	5,911	-
Malaysia	500	-	-	930	422
Philippines	-	233	210	336	278
Total Export	11,403	443	210	11,501	1,680
Value (Million Baht)	24.6	2.3	0.8	31.5	6.5
<u>Import</u>¹					
Total Import	21,961	1,005	903	753	1,097
Value (Million Baht)	10.0	11.2	9.6	11.5	34.8

1 data from 'www.customs.go.th'

I R O N

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Nakhon Sawan	44,700	25,000	-	4,400	33,500
Phayao	-	-	74,950	-	-
Phetchabun	18,500	-	7,000	7,952	20,900
Uthai Thani	43,490	10,430	31,000	5,200	-
Northeastern Region					
Loei	1,601,450	309,513	421,297	350,571	188,333
Central Region					
Cha Choeng Sao	1,610	120,456	30,000	-	3,000
Chon Buri	-	-	40,500	60,000	57,500
Lop Buri	-	123,000	101,000	-	-
Southern Region					
Nakhon Si Thammarat	-	28,000	271,190	61,236	-
Total Production	1,709,750	616,399	976,937	489,359	303,233
Value (Million Baht)	2,113.2	756.0	1,360.0	903.8	751.7
<u>Export</u>					
Asia					
China	875,678	200,150	321,950	390,580	161,139
Hong Kong	-	-	159,065	62,500	-
India	1,864	-	-	-	-
Singapore	-	-	20	-	-
Total Export	877,542	200,150	481,035	453,080	161,139
Value (Million Baht)	1,027.4	306.4	452.3	510.7	532.3
<u>Consumption</u>					
Total Consumption	3,200	96,500	-	-	-
Value (Million Baht)	4.1	120.1	-	-	-
<u>Import¹</u>					
1.Iron Ore	10,216	192,038	457,508	161,427	16,217
Value (Million Baht)	69.5	509.9	1,689.8	770.2	69.8
2.Iron Pyrite	243	189	314	230	299
Value (Million Baht)	4.5	3.4	4.2	3.1	3.5

1 data from 'www.customs.go.th'

K A O L I N

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Kaolin (Washed)					
Northern Region					
Lampang	35,605	31,639	33,749	28,033	35,670
Central Region					
Phetchaburi	31,400	28,900	31,300	29,350	26,700
Ratchaburi	3,000	3,000	3,200	6,200	-
Southern Region					
Narathiwat	6,780	6,100	6,985	6,415	6,975
Ranong	84,430	61,492	81,593	93,884	99,119
Total Production	161,215	131,131	156,827	163,882	168,464
Value (Million Baht)	154.8	125.9	150.6	157.3	161.7
2. Kaolin (Unwashed)					
Northern Region					
Lampang	354,588	481,817	180,154	386,391	464,095
Uthai Thani	16,190	64,000	64,450	147,400	255,080
Uttaradit	4,650	5,250	7,100	92,900	21,000
Central Region					
Chanthaburi	352	6,262	28,190	50,335	-
Kanchanaburi	63,200	125,600	234,100	173,000	135,300
Lop Buri	23,000	9,300	51,000	68,300	80,500
Prachin Buri	8,981	16,517	18,000	14,000	18,300
Southern Region					
Nakhon Si Thammarat	8,482	-	-	-	-
Total Production	479,443	708,746	582,994	932,326	974,275
Value (Million Baht)	184.6	272.9	224.5	358.9	375.1

Tonnes

	2008	2009	2010	2011	2012
3. Kaolin (Filler)					
Northern Region					
Uttaradit	6,061	4,046	3,837	4,329	300
Total Production	6,061	4,046	3,837	4,329	300
Value (Million Baht)	11.5	7.7	7.3	8.2	0.6
<u>Export</u>					
1. Washed					
Asia					
Bangladesh	-	-	88	622	765
China	6	22	64	189	20
India	-	132	971	258	758
Indonesia	692	792	528	1,076	1,488
Korea, South	-	-	-	-	1
Malaysia	1,006	658	842	2,300	1,790
Myanmar	-	-	-	9	-
Pakistan	40	-	48	40	-
Philippines	368	192	240	398	506
Sri Lanka	48	48	-	-	-
Vietnam	4,041	3,058	2,848	3,744	4,140
Europe					
U.K	-	-	-	-	20
Total Export	6,201	4,902	5,629	8,636	9,488
Value (Million Baht)	28.0	20.5	24.5	37.0	58.7
2. Unwashed					
Asia					
Vietnam	22,100	4,200	-	21	-
Total Export	22,100	4,200	-	21	-
Value (Million Baht)	16.2	0.1	-	0.1	-

Tonnes

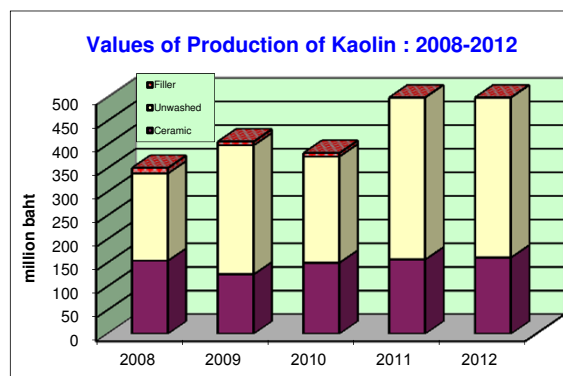
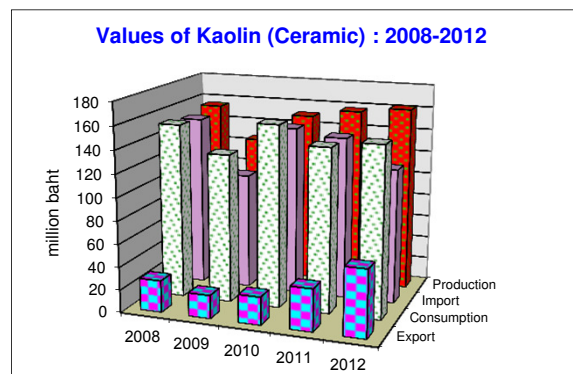
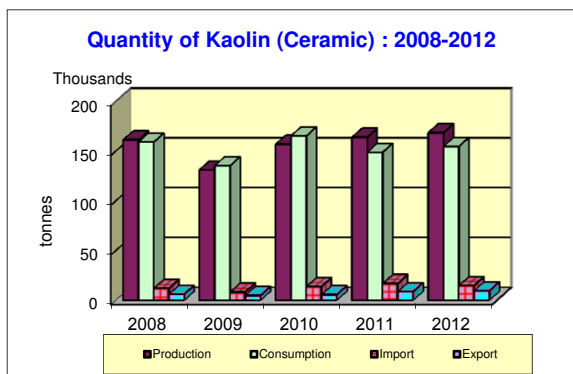
	2008	2009	2010	2011	2012
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Consumption

1. Washed	159,059	135,265	165,187	148,741	154,594
Value (Million Baht)	152.7	129.9	158.6	142.8	148.4
2. Unwashed	460,689	471,121	404,635	634,639	962,495
Value (Million Baht)	175.9	181.4	155.8	244.3	370.6
3. Filler	6,111	3,774	3,837	4,029	300
Value (Million Baht)	11.6	7.2	7.3	7.7	0.6

Import¹

1. Ceramic	12,204	8,410	13,880	16,907	14,965
Value (Million Baht)	149.7	102.0	147.3	141.9	117.9
2. Paper	11,989	4,534	5,918	4,423	4,404
Value (Million Baht)	105.0	54.9	62.5	42.7	41.1
3. Others	59,004	68,336	65,956	65,691	68,868
Value (Million Baht)	468.2	405.7	536.9	543.5	663.2



L E A D

Tonnes

	2008	2009	2010	2011	2012
<u>Import (Lead Ore)¹</u>					
Total Import	26	0.2	283	32	2
Value (Million Baht)	0.4	0.0*	5.5	0.7	0.0*

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

LEUCOXENE

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	1	1,512	1,224	-	-
India	-	426	256	448	-
Indonesia	24	-	273	299	1
Iran	210	-	-	648	-
Japan	-	-	-	-	21
Korea, South	21	-	-	539	556
Malaysia	-	-	-	357	84
Philippines	-	-	24	383	1,102
Taiwan	-	207	24	63	-
Africa					
Tunisia	132	160	-	-	72
Europe					
Iceland	-	-	-	336	-
Turkey	64	292	216	671	561
Total Export	452	2,597	2,017	3,744	2,397
Value (Million Baht)	5.8	33.7	33.3	65.3	60.3
<u>Import</u>¹					
Total Import	7,371	4,535	8,080	3,389	3,461
Value (Million Baht)	165.5	122.9	215.2	104.6	265.6

LIGNITE

Tonnes

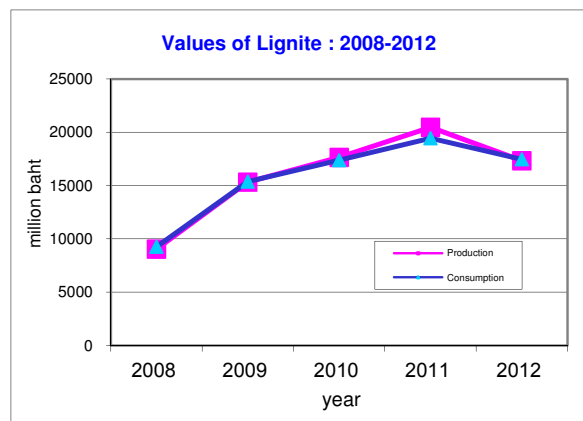
	2008	2009	2010	2011	2012
Production					
Northern Region					
Lampang	17,746,871	17,576,961	18,165,299	20,881,950	17,778,246
Lamphun	133,531	181,900	160,600	352,960	145,433
Phayao	191,725	-	-	-	-
Tak	-	-	73,500	92,196	145,749
Southern Region					
Krabi	23,248	-	-	-	-
Total Production	18,095,375	17,758,861	18,399,399	21,327,106	18,069,428
Value (Million Baht)	9,047.7	15,334.8	17,663.4	20,474.0	17,346.7

Consumption

Total Consumption	18,531,550	17,842,528	18,117,685	20,256,989	18,198,546
Value (Million Baht)	9,265.8	15,376.6	17,393.0	19,446.7	17,470.6

Import¹

Total Import	6	23	79	15	481
Value (Million Baht)	0.1	0.5	1.2	0.3	16.2



1 data from 'www.customs.go.th'

L I M E S T O N E

Tonnes

	2008	2009	2010	2011	2012
Production					
1. Cement Industry					
Northern Region					
Lampang	1,253,296	1,424,530	2,236,129	2,224,080	2,489,710
Nakhon Sawan	543,059	152,688	-	-	-
Northeastern Region					
Nakhon Ratchasima	55,813	34,018	36,674	30,926	14,950
Central Region					
Phetchaburi	572,482	41,270	340,471	530,319	399,205
Sara Buri	45,788,896	49,302,757	52,226,265	53,156,082	55,771,160
Southern Region					
Nakhon Si Thammarat	6,623,185	5,893,231	6,609,103	7,066,604	7,159,780
Total Production	54,836,731	56,848,494	61,448,642	63,008,011	65,834,805
Value (Million Baht)	5,587.1	6,821.8	7,373.8	7,561.0	7,900.2
2. Other Industries					
Northern Region					
Lampang	1,442,318	1,374,735	1,380,000	1,625,812	1,593,150
Northeastern Region					
Nakhon Ratchasima	18,000	21,937	80,832	62,365	94,636
Central Region					
Kanchanaburi	1,760	310	900	1,900	3,700
Sara Buri	2,516,060	2,143,932	2,243,644	2,594,355	3,357,937
Southern Region					
Surat Thani	98,896	-	-	-	-
Total Production	4,077,034	3,540,914	3,705,376	4,284,432	5,049,423
Value (Million Baht)	411.7	424.9	444.6	514.1	605.9
3. Dimension Stone					
Northern Region					
Kamphaeng Phet	-	1,820	-	-	-
Nan	60	80	-	-	-
Central Region					
Sara Buri	34	41	34	27	60
Total Production	94	1,941	34	27	60
Value (Million Baht)	0.2	3.9	0.1	0.1	0.1

Tonnes

	2008	2009	2010	2011	2012
4. Construction					
Northern Region					
Chiang Mai	1,808,243	652,600	1,306,313	1,538,608	2,051,300
Chiang Rai	519,500	1,012,145	985,120	1,677,070	1,981,480
Kamphaeng Phet	260,194	256,259	337,724	932,462	543,321
Lampang	686,441	1,364,858	866,873	668,317	900,995
Lamphun	1,123,179	972,689	973,310	689,283	450,210
Nakhon Sawan	1,940,248	2,260,398	3,489,484	2,699,768	2,775,065
Nan	235,000	270,450	442,000	118,412	254,131
Phayao	746,082	1,523,214	445,071	294,686	872,735
Phetchabun	1,609,653	1,839,752	2,051,249	1,575,687	1,893,858
Phitsanulok	507,000	-	103,329	245,946	316,912
Phrae	418,937	287,023	310,314	204,856	244,191
Sukhothai	964,013	574,074	988,388	1,036,475	1,150,233
Tak	328,478	309,843	320,136	348,950	653,220
Uthai Thani	165,536	254,424	342,787	284,061	427,766
Uttaradit	516,135	458,958	556,589	169,871	-
Northeastern Region					
Khon Kaen	3,451,228	3,765,780	3,910,720	5,779,595	3,063,236
Loei	1,354,600	2,026,854	2,156,224	2,594,267	2,898,620
Nakhon Ratchasima	2,088,308	1,945,352	2,390,503	2,536,384	2,309,724
Nong Bua Lamphu	1,219,832	1,285,852	1,197,510	1,235,802	1,218,982
Udon Thani	323,118	441,600	368,712	200,000	279,100
Central Region					
Chai Nai	111,056	24,165	34,013	50,643	113,220
Chanthaburi	183,437	101,055	101,908	120,659	173,001
Chon Buri	9,358,385	8,124,039	7,610,566	9,457,415	9,079,492
Kanchanaburi	1,594,622	1,043,583	1,650,047	1,745,124	1,331,891
Lop Buri	714,152	917,772	658,671	947,000	695,500
Phetchaburi	368,474	604,721	1,018,488	1,623,957	1,442,057
Prachin Buri	594,263	319,214	100,079	283,021	327,710
Prachuap Khiri Khan	1,061,118	796,928	1,154,890	1,124,612	1,274,998
Ratchaburi	4,878,213	4,663,175	2,918,732	2,890,462	3,729,490
Rayong	627,245	630,230	617,715	476,980	546,496
Sa Kaeo	245,528	240,974	261,662	228,366	503,182
Sara Buri	10,442,197	10,648,244	9,488,282	11,458,877	11,624,816
Suphan Buri	8,937,564	9,108,539	10,891,410	11,556,842	12,444,394

	Tonnes				
	2008	2009	2010	2011	2012
Southern Region					
Chumphon	677,383	1,438,316	553,707	866,189	828,599
Krabi	1,035,333	612,929	744,135	713,672	631,279
Nakhon Si Thammarat	3,976,845	3,828,089	3,687,151	4,233,315	4,590,647
Phangnga	714,667	686,536	613,557	492,617	529,880
Phatthalung	143,313	155,323	204,008	423,487	-
Satun	869,094	282,500	511,526	761,762	1,015,576
Songkhla	967,080	1,254,452	506,550	696,840	440,383
Surat Thani	3,331,752	1,479,692	2,218,459	2,319,260	2,333,327
Trang	595,022	757,565	316,540	397,929	407,544
Yala	726,925	970,478	429,569	580,891	886,714
Total Production	72,419,391	70,190,643	69,834,022	78,280,420	79,235,275
Value (Million Baht)	6,204.9	7,370.0	7,332.6	8,219.4	8,319.7

Export**1. Construction****Asia**

Bangladesh	-	30,900	53,737	22,000	40,900
Cambodia	2,960	600	-	-	-
India	1,157,099	1,186,826	202,750	213,183	153,192
Laos	105	-	-	-	-
Malaysia	3,600	-	-	-	-
Singapore	-	-	-	-	87,164
Vietnam	-	-	60	-	-
Taiwan	-	-	-	27,700	38,500

Australia / Oceania

New Caledonia	-	-	-	66,859	-
New Zealand	7	-	-	-	-

Europe

Germany	-	3	1	1	9
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Total Export	1,163,771	1,218,329	256,548	329,743	319,765
Value (Million Baht)	460.0	487.7	88.5	132.1	110.6

Tonnes

	2008	2009	2010	2011	2012
2. Other Industries					
Asia					
Brunei	-	-	-	1	-
Cambodia	-	2,254	1,560	1,146	834
China	-	-	-	-	22
India	-	300	-	-	-
Indonesia	-	-	-	-	3,123
Japan	4	-	-	-	-
Jordan	-	-	-	22	21
Laos	-	-	-	-	440
Malaysia	-	1	-	-	-
Myanmar	1	0.3	-	56	33
Taiwan	460	-	-	-	-
Vietnam	4	11	5	-	-
Africa					
Nigeria	-	-	2	-	-
South Africa	5	59	-	-	-
Australia / Oceania					
Australia	-	45	120	241	384
French Polynesia	24	-	-	-	-
Europe					
Denmark	-	-	-	2	-
Germany	-	-	-	11	1
Total Export	498	2,669	1,687	1,479	4,859
Value (Million Baht)	1.3	4.3	3.5	3.4	15.0

Consumption

1. Cement Industry	55,969,381	54,882,205	60,614,383	62,530,873	63,783,890
Value (Million Baht)	5,712.2	6,585.9	7,273.7	7,503.7	7,654.1
2. Construction	68,801,246	62,552,086	69,205,206	71,141,814	78,234,119
Value (Million Baht)	5,896.6	6,567.9	7,266.5	7,469.9	8,214.6
3. Dimension Stone	34	41	34	12	60
Value (Million Baht)	0.1	0.1	0.1	0.0*	0.1
4. Other Industries	3,908,735	3,266,563	3,383,776	4,304,560	5,137,747
Value (Million Baht)	394.8	392.0	406.1	516.6	616.5

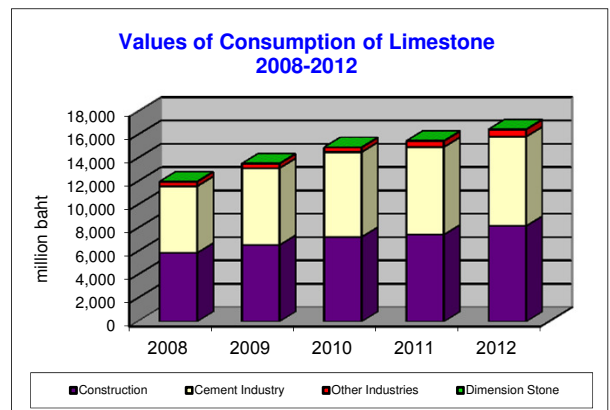
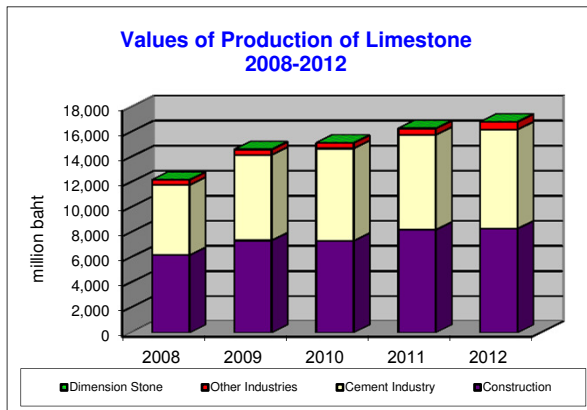
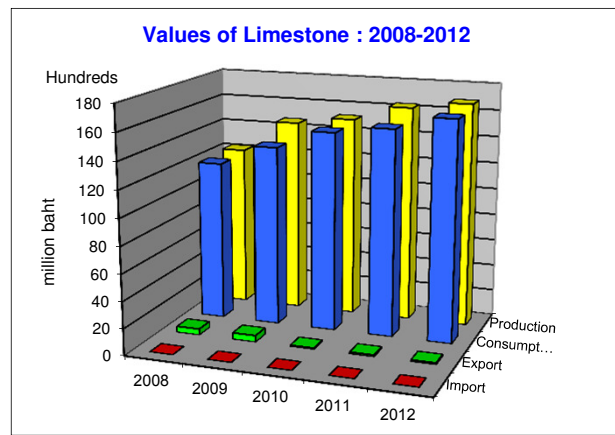
0.0* denoting the amount of less than 0.05 million baht

Tonnes

	2008	2009	2010	2011	2012
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Import¹

Total Import	2,072	4,045	76	16	1
Value (Million Baht)	2.2	3.8	2.4	0.1	0.2



1 data from 'www.customs.go.th'

M A N G A N E S E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Metallurgical grade					
Northern Region					
Chiang Mai	-	23,500	1,650	-	-
Chiang Rai	500	16,430	17,800	398	8,151
Lamphun	-	25,000	31,000	-	-
Northeastern Region					
Loei	110,500	-	-	-	-
Total Production	111,000	64,930	50,450	398	8,151
Value (Million Baht)	112.3	187.5	146.3	1.2	30.4
<u>Export</u>					
Metallurgical grade					
Asia					
Bangladesh	-	-	1,234	2,860	-
China	70	19,055	57,075	16,381	12,375
India	-	-	1,389	-	100
Indonesia	-	-	-	-	300
Jordan	-	-	-	-	50
Malaysia	-	-	1	-	-
Total Export	70	19,055	59,699	19,241	12,825
Value (Million Baht)	0.1	56.6	754.0	63.0	51.4
<u>Consumption</u>					
Total Consumption	10,425	11,500	54,415	-	1,118
Value (Million Baht)	10.6	33.4	157.8	-	4.3
<u>Import</u>¹					
Total Import	694	50	4,530	18,633	24,282
Value (Million Baht)	9.5	1.6	17.8	42.8	52.8

1 data from 'www.customs.go.th'

MARBLE

Cubic metre

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Dimension Stone					
Northern Region					
Kamphaeng Phet	3,716	-	2,469	320	-
Lampang	974	1,140	-	-	-
Nakhon Sawan	60	-	25	10	10
Sukhothai	1,759	2,303	2,229	1,403	769
Uttaradit	-	-	835	-	-
Northeastern Region					
Nakhon Ratchasima	101	903	779	421	668
Central Region					
Kanchanaburi	-	30	-	-	-
Lop Buri	-	-	-	10	500
Sara Buri	4,405	6,460	5,760	5,510	5,275
Total Production	11,015	10,836	12,097	7,674	7,222
Value (Million Baht)	40.7	40.1	44.8	28.4	26.7
2. Fragment					
Northern Region					
Kamphaeng Phet	120,455	152,306	215,284	139,353	-
Lampang	-	-	-	-	-
Lamphun	-	-	-	-	38,503
Sukhothai	4,598	21,795	-	5,308	14,000
Tak	41,137	42,803	73,773	105,219	-
Uttaradit	-	4,000	750	99,697	252,144
Central Region					
Lop Buri	-	-	-	200	-
Sara Buri	487,725	503,476	477,330	151,786	-
Total Production	653,915	724,380	767,137	501,563	304,647
Value (Million Baht)	147.1	163.0	249.3	163.0	99.0

Cubic metre

	2008	2009	2010	2011	2012
<u>Consumption</u>					
1. Dimension Stone	10,590	68,994	182,996	128,512	26,457
Value (Million Baht)	39.1	255.3	677.1	475.5	97.9
2. Fragment	628,165	851,561	1,078,912	535,439	221,766
Value (Million Baht)	141.3	191.6	350.6	174.0	72.1
<u>Import¹</u>					
Total Import	39,215	39,806	45,010	49,532	44,094
Value (Million Baht)	301.0	313.4	322.0	364.0	386.5

1 data from 'www.customs.go.th'

M A R L

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Sara Buri	41,720	98,000	68,000	65,000	100,000
Total Production	41,720	98,000	68,000	65,000	100,000
Value (Million Baht)	3.5	8.3	5.8	5.5	8.5
<u>Consumption</u>					
Total Consumption	41,900	86,550	69,550	69,000	113,100
Value (Million Baht)	3.6	7.4	5.9	5.9	9.6

M I C A

Tonnes

	2008	2009	2010	2011	2012
<u>Import</u>¹					
Total Import	4,904	2,991	5,504	4,860	4,577
Value (Million Baht)	107.2	80.7	125.3	128.8	140.7

1 data from 'www.customs.go.th'

MONAZITE

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	4,615	6,510	9,345	4,328	-
India	-	105	-	-	-
Korea, South	120	60	60	-	-
Laos	-	-	-	760	-
Malaysia	-	-	-	-	200
Philippines	84	-	-	-	-
Taiwan	-	-	-	-	-
Total Export	4,819	6,675	9,405	5,088	200
Value (Million Baht)	97.4	180.8	284.3	171.6	10.4

P E R L I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Lop Buri	7,000	13,500	14,700	26,500	41,400
Total Production	7,000	13,500	14,700	26,500	41,400
Value (Million Baht)	4.9	9.5	10.4	18.7	29.2
<u>Consumption</u>					
Total Consumption	16,625	11,350	11,634	13,796	12,687
Value (Million Baht)	11.7	8.0	8.2	9.7	7.7

P H O S P H A T E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Kamphaeng Phet	-	-	822	-	-
Lamphun	925	50	34,210	3,020	-
Central Region					
Kanchanaburi	300	-	-	-	1,740
Phetchaburi	2,250	608	751	280	250
Total Production	3,475	658	35,783	3,300	1,990
Value (Million Baht)	1.4	0.3	14.9	1.4	0.8
<u>Consumption</u>					
Total Consumption	2,475	12,506	2,316	344	1,799
Value (Million Baht)	1.0	5.2	1.0	0.1	0.7
<u>Import</u>¹					
1. Ground	10,530	11,670	356	71	-
Value (Million Baht)	46.2	66.6	3.0	0.7	-
2. Unground	-	-	11,000	1	-
Value (Million Baht)	-	-	25.0	0.1	-

1 data from 'www.customs.go.th'

PYROPHYLLITE

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Sara Buri	106,600	124,384	2,205	5,300	35,000
Total Production	106,600	124,384	2,205	5,300	35,000
Value (Million Baht)	37.3	43.5	0.8	1.9	12.3
<u>Export</u>					
Asia					
Indonesia	2,813	1,500	880	5,812	3,856
Malaysia	69	103	198	52	20
Vietnam	2,800	1,040	1,500	3,300	2,100
Total Export	5,682	2,643	2,578	9,164	5,976
Value (Million Baht)	16.0	8.6	7.2	25.2	16.3
<u>Consumption</u>					
Total Consumption	84,336	5,630	2,205	5,300	33,000
Value (Million Baht)	29.5	2.0	0.8	1.9	11.6

Q U A R T Z

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Ground					
Northern Region					
Tak	2,290	2,144	2,994	3,046	3,040
Total Production	2,290	2,144	2,994	3,046	3,040
Value (Million Baht)	1.7	1.6	2.2	2.3	2.3
2. Underground					
Central Region					
Kanchanaburi	500	10,180	38,870	116,710	107,700
Phetchaburi	500	-	-	-	-
Prachuap Khiri Khan	-	-	-	1,500	4,500
Southern Region					
Nakhon Si Thammarat	-	630	2,200	2,100	-
Total Production	1,000	10,810	41,070	120,310	112,200
Value (Million Baht)	0.8	8.1	30.8	90.2	84.2
3. Industrial Rock					
Central Region					
Kanchanaburi	-	-	5,000	-	-
Southern Region					
Songkhla	-	-	-	29,220	289,560
Total Production	-	-	5,000	29,220	289,560
Value (Million Baht)	-	-	0.5	3.1	30.4
<u>Export</u>					
Ground					
Asia					
Taiwan	-	300	-	-	-
Total Export	-	300	-	-	-
Value (Million Baht)	-	1.1	-	-	-

Tonnes

	2008	2009	2010	2011	2012
<u>Consumption</u>					
1. Ground	2,410	2,494	2,908	4,706	3,237
Value (Million Baht)	1.8	1.9	2.2	3.5	2.4
2. Underground	100	4,250	29,433	64,300	47,190
Value (Million Baht)	0.1	3.2	22.1	48.2	35.4
3. Industrial Rock	-	-	200	15,576	194,460
Value (Million Baht)	-	-	0.0*	1.6	20.4
<u>Import</u>¹					
Total Import	1,884	2,595	2,572	3,127	3,082
Value (Million Baht)	8.4	10.9	23.5	14.0	15.6

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

RHYOLITE

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Sara Buri	288,056	217,462	313,631	562,314	794,226
Total Production	288,056	217,462	313,631	562,314	794,226
Value (Million Baht)	25.9	22.8	32.9	59.0	83.4
<u>Consumption</u>					
Total Consumption	274,627	243,270	334,891	647,913	609,717
Value (Million Baht)	25.4	25.5	35.2	68.0	64.0

R O C K S A L T

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Nakhon Ratchasima	1,211,581	1,376,037	1,405,406	1,359,493	1,363,539
Total Production	1,211,581	1,376,037	1,405,406	1,359,493	1,363,539
Value (Million Baht)	1,301.7	1,513.6	1,545.9	1,495.4	1,499.9
<u>Consumption</u>					
Total Consumption	1,200,901	1,380,363	1,396,015	1,351,073	1,344,162
Value (Million Baht)	1,292.2	1,518.4	1,535.6	1,486.2	1,478.6
<u>Import</u>¹					
Total Import	700	2	1	5	-
Value (Million Baht)	10.9	0.0*	0.0*	0.1	-

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

R U T I L E

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	-	24	504	1,242	10
India	105	1,039	210	-	-
Indonesia	-	46	-	-	-
Iran	462	-	96	48	93
Japan	88	-	-	-	-
Korea, South	-	41	-	-	-
Malaysia	-	-	24	305	-
Pakistan	-	100	-	-	-
Philippines	-	84	651	577	-
Europe					
Netherlands	-	132	-	-	-
Turkey	-	651	813	428	-
Ukraine	-	-	-	115	514
Total Export	655	2,117	2,298	2,715	617
Value (Million Baht)	8.8	28.7	38.5	53.2	21.2
<u>Import</u>¹					
Total Import	6,779	7,331	7,276	6,684	5,492
Value (Million Baht)	94.4	68.5	77.9	181.5	460.1

1 data from 'www.customs.go.th'

S A N D S T O N E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Dimension Stone					
Northern Region					
Nakhon Ratchasima	500	670	2,642	2,883	1,498
Total Production	500	670	2,642	2,883	1,498
Value (Million Baht)	0.3	0.5	1.8	2.0	1.0
2. Industrial Rock					
Southern Region					
Phangnga	136,325	116,885	127,625	127,450	228,131
Satun	-	-	50,861	180,720	167,549
Total Production	136,325	116,885	178,486	308,170	395,680
Value (Million Baht)	10.3	11.7	17.9	30.8	39.6
<u>Consumption</u>					
1. Dimension Stone	500	640	2,642	2,883	1,498
Value (Million Baht)	0.3	0.4	1.8	2.0	1.0
2. Industrial Rock	136,325	116,885	187,048	301,811	322,860
Value (Million Baht)	10.3	11.7	18.7	30.2	32.3
<u>Import</u>¹					
Dimension Stone	939	738	0**	-	-
Value (Million Baht)	9.2	12.0	0.0*	-	-

0** denoting the amount of less than 0.1 tonnes

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

S H A L E

	Tonnes				
	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Lampang	35,652	46,737	-	-	1,147
Central Region					
Sara Buri	3,991,222	3,720,054	4,180,593	4,593,446	4,754,237
Total Production	4,026,874	3,766,791	4,180,593	4,593,446	4,755,384
Value (Million Baht)	427.9	470.9	522.6	574.2	594.4
<u>Consumption</u>					
Total Consumption	3,912,722	4,078,561	4,126,822	4,343,767	4,698,855
Value (Million Baht)	425.2	509.8	515.9	543.0	587.4

S I L V E R

Gram

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Phetchabun	881,000	5,640,670	7,072,696	10,075,526	26,193,636
Phichit	4,490,630	10,562,930	10,359,768	9,245,833	5,631,776
Northeastern Region					
Loei	93,849	59,818	126,009	134,533	221,389
Total Production	5,465,479	16,263,418	17,558,473	19,455,892	32,046,801
Value (Million Baht)	91.4	264.0	359.3	661.7	988.4
<u>Export</u>					
Asia					
Hong Kong	5,465,479	16,263,418	17,558,473	19,456,075	32,046,801
Total Export	5,465,479	16,263,418	17,558,473	19,456,075	32,046,801
Value (Million Baht)	91.4	263.9	359.3	661.7	988.4
<u>Import</u>¹					
Total Import	13	13	25	19	-
Value (Million Baht)	0.6	0.6	1.3	1.7	-

1 data from 'www.customs.go.th'

S T R U V E R I T E

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	40	-	276	642	410
Total Export	40	-	276	642	410
Value (Million Baht)	4.7	-	26.7	71.1	39.0

T A L C

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Uttaradit	3,264	504	672	2,304	5,856
Total Production	3,264	504	672	2,304	5,856
Value (Million Baht)	2.0	0.3	0.4	1.4	3.5
<u>Consumption</u>					
Total Consumption	3,249	488	647	3,024	5,732
Value (Million Baht)	2.0	0.3	0.4	1.8	3.4
<u>Import</u>¹					
Total Import	116,906	100,919	135,219	126,254	138,694
Value (Million Baht)	1,033.8	5,089.2	1,452.9	1,380.8	1,786.2

1 data from 'www.customs.go.th'

TANTALUM

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
1. Columbium Pentoxide Powder					
Asia					
China	-	-	-	150	-
Total Export	-	-	-	150	-
Value (Million Baht)	-	-	-	15.7	-
<u>Import (Tantalite)¹</u>					
Total Import	11,043	-	-	483	652
Value (Million Baht)	91.8	-	-	946.8	675.3

1 data from 'www.customs.go.th'

T I N

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
1. Production of Tin Concentrates by changwat					
Northern Region					
Chiang Mai	183	105	216	228	154
Central Region					
Kanchanaburi	11	14	5	5	13
Phetchaburi	-	6	10	8	-
Southern Region					
Ranong	41	42	60	45	32
Total Production	235	167	292	286	199
Value (Million Baht)	104.7	57.3	134.3	172.0	94.1
2. Production of Tin Concentrates by Mining Methods.					
Open Pitting	194	126	231	241	167
Dulang Washing	41	42	60	45	32
Total Production	235	168	291	286	199
3. Percentage of Tin Production by Mining Methods.					
Open Pitting	82.5	74.9	79.4	84.3	83.9
Dulang Washing	17.5	25.1	20.6	15.7	16.1
4. Production of Primary Tin Metal					
Total Production	21,618	19,248	23,319	23,714	22,797
Value (Million Baht)	13,388.6	8,835.4	15,116.9	19,042.1	15,012.7

	Tonnes				
	2008	2009	2010	2011	2012
<u>Export</u>					
1. Primary Tin Metal					
Africa					
Egypt	-	4	5	-	-
Guinea	-	-	-	204	-
South Africa	-	-	-	-	125
U.A.E	-	-	5	-	-
Asia					
China	40	260	80	200	519
Hong Kong	171	1,385	80	50	51
India	20	620	120	255	585
Japan	10,705	6,299	13,952	10,156	9,524
Korea, South	1,916	893	1,334	1,181	2,673
Malaysia	1,060	791	521	184	140
Philippines	55	2	31	6	10
Singapore	812	4,785	1,595	4,000	134
Taiwan	150	351	353	393	361
Vietnam	155	-	-	-	-
Australia / Oceania					
Australia	102	312	190	498	213
New Zealand	-	-	-	6	-
Europe					
Austria	-	-	50	178	-
Belgium	31	20	20	122	158
France	41	10	-	-	120
Germany	101	26	394	1,400	484
Italy	483	571	125	-	50
Netherlands	1,279	306	21	-	1,975
Switzerland	-	-	25	1,125	-
Turkey	250	25	-	-	25
U.K.	20	3	462	57	301
North America					
U.S.A.	16	-	-	-	2,180
Total Export	17,407	16,661	19,363	20,015	19,628
Value (Million Baht)	10,939.1	7,890.1	12,694.3	16,387.6	13,248.0

Tonnes

	2008	2009	2010	2011	2012
2. Tin-Lead Alloy					
Asia					
Hong Kong	-	22	14	-	-
Malaysia	-	21	-	-	-
Europe					
Belgium	-	-	22	37	55
Total Export	-	43	36	37	55
Value (Million Baht)	-	17.1	19.7	33.8	30.5
3. Final Slag					
Asia					
China	934	1,910	1,271	50	57
Total Export	934	1,910	1,271	50	57
Value (Million Baht)	93.1	157.0	105.6	3.7	6.4
4. Metallic Residue					
Asia					
Japan	-	-	-	-	20
Total Export	-	-	-	-	20
Value (Million Baht)	-	-	-	-	12.5
5. Tin Slag					
Asia					
China	-	-	-	74	-
Total Export	-	-	-	74	-
Value (Million Baht)	-	-	-	4.4	-

	Tonnes				
	2008	2009	2010	2011	2012
6. Hard Head					
Africa					
U.A.E	-	-	-	-	86
Asia					
China	114	-	-	-	-
Malaysia	23	-	-	-	-
Europe					
Belgium	1,000	1,357	1,389	297	280
U.K.	20	-	-	-	-
South America					
Peru	170	-	-	-	-
Total Export	1,327	1,357	1,389	297	366
Value (Million Baht)	403.0	271.3	422.3	138.5	164.5
7. Tin Dross					
Asia					
Saudi Arabia	-	-	-	22	-
U.A.E.	-	-	39	86	-
Europe					
Belgium	-	-	20	-	39
Total Export	-	-	59	108	39
Value (Million Baht)	-	-	24.8	48.0	13.9
<u>Consumption</u>					
1. Primary Tin Metal	4,080	2,603	3,707	3,321	3,321
Value (Million Baht)	2,525.9	1,216.5	2,346.8	2,648.3	2,176.1
2. Tin-lead Alloy	684	697	1,037	985	833
Value (Million Baht)	n.a.	n.a.	n.a.	n.a.	n.a.
<u>Import</u>¹					
Tin ore	18,771	17,985	3,432	2,716	2,842
Value (Million Baht)	5,865.6	4,272.0	685.0	257.2	397.0

1 data from 'www.customs.go.th'

T R A V E R T I N E

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Central Region					
Sara Buri	3,640	2,910	1,760	900	900
Total Production	3,640	2,910	1,760	900	900
Value (Million Baht)	7.3	5.8	3.5	1.8	1.8
<u>Consumption</u>					
Total Consumption	3,280	2,910	1,720	900	900
Value (Million Baht)	6.6	5.8	3.4	1.8	1.8
<u>Import¹</u>					
Total Import	-	0.1	0.1	0.1	0**
Value (Million Baht)	-	0.0*	0.0*	0.1	0.0*

0** denoting the amount of less than 0.1 tonnes

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

TUNGSTEN

Tonnes

	2008	2009	2010	2011	2012
<u>1. Wolfram</u>					
<u>Production</u>					
Northern Region					
Phrae	368	200	320	146	-
Low grade	530	-	256	-	-
Central Region					
Kanchanaburi	-	-	4.5	7.3	2.5
Phetchaburi	15	0**	1.9	0.3	-
Total Production	383	200	326.4	153.6	2.5
Low grade	530	-	256	-	-
Value (Million Baht)	38.1	19.9	32.4	15.3	0.2
Low grade	14.6	-	7.0	-	-
<u>Export</u>					
Asia					
China	550	160	320	204	-
Europe					
Germany	-	-	20	-	-
North America					
U.S.A.	-	-	7	-	-
Total Export	550	160	347	204	-
Value (Million Baht)	198.9	47.3	2.3	3.1	-
<u>Import¹</u>					
Total Import	-	8	7	39	21
Value (Million Baht)	-	0.7	0.1	2.9	1.8

0** denoting the amount of less than 0.1 tonnes

1 data from 'www.customs.go.th'

	Tonnes				
	2008	2009	2010	2011	2012
<u>2. Scheelite</u>					
<u>Production</u>					
Northern Region					
Chiang Mai	199	150	129	138	130
Total Production	199	150	129	138	130
Value (Million Baht)	19.8	14.9	12.8	13.7	12.9
<u>Export</u>					
Asia					
China	-	-	-	19	-
Hong Kong	-	-	-	-	17
Vietnam	-	-	-	19	21
Europe					
Austria	-	-	-	-	43
North America					
U.S.A.	163	122	116	122	135
Total Export	163	122	116	160	216
Value (Million Baht)	55.6	46.6	43.9	46.5	22.0
<u>3. Other Tungsten</u>					
<u>Import¹</u>					
Total Import	-	-	0**	0**	0**
Value (Million Baht)	-	-	0.0*	0.0*	0.0*

0** denoting the amount of less than 0.1 tonnes

0.0* denoting the amount of less than 0.05 million baht

1 data from 'www.customs.go.th'

X E N O T I M E

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	-	-	42	21	-
Korea, South	-	-	-	-	-
Total Export	-	-	42	21	-
Value(Million Baht)	-	-	0.1	1.9	-

Z I N C

Tonnes

	2008	2009	2010	2011	2012
<u>Production</u>					
Northern Region					
Tak	118,739	183,288	146,470	148,391	166,642
Total Production	118,739	183,288	146,470	148,391	166,642
Value (Million Baht)	1,394.6	2,056.1	2,099.2	2,006.3	2,102.8
<u>Export</u>					
1. Zinc Metal					
Africa					
Nigeria	-	-	-	13	35
Asia					
Cambodia	-	-	-	51	20
China	909	6,574	-	-	-
Hong Kong	1,362	121	-	-	-
India	-	122	1	-	250
Indonesia	661	609	7	7	8
Japan	-	-	-	982	41
Korea, South	-	2,420	302	-	80
Laos	50,237	121	273	374	-
Malaysia	3,055	637	1	2,023	1,271
Myanmar	62,639	40	615	-	1,342
Saudi Arabia	-	4,023	-	-	-
Singapore	242	919	-	2,407	331
Sri Lanka	24,946	-	-	-	-
Taiwan	4,347	-	-	-	2
Vietnam	316	3,362	3,322	4,678	3,758
Europe					
Italy	-	-	-	20	-
Total Export	148,714	18,947	4,522	10,555	7,138
Value (Million Baht)	666.9	911.2	329.1	714.5	441.1

	Tonnes				
	2008	2009	2010	2011	2012
2. Zinc Alloy					
Africa					
Nigeria	-	-	-	62	-
Asia					
Cambodia	120	22	18	0.4	-
Japan	-	-	-	21	-
Malaysia	55	-	-	-	41
Australia / Oceania					
Australia	-	-	96	59	55
Total Export	175	22	114	142	96
Value (Million Baht)	8.1	1.9	6.6	10.5	5.2
<u>Consumption</u>					
1. Zinc Alloy	26,814	24,045	30,873	8,970	-
Value (Million Baht)	1,995.7	1,517.6	2,380.1	714.5	-
2. Zinc Metal	57,902	55,817	61,142	80,601	86,695
Value (Million Baht)	4,068.6	3,205.9	4,390.3	5,631.4	5,447.6
<u>Import</u>¹					
Zinc Ore	193,809	148,441	174,586	125,818	139,625
Value (Million Baht)	3,499.3	1,845.4	3,781.4	3,273.4	3,090.1

1 data from 'www.customs.go.th'

Z I R C O N

Tonnes

	2008	2009	2010	2011	2012
<u>Export</u>					
Asia					
China	8,868	10,420	7,512	11,064	4,882
India	-	16	-	-	-
Philippines	21	21	64	-	-
Taiwan	-	-	-	138	240
Total Export	8,889	10,457	7,576	11,202	5,122
Value(Million Baht)	121.0	165.9	133.3	277.3	176.9
<u>Import</u>¹					
Total Import	48,724	18,138	47,451	46,633	12,334
Value (Million Baht)	623.9	266.8	493.1	1,351.6	615.0

1 data from 'www.customs.go.th'

NUMBER OF ACTIVE MINES BY KIND OF MINERALS

	2008	2009	2010	2011	2012
Andesite	2	2	2	2	3
Antimony	-	1	2	2	2
Ball clay	17	17	11	7	6
Barite	3	4	4	4	4
Basalt (industrial rock)	28	30	31	29	26
Bentonite	1	1	1	1	1
Calcite	7	8	7	6	6
Cement clay	45	47	37	31	4
Ceramic clay	16	17	14	10	2
Diatomite	2	2	2	1	1
Dolomite	19	16	17	18	22
Feldspar	26	25	23	22	23
Fluorite	4	5	4	4	3
Gem stone	2	1	1	-	-
Glass sand	12	13	12	11	9
Gneiss	1	1	1	1	1
Gold	4	4	4	4	4
Granite (dimension stone)	32	33	30	28	23
Granite (industrial rock)	22	19	19	18	17
Graywacke	1	1	1	1	1
Gypsum	42	45	48	49	47
Iron	8	10	10	9	13
Kaolin	38	32	33	34	31
Lignite	9	9	9	8	8
Limestone (cement)	20	18	19	18	15
Limestone (construction)	203	195	179	186	190
Limestone (dimension)	3	3	3	3	4
Limestone (others)	21	21	18	19	19
Manganese	2	3	2	3	3
Marble	37	31	32	25	19
Marl	3	4	4	3	3

NUMBER OF ACTIVE MINES BY KIND OF MINERALS

	2008	2009	2010	2011	2012
Perlite	2	2	2	2	2
Phosphate	2	2	2	2	1
Pyrophyllite	4	3	2	2	3
Quartz	1	2	2	4	7
Quartz (industrial rock)	-	1	1	-	-
Rhyolite (industrial rock)	1	1	1	1	1
Rock salt	3	4	4	4	4
Sand stone (dimension)	11	10	8	7	7
Sand stone (industrial rock)	2	2	2	2	3
Shale	6	7	7	7	7
Talc	2	1	1	1	1
Tin*	6	5	5	5	3
Travertine	4	4	4	3	3
Wolfram	2	1	1	1	1
Zinc	1	1	1	1	1
Total	677	664	623	599	554

* Including tin-tungsten mines

**NUMBER OF WORKERS EMPLOYED IN MINES
BY KIND OF MINERAL**

	2008	2009	2010	2011	2012
Andesite	43	43	35	33	30
Antimony	-	7	11	13	21
Ball clay	222	200	161	141	283
Barite	40	71	97	68	55
Basalt (industrial rock)	542	580	709	626	554
Bentonite	12	12	12	11	12
Calcite	83	111	120	89	93
Cement clay	216	261	272	233	35
Ceramic clay	63	90	89	60	17
Diatomite	7	9	5	4	4
Dolomite	278	243	249	257	284
Feldspar	365	357	327	330	324
Fluorite	160	186	145	108	95
Gem stone	42	15	9	-	-
Glass sand	68	64	61	43	30
Gneiss	7	7	7	7	7
Gold	225	207	224	229	213
Granite (dimension)	420	392	338	310	251
Granite (industrial rock)	351	316	314	310	340
Graywacke	23	24	29	31	29
Gypsum	1,017	1017	1024	1008	1017
Iron	192	342	337	267	353
Kaolin	458	348	353	380	361
Lignite	2,530	2087	1967	1967	1954
Limestone (cement)	967	1021	1288	1263	1170
Limestone (construction)	3,885	3626	3032	3233	3399
Limestone (dimension)	25	25	25	25	30
Limestone (others)	372	354	287	316	361
Manganese	24	41	27	24	12
Marble	665	594	561	390	298
Marl	17	23	20	19	16

**NUMBER OF WORKERS EMPLOYED IN MINES
BY KIND OF MINERAL**

	2008	2009	2010	2011	2012
Perlite	28	29	31	28	31
Phosphate	32	22	26	45	59
Pyrophyllite	52	34	23	24	35
Quartz	19	30	31	61	103
Quartz (industrial rock)	-	27	27	-	-
Rhyolite (industrial rock)	43	43	43	43	43
Rock salt	122	124	127	125	128
Sand stone (dimension)	60	55	53	45	42
Sand stone (industrial rock)	28	30	25	25	39
Shale	118	132	140	85	85
Talc	9	6	6	6	8
Tin*	251	283	313	282	269
Travertine	24	22	17	18	19
Wolfram	18	15	15	15	125
Zinc	364	362	292	301	298
Dulang Washer	285	321	209	188	266
Total	14,772	14,208	13,513	13,086	13,198

* Including workers employed in tin-tungsten mines

Mineral Production of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Mineral Fuels and Energy										
Lignite	18,095,375	9,047.7	17,758,861	15,334.8	18,399,399	17,663.4	21,327,106	20,474.0	18,069,428	17,346.7
Total		9,047.7		15,334.8		17,663.4		20,474.0		17,346.7
%		23.34		29.21		30.98		34.22		28.31
Iron and Ferro Alloy										
Iron ore	1,709,750	2,113.2	616,399	756.0	976,937	1,360.0	489,359	903.7	303,233	751.7
Manganese (metallurgical grade)	111,000	112.3	64,930	187.5	50,450	146.3	398	1.2	8,151	30.4
Tungsten										
- Scheelite	199	19.8	150	14.9	129	12.8	138	13.7	130	12.9
- Wolfram	383	38.1	200	19.9	326	32.4	154	15.3	3	0.2
- Low grade	530	14.6	-	-	256	7.0	-	-	-	-
Total		2,298.0		978.3		1,558.5		933.9		795.2
%		5.93		1.86		2.73		1.56		1.30
Base Metals										
Antimony										
- Low grade	-	-	-	-	-	-	172	n.a.	43	n.a.
- Ore	-	-	35	1.0	738	21.3	56	1.6	-	-
Copper metal	1	0.1	0	0.0**	723	168.5	525	146.4	721	186.5
Tin concentrates	235	104.7	167	57.3	292	134.3	286	172.0	199	94.0
Zinc ore	118,739	1,394.6	183,288	2,056.1	146,470	2,099.2	148,391	2,006.3	166,642	2,102.8
Total		1,499.4		2,114.4		2,423.3		2,326.3		2,383.3
%		3.87		4.03		4.25		3.89		3.89

Mineral Production of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Precious Metals and Precious Stone										
Gem stone (unit : gram)	6,381	n.a.	570	n.a.	240	n.a.	-	-	-	-
Gold metal (unit : gram)	2,721,146	2,541.1	4,866,133	5,235.0	4,045,567	5,023.0	2,860,229	4,425.4	4,895,021	8,119.9
Silver metal (unit : gram)	5,465,479	91.4	16,263,418	264.0	17,558,473	359.3	19,455,892	661.7	32,046,801	988.4
Total		2,632.5		5,499.0		5,382.3		5,087.1		9,108.3
%		6.79		10.48		9.44		8.50		14.87
Cement Industrial Minerals										
Anhydrite	488,681	221.2	633,820	350.2	536,120	279.3	614,148	304.0	857,172	424.3
Cement Clay	3,753,617	337.8	4,894,329	440.5	8,250,823	742.6	8,571,884	771.5	6,007,039	540.6
Gypsum (unground)	8,500,401	3,861.3	8,631,797	4,788.3	10,172,629	5,270.4	10,994,074	5,442.1	11,447,199	5,666.4
Limestone	54,836,731	5,587.1	56,848,493	6,821.8	61,448,642	7,373.8	63,008,011	7,561.0	65,834,804	7,900.2
Marl	41,720	3.5	98,000	8.3	68,000	5.8	65,000	5.5	100,000	8.5
Shale	4,026,874	427.9	3,766,791	470.9	4,180,593	522.6	4,593,446	574.2	4,755,384	594.4
Total		10,438.8		12,880.0		14,194.5		14,658.3		15,134.4
%		26.93		24.54		24.89		24.50		24.70
Ceramic Industrial Minerals										
Ball clay	1,499,993	825.0	2,312,625	1,271.9	1,513,767	832.6	425,048	233.8	447,348	246.0
Ceramic Clay	341,227	187.7	272,464	149.9	929,162	511.0	404,129	222.3	60,327	33.2
Dolomite	1,353,763	473.8	1,964,410	687.5	2,451,990	858.2	2,556,765	894.9	2,608,997	913.1
Feldspar										
- Potassium (ground)	123	0.3	120	0.3	-	-	-	-	-	-
- Potassium (unground)	423	0.7	9,772	16.6	9,060	15.4	139,169	236.6	5,710	9.7

Mineral Production of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Ceramic Industrial Minerals										
Feldspar										
- Sodium (ground)	3,191	4.5	65	0.1	120	0.2	-	-	-	-
- Sodium (unground)	666,881	466.8	708,735	496.1	632,720	442.9	901,983	631.4	1,095,013	766.5
Glass sand	495,848	173.6	357,585	125.2	323,985	113.4	221,721	77.6	434,094	151.9
Kaolin										
- Filler	6,061	11.5	4,046	7.7	3,837	7.3	4,329	8.2	300	0.6
- Unwashed	479,443	184.6	708,746	272.9	582,994	224.5	932,326	358.9	974,275	375.1
- Washed	161,215	154.8	131,131	125.9	156,827	150.6	163,881	157.3	168,464	161.7
Quartz										
- Ground	2,290	1.7	2,144	1.6	2,994	2.2	3,046	2.3	3,040	2.3
- Unground	1,000	0.8	10,810	8.1	41,070	30.8	120,310	90.2	112,200	84.2
Total		2,485.8		3,163.8		3,189.1		2,913.5		2,744.3
%		6.41		6.03		5.59		4.87		4.48
Dimension Stone										
Gneiss	-	-	-	-	-	-	60	0.2	140	0.6
Granite	10,579*	54.0	6,352*	32.4	6,123*	31.2	5,267*	26.9	5,505*	28.1
Limestone	94	0.2	1,941	3.9	34	0.1	27	0.1	60	0.1
Marble	11,015*	40.7	10,836*	40.1	12,097*	44.8	7,674*	28.4	7,222*	26.7
Sandstone	500	0.3	670	0.5	2,642	1.8	2,883	2.0	1,498	1.0
Travertine	3,640	7.3	2,910	5.8	1,760	3.5	900	1.8	900	1.8
Total		102.5		82.7		81.4		59.4		58.3
%		0.26		0.16		0.14		0.10		0.10

Mineral Production of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Industrial Rock										
Andesite	1,000,992	114.2	930,655	125.6	1,209,235	163.2	945,587	127.7	1,009,690	136.3
Basalt	8,877,552	1,026.9	10,521,955	1,420.5	12,489,201	1,686.0	11,318,212	1,528.0	10,712,823	1,446.2
Granite	5,189,829	614.1	5,210,304	703.4	5,258,609	709.9	5,648,459	762.5	6,346,756	856.8
Graywacke	748,573	65.1	730,597	76.7	968,690	101.7	966,817	101.5	737,621	77.5
Limestone	72,419,391	6,204.9	70,190,643	7,370.0	69,834,022	7,332.6	78,280,420	8,219.4	79,235,275	8,319.7
Marble (fragment)	653,915*	147.1	724,380*	163.0	767,137*	249.3	501,563*	163.0	304,647*	99.0
Perlite	7,000	4.9	13,500	9.5	14,700	10.4	26,500	18.7	41,400	29.2
Quartz	-	-	-	-	5,000	0.5	29,220	3.1	289,560	30.4
Rhyolite	288,056	25.9	217,462	22.8	313,631	32.9	562,314	59.0	794,226	83.4
Sandstone	136,325	10.3	116,885	11.7	178,486	17.9	308,170	30.8	395,680	39.6
Total		8,213.4		9,903.2		10,304.4		11,013.7		11,118.1
%		21.18		18.87		18.07		18.41		18.15
Other Industrial Minerals										
Barite										
- Chemical grade (ground)	2,480	14.5	1,985	11.6	3,865	22.6	2,403	14.1	3,301	19.3
- Drilling mud (ground)	-	-	-	-	-	-	-	-	14,200	55.3
- Unground	6,700	9.9	49,910	74.1	29,600	44.0	65,300	96.9	46,998	69.8
Bentonite	210	0.1	110	0.1	130	0.1	55,220	33.1	141,000	84.6
Calcite	823,706	162.3	544,019	107.2	693,754	136.7	786,250	154.9	865,800	170.6
Diatomite	4,075	3.7	5,600	5.0	7,100	6.4	38,130	34.3	8,500	7.7

Mineral Production of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals										
Fluorite (metallurgical grade)	26,118	106.2	86,365	351.1	2,222	9.0	5,093	20.7	9,602	50.8
Limestone	4,077,034	411.7	3,540,914	424.9	3,705,376	444.6	4,284,432	514.1	5,049,423	605.9
Phosphate	3,475	1.4	658	0.3	35,783	14.9	3,300	1.4	1,990	0.8
Pyrophyllite	106,600	37.3	124,384	43.5	2,205	0.8	5,300	1.9	35,000	12.3
Rock salt	1,211,581	1,301.7	1,376,037	1,513.6	1,405,406	1,545.9	1,359,493	1,495.4	1,363,539	1,499.9
Talc (unground)	3,264	2.0	504	0.3	672	0.4	2,304	1.4	5,856	3.5
Total		2,050.8		2,531.7		2,225.4		2,368.2		2,580.5
%		5.29		4.82		3.90		3.96		4.21
Grand Total		38,768.9		52,487.9		57,022.3		59,834.4		61,269.1

*:- n.a. = not available :- * = Cubic Meter :- 0.0** = denoting the amount of less than 0.05 million baht*

Mineral Export of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Iron and Ferro Alloy</u>										
Columbium pentoxide powder	-	-	-	-	-	-	150	15.7	-	-
Iron ore	877,542	1,027.4	200,150	306.4	481,035	452.3	453,080	510.7	161,139	532.3
Manganese (metallurgical grade)	70	0.1	19,055	56.6	59,699	754.0	19,241	63.0	12,825	51.4
Tungsten										
- Scheelite	163	55.6	122	46.6	116	43.9	160	46.5	216	22.0
- Wolfram	550	198.9	160	47.3	347	2.3	204	3.1	-	-
Total		1,282.0		456.9		1,252.5		639.0		605.7
%		6.2		2.2		4.8		2.2		2.0
<u>Base Metals</u>										
Antimony ore	253	5.1	539	7.5	1,748	32.8	7,381	142.4	6,268	124.3
Copper										
- Metal	1	0.1	0*	0.0**	723	168.5	525	146.4	721	186.5
- Dross	-	-	86	14.6	44	14.7	-	-	-	-
- Powder	-	-	-	-	4	1.2	2	0.7	-	-
Tin										
- Tin dross	-	-	-	-	59	24.8	108	48.0	39	13.9
- Final slag	934	93.1	1,910	157.0	1,271	105.6	50	3.7	57	6.4
- Hard head	1,327	403.0	1,357	271.3	1,389	422.3	297	138.5	366	164.5
- Tin metal	17,407	10,939.1	16,661	7,890.1	19,363	12,694.3	20,015	16,387.6	19,628	13,248.0
- Metallic residue	-	-	-	-	-	-	-	-	20	12.5
- Tin-lead alloy	-	-	43	17.1	36	19.7	37	33.8	55	30.5
- Tin slag	-	-	-	-	-	-	74	4.4	-	-

Mineral Export of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Base Metals</u>										
Zinc										
- Zinc alloy	175	8.1	22	1.9	114	6.6	142	10.5	96	5.2
- Zinc metal	148,714	666.9	18,947	911.2	4,522	329.1	10,555	714.5	7,137	441.1
Total		12,115.4		9,270.7		13,819.6		17,630.5		14,232.9
%		58.5		45.4		53.3		60.3		47.4
<u>Precious Metals and Precious Stone</u>										
Garnet	-	-	-	-	-	-	-	-	23	0.1
Gold metal (unit : gram)	2,721,146	2,527.7	4,866,133	5,234.9	4,045,567	5,022.9	2,860,229	4,425.4	4,895,021	8,119.9
Silver metal (unit : gram)	5,433,094	91.0	16,263,418	263.9	17,558,473	359.3	19,455,892	661.7	32,046,801	988.4
Total		2,618.7		5,498.8		5,382.2		5,087.1		9,108.4
%		12.7		26.9		20.8		17.4		30.3
<u>Light Metals and Rare Earth</u>										
Ilmenite	11,403	24.6	443	2.3	210	0.8	11,501	31.5	1,680	6.5
Leucoxene	452	5.8	2,597	33.7	2,017	33.3	3,744	65.3	2,397	60.3
Monazite	4,819	97.4	6,675	180.8	9,405	284.3	5,088	171.6	200	10.4
Rutile	655	8.8	2,117	28.7	2,298	38.5	2,715	53.2	617	21.2
Struverite	40	4.7	-	-	276	26.7	642	71.1	410	39.0
Xenotime	-	-	-	-	42	0.1	21	1.9	-	-
Zircon	8,889	121.0	10,457	165.9	7,576	133.3	11,202	277.3	5,122	176.9
Total		262.3		411.4		517.0		671.9		314.3
%		1.3		2.0		2.0		2.3		1.1

Mineral Export of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Cement Industrial Minerals</u>										
Anhydrite										
- Unground	589,227	276.4	533,820	291.2	600,990	308.7	704,550	344.0	788,906	401.3
- Ground	460	1.5	160	0.5	200	0.6	120	0.4	300	1.1
Gypsum										
- Ground	9,674	15.5	1,758	6.3	2,333	6.9	2,138	7.9	2,578	10.3
- Unground	6,033,222	2,820.5	5,990,400	3,252.3	6,993,620	3,572.8	7,753,028	3,791.7	8,117,121	4,151.4
Total		3,113.9		3,550.3		3,889.0		4,144.0		4,564.1
%		15.0		17.4		15.0		14.2		15.2
<u>Ceramic Industrial Minerals</u>										
Ball clay	29,772	111.7	25,743	122.5	30,316	146.3	15,205	68.6	13,591	66.9
Dolomite										
- Ground	1,630	4.3	1,644	1.4	102	0.5	89	0.4	165	0.7
- Unground	702,546	201.6	840,208	264.5	1,368,198	410.9	1,181,260	343.8	1,003,160	313.0
Feldspar										
- Potassium (ground)	-	-	-	-	-	-	72	0.2	-	-
- Sodium (ground)	413,914	330.8	376,003	289.1	383,181	317.6	608,297	449.0	717,565	603.0
- Sodium (unground)	156,571	106.2	-	-	66,300	50.9	8,200	3.6	-	-
Kaolin										
- Unwashed	22,100	16.2	4,200	0.1	-	-	21	0.1	-	-
- Washed	6,201	28.0	4,902	20.5	5,629	24.5	8,636	37.0	9,488	58.7
Quartz (ground)	-	-	300	1.1	-	-	-	-	-	-
Total		798.8		699.2		950.7		902.7		1,042.3
%		3.9		3.4		3.7		3.1		3.5

Mineral Export of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Industrial Rock										
Granite (industrial rock)	-	-	-	-	-	-	-	-	8,500	4.0
Gravel (industrial rock)	832	3.3	921	3.6	938	2.9	685	2.0	489	1.9
Limestone (industrial rock-construction)	1,163,771	460.0	1,218,329	487.7	256,548	88.5	329,743	132.1	319,765	110.6
Total		463.3		491.3		91.4		134.1		116.5
%		2.2		2.4		0.4		0.5		0.4
Other Industrial Minerals										
Barite chemical grade (ground)	7,023	31.2	17,008	34.4	12	0.1	2,952	24.0	4,091	39.9
Fluorite (metallurgical grade)	-	-	-	-	-	-	-	-	26	0.2
Limestone (industrial rock-others)	498	1.3	2,669	4.3	1,687	3.5	1,479	3.4	4,859	15.0
Pyrophyllite	5,682	16.0	2,643	8.6	2,578	7.2	9,164	25.2	5,976	16.3
Total		48.5		47.3		10.8		52.6		71.4
%		0.2		0.2		0.0**		0.2		0.2
Grand Total		20,702.9		20,425.9		25,913.2		29,261.9		30,055.6

-: 0* = denoting the amount of less than 0.1 metric tonnes -: 0.0** = denoting the amount of less than 0.05 million baht

Mineral Consumption of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Mineral Fuels and Energy</u>										
Lignite	18,531,550	9,265.8	17,842,528	15,376.6	18,117,685	17,393.0	20,256,989	19,446.7	18,198,546	17,470.6
Total		9,265.8		15,376.6		17,393.0		19,446.7		17,470.6
%		25.20		35.60		33.86		36.24		34.69
<u>Iron and Ferro Alloy</u>										
Iron ore	3,200	4.1	96,500	120.1	-	-	-	-	-	-
Manganese (metallurgical grade)	10,425	10.6	11,500	33.4	54,415	157.8	-	-	1,118	4.3
Total		14.7		153.5		157.8		-		4.3
%		-		0.36		0.31		-		-
<u>Base Metals</u>										
Antimony ore	-	-	-	-	56	1.2	-	-	-	-
Copper metal	419	109.6	441	76.9	833	193.5	1,824	515.3	1,128	289.9
Tin										
- Tin metal	4,080	2,525.9	2,603	1,216.5	3,707	2,346.8	3,321	2,648.3	3,321	2,176.1
- Tin-lead alloy	684	n.a.	697	n.a.	1,037	n.a.	985	n.a.	833	n.a.
Zinc										
- Zinc alloy	26,814	1,995.7	24,045	1,517.6	30,873	2,380.1	8,970	714.5	-	-
- Zinc metal	57,902	4,068.6	55,817	3,205.9	61,142	4,390.3	80,601	5,631.4	86,695	5,447.6
Total		8,699.8		6,016.9		9,311.9		9,509.5		7,913.6
%		23.66		13.93		18.13		17.72		15.71

Mineral Consumption of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Precious Metals and Precious Stone										
Gem stone (unit : gram)	6,378	n.a.	610	n.a.	240	n.a.	-	-	-	-
Total		n.a.		n.a.		n.a.		-		-
%		-		-		-		-		-
Cement Industrial Minerals										
Anhydrite	13,748	6.1	-	-	32,634	16.5	3,240	1.6	25,150	12.4
Cement clay (industrial rock)	3,692,042	332.3	4,876,744	438.9	6,833,705	615.0	6,525,005	587.3	1,622,039	145.9
Gypsum (unground)	2,467,276	1,121.7	2,363,350	1,312.2	3,327,023	1,713.8	3,240,627	1,604.1	3,577,011	1,770.6
Limestone	55,969,381	5,712.2	54,882,205	6,585.9	60,614,383	7,273.7	62,530,873	7,503.7	63,783,890	7,654.1
Marl	41,900	3.6	86,550	7.4	69,550	5.9	69,000	5.9	113,100	9.6
Shale	3,912,722	425.2	4,078,561	509.8	4,126,822	515.9	4,343,767	543.0	4,698,855	587.4
Total		7,601.1		8,854.2		10,140.8		10,245.6		10,180.0
%		20.67		20.50		19.74		19.09		20.21
Ceramic Industrial Minerals										
Ball clay	262,598	144.4	221,472	121.8	253,292	139.3	324,283	178.4	227,150	124.9
Ceramic clay	135,241	74.4	226,849	124.8	233,286	128.3	276,466	152.1	67,847	37.3
Dolomite	669,702	234.4	786,973	275.4	722,216	252.8	1,194,362	418.0	970,750	339.8
Feldspar										
- Potassium (ground)	45	0.1	52	0.1	-	-	-	-	-	-
- Potassium (unground)	1,004	1.7	2,906	4.9	3,330	5.7	13,935	23.7	2,618	4.5
- Sodium (ground)	201,745	282.4	170,723	239.0	171,233	239.7	165,403	231.6	162,716	227.8
- Sodium (unground)	90,205	63.1	139,750	97.8	239,877	167.9	214,211	150.0	175,272	122.7

Mineral Consumption of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Ceramic Industrial Minerals</u>										
Glass sand	486,790	170.4	355,133	124.3	364,215	127.5	196,778	68.9	393,269	137.6
Kaolin										
- Filler	6,111	11.6	3,774	7.2	3,837	7.3	4,029	7.7	300	0.6
- Unwashed	460,689	175.9	471,121	181.4	404,635	155.8	634,639	244.3	962,495	370.6
- Washed	159,059	152.7	135,265	129.9	165,187	158.6	148,741	142.8	154,594	148.4
Quartz										
- Ground	2,410	1.8	2,494	1.9	2,908	2.2	4,706	3.5	3,237	2.4
- Unground	100	0.1	4,250	3.2	29,433	22.1	64,300	48.2	47,190	35.4
Total		1,313.0		1,311.7		1,407.2		1,669.2		1,552.0
%		3.57		3.04		2.74		3.11		3.08
<u>Dimension Stone</u>										
Gneiss	109	0.4	46	0.2	100	0.4	60	0.2	40	0.2
Granite	7,628*	38.9	6,102*	31.1	6,053*	30.9	6,069*	30.9	5,383*	27.5
Limestone	34	0.1	41	0.1	34	0.1	12	0.0**	60	0.1
Marble	10,590*	39.1	68,994*	255.3	182,996*	677.1	128,512*	475.5	26,457*	97.9
Sand stone	500	0.3	640	0.4	2,642	1.8	2,883	2.0	1,498	1.0
Travertine	3,280	6.6	2,910	5.8	1,720	3.4	900	1.8	900	1.8
Total		85.4		292.9		713.7		510.4		128.5
%		0.23		0.68		1.39		0.95		0.26

Mineral Consumption of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Industrial Rock</u>										
Andesite	980,541	112.2	765,806	103.4	1,230,985	166.2	799,192	107.9	918,429	123.9
Basalt	8,736,654	1,010.7	10,878,292	1,468.6	12,164,953	1,642.3	10,985,713	1,483.1	10,450,773	1,410.9
Granite	4,620,994	551.5	4,865,279	656.8	4,199,593	566.9	5,013,445	676.8	5,293,829	714.7
Grawacke	719,682	61.8	765,450	80.4	914,307	96.0	934,171	91.1	810,849	85.1
Limestone	68,801,246	5,896.6	62,552,086	6,567.9	69,205,206	7,266.5	71,141,814	7,469.9	78,234,119	8,214.6
Marble (fragment)	628,165*	141.3	851,561*	191.6	1,078,912*	350.6	535,439*	174.0	221,766*	72.1
Perlite	16,625	11.7	11,350	8.0	11,634	8.2	13,796	9.7	12,687	7.7
Quartz	-	-	-	-	200	0.0**	15,576	1.6	194,460	20.4
Rhyolite	274,627	25.4	243,270	25.5	334,891	35.2	647,913	68.0	609,717	64.0
Sand stone	136,325	10.3	116,885	11.7	187,048	18.7	301,811	30.2	322,860	32.3
Total		7,821.5		9,113.9		10,150.6		10,112.3		10,745.7
%		21.27		21.10		19.76		18.84		21.34
<u>Other Industrial Minerals</u>										
Barite										
- Chemical grade (ground)	-	-	49	0.3	-	-	-	-	-	-
- Drilling mud (ground)	-	-	-	-	-	-	-	-	13,956	54.4
- Unground	6,210	9.2	10,420	15.5	9,334	13.9	21,229	31.5	-	-
Bentonite	-	-	10,000	6.0	10,000	6.0	40,000	24.0	30,000	18.0
Calcite	817,801	161.1	477,732	94.1	578,500	113.9	439,759	86.6	803,377	158.3
Diatomite	4,400	4.0	5,730	5.2	7,625	6.9	11,300	10.2	27,060	24.4

Mineral Consumption of Thailand 2008 - 2012

Quantity : Tonnes

Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals										
Fluorite (metallurgical grade)	19,756	80.3	7,622	30.9	1,412	5.7	2,832	11.5	1,423	5.9
Limestone	3,908,735	394.8	3,266,563	392.0	3,383,776	406.1	4,304,560	516.6	5,137,747	616.5
Phosphate	2,475	1.0	12,506	5.2	2,316	1.0	344	0.1	1,799	0.7
Pyrophyllite	84,336	29.5	5,630	2.0	2,205	0.8	5,300	1.9	33,000	11.6
Rock salt	1,200,901	1,292.2	1,380,363	1,518.4	1,396,015	1,535.6	1,351,073	1,486.2	1,344,162	1,478.6
Talc (unground)	3,249	2.0	488	0.3	647	0.4	3,024	1.8	5,732	3.4
Total		1,974.1		2,069.9		2,090.3		2,170.4		2,371.8
%		5.37		4.79		4.07		4.05		4.71
Grand Total		36,775.4		43,189.6		51,365.3		53,664.1		50,366.5

:- n.a. = not available :- * = Cubic Meter :- 0.0** = denoting the amount of less than 0.05 million baht

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Mineral Fuels and Energy										
Anthracite	242,197	1,280.4	677,522	2,209.5	367,817	1,539.6	210,701	1,407.3	138,064	808.1
Bituminous coal	7,299,492	17,465.6	7,066,802	16,445.4	6,619,170	15,548.3	4,484,690	13,077.7	7,326,828	19,864.9
Coke	52,593	1,040.3	117,544	1,224.2	208,729	2,922.0	108,164	1,667.5	36,019	647.6
Lignite	6	0.1	23	0.5	79	1.2	15	0.3	481	16.2
Peat	4,874	45.0	6,237	51.6	7,770	64.7	9,644	81.7	8,239	69.9
Other coal	8,379,841	16,624.7	8,520,470	17,003.1	9,700,720	19,286.5	11,459,285	25,973.6	152,025,749	25,297.6
Total		36,456.1		36,934.3		39,362.3		42,208.2		46,704.3
%		64.17		67.65		70.14		71.37		74.46
Iron and Ferro Alloy										
Chromite ore	2,235	35.9	1,140	14.8	2,785	37.6	2,202	40.4	3,053	56.4
Cobalt ore	-	-	0*	0.1	-	-	-	-	-	-
Columbite	25	21.9	123	95.8	-	-	196	81.0	30	26.7
Iron ore	10,216	69.5	192,062	509.9	457,508	1,689.8	161,427	770.2	16,217	69.8
Iron Pyrites	243	4.5	189	3.4	314	4.2	230	3.1	299	3.5
Manganese ore	694	9.5	50	1.6	4,530	17.8	18,633	42.8	24,282	52.8
Molybdenite ore	1,427	277.1	4,771	500.4	9,864	1,627.7	10,420	1,406.1	8,611	922.2
Nickel ore	400	2.3	1	0.1	0	0.1	4	4.2	0.1	0.2
Tungsten										
- Wolfram	-	-	8	0.7	7	0.1	39	2.9	21	1.8
- Other tungsten	-	-	-	-	-	0.0*	-	0.0*	-	-
Total		420.7		1,126.8		3,377.3		2,350.7		1,133.4
%		0.74		2.06		6.02		3.97		1.8

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Base Metals</u>										
Aluminium ore	51,779	480.4	31,519	297.1	32,051	270.3	32,736	284.9	29,077	289.4
Antimony ore	1,218	22.0	1,496	23.8	4,356	134.6	8,803	263.1	6,949	145.2
Copper	16	0.2	25	0.6	374	4.9	352	4.1	1,735	7.4
Lead ore	26	0.4	0.2	0.0**	283	5.5	32	0.7	2	0.0*
Tin ore	18,771	5,865.6	17,985	4,272.0	3,432	685.0	2,716	257.2	2,842	397.0
Zinc ore	193,809	3,499.3	148,441	1,845.4	174,586	3,781.4	125,818	3,273.4	139,625	3,090.1
Total		9,867.9		6,438.9		4,881.7		4,083.4		3,929.1
%		17.37		11.80		8.70		6.90		6.26
<u>Precious Metals and Precious Stone</u>										
Emery	4,411	55.1	3,900	47.2	4,812	53.7	4,804	52.7	32,712	115.7
Silver ore	13	0.6	13	0.6	25	1.3	19	1.7	-	-
Total		55.7		47.8		55.0		54.4		115.7
%		0.10		0.09		0.10		0.09		0.18
<u>Light Metals and Rare Earth</u>										
ilmenite ore	21,041	1.4	125	3.1	63	1.5	73	3.3	197	13.6
Niobium and Vanadium ore	17,591	346.6	10,773	38.0	11,863	1,101.8	8,075	686.1	13,165	1,602.7
Titanium ore										
- Rutile	6,779	94.4	7,331	68.5	7,276	77.9	6,684	181.5	5,492	460.1
- Leucoxene	7,371	165.5	4,535	122.9	8,080	215.2	3,389	104.6	3,461	265.6
- Ilmenite	920	8.6	880	8.1	840	8.1	680	8.2	900	21.2
- Other Titanium ore	371	9.4	319	5.8	1,003	27.7	1,035	67.3	1,044	22.1

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Light Metals and Rare Earth</u>										
Thorium ore	-	-	-	-	0*	0.1	20,069	114.8	1	0.1
Tantalite	11,043	91.8	-	-	-	-	483	946.8	652	675.3
Zirconium ore	48,724	623.9	18,138	266.8	47,451	493.1	46,633	1,351.6	12,334	615.0
Total		1,341.6		513.2		1,925.4		3,464.2		3,675.7
%		2.36		0.94		3.43		5.86		5.86
<u>Cement Industrial Minerals</u>										
Anhydrite	0*	0.0**	4	0.0**	25	0.7	0*	0.0**	0*	0.0*
Gypsum	470	7.2	452	8.5	522	9.0	614	9.9	659	11.4
Limestone	2,072	2.2	4,045	3.8	76	2.4	16	0.1	1	0.2
Total		9.4		12.3		12.1		10.0		11.6
%		0.01		0.02		0.02		0.02		0.02
<u>Ceramic Industrial Minerals</u>										
Andalusite, Kyannite and Sillimanite	2,858	36.0	2,304	33.8	2,856	41.5	3,555	47.5	2,227	29.8
Attapulgite	116	1.2	7	0.6	146	1.1	412	3.2	-	-
Ball Clay	28,981	94.3	20,508	64.2	6,592	42.4	5,463	33.8	-	-
Dolomite	502	6.3	595	8.5	977	11.6	1,224	12.2	940	10.5
Feldspar										
- Potassium	32,446	100.9	28,996	89.5	25,928	81.4	33,342	104.6	35,505	115.1
- Sodium	16,592	35.8	7,850	19.0	3,010	11.1	3,772	13.8	2,140	10.4
- Other Feldspar	14,339	49.4	3,590	22.3	3,891	24.0	3,935	22.1	3,900	28.0

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Ceramic Industrial Minerals</u>										
Kaolin									-	-
- Ceramic	12,204	149.7	8,410	102.0	13,880	147.3	16,907	141.9	14,965	117.9
- Paper	11,989	105.0	4,534	54.9	5,918	62.5	4,423	42.7	4,404	41.1
- Others	59,004	468.2	68,336	405.7	65,956	536.9	65,691	543.5	68,868	663.2
Lucite, Nepheline and Nepheline Syenite	2,786	22.8	1,805	16.8	1,489	15.1	1,535	14.5	1,347	13.3
Mullite	1,466	25.1	902	15.5	1,771	26.1	1,671	23.3	1,661	23.6
Quartz	1,884	8.4	2,595	10.9	2,572	23.5	3,127	14.0	3,082	15.6
Silica sand	66,685	258.3	31,013	106.2	28,195	94.6	27,943	120.3	51,698	192.5
Total		1,361.4		949.9		1,119.1		1,137.6		1,260.9
%		2.40		1.74		2.00		1.92		2.01
<u>Dimension Stone</u>										
Ecaussine	104	0.9	11	0.1	2	0.0*	3	0.7	-	-
Marble	39,215	301.0	39,806	313.4	45,010	322.0	49,532	364.0	44,094	386.5
Granite	138,162	538.7	137,656	553.7	138,476	476.9	136,495	482.9	136,741	491.3
Travertine	-	-	0.1	0.0**	0	0.0*	0.1	0.1	0*	0.0*
Sandstone	939	9.2	738	12.0	0	0.0*	-	-	-	-
Slate	179	2.7	-	-	346	4.4	21	0.3	93	0.6
Total		852.5		879.2		803.3		848.0		878.4
%		1.50		1.61		1.43		1.44		1.40

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Industrial Rock</u>										
Basalt	20,857	112.4	17,091	98.8	268,767	102.3	57,184	103.5	-	-
Flint	1,929	16.2	1,663	13.7	6,503	15.2	45,200	22.9	1,766	12.7
Pumice stone	5,194	50.4	4,213	44.8	5,286	56.5	5,077	58.6	5,275	65.9
Vermiculite, Perlite and Chlorites	1,437	11.2	1,192	9.7	1,944	14.9	3,133	28.8	4,901	39.9
Total		190.2		167.0		188.9		213.9		118.5
%		0.33		0.31		0.34		0.36		0.19
<u>Other Industrial Minerals</u>										
Apatite										
- Ground	1,611	14.4	1,815	25.8	3,140	39.5	2,705	17.8	1,763	7.1
- Unground	-	-	-	-	-	-	2	0.0*	-	0.0*
Asbestos	94,278	1,071.6	102,739	1,432.7	79,250	1,121.5	81,411	1,111.9	58,037	839.5
Barite	96,433	391.6	57,452	178.7	78,862	274.1	94,650	399.2	104,668	509.8
Bentonite	54,345	378.4	42,429	272.5	65,096	408.2	103,555	505.9	83,377	555.1
Calcite	1,109	3.5	-	-	-	-	-	-	-	-
Chalk	13	0.6	9	0.7	31	1.2	62	1.6	53	1.8
Fireclay	81	1.4	67	1.1	4,688	61.6	1,621	20.6	729	9.8
Fluorite	841	11.2	472	10.8	508	9.8	1,022	18.0	555	12.1
Kieserite	29,768	269.2	8,189	63.2	2,847	17.1	8,062	57.6	11,172	68.0
Mica	4,904	107.2	2,991	80.7	5,504	125.3	4,860	128.8	4,577	140.7
Orpiment	20	0.2	-	-	0	0.0*	1	0.0*	-	-

Mineral Import of Thailand 2008 - 2012

Quantity : Tonnes
Value : Million Baht

Mineral	2008		2009		2010		2011		2012	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals										
Phosphate										
- Ground	10,530	46.2	11,670	66.6	356	3.0	71	0.7	-	0.0*
- Underground	-	-	-	-	11,000	25.0	1	0.1	-	-
Graphite	1,792	66.9	898	48.0	1,372	75.9	1,397	98.2	1,398	113.2
Magnesite	10,538	193.7	2,028	40.2	3,530	48.9	4,429	62.7	4,867	52.6
Steatite	4,705	67.0	2,632	14.1	2,295	11.6	1,451	10.1	2,014	22.4
Potash	-	-	0*	0.0**	-	-	-	-	-	-
Rock salt	700	10.9	2	0.0**	1	0.0*	5	0.1	-	-
Sulphur	119,862	2,581.6	57,076	196.3	132,199	713.9	125,722	937.7	102,175	760.4
Talc	116,906	1,033.8	100,919	5,089.2	135,219	1,452.9	126,254	1,380.8	138,694	1,786.2
Witherite	698	6.4	450	4.1	501	4.8	1,149	16.6	1,500	21.6
Total		6,255.8		7,524.7		4,394.3		4,768.4		4,900.3
%		11.01		13.78		7.83		8.06		7.81
Grand Total		56,811.3		54,594.1		56,119.4		59,138.6		62,728.0

0* denoting the amount of less than 0.1 metric tonnes

0.0** denoting the amount of less than 0.05 million baht

data from 'www.customs.go.th'

Mineral Royalty of Thailand 2008-2012

unit: Thousand Baht

Mineral	2008	2009	2010	2011	2012
Andesite (Industrial rock)	4,897.63	3,933.00	7,318.19	6,663.09	5,903.14
Anhydrite	11,167.13	11,969.62	12,399.08	13,914.01	18,175.13
Antimony	153.74	182.07	1,104.75	690.71	216.75
Ball clay	10,304.72	7,922.92	8,172.66	7,656.37	5,518.41
Barite					
- Chemical grade (ground)	388.64	208.26	231.66	258.66	389.95
- Drilling mud (ground)	-	-	-	-	1,090.60
- Unground	2,789.71	5,351.24	3,838.87	2,835.16	4,471.83
Basalt (Industrial rock)	41,845.61	57,733.48	67,462.88	66,577.69	69,492.32
Bentonite	-	240.00	240.00	1,200.00	3,120.00
Calcite	6,414.72	4,101.28	5,683.93	6,673.37	6,874.60
Ceramic clay	5,646.74	5,170.92	9,861.71	10,411.74	9,513.17
Cement clay	9,143.21	8,410.87	24,984.02	33,232.04	19,520.73
Conglomerate (Industrial rock)	87.26	127.18	298.60	345.36	16.80
Copper Ore	2.69	262.89	5,329.39	4,217.55	4,954.11
Diatomite	79.20	103.14	137.25	203.40	730.62
Dolomite	18,726.71	27,271.51	36,937.79	38,103.36	33,152.83
Feldspar					
- Potassium (ground)	5.88	-	24.00	-	96.00
- Potassium (unground)	68.27	522.64	212.84	1,180.82	189.18
- Sodium (ground)	9,937.38	9,199.40	9,709.42	7,155.24	10,591.08
- Sodium (unground)	11,725.14	11,325.08	9,842.18	17,424.37	22,526.08
Fluorite					
- Metallurgical grade	6,494.04	4,027.81	1,285.60	2,674.31	5,949.73
- Acid grade	-	-	-	-	114.00
Garnet	-	12.00	12.00	12.00	-

Mineral Royalty of Thailand 2008-2012

unit: Thousand Baht

Mineral	2008	2009	2010	2011	2012
Gem stone	133.00	141.00	-	-	-
Glass sand	13,085.96	12,452.55	9,559.81	2,555.22	6,630.97
Gneiss (Dimension stone)	3.20	3.20	16.00	16.00	24.00
Gold Ore	119,679.42	363,281.71	387,933.06	419,771.42	828,741.64
Granite					
- Dimension stone	1,344.92	1,449.02	1,246.63	1,131.02	807.59
- Industrial rock	23,066.11	28,691.83	27,005.11	30,038.53	30,699.07
Graywacke	1,843.46	1,781.61	2,408.26	3,108.08	3,150.29
Gypsum	157,159.43	192,455.57	214,696.61	216,150.76	231,672.08
Ilmenite	375.70	563.94	-	58.42	69.20
Iron Ore	112,318.07	38,622.58	76,185.71	31,556.92	16,663.98
Kaolin					
- Filler	650.52	616.24	881.34	1,001.60	1,164.07
- Unwashed	8,210.68	8,569.13	7,334.57	12,770.39	15,161.50
- Washed	4,974.75	4,077.01	4,787.02	5,121.76	5,227.77
Lead Ore	24,882.53	7,568.27	-	-	-
Lignite	370,781.45	601,707.09	713,015.84	769,432.59	698,853.48
Limestone					
- Dimension stone	2.72	3.12	2.88	2.16	0.96
- Industrial rock-construction	251,446.49	302,790.69	316,833.66	307,195.92	370,656.28
- Industrial rock-cement	391,152.12	477,311.26	518,157.58	519,311.47	532,792.66
- Industrial rock-others	18,428.16	16,142.47	17,727.08	21,026.40	25,421.63
Manganese					
- Metallurgical grade	-	-	170.59	-	-
- Metallurgical-others	699.65	1,332.08	4,266.99	-	162.01

Mineral Royalty of Thailand 2008-2012

unit: Thousand Baht

Mineral	2008	2009	2010	2011	2012
Marble					
- Dimension stone	1,660.76	1,377.36	1,655.36	1,165.93	1,505.06
- Fragment	17,123.20	21,587.55	16,554.04	5,564.77	4,064.86
Marl	151.98	328.95	255.85	262.14	452.20
Monazite	70.64	-	282.50	83.73	50.47
Perlite (Industrial rock)	553.48	379.10	537.18	474.32	520.86
Phosphate	42.43	25.21	117.31	90.52	36.61
Pyrophyllite	1,196.00	1,363.43	225.05	152.74	490.00
Quartz	124.86	275.73	2,154.38	2,938.82	3,084.48
Rhyolite (Industrial rock)	938.62	1,021.73	1,439.41	1,827.48	2,560.81
Rock salt	51,196.40	61,273.98	62,260.00	56,584.00	59,356.00
Rutile	-	246.54	-	25.54	-
Sand Stone					
- Dimension stone	8.21	36.75	75.29	78.88	49.71
- Industrial rock	378.72	481.36	721.08	1,265.28	1,353.63
Scheelite	910.20	910.20	1,653.54	1,062.41	1,170.87
Shale (Industrial rock-cement)	31,300.32	35,912.33	36,536.86	40,500.82	41,908.04
Silver Ore	8,200.68	26,243.12	36,175.78	66,052.69	98,992.78
Struverite	87.56	87.56	78.81	2,622.15	109.33
Talc	79.54	12.10	14.98	50.69	142.85
Tin	8,202.21	4,661.27	11,912.33	20,529.68	10,253.90
Tin Slag (Ta ₂ O ₅ <13%)	7.58	31.49	27.93	-	1.74
Tin Slag (Ta ₂ O ₅ <5%)	-	-	-	166.01	-
Travertine (Dimension)	318.64	303.36	189.60	73.60	106.40
Wolfram	5,913.69	697.02	1,690.58	816.68	3.47
Xenotime	1,050.44	47.44	60.83	149.98	-

Mineral Royalty of Thailand 2008-2012

unit: Thousand Baht

Mineral	2008	2009	2010	2011	2012
Zinc					
- Metal	38,055.92	45,079.69	38,191.39	33,331.97	42,703.11
- Ore	42.75	344.21	-	-	-
Zircon	-	28.10	-	45.35	-
Total	1,807,731.61	2,420,391.25	2,720,125.64	2,797,594.06	3,259,423.42