

Statistics Report

No. ICTC 1/2020

Mineral Statistics of Thailand

2015 - 2019

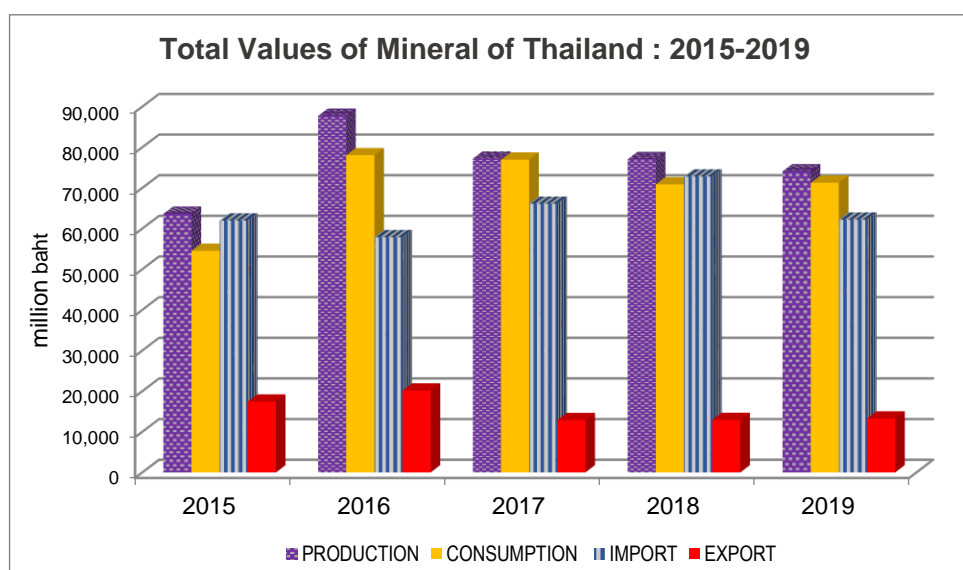
Statistics Group
Information and Communication Technology Center
Department of Primary Industries and Mines

Statistics Report

No. ICTC 1/2020

Mineral Statistics of Thailand

2015 - 2019



Statistics Group

Information and Communication Technology Center

Department of Primary Industries and Mines

Director General – Department of Primary Industries and Mines

Mr. Wisanu Tabtieng

Director – Information and Communication Technology Center

Mr. Manuse Maneenuse

Chief – Statistics Group

Ms. Patcharee Chotiyasiti

Printed By

Information and Communication Technology Center

Department of Primary Industries and Mines,

Rama VI Road, Ratchathewi,

Bangkok 10400, Thailand

Tel. 0-2202-3666-8 Fax. 0-2202-3668

First Edition

September, 2020

Bibliography Information

Mineral Statistics of Thailand 2015 - 2019 -- Bangkok : Information and Communication
Technology Center, Department of Primary Industries and Mines, 2020.

107 pages

Statistics Report No. ICTC 1/2020

CONTENTS

	PAGE
ANDESITE	1
ANHYDRITE	2
ANTHRACITE	3
ANTIMONY	4
BALL CLAY	5
BARITE	7
BASALT	10
BENTONITE	11
CALCITE	12
CEMENT CLAY	13
CERAMIC CLAY	14
COLUMBITE - TANTALITE	15
COPPER	16
DICKITE	17
DOLOMITE	18
DOLOMITIC MARL.....	20
FELDSPAR	21
FLUORITE	24
GARNET	25
GLASS SAND	26
GNEISS	27
GOLD	28
GRANITE	29
GRAVEL	31
GRAYWACKE	32
GYPSUM	33
ILMENITE	36
IRON	37
KAOLIN	38
LEAD	41
LEUCOXENE	42
LIGNITE	43

	PAGE
LIMESTONE	44
MANGANESE	49
MARBLE	50
MARL	52
MICA	53
MONAZITE	54
PERLITE	55
PHOSPHATE	56
PYROPHYLLITE	57
QUARTZ	58
RHYOLITE	59
ROCK SALT	60
RUTILE	61
SAND STONE	62
SERPENTINE.....	64
SHALE	65
SILVER	66
STRUVERITE	67
TALC	68
TANTALUM	69
TIN	70
TRAVERTINE	74
TUNGSTEN	75
XENOTIME	77
ZINC	78
ZIRCON	80
NUMBER OF ACTIVE MINES	81
NUMBER OF WORKERS EMPLOYED	83
MINERAL PRODUCTION OF THAILAND	85
MINERAL EXPORT OF THAILAND	90
MINERAL CONSUMPTION OF THAILAND	94
MINERAL IMPORT OF THAILAND	98
MINERAL ROYALTY OF THAILAND	104
TOTAL VALUES OF MINERAL OF THAILAND	107

CONTENTS

	PAGE
GRAPH :	
DOLOMITE	19
QUANTITY OF DOLOMITE	
VALUES OF DOLOMITE	
GRANITE	30
QUANTITY OF INDUSTRIAL GRANITE	
VALUES OF INDUSTRIAL GRANITE	
GYP SUM	35
QUANTITY OF GYP SUM	
VALUES OF GYP SUM	
KAOLIN	40
QUANTITY OF KAOLIN (CERAMIC)	
VALUES OF KAOLIN (CERAMIC)	
LIMESTONE	48
VALUES OF LIMESTONE	
VALUES OF PRODUCTION OF LIMESTONE	
VALUES OF CONSUMPTION OF LIMESTONE	
TOTAL VALUES OF MINERAL OF THAILAND 2015 - 2019	107

A N D E S I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Chiang Mai	-	-	217,466	484,820	52,626
Phetchabun	301,800	339,368	398,200	459,584	296,016
Uttaradit	370,648	295,983	257,653	320,559	268,964
Central Region					
Sara Buri	200,574	179,764	293,595	-	368,145
Total Production	873,022	815,115	1,166,914	1,264,963	985,751
Value (Million Baht)	126.7	163.0	233.4	253.0	197.2
<u>Consumption</u>					
Total Consumption	837,262	789,284	890,965	1,040,277	1,349,235
Value (Million Baht)	121.6	157.9	178.2	208.1	269.8

ANHYDRITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Nakhon Sawan	-	-	18,000	-	-
Southern Region					
Nakhon Si Thammarat	49,700	91,690	93,050	142,150	91,585
Surat Thani	826,324	1,248,523	1,281,643	1,375,078	1,328,002
Total Production	876,024	1,340,213	1,392,693	1,517,228	1,419,587
Value (Million Baht)	552.6	889.9	896.1	904.2	838.8
<u>Export</u>					
Unground					
Asia					
Cambodia	-	-	-	1,100	74,550
India	50,000	100,000	139,500	164,757	236,250
Indonesia	2,000	33,900	28,750	29,000	22,350
Japan	426,710	511,550	544,860	641,900	457,050
Korea, South	316,450	365,200	349,550	257,950	214,800
Malaysia	168,550	170,400	182,300	241,000	140,100
Philippines	-	-	-	-	-
Vietnam	71,200	169,200	204,200	192,500	209,480
Australia / Oceania					
Australia	60	-	-	-	-
Total Export	1,034,970	1,350,250	1,449,160	1,528,207	1,366,080
Value (Million Baht)	674.3	880.2	896.2	913.3	797.8
<u>Consumption</u>					
Total Consumption	-	-	102	-	4,546
Value (Million Baht)	-	-	0.1	-	2.6
<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'

A N T H R A C I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Import</u>¹					
Total Import	166,002	181,673	138,649	173,288	125,723
Value (Million Baht)	667.6	777.4	573.2	760.8	566.5

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

ANTIMONY

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Phrae Ore	-	32	-	-	-
Total Production Ore	-	32	-	-	-
Value (Million Baht) Ore	-	0.9	-	-	-
<u>Export</u>					
Ore					
Asia					
China	648	752	1,386	888	3,147
Hong Kong	-	-	-	-	-
India	-	70	13	-	-
Japan	0**	-	0.2	0.1	-
Malaysia	-	-	-	-	-
Myanmar	-	40	-	-	-
Taiwan	42	43	-	0**	-
Vietnam	2,825	3,001	0**	1,108	477
Australia / Oceania					
Australia	-	-	0**	-	-
Europe					
Belgium	-	-	-	-	-
Netherlands	195	-	-	26	-
U.K.	-	-	-	0**	-
Total Export	3,710	3,906	1,399	2,022	3,624
Value (Million Baht)	208.9	95.4	21.6	86.8	64.9
<u>Consumption</u>					
Total Consumption	-	2	-	-	-
Value (Million Baht)	-	0.1	-	-	-
<u>Import¹</u>					
Total Import	6,134	4,143	2,184	1,914	3,989
Value (Million Baht)	378.4	90.3	63.2	54.5	60.5

0** denoting the amount of less than 0.1 tonnes

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

BALL CLAY

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Lampang	-	65,701	86,254	490,837	241,244
Central Region					
Sara Buri	78,800	68,000	66,000	84,948	89,097
Southern Region					
Nakhon Si Thammarat	2,445	2,945	3,415	3,780	2,445
Total Production	81,245	136,646	155,669	579,565	332,786
Value (Million Baht)	44.7	75.2	85.6	318.8	183.0
<u>Export</u>					
Asia					
Bangladesh	154	-	1,330	2,908	596
China	3,510	1,490	1,552	2,680	1,155
India	3,973	1,344	3	24	-
Indonesia	1,486	-	1,782	4,112	2,145
Iran	60	-	-	-	-
Japan	-	-	20	200	260
Malaysia	9,318	6,904	6,020	7,845	5,832
Vietnam	7,960	3,600	3,143	4,084	2,870
Total Export	26,461	13,338	13,850	21,853	12,858
Value (Million Baht)	120.6	64.0	61.1	97.9	56.3

Tonnes

	2015	2016	2017	2018	2019
--	------	------	------	------	------

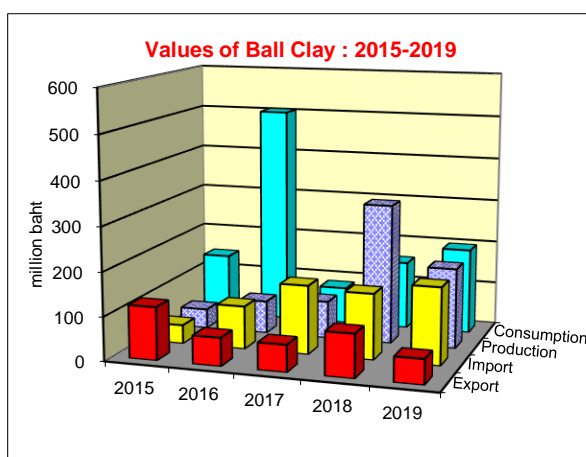
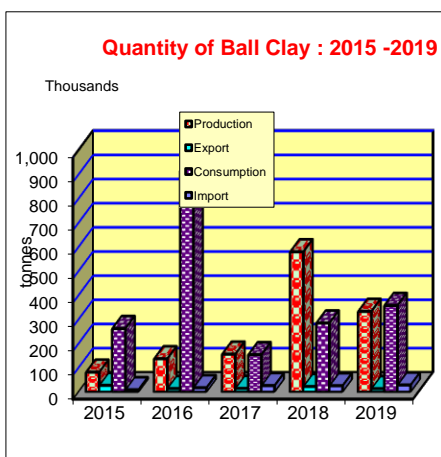
Consumption

Total Consumption	261,677	915,326	153,677	284,563	357,420
Value (Million Baht)	143.9	503.4	84.5	156.5	196.6

Import¹

Total Import	8,246	16,815	25,594	24,895	27,961
Value (Million Baht)	43.0	98.3	156.9	149.5	175.0

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



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

B A R I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Ground (Chemical grade)					
Northeastern Region					
Loei	4,075	2,232	1,563	1,647	1,757
Total Production	4,075	2,232	1,563	1,647	1,757
Value (Million Baht)	23.8	13.8	14.8	16.0	17.0
2. Ground (Drilling Mud grade)					
Northern Region					
Phrae	127,591	155,799	105,000	52,694	31,557
Total Production	127,591	155,799	105,000	52,694	31,557
Value (Million Baht)	497.0	606.8	489.3	246.1	147.4
3. Unground					
Southern Region					
Nakhon Si Thammarat	38,995	65,070	41,391	13,149	330
Total Production	38,995	65,070	41,391	13,149	330
Value (Million Baht)	57.8	96.6	61.5	19.5	0.5
<u>Export</u>					
1. Unground					
Asia					
Brunei	-	1,261	-	-	-
Indonesia	-	-	66	-	-
Korea, South	-	-	38	-	-
Malaysia	2,666	5,050	3,570	-	-
Vietnam	-	20	-	-	-
Total Export	2,666	6,331	3,674	-	-
Value (Million Baht)	4.0	31.8	18.8	-	-

Tonnes

	2015	2016	2017	2018	2019
2. Ground (Chemical grade)					
Africa					
Egypt	22	-	-	-	-
South Africa	10	-	-	-	-
Asia					
Brunei	510	3,519	-	-	-
China	-	-	-	-	5
Hong Kong	60	44	40	-	-
Indonesia	806	-	-	-	-
Japan	369	225	177	80	64
Jordan	22	22	22	40	-
Korea, South	168	93	105	252	252
Malaysia	2,023	11,404	2,202	803	503
Singapore	228	183	120	140	120
Taiwan	489	189	308	391	286
U.A.E.	-	288	-	-	-
Vietnam	910	323	72	-	-
Australia / Oceania					
Australia	1,104	216	48	24	-
New Zealand	24	-	-	-	-
Total Export	6,745	16,506	3,094	1,730	1,230
Value (Million Baht)	84.9	94.2	22.9	18.4	12.3
3. Ground (Drilling Mud grade)					
Asia					
Brunei	2,000	-	4,002	4,002	-
Indonesia	-	2,091	-	1,000	-
Korea, South	282	-	2	-	-
Kuwait	-	2,000	-	-	-
Malaysia	11,658	-	2,884	450	-
Myanmar	1,000	-	-	-	-
Saudi Arabia	-	22,450	-	-	-
Singapore	904	-	3,051	-	507
Taiwan	-	-	-	-	20
Total Export	15,844	26,541	9,939	5,452	527
Value (Million Baht)	68.4	70.0	53.8	32.8	3.5

Tonnes

	2015	2016	2017	2018	2019
<u>Consumption</u>					
1. Ground (Chemical grade)	-	-	-	-	1,091
Value (Million Baht)	-	-	-	-	10.6
2. Ground (Drilling mud)	88,061	155,179	10,500	54,221	30,745
Value (Million Baht)	343.0	604.4	489.3	253.2	143.6
3. Unground	18,050	37,017	22,320	4,522	2,199
Value (Million Baht)	26.8	54.9	33.1	6.7	3.3
<u>Import</u>¹					
Total Import	98,358	86,651	81,133	90,092	161,560
Value (Million Baht)	183.6	163.0	177.1	197.0	274.1

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

B A S A L T

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northeastern Region					
Buri Ram	4,289,522	4,466,448	4,057,082	4,849,318	3,673,749
Nakhon Ratchasima	1,554,918	1,989,920	2,035,267	1,868,623	2,419,020
Si Sa Ket	83,320	316,580	539,300	919,286	664,489
Surin	4,415,255	3,986,076	2,733,650	2,169,304	2,237,881
Ubon Ratchathani	2,442,666	2,615,568	3,140,813	4,226,687	3,623,530
Central Region					
Lop Buri	84,640	168,358	227,973	268,362	67,687
Trat	6,728	4,492	-	-	-
Total Production	12,877,048	13,547,442	12,734,085	14,301,580	12,686,356
Value (Million Baht)	1,851.2	2,709.5	2,546.8	2,860.3	2,537.3
<u>Consumption</u>					
Total Consumption	12,055,712	12,927,838	12,822,093	12,486,969	12,165,390
Value (Million Baht)	1,734.7	2,585.6	2,564.4	2,497.4	2,433.1
<u>Import</u>¹					
Total Import	25,122	40,860	90,726	201,574	131,889
Value (Million Baht)	199.5	298.3	235.0	177.7	131.9

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

BENTONITE

	Tonnes				
	2015	2016	2017	2018	2019
<u>Import</u> ¹					
Total Import	104,547	107,644	120,287	127,807	137,667
Value (Million Baht)	717.4	758.0	776.6	776.4	763.2

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

CALCITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Lop Buri	1,281,765	1,452,235	1,456,747	1,467,822	1,440,030
Total Production	1,281,765	1,452,235	1,456,747	1,467,822	1,440,030
Value (Million Baht)	610.8	1,089.2	1,092.6	1,100.9	1,080.0
<u>Consumption</u>					
Total Consumption	1,357,864	1,504,067	1,443,368	1,408,695	1,448,141
Value (Million Baht)	634.1	1,128.1	1,082.5	1,056.5	1,086.1
<u>Import¹</u>					
Total Import	-	30	216	304	1
Value (Million Baht)	-	0.1	0.5	0.6	0.0*

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

0.0* denoting the amount of less than 0.05 million baht

CEMENT CLAY

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Lampang	230,591	297,776	255,544	220,406	293,221
Nakhon Sawan	20,000	40,000	38,550	-	-
Northeastern Region					
Nakhon Ratchasima	1,180,754	710,897	533,673	866,383	828,315
Central Region					
Lop Buri	857,160	1,086,932	1,053,093	982,712	1,514,921
Phetchaburi	-	150,734	5,000	27,980	71,408
Prachin Buri	43,000	125,540	110,072	38,893	83,445
Sara Buri	2,077,178	1,597,999	1,833,851	3,363,467	4,193,131
Southern Region					
Krabi	384,000	497,000	330,000	301,642	425,000
Nakhon Si Thammarat	-	-	95,000	36,325	46,000
Total Production	4,792,683	4,506,878	4,254,783	5,837,808	7,455,441
Value (Million Baht)	431.3	405.6	382.9	525.4	670.9
<u>Consumption</u>					
Total Consumption	4,760,412	4,278,942	3,142,781	5,770,321	8,630,270
Value (Million Baht)	428.4	385.1	282.9	519.3	776.7

C E R A M I C C L A Y

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
 Northeastern Region					
Chaiyaphum	304,800	266,000	252,850	309,000	262,000
 Central Region					
Lop Buri	102,000	36,100	45,800	121,000	41,000
Sara Buri	107,244	69,586	49,332	31,653	31,686
Sing Buri	-	-	10,000	24,200	43,400
Total Production	514,044	371,686	357,982	485,853	378,086
Value (Million Baht)	282.7	204.4	196.9	267.2	207.9
<u>Consumption</u>					
Total Consumption	373,642	361,182	341,762	337,964	478,769
Value (Million Baht)	205.5	198.7	187.9	185.9	263.3

C O L U M B I T E - T A N T A L I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Import (Columbite)</u>¹					
Total Import	319	25	291	377	357
Value (Million Baht)	143.1	9.8	107.4	209.0	167.4

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

C O P P E R

Tonnes

	2015	2016	2017	2018	2019
<u>Import (ore)¹</u>					
Total Import	18,818	19,868	299	384	142
Value (Million Baht)	815.4	619.9	3.9	3.9	1.2

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'

DICKITE

	Tonnes				
	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Sara Buri	-	-	-	-	5,000
Total Production	-	-	-	-	5,000
Value (Million Baht)	-	-	-	-	3.0

D O L O M I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Phetchabun	14,000	6,600	2,640	23,431	2,270
Phrae	3,717	25,600	-	-	-
Central Region					
Kanchanaburi	266,091	184,572	402,606	269,465	505,262
Southern Region					
Krabi	603,667	1,045,086	631,691	984,506	177,666
Phangnga	179,577	202,579	237,288	206,621	235,318
Songkhla	259,137	501,922	341,500	326,590	316,600
Surat Thani	845,665	698,500	912,011	1,310,172	1,316,103
Trang	261,000	370,000	367,000	319,408	297,625
Total Production	2,432,853	3,034,860	2,894,736	3,440,193	2,850,844
Value (Million Baht)	1,090.0	1,669.2	1,592.1	1,892.1	1,568.0
<u>Export</u>					
1. Ground					
Asia					
Bangladesh	-	55	-	40	-
Cambodia	-	4,585	-	-	-
Laos	-	-	-	-	734
Malaysia	-	-	-	-	-
Philippines	-	-	820	-	80
Total Export	-	4,640	820	40	814
Value (Million Baht)	-	7.4	0.2	0.3	0.8
2. Unground					
Asia					
Bangladesh	2,120	-	-	-	75
India	497,134	438,870	458,461	425,500	320,000
Indonesia	-	35,000	7,500	-	-
Japan	537,900	565,850	458,150	360,500	319,460
Jordan	-	-	-	33,200	-
Malaysia	40,250	-	-	222,200	342,050
Taiwan	135,650	222,165	156,305	182,000	141,000
South America					
Chile	-	-	-	46,200	46,200
Total Export	1,213,054	1,261,885	1,080,416	1,269,600	1,168,785
Value (Million Baht)	469.3	547.4	487.2	508.7	394.4

Tonnes

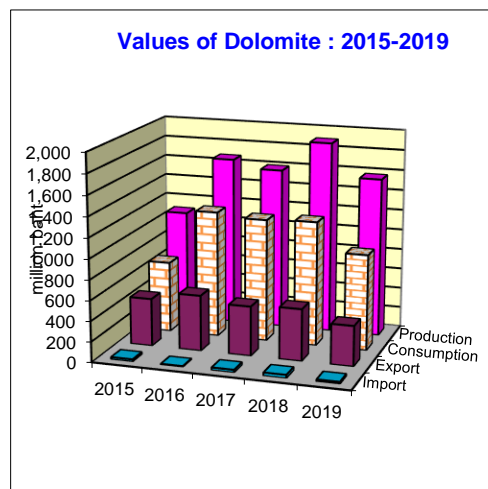
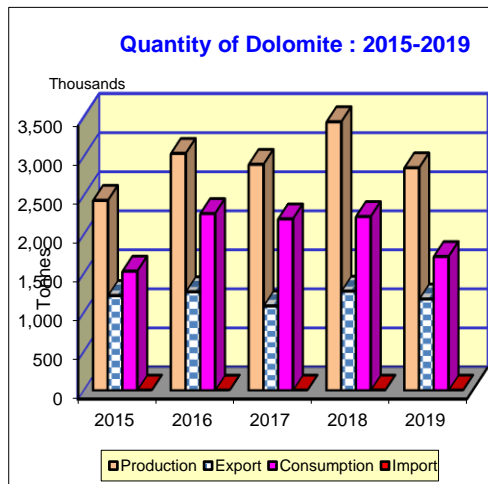
	2015	2016	2017	2018	2019
--	------	------	------	------	------

Consumption

Total Consumption	1,525,810	2,263,982	2,195,261	2,225,240	1,713,149
Value (Million Baht)	699.4	1,245.2	1,207.4	1,223.9	942.2

Import¹

Total Import	1,495	785	1,078	1,549	1,349
Value (Million Baht)	21.6	7.9	25.6	30.5	18.4



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

DOLOMITIC MARL

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Phetchabun	-	-	-	-	1,585
Phrae	-	-	-	6,920	-
Total Production	-	-	-	6,920	1,585
Value (Million Baht)	-	-	-	2.4	0.6
<u>Consumption</u>					
Total Consumption	-	-	-	10,634	11,495
Value (Million Baht)	-	-	-	3.7	4.0

F E L D S P A R

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Potassium Feldspar (Unground)					
Central Region					
Kanchanaburi	400	-	-	-	-
Southern Region					
Nakhon Si Thammarat	2,420	3,200	-	-	5,972
Total Production	2,820	3,200	-	-	5,972
Value (Million Baht)	4.8	5.4	-	-	10.2
2. Sodium Feldspar (Unground)					
Northern Region					
Tak	250,943	252,723	269,849	204,340	254,172
Central Region					
Kanchanaburi	5,096	5,260	11,550	2,900	-
Ratchaburi	126,017	158,864	188,596	118,200	142,030
Southern Region					
Nakhon Si Thammarat	947,040	747,100	915,930	792,363	854,941
Total Production	1,329,096	1,163,947	1,385,925	1,117,803	1,251,143
Value (Million Baht)	930.4	814.8	970.1	782.5	875.8
<u>Export</u>					
Potassium Feldspar (Unground)					
Asia					
Bangladesh	-	-	13,100	-	-
Indonesia	-	-	17,250	-	-
Vietnam	-	-	7,000	-	-
Total Export	-	-	37,350	-	-
Value (Million Baht)	-	-	30.7	-	-

Tonnes

	2015	2016	2017	2018	2019
3. Sodium Feldspar (Ground)					
Asia					
Bangladesh	207,670	263,972	375,940	404,286	484,944
India	33,000	22,072	-	-	-
Indonesia	177,812	100,884	72,292	94,672	119,166
Malaysia	101,190	64,180	70,730	66,970	7,150
Philippines	-	-	-	-	240,240
Singapore	18,500	-	-	-	-
Sri Lanka	-	-	1	-	-
U.A.E.	198,900	153,480	116,288	104,400	270,570
Vietnam	33,045	33,909	25,625	29,585	12,911
Australia / Oceania					
New Zealand	-	-	-	-	50
Total Export	770,117	638,497	660,876	699,913	1,135,031
Value (Million Baht)	707.9	569.4	579.5	593.4	1,396.7
<u>Consumption</u>					
1. Potassium Feldspar (Unground)	14,200	1,185	-	-	-
Value (Million Baht)	24.1	2.0	-	-	-
2. Sodium Feldspar (Ground)	54,530	24,080	16,254	32,598	32,762
Value (Million Baht)	76.3	33.7	22.8	45.6	45.9
3. Sodium Feldspar (Unground)	159,779	229,618	496,357	441,345	857,771
Value (Million Baht)	111.8	160.7	347.4	308.9	600.4

Tonnes

	2015	2016	2017	2018	2019
<u>Import</u>¹					
1. Potassium Feldspar	34,389	27,416	-	-	-
Value (Million Baht)	116.2	97.9	-	-	-
2. Sodium Feldspar	1,645	2,051	-	-	-
Value (Million Baht)	7.0	8.7	-	-	-
3. Other Feldspar	14,403	7,568	-	-	-
Value (Million Baht)	84.0	57.1	-	-	-

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

F L U O R I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Lamphun	14,495	18,800	-	10,500	17,000
Phrae	600	1,100	2,500	6,200	747
Central Region					
Kanchanaburi	-	200	3,000	-	-
Total Production	15,095	20,100	5,500	16,700	17,747
Value (Million Baht)	112.4	120.2	26.8	80.9	85.6
<u>Export (Metallurgical Grade)</u>					
Asia					
China	550	5,124	520	1,080	3,050
India	20,613	24,541	19,163	36,968	41,323
Indonesia	80	60	-	-	-
Korea, North	330	-	-	-	-
Korea, South	22	-	-	154	352
Malaysia	-	-	-	95	-
Singapore	25	-	-	-	-
Taiwan	-	150	-	-	-
Europe					
Turkey	850	1,819	1,040	182	958
Ukraine	-	480	-	-	-
Total Export	22,470	32,174	20,723	38,479	45,683
Value (Million Baht)	121.8	174.2	111.5	186.2	256.3
<u>Consumption</u>					
Total Consumption	-	204	1,640	500	200
Value (Million Baht)	-	1.2	7.9	2.4	1.0
<u>Import¹</u>					
Total Import	498	1,517	2,962	1,994	11,658
Value (Million Baht)	8.7	10.3	22.3	16.2	45.5

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

G A R N E T

	Tonnes				
	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	-	-	-	900	-
Hong Kong	-	-	-	2,380	-
Malaysia	-	-	-	-	164
Singapore	-	-	-	-	350
U.A.E.	-	-	-	-	25
Europe					
Ukraine	-	-	378	-	-
North America					
U.S.A.	-	-	6,490	1,320	-
Total Export	-	-	6,868	4,600	539
Value (Million Baht)	-	-	43.5	46.5	2.7

GLASS SAND

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northeastern Region					
Bueng Kan	23,289	43,000	60,000	44,101	36,100
Roi Et	45,900	122,850	140,850	126,000	142,212
Central Region					
Cha Choeng Sao	215,000	120,000	132,990	186,531	155,000
Chanthaburi	193,560	207,675	102,995	92,305	82,850
Rayong	600,632	518,345	953,340	1,003,579	698,208
Southern Region					
Chumphon	113,231	90,829	386,013	104,702	133,662
Total Production	1,191,612	1,102,699	1,776,188	1,557,218	1,248,032
Value (Million Baht)	838.3	1,091.7	1,758.4	1,541.6	1,235.6
<u>Consumption</u>					
Total Consumption	991,337	918,481	1,383,058	1,529,709	1,208,333
Value (Million Baht)	658.6	909.3	1,369.2	1,514.4	1,196.3
<u>Import</u>¹					
Total Import	144,273	143,315	190,852	156,550	150,830
Value (Million Baht)	250.3	277.3	380.1	477.9	446.1

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

G N E I S S

	Tonnes				
	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Prachuap Khiri Khan	-	-	485	1,180	-
Total Production	-	-	485	1,180	-
Value (Million Baht)	-	-	1.9	4.7	-
<u>Consumption</u>					
Total Consumption	70	5	-	-	-
Value (Million Baht)	0.3	0.0*	-	-	-

0.0* denoting the amount of less than 0.05 million baht

G O L D

Gram

	2015	2016	2017	2018	2019
<u>Production (Metal)</u>					
Northern Region					
Phetchabun	3,305,225	4,185,795	-	-	-
Phichit	-	107,151	-	-	-
Total Production	3,305,225	4,292,946	-	-	-
Value (Million Baht)	4,210.4	6,039.9	-	-	-
<u>Export (Metal)</u>					
Asia					
Hong Kong	3,305,225	4,292,946	-	-	-
Total Export	3,305,225	4,292,946	-	-	-
Value (Million Baht)	4,210.4	6,039.9	-	-	-

G R A N I T E

	Tonnes				
	2015	2016	2017	2018	2019
<u>Production</u>					
1. Dimension Stone*					
Northern Region					
Kamphaeng Phet	707	115	-	-	15,099
Nakhon Sawan	-	-	-	-	-
Tak	3,673	3,859	2,802	1,263	2,397
Northeastern Region					
Nakhon Ratchasima	-	-	-	-	17
Central Region					
Cha Choeng Sao	179	47	20	51	18
Prachuap Khiri Khan	600	1,503	2,545	3,800	1,137
Total Production	5,159	5,524	5,367	5,114	18,668
Value (Million Baht)	29.9	32.0	34.9	32.2	117.3
2. Industrial Rock					
Northern Region					
Tak	190,764	179,478	52,316	-	-
Central Region					
Cha Chaeng Sao	291,500	422,700	315,525	469,001	470,011
Chon Buri	2,787,910	3,326,592	4,402,015	4,803,684	5,940,980
Kanchanaburi	161,000	477,440	40,000		
Prachuap Khiri Khan	80,993	168,552	151,964	153,532	124,627
Rayong	1,539,286	1,507,400	1,114,888	1,263,752	1,685,424
Ratchaburi	-	-	-	-	196,076
Southern Region					
Nakhon Si Thammarat	-	-	-	-	40,380
Narathiwat	1,222,374	1,179,675	1,234,682	1,509,184	1,508,717
Phangnga	639,619	667,966	652,946	777,316	1,023,188
Songkhla	1,161,055	1,528,942	1,065,354	2,304,526	2,874,832
Total Production	8,074,501	9,458,745	9,029,690	11,280,995	13,864,234
Value (Million Baht)	1,162.3	1,891.7	1,805.9	2,256.2	2,772.8

* unit : cubic meter

Tonnes

	2015	2016	2017	2018	2019
--	------	------	------	------	------

Export (Industrial Rock)**Asia**

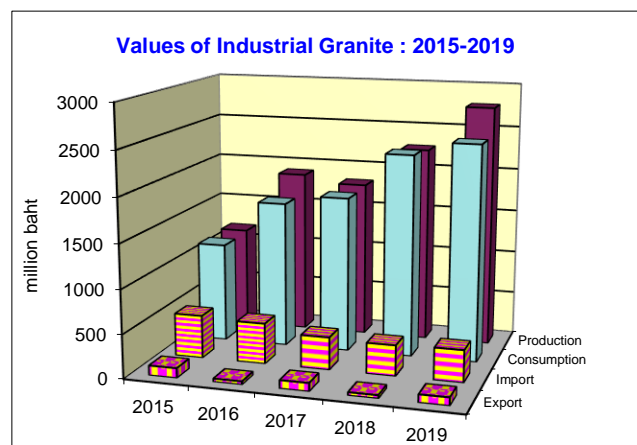
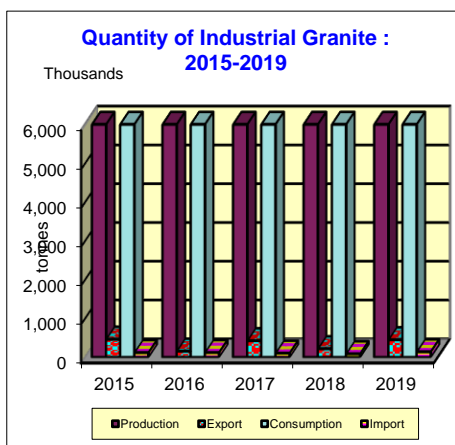
Singapore	458,800	149,995	419,320	212,100	444,261
Total Export	458,800	149,995	419,320	212,100	444,261
Value (Million Baht)	111.3	36.1	93.3	35.9	90.0

Consumption

1. Dimension Stone *	4,977	4,718	3,873	1,352	2,059
Value (Million Baht)	28.4	27.4	25.2	8.5	12.6
2. Industrial Rock	7,893,062	8,392,556	8,926,182	11,570,394	12,342,111
Value (Million Baht)	1,142.9	1,678.5	1,785.2	2,314.1	2,468.4

Import (Dimension Stone)¹

Total Import	112,695	114,134	98,569	82,568	133,251
Value (Million Baht)	492.4	465.4	373.4	351.3	366.4



* unit : cubic meter

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

G R A V E L

Tonnes

	2015	2016	2017	2018	2019
<u>Export (Industrial Rock)</u>					
Asia					
Malaysia	155	-	-	34	6
Qatar	-	-	-	-	-
Singapore	264	144	528	216	264
Total Export	419	144	528	250	270
Value (Million Baht)	2.4	0.8	2.4	0.9	1.2

G R A Y W A C K E

Tonnes

	2015	2016	2017	2018	2019
<u>Production (Industrial Rock)</u>					
Central Region					
Chanthaburi	340,461	374,223	606,930	543,335	515,176
Trat	642,570	681,126	1,000,766	733,031	917,112
Total Production	983,031	1,055,349	1,607,696	1,276,366	1,432,288
Value (Million Baht)	112.5	211.1	321.5	255.3	286.5
<u>Consumption (Industrial Rock)</u>					
Total Consumption	942,630	819,237	1,546,315	1,343,459	1,414,867
Value (Million Baht)	107.7	163.8	309.3	268.7	282.9

G Y P S U M

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Nakhon Sawan	3,704,056	3,838,830	3,939,135	3,868,573	4,004,497
Phichit	400,246	503,703	529,482	560,545	381,634
Southern Region					
Nakhon Si Thammarat	2,033,928	1,326,727	1,360,870	1,992,072	1,645,184
Surat Thani	5,128,914	4,737,338	3,424,464	3,259,239	2,336,385
Total Production	11,267,144	10,406,598	9,253,951	9,680,429	8,367,700
Value (Million Baht)	7,040.4	6,910.0	5,960.7	5,767.1	4,903.7
<u>Export</u>					
1. Ground					
Asia					
Cambodia	-	-	-	60,630	87,440
China	-	-	110	220	-
India	-	-	-	60	-
Japan	1,360	1,120	1,340	1,280	1,640
Malaysia	-	-	5,000	-	8,000
Myanmar	-	-	-	-	-
Taiwan	252	315	430	430	210
Total Export	1,612	1,435	6,880	62,620	97,290
Value (Million Baht)	6.4	6.1	11.1	45.1	63.6
2. Unground					
Africa					
Reunion (La Reunion)	-	22,000	11,000	22,000	-
Mozambique	-	-	5,000	-	-
Australia / Oceania					
Australia	83,600	9,900	-	8,800	8,800
Fiji	-	-	-	-	-
New Zealand	-	-	5,500	7,000	6,600
Europe					
Turkey	-	-	19,000	-	-

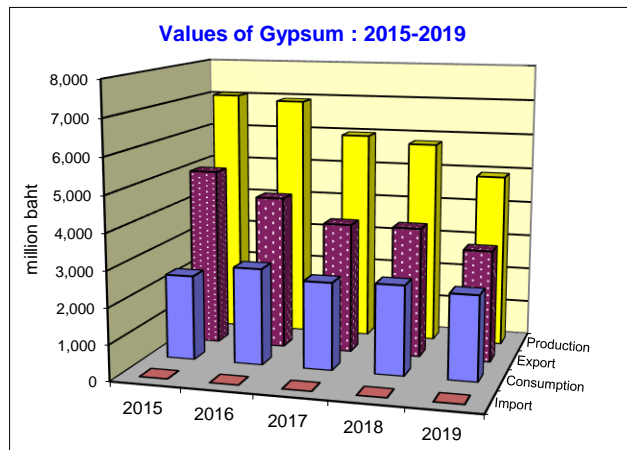
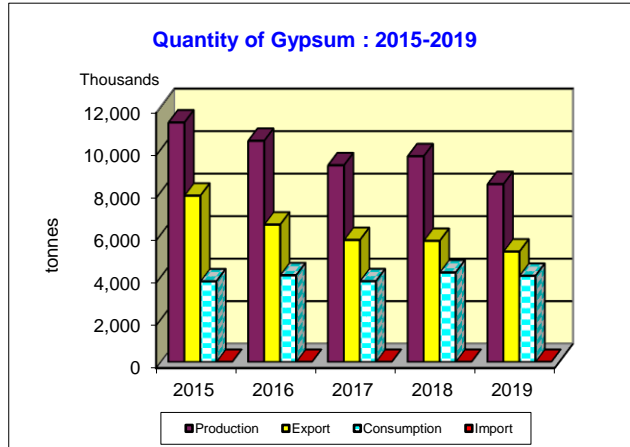
Tonnes

	2015	2016	2017	2018	2019
2. Unground (cont.)					
Asia					
Bangladesh	191,094	175,800	55,450	34,650	93,950
Brunei	-	-	17,600	17,600	-
Cambodia	122,100	158,300	183,100	264,600	233,000
China	158,425	185,010	396,960	417,490	349,950
Indonesia	2,100,013	1,695,900	1,377,910	1,487,025	1,196,838
Japan	941,092	777,010	842,920	885,310	1,069,520
Korea,South	81,500	110,000	54,000	15,000	45,500
Malaysia	1,487,015	1,159,470	1,010,740	959,410	1,027,330
Myanmar	11,000	-	11,000	-	120
Philippines	490,212	410,600	411,450	436,450	271,380
Singapore	4,600	-	11,000	11,000	-
Sri Lanka	195,600	156,750	91,250	89,100	85,800
Taiwan	106,600	-	27,500	83,600	86,050
Vietnam	1,848,766	1,599,290	1,200,570	894,810	719,550
Total Export	7,821,617	6,460,030	5,731,950	5,633,845	5,194,388
Value(Million Baht)	5,011.3	4,329.6	3,663.7	3,622.9	3,141.1
<u>Consumption</u>					
Total Consumption	3,792,611	4,077,140	3,798,078	4,207,417	4,051,629
Value (Million Baht)	2,382.3	2,707.2	2,449.5	2,506.2	2,370.7
<u>Import</u>¹					
Total Import	258	227	214	267	340
Value (Million Baht)	5.5	3.8	4.4	5.4	6.6

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

Tonnes

2015 2016 2017 2018 2019



ILMENITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Southern Region					
Nakhon Si Thammarat	-	-	8	41	117
Total Production	-	-	8	41	117
Value (Million Baht)	-	-	0.1	0.4	1.1
<u>Export</u>					
Asia					
Bangladesh	200	100	-	-	-
Korea,South	20	22	-	-	20
Malaysia	100	-	-	-	-
Philippines	-	154	-	8	-
Total Export	320	276	-	8	20
Value (Million Baht)	2.0	2.4	-	0.1	1.4
<u>Import</u>¹					
Total Import	1,040	1,040	960	1,020	1,400
Value (Million Baht)	15.7	15.0	13.5	14.3	17.7

0.0* denoting the amount of less than 0.05 million baht

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

I R O N

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northeastern Region					
Loei	9,683	-	135	-	17,660
Southern Region					
Nakhon Si Thammarat	6,800	-	-	-	-
Total Production	16,483	-	135	-	17,660
Value (Million Baht)	30.4	-	0.2	-	33.5
<u>Export</u>					
Asia					
China	15,770	57,668	9,178	37,582	216,643
Total Export	15,770	57,668	9,178	37,582	216,643
Value (Million Baht)	33.7	61.3	18.6	73.4	413.5
<u>Import</u>¹					
1.Iron Ore	1,567	2,768	-	-	-
Value (Million Baht)	11.0	13.0	-	-	-
2.Iron Pyrite	330	321	265	442	1,647
Value (Million Baht)	4.6	5.0	4.1	7.4	11.8

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

K A O L I N

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Kaolin (Filler)					
Northern Region					
Uttaradit	-	-	-	13,771	11,638
Total Production	-	-	-	13,771	11,638
Value (Million Baht)	-	-	-	26.2	22.1
2. Kaolin (Washed)					
Northern Region					
Lampang	1,708	175	-	-	-
Central Region					
Chanthaburi	1,125	1,665	1,900	1,255	1,270
Southern Region					
Narathiwat	6,252	5,673	5,265	5,080	6,148
Ranong	93,678	94,105	95,914	90,331	73,358
Total Production	102,763	101,618	103,079	96,666	80,776
Value (Million Baht)	98.7	97.6	99.0	92.8	77.5
3. Kaolin (Unwashed)					
Northern Region					
Lampang	333,181	397,159	216,370	206,704	266,840
Uttaradit	2,400	32,940	34,650	25,600	20,400
Central Region					
Chanthaburi	25,565	13,444	11,510	90	-
Kanchanaburi	272,800	366,257	101,400	165,850	249,314
Prachin Buri	21,250	20,593	28,170	4,981	15,120
Total Production	655,196	830,393	392,100	403,225	551,674
Value (Million Baht)	252.3	319.7	151.0	155.2	212.4

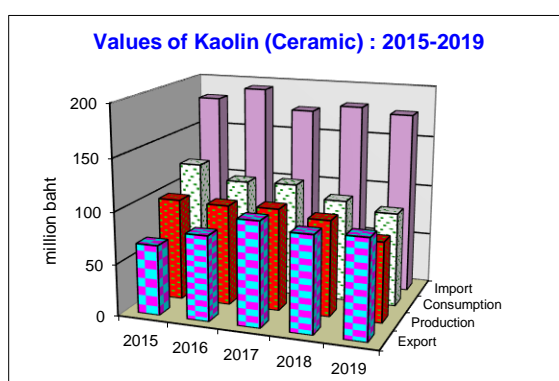
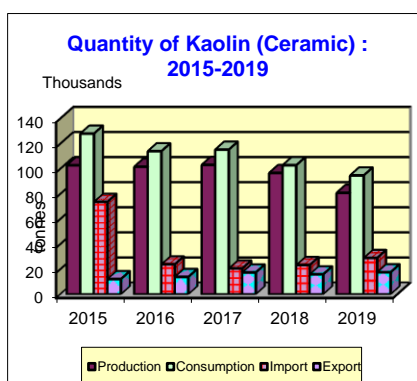
	Tonnes				
	2015	2016	2017	2018	2019
<u>Export</u>					
1. Washed					
Asia					
Bangladesh	1,812	2,492	4,316	3,844	6,656
China	457	2,472	3,769	3,762	2,855
India	1,005	620	1,366	1,149	24
Indonesia	436	48	48	314	361
Iran	36	-	282	-	-
Japan	-	-	42	59	40
Korea,South	-	20	20	30	-
Malaysia	3,546	2,985	2,145	2,249	2,520
Pakistan	-	-	-	-	-
Philippines	744	676	336	600	624
Singapore	16	26	-	-	-
Taiwan	-	-	-	-	-
Vietnam	4,018	4,440	5,016	3,843	4,431
Europe					
Italy	-	-	-	-	2
Turkey	-	6	-	-	-
Total Export	12,070	13,785	17,340	15,850	17,513
Value (Million Baht)	67.7	82.1	100.8	93.2	95.6
2. Kaolin (Filler)					
Asia					
China	-	-	-	20	-
Korea,South	-	-	-	24	120
Singapore	-	48	106	98	80
Taiwan	-	-	-	-	6
Vietnam	-	-	-	100	378
Europe					
Turkey	-	18	30	42	18
Total Export	-	66	136	284	602
Value (Million Baht)	-	0.5	1.2	2.7	3.7

Tonnes

	2015	2016	2017	2018	2019
Consumption					
1. Washed	127,965	113,947	115,224	102,802	94,636
Value (Million Baht)	122.8	109.4	110.6	98.7	90.9
2. Unwashed	532,137	849,767	326,956	334,578	516,491
Value (Million Baht)	204.9	327.2	125.9	128.8	198.8
3. Filler	-	-	-	13,818	11,558
Value (Million Baht)	-	-	-	26.3	22

Import¹

1. Ceramic	73,587	23,810	20,539	23,250	28,916
Value (Million Baht)	181.5	193.3	174.4	181.0	176.0
2. Paper	3,600	4,371	4,781	4,875	5,818
Value (Million Baht)	39.5	49.8	51.8	49.6	58.2
3. Others	65,872	73,499	68,343	92,688	79,004
Value (Million Baht)	675.7	729.1	658.5	777.4	669.9



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

L E A D

Tonnes

	2015	2016	2017	2018	2019
<u>Import (Lead Ore)¹</u>					
Total Import	1	42	85	104	98
Value (Million Baht)	0.0*	0.7	1.3	5.9	11.0

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'

L E U C O X E N E

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
Africa					
Tunisia	-	125	-	-	-
Asia					
China	21	-	250	-	-
India	932	1,600	1,450	-	9
Indonesia	300	-	-	-	-
Japan	84	-	-	-	21
Hong Kong	-	-	-	869	-
Korea, South	102	450	160	-	80
Malaysia	75	425	595	40	50
Philippines	286	1,320	934	369	383
Singapore	-	-	80	-	-
U.A.E.	-	-	-	-	200
Vietnam	-	201	-	-	-
Europe					
Italy	26	-	-	-	-
Russia	-	300	-	-	275
Turkey	389	1,342	350	-	-
Ukraine	54	150	175	-	175
North America					
Brazil	24	72	-	-	-
Total Export	2,293	5,985	3,994	1,278	1,193
Value (Million Baht)	54.4	148.8	127.6	45.8	40.4
<u>Import</u>¹					
Total Import	2,798	2,960	4,382	5,080	5,760
Value (Million Baht)	97.4	96.9	145.1	184.4	225.4

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

LIGNITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Lampang	15,150,549	16,978,601	16,258,637	14,851,950	14,071,710
Total Production	15,150,549	16,978,601	16,258,637	14,851,950	14,071,710
Value (Million Baht)	14,544.5	16,299.5	15,608.3	14,257.9	13,508.8
<u>Consumption</u>					
Total Consumption	15,369,157	16,869,269	16,240,637	14,417,889	13,973,815
Value (Million Baht)	14,754.4	16,194.5	15,591.0	13,841.2	13,414.9
<u>Import¹</u>					
Total Import	30,366	91,721	198,926	245,458	382,846
Value (Million Baht)	46.0	120.1	209.4	231.2	347.2

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

L I M E S T O N E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Cement Industry					
Northern Region					
Lampang	2,630,045	2,560,891	3,832,460	1,320,000	3,628,470
Nakhon Sawan	699,320	680,879	617,680	233,661	-
Northeastern Region					
Nakhon Ratchasima	95,923	69,051	-	-	-
Central Region					
Phetchaburi	653,209	746,733	456,615	496,984	508,340
Sara Buri	61,794,681	59,859,201	57,836,801	55,825,324	54,144,189
Southern Region					
Nakhon Si Thammarat	7,398,104	6,505,696	5,280,291	6,288,717	6,992,762
Trang	-	-	-	137,816	-
Total Production	73,271,282	70,422,450	68,023,847	64,302,502	65,273,761
Value (Million Baht)	9,968.8	17,605.6	17,006.0	16,075.6	16,318.4
2. Other Industries					
Northern Region					
Lampang	1,427,421	1,370,122	1,362,092	1,127,326	1,049,308
Northeastern Region					
Nakhon Ratchasima	-	-	-	158,892	-
Central Region					
Lop Buri	-	-	-	-	36,400
Sara Buri	5,296,271	5,095,627	6,147,107	7,975,114	7,823,372
Total Production	6,723,692	6,465,749	7,509,199	9,261,332	8,909,080
Value (Million Baht)	918.0	1,616.4	1,877.3	2,315.3	2,227.3
3. Dimension Stone					
Central Region					
Ratchaburi	-	-	-	-	2,076
Sara Buri	24	-	43	3,765	2,011
Total Production	24	-	43	3,765	4,087
Value (Million Baht)	0.0*	-	0.1	7.5	8.2

0.0* denoting the amount of less than 0.05 million baht

	Tonnes				
	2015	2016	2017	2018	2019
4. Construction					
Northern Region					
Chiang Mai	2,428,100	2,811,000	2,052,226	2,963,568	1,397,654
Chiang Rai	1,707,741	1,860,356	1,800,681	2,936,629	1,445,839
Kamphaeng Phet	742,597	311,196	250,344	263,400	242,136
Lampang	1,469,609	1,820,615	1,994,115	2,875,072	3,376,264
Lamphun	899,940	1,220,152	1,083,664	1,179,038	1,296,277
Nakhon Sawan	2,756,196	2,738,069	2,736,363	2,711,728	2,874,657
Nan	460,667	469,065	461,142	720,685	554,167
Phayao	965,134	631,456	18,592	344,072	1,465,379
Phetchabun	2,273,161	2,414,606	2,066,838	2,481,138	2,630,089
Phitsanulok	286,819	313,475	359,299	162,414	-
Phrae	449,846	578,550	704,054	1,199,335	1,014,231
Sukhothai	2,454,544	2,142,379	2,334,670	2,527,894	1,848,062
Tak	1,256,462	1,055,459	1,361,693	1,086,942	863,620
Uthai Thani	191,092	198,516	329,207	261,023	264,375
Northeastern Region					
Khon Kaen	2,492,399	2,418,741	2,735,140	3,269,698	3,884,946
Loei	4,795,833	5,042,611	7,245,121	7,986,729	5,464,295
Nakhon Ratchasima	2,020,135	2,403,586	1,879,779	1,732,757	2,047,867
Nong Bua Lamphu	984,872	1,166,225	1,774,304	2,417,411	1,405,976
Udon Thani	418,128	340,296	206,608	-	215,536
Central Region					
Cha Choeng Sao	-	-	31,726	389,073	871,138
Chai Nat	179,797	113,161	111,565	139,976	124,134
Chanthaburi	411,100	367,400	407,000	888,283	160,616
Chon Buri	12,414,194	12,875,789	9,162,843	9,640,328	9,530,067
Kanchanaburi	2,099,642	2,211,319	1,592,862	2,029,787	2,064,491
Lop Buri	734,000	1,963,512	3,182,592	-	-
Phetchaburi	1,690,830	1,555,925	1,366,121	1,532,706	1,215,815
Prachin Buri	662,684	676,000	1,104,000	817,247	916,153
Prachuap Khiri Khan	1,451,884	1,727,811	1,390,574	1,225,559	962,547
Ratchaburi	4,874,536	4,322,729	4,679,812	4,213,329	4,605,151
Rayong	529,469	583,974	1,406,190	1,681,877	1,951,507
Sa Kaeo	318,031	179,685	285,699	289,688	289,854
Sara Buri	15,189,241	15,980,362	15,871,414	15,067,756	19,215,170
Suphan Buri	13,720,231	14,487,887	15,285,450	17,437,112	17,154,080

Tonnes

	2015	2016	2017	2018	2019
Southern Region					
Chumphon	1,451,184	1,765,925	1,741,660	1,546,697	1,504,413
Krabi	567,864	567,470	604,944	482,886	924,599
Nakhon Si Thammarat	4,094,317	4,269,814	4,768,693	5,091,528	5,909,035
Phangnga	567,233	623,558	674,172	919,089	729,875
Phatthalung	562,063	33,120	442,980	409,419	375,406
Satun	914,084	902,484	983,182	783,788	104,627
Songkhla	331,674	411,122	216,160	231,830	276,025
Surat Thani	3,256,902	3,303,451	3,664,434	3,683,045	2,038,865
Trang	552,648	611,700	601,450	560,655	570,467
Yala	1,037,609	986,249	1,002,471	1,470,848	1,207,467
Total Production	96,664,493	100,456,800	101,971,834	107,652,039	104,992,869
Value (Million Baht)	11,184.1	18,082.2	18,354.9	19,377.4	18,898.7

Export**1. Construction****Africa**

Mozambique	-	15,040	-	-	-
------------	---	--------	---	---	---

Asia

Bangladesh	192,910	238,131	392,460	150,945	377,430
Cambodia	6,000	-	-	37,000	-
India	147,918	120,085	-	-	-
Indonesia	9,100	-	-	-	-
Malaysia	-	-	-	5,000	-
Myanmar	-	-	-	6	-
Taiwan	134,300	125,147	141,060	5,000	-

Australia / Oceania

Australia	-	-	1,476	31	162
New Caledonia	116,125	112,867	11,007	40,014	46,062

Europe

France	-	-	-	-	0.2
Italy	-	-	-	-	-

South America

Chile	-	-	20	-	-
-------	---	---	----	---	---

Total Export	606,353	611,270	546,023	237,996	423,654
Value (Million Baht)	251.1	271.0	219.6	236.4	187.1

	Tonnes				
	2015	2016	2017	2018	2019
2. Other Industries					
Asia					
Cambodia	20	40	-	52	180
China	-	-	2,916	1,785	-
India	150	-	-	-	36
Korea, South	270	-	-	-	-
Laos	45	241	-	20	100
Malaysia	-	-	11,843	772	15,256
Myanmar	74	106	101	125	308
Singapore	-	-	-	6	-
Taiwan	-	-	32	-	-
Australia / Oceania					
Australia	266	-	13	316	429
South America					
Chile	-	-	-	425	500
Colombia	-	-	-	150	-
Total Export	825	387	14,905	3,651	16,809
Value (Million Baht)	1.8	1.6	28.3	8.7	30.9

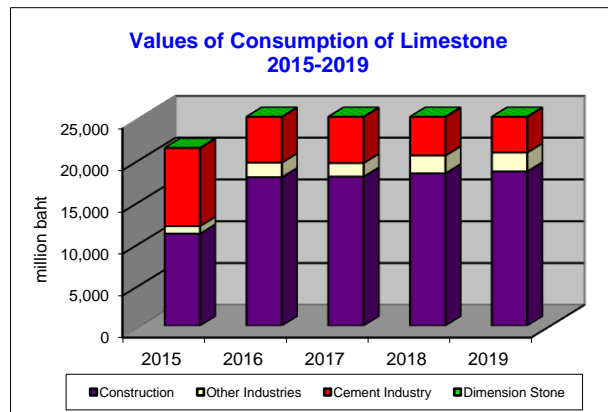
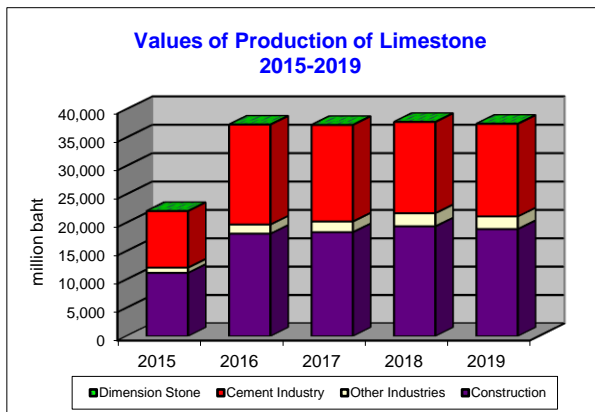
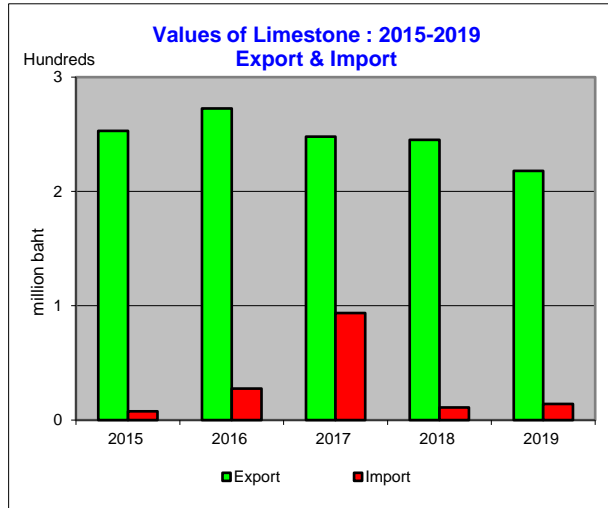
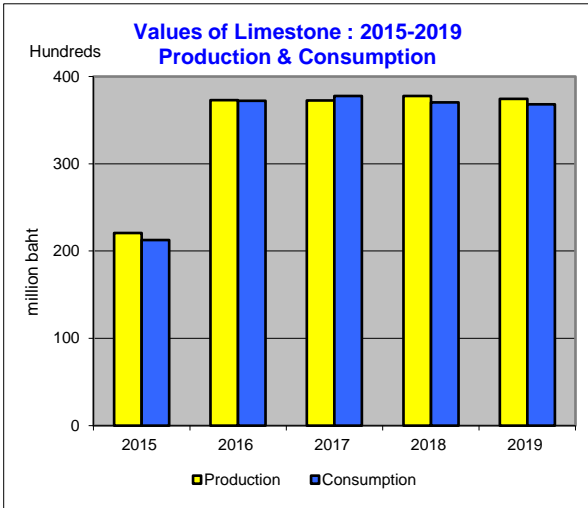
Consumption

1. Cement Industry	68,188,880	70,790,395	73,124,917	66,707,813	64,324,112
Value (Million Baht)	9,343.5	17,697.6	18,281.2	16,677.0	16,081.0
2. Construction	95,625,701	98,770,644	99,130,978	101,353,466	102,616,090
Value (Million Baht)	11,034.3	17,778.7	17,843.6	18,243.6	18,470.9
3. Dimension Stone	24	-	43	1,549	4,536
Value (Million Baht)	0.1	-	0.1	3.1	9.1
4. Other Industries	6,568,305	6,970,446	6,514,668	8,487,771	9,042,913
Value (Million Baht)	900.4	1,742.6	1,628.7	2,121.9	2,260.7

2015 2016 2017 2018 2019

Import¹

Total Import	2,844	76,654	374,399	4,054	1,527
Value (Million Baht)	7.6	27.5	93.7	10.9	14.2



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

M A N G A N E S E

	Tonnes				
	2015	2016	2017	2018	2019
<u>Production</u> (Metallurgical grade)					
Northern Region					
Chiang Mai	4,000	400	3,520	500	4,800
Central Region					
Sa Kaeo	5,000	8,750	4,500	-	-
Southern Region					
Narathiwat	-	-	-	3,500	-
Total Production	9,000	9,150	8,020	4,000	4,800
Value (Million Baht)	39.6	24.1	37.5	21.2	25.5
<u>Export</u> (Metallurgical grade)					
Asia					
Bangladesh	132,277	-	-	-	-
China	12,714	31,954	39,963	73,638	144,199
Hong Kong	-	-	-	0**	0**
Indonesia	-	-	0**	-	-
Singapore	-	-	-	0**	0**
Africa					
Kenya	-	-	-	0.1	-
Total Export	144,991	31,954	39,963	73,638	144,199
Value (Million Baht)	199.0	79.5	78.7	115.0	397.3
<u>Consumption</u>					
Total Consumption	684	2,566	30	2,310	-
Value (Million Baht)	2.8	10.6	0.2	12.3	-
<u>Import</u> (Manganese Ore)¹					
Total Import	18,562	21,027	36,428	71,362	135,616
Value (Million Baht)	41.1	37.5	60.5	108.0	203.8

0** denoting the amount of less than 0.1 tonnes

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

M A R B L E

Cubic metre

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Dimension Stone					
Northern Region					
Kamphaeng Phet	945	1,675	1,164	-	-
Sukhothai	-	-	200	331	-
Uthai Thani	175	-	-	-	-
Northeastern Region					
Nakhon Ratchasima	700	550	600	1,063	1,313
Central Region					
Sara Buri	10,531	9,879	14,692	6,286	10,913
Total Production	12,351	12,104	16,656	7,680	12,226
Value (Million Baht)	98.1	49.6	68.3	34.6	55.3
2. Fragment					
Northern Region					
Kamphaeng Phet	203,678	334,882	243,578	278,735	245,784
Nakhon Sawan	205,848	-	-	-	-
Uttaradit	617,657	668,590	519,184	916,706	66,685
Total Production	1,027,183	1,003,472	762,762	1,195,441	312,469
Value (Million Baht)	333.8	469.6	396.6	621.6	162.5

Cubic metre

	2015	2016	2017	2018	2019
<u>Consumption</u>					
1. Dimension Stone*	12,752	11,400	12,381	7,131	20,344
Value (Million Baht)	101.3	46.7	50.8	32.1	91.5
2. Fragment	1,016,419	1,003,471	769,531	1,283,400	2,561,204
Value (Million Baht)	330.3	469.6	400.2	667.4	1,331.8
<u>Import</u>¹					
Total Import	55,610	60,462	59,121	54,231	45,128
Value (Million Baht)	565.7	588.8	720.1	669.2	598.7

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

M A R L

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Phrae	-	-	2,000	-	8,000
Central Region					
Sara Buri	-	-	6,200	28,707	26,575
Total Production	-	-	8,200	28,707	34,575
Value (Million Baht)	-	-	0.7	2.4	2.9
<u>Consumption</u>					
Total Consumption	4,900	5,000	10,600	41,451	26,259
Value (Million Baht)	0.4	0.4	0.9	3.5	2.2

M I C A

	Tonnes				
	2015	2016	2017	2018	2019
<u>Import</u>¹					
Total Import	5,501	5,979	5,828	6,162	5,835
Value (Million Baht)	167.2	176.2	180.0	164.8	150.7

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

M O N A Z I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	1,260	2,620	2,150	655	108
Hong Kong	-	-	-	210	-
Malaysia	-	-	-	-	54
Total Export	1,260	2,620	2,150	865	162
Value (Million Baht)	61.0	111.0	216.4	85.7	13.4

P E R L I T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Lop Buri	17,200	15,690	5,800	5,600	15,000
Total Production	17,200	15,690	5,800	5,600	15,000
Value (Million Baht)	14.7	23.5	8.7	8.4	22.5
<u>Consumption</u>					
Total Consumption	12,200	12,190	7,300	5,500	5,000
Value (Million Baht)	10.6	18.3	10.9	8.3	7.5

P H O S P H A T E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Kanchanaburi	-	-	8,000	-	-
Total Production	-	-	8,000	-	-
Value (Million Baht)	-	-	3.3	-	-
<u>Consumption</u>					
Total Consumption	-	120	8,370	590	-
Value (Million Baht)	-	0.0*	3.5	0.2	-
<u>Import</u>¹					
1. Ground	0.1	0**	0**	0**	-
Value (Million Baht)	0.0*	0.0*	0.0*	0.0**	-
2. Underground	0**	250	1	1	1
Value (Million Baht)	0.0*	1.2	0.2	0.5	0.5

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'

PYROPHYLLITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Sara Buri	45,500	96,800	54,000	50,920	6,500
Total Production	45,500	96,800	54,000	50,920	6,500
Value (Million Baht)	27.3	58.1	32.4	30.6	3.9
<u>Export</u>					
Asia					
Indonesia	800	352	2,022	1,426	1,680
Malaysia	20	20	20	-	150
Sri Lanka	-	-	40	-	-
Vietnam	440	480	680	180	1,360
Australia / Oceania					
New Zealand	-	-	-	-	25
Total Export	1,260	852	2,762	1,606	3,215
Value (Million Baht)	4.4	3.2	9.7	6.3	12.3
<u>Consumption</u>					
Total Consumption	45,488	71,220	67,816	32,374	33,061
Value (Million Baht)	27.3	42.7	40.7	19.4	19.8
<u>Import</u>¹					
Total Import	0.1	-	-	140	20
Value (Million Baht)	0.0*	-	-	0.9	0.1

0.0* denoting the amount of less than 0.05 million baht

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

Q U A R T Z

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Ground					
Northern Region					
Tak	3,006	-	-	-	-
Total Production	3,006	-	-	-	-
Value (Million Baht)	2.3	-	-	-	-
2. Unground					
Central Region					
Kanchanaburi	84,980	20,340	6,200	66,802	14,000
Prachuap Khiri Khan	9,500	13,500	5,500	1,000	-
Total Production	94,480	33,840	11,700	67,802	14,000
Value (Million Baht)	70.9	25.4	8.8	50.9	10.5
3. Quartzite (Industrial Rock)					
Southern Region					
Songkhla	91,164	16,320	164,383	-	-
Total Production	91,164	16,320	164,383	-	-
Value (Million Baht)	10.0	3.3	32.9	-	-
<u>Consumption</u>					
1. Ground	3,366	-	-	-	-
Value (Million Baht)	2.5	-	-	-	-
2. Unground	70,350	20,320	30,011	15,818	14,290
Value (Million Baht)	52.8	15.2	22.5	11.9	10.7
3. Quartzite (Industrial Rock)	98,208	20,424	174,096	-	-
Value (Million Baht)	11.0	4.1	34.8	-	-
<u>Import</u>¹					
Total Import	9,978	15,578	37,216	16,867	18,576
Value (Million Baht)	95.2	137.4	229.2	143.3	130.2

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

RHYOLITE

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Sara Buri	893,249	833,793	696,503	637,499	1,153,507
Total Production	893,249	833,793	696,503	637,499	1,153,507
Value (Million Baht)	98.3	125.1	104.5	95.6	173.0
<u>Consumption</u>					
Total Consumption	869,788	797,212	735,682	658,032	906,240
Value (Million Baht)	96.5	119.6	110.4	98.7	135.9

R O C K S A L T

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northeastern Region					
Nakhon Ratchasima	1,385,911	1,390,548	1,497,223	1,487,364	1,580,390
Total Production	1,385,911	1,390,548	1,497,223	1,487,364	1,580,390
Value (Million Baht)	2,148.6	2,711.6	2,919.6	2,900.4	3,081.8
<u>Consumption</u>					
Total Consumption	1,397,168	1,339,851	1,475,405	1,491,766	1,528,522
Value (Million Baht)	2,124.5	2,612.7	2,877.0	2,908.9	2,980.6

R U T I L E

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	-	-	425	100	-
India	-	78	390	264	-
Europe					
Belgium	24	-	-	-	-
Russia	408	-	-	-	-
Spain	-	-	50	-	-
Turkey	-	-	100	-	-
North America					
Mexico	-	48	-	-	29
South America					
Brazil	-	52	-	-	-
Colombia	-	48	-	-	-
Total Export	432	226	965	364	29
Value (Million Baht)	15.3	7.7	21.2	7.8	1.0
<u>Import</u>¹					
Total Import	5,220	4,108	2,423	2,278	4,937
Value (Million Baht)	169.5	129.8	75.9	82.8	210.5

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

S A N D S T O N E

Tonnes

	2015	2016	2017	2018	2019
--	------	------	------	------	------

Production

1. Dimension Stone

Northeastern Region

Nakhon Ratchasima	4,540	560	2,460	826	-
Total Production	4,540	560	2,460	826	-
Value (Million Baht)	3.1	0.4	1.7	0.6	-

2. Industrial Rock

Northern Region

Uttaradit	168,555	155,356	80,651	61,008	49,468
-----------	---------	---------	--------	--------	--------

Northeastern Region

Buang Kan	-	-	-	-	29,500
Mukda Han	-	-	75,557	25,500	23,985
Nakhon Phanom	-	446,882	-	236,898	352,422
Nakhon Ratchasima	-	-	-	-	550
Ubon Ratchathani	-	-	-	303,934	501,063

Central Region

Ratchaburi	-	-	5,000	-	-
------------	---	---	-------	---	---

Southern Region

Phangnga	160,507	234,336	208,322	135,189	252,100
Satun	6,198	-	-	-	-

Total Production	335,260	836,574	369,530	762,529	1,209,088
Value (Million Baht)	35.8	125.5	55.4	114.4	181.4

Export (industrial rock)

Asia

Bangladesh	-	-	-	5,000	-
------------	---	---	---	-------	---

Total Export	-	-	-	5,000	-
Value (Million Baht)	-	-	-	2.0	-

Consumption

1. Dimension Stone	4,510	560	1,260	1,035	705
Value (Million Baht)	3.1	0.4	0.9	0.7	0.8

2. Industrial Rock	331,271	814,095	362,027	554,836	1,140,380
Value (Million Baht)	35.2	122.1	54.3	83.2	171.1

	Tonnes				
	2015	2016	2017	2018	2019
<u>Import</u>¹					
Dimension Stone	6,847	14,182	14,871	8,023	8,097
Value (Million Baht)	12.1	11.2	16.1	17.9	12.5

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

S E R P E N T I N E

Tonnes

	2015	2016	2017	2018	2019
<u>Production (Industrial Rock)</u>					
Southern Region					
Narathiwat	400	-	-	29,384	117,473
Total Production	400	-	-	29,384	117,473
Value (Million Baht)	0.0*	-	-	4.4	17.6
<u>Consumption (Industrial Rock)</u>					
Total Consumption	400	-	-	-	-
Value (Million Baht)	0.0*	-	-	-	-
<u>Import¹</u>					
Dimension Stone	-	-	-	-	27
Value (Million Baht)	-	-	-	-	0.1

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

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Lampang	2,000	18,750	-	-	10,300
Central Region					
Sara Buri	6,275,143	7,571,322	6,505,772	6,715,746	4,942,783
Total Production	6,277,143	7,590,072	6,505,772	6,715,746	4,953,083
Value (Million Baht)	893.4	1,897.5	1,626.4	1,678.9	1,238.3
<u>Consumption</u>					
Total Consumption	5,996,646	7,615,048	6,527,217	5,015,765	5,146,264
Value (Million Baht)	850.5	1,903.8	1,631.8	1,253.9	1,286.6

S I L V E R

Gram

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Phetchabun	21,047,075	34,350,652	-	-	-
Phichit	-	1,602,983	-	-	-
Total Production	21,047,075	35,953,635	-	-	-
Value (Million Baht)	366.0	712.5	-	-	-
<u>Export</u>					
Asia					
Hong Kong	21,047,075	35,953,635	-	-	-
Total Export	21,047,075	35,953,635	-	-	-
Value (Million Baht)	366.0	712.5	-	-	-
<u>Import¹</u>					
Total Import	12	11	19	8	-
Value (Million Baht)	1.3	0.7	1.3	0.7	-

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

STRUVERITE

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	64	100	248	128	-
Hong Kong	-	-	50	-	-
Total Export	64	100	298	128	-
Value (Million Baht)	12.6	20.7	65.2	41.3	-

T A L C

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Uttaradit	6,768	7,126	7,436	7,756	8,064
Total Production	6,768	7,126	7,436	7,756	8,064
Value (Million Baht)	4.1	4.3	4.5	4.7	4.8
<u>Consumption</u>					
Total Consumption	6,765	8,382	7,312	7,844	7,962
Value (Million Baht)	4.1	5.0	4.4	4.7	4.8
<u>Import</u>¹					
Total Import	134,349	137,350	140,289	141,898	145,985
Value (Million Baht)	1,625.0	1,646.5	1,634.2	1,643.5	1,627.7

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

TANTALUM

Tonnes

	2015	2016	2017	2018	2019
<u>Import (Tantalite)¹</u>					
Total Import	387	208	658	685	495
Value (Million Baht)	693.0	360.8	904.5	1,188.0	695.6

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

TIN

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
1. Production of Tin Concentrates by changwat					
Northern Region					
Chiang Mai	39	41	36	57	55
Central Region					
Kanchanaburi	11	13	-	-	-
Southern Region					
Nakhon Si Thammarat	-	21	502	16	18
Ranong	22	17	3	2	-
Total Production	72	92	541	75	73
Value (Million Baht)	28.4	43.8	265.0	35.0	30.4
2. Production of Tin Concentrates by Mining Methods.					
Open Pitting	50	75	538	73	73
Dulang Washing	22	17	3	2	-
Total Production	72	92	541	75	73
Value (Million Baht)	28.4	43.8	265.0	35.0	30.4
3. Percentage of Tin Production by Mining Methods.					
Open Pitting	69.3	81.7	99.5	97.3	100.0
Dulang Washing	30.7	18.3	0.5	2.7	-
4. Production of Primary Tin Metal					
Total Production	10,616	10,807	10,588	10,721	10,956
Value (Million Baht)	5,784.9	6,847.1	7,208.2	5,826.2	6,385.6

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
1. Tin Metal					
Africa					
Egypt	-	-	6	6	-
Asia					
Bangladesh	10	-	-	10	220
Cambodia					1
China	280	304	9	-	100
Hong Kong	12	43	37	79	34
India	1	30	-	-	-
Japan	3,609	2,965	3,348	2,795	2,762
Korea, South	1,854	2,073	1,514	1,568	1,253
Malaysia	1	28	6	2	37
Pakistan	5	6	5	154	4
Philippines	6	7	2	6	13
Singapore	23	42	63	56	36
Sri Lanka	-	-	-	1	-
Taiwan	193	486	312	557	547
U.A.E.	-	1	-	24	38
Vietnam	-	2	-	-	43
Australia / Oceania					
Australia	88	76	65	99	111
Europe					
Austria	-	-	2	2	-
Belgium	252	146	214	157	132
Bosnia & Herzegovina	1	-	-	-	-
France	-	5	25	150	125
Germany	385	443	494	460	409
Italy	26	150	300	50	95
Netherlands	346	205	350	525	1,025
Spain	25	75	25	595	900
Turkey	-	25	51	-	26
U.K.	320	316	361	322	317
North America					
U.S.A.	62	396	425	494	630
South America					
Ecuador	-	-	-	-	5
Total Export	7,499	7,824	7,614	8,112	8,862
Value (Million Baht)	4,271.2	4,989.2	5,345.5	5,424.9	5,411.1

Tonnes

	2015	2016	2017	2018	2019
2. Tin-Lead Alloy					
Asia					
India	0.3	1	-	-	-
Korea, South	-	-	0.2	0.5	-
Malaysia	4	1	-	0.3	0.2
Philippines	-	2	4	0.5	1.4
Europe					
Belgium	-	-	24	11	-
Spain	-	-	-	0.1	-
Total Export	4	4	28	12	2
Value (Million Baht)	2.0	2.0	13.6	5.2	1.1
3. Final Slag					
Asia					
China	-	705	315	-	-
Europe					
Germany	-	313	642	526	1,716
Total Export	-	1,018	957	526	1,716
Value (Million Baht)	-	36.4	47.9	42.9	81.0
4. Bismuth Slime					
Asia					
Korea, South	-	-	-	3	710
Malaysia	-	-	1	-	-
Total Export	-	-	1	3	710
Value (Million Baht)	-	-	1.7	4.6	10.6
5. Tin Slime					
Asia					
Malaysia	0.5	-	-	-	-
Total Export	0.5	-	-	-	-
Value (Million Baht)	0.7	-	-	-	-
6. Copper Dross					
Europe					
Belgium	-	59	-	12	21
Total Export	-	59	-	12	21
Value (Million Baht)	-	23.2	-	4.8	10.1

Tonnes

	2015	2016	2017	2018	2019
7. Copper Powder					
Asia					
Philippines	-	-	0.5	-	-
Total Export	-	-	0.5	-	-
Value (Million Baht)	-	-	0.4	-	-
8. Hard Head					
Europe					
Belgium	-	421	192	138	341
Total Export	-	421	192	138	341
Value (Million Baht)	-	137.0	70.9	21.7	30.1
9. Tin Dross					
Europe					
Germany	2	-	-	-	-
U.K.	-	-	2	-	-
Total Export	2	-	2	-	-
Value (Million Baht)	0.8	-	0.8	-	-
<u>Consumption</u>					
Primary Tin Metal	2,930	3,132	3,564	2,545	1,945
Value (Million Baht)	1,613.0	1,976.2	2,430.6	1,545.2	1,137.9
<u>Import</u>¹					
Tin ore	5,742	7,870	10,877	12,261	10,559
Value (Million Baht)	1,731.6	2,738.3	4,237.0	4,494.3	3,586.3

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

T R A V E R T I N E

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Central Region					
Sara Buri	1,350	2,600	1,969	1,628	2,494
Total Production	1,350	2,600	1,969	1,628	2,494
Value (Million Baht)	2.7	5.2	3.9	3.3	8.5
<u>Consumption</u>					
Total Consumption	2,200	3,600	1,990	1,326	2,493
Value (Million Baht)	4.4	7.2	3.9	2.7	8.5
<u>Import¹</u>					
Total Import	-	0**	-	-	-
Value (Million Baht)	-	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

	2015	2016	2017	2018	2019
<u>1. Wolfram</u>					
<u>Production</u>					
Northern Region					
Phrae	-	-	1	79	30
Central Region					
Kanchanaburi	19	15	-	-	-
Total Production	19	15	1	79	30
Value (Million Baht)	3.5	4.9	0.3	24.9	11.6

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

Tonnes

	2015	2016	2017	2018	2019
<u>2. Scheelite</u>					
<u>Production</u>					
Northern Region					
Chiang Mai	42	42	82	48	41
Total Production	42	42	82	48	41
Value (Million Baht)	5.9	11.8	26.6	15.2	16.3
<u>Export</u>					
North America					
U.S.A.	18	18	40	66	36
Total Export	18	18	40	66	36
Value (Million Baht)	10.5	6.6	14.1	30.2	17.3
<u>3. Other Tungsten</u>					
<u>Import</u>¹					
Total Import	0.4	0**	553.0	-	-
Value (Million Baht)	0.8	0.0*	4.8	-	-

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

	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	-	-	30	-	-
Total Export	-	-	30	-	-
Value (Million Baht)	-	-	1.5	-	-
<u>Import</u>¹					
Total Import	40	-	-	-	-
Value (Million Baht)	0.5	-	-	-	-

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

Z I N C

Tonnes

	2015	2016	2017	2018	2019
<u>Production</u>					
Northern Region					
Tak	181,025	175,632	7,877	-	-
Total Production	181,025	175,632	7,877	-	-
Value (Million Baht)	2,440.8	2,388.2	153.6	-	-
<u>Export</u>					
1. Zinc Metal					
Africa					
Nigeria	149	-	-	-	-
Asia					
Bangladesh	202	102	199	-	-
Cambodia	-	0**	2	33	0.1
China	0.1	-	-	-	-
India	83	2,575	432	79	47
Indonesia	102	205	14	11	1
Laos	14	91	12	28	4
Malaysia	280	2	3	65	-
Myanmar	72	96	32	-	200
Saudi Arabia	126	-	-	-	-
Singapore	0.2	-	1	0.5	-
Sri Lanka	-	0.2	0.2	0**	0**
Taiwan	-	182	66	2,076	-
Vietnam	2	31	38	31	333
Europe					
Belgium	-	-	-	-	50
South America					
Colombia	-	-	-	-	8
Total Export	881	3,284	601	2,324	643
Value (Million Baht)	69.8	220.6	68.1	234.1	46.2

0** denoting the amount of less than 0.1 tonnes

Tonnes

	2015	2016	2017	2018	2019
2. Zinc Alloy					
Asia					
Cambodia	0**	-	-	-	-
China	-	-	77	-	-
India	-	177	329	699	474
Indonesia	193	145	503	265	648
Japan	-	0.1	-	-	-
Malaysia	-	26	19	-	36
Pakistan	-	-	0**	-	-
Taiwan	-	-	114	24	-
Vietnam	-	-	8	-	-
Europe					
Belgium	-	34	-	-	-
Total Export	193	382	1,050	988	1,158
Value (Million Baht)	12.3	26.1	92.7	83.4	93.8
<u>Consumption</u>					
1. Zinc Alloy	26,791	23,697	17,675	-	-
Value (Million Baht)	2,084.6	1,908.9	1,877.1	-	-
2. Zinc Metal	27,662	33,063	14,604	-	-
Value (Million Baht)	1,947.5	2,390.7	1,430.2	-	-
<u>Import (Zinc Ore)¹</u>					
Total Import	82,710	32,306	0.1	318.0	3,414.0
Value (Million Baht)	1,902.7	757.3	0.0*	2.6	12.6

0** denoting the amount of less than 0.1 tonnes

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

Z I R C O N

Tonnes

	2015	2016	2017	2018	2019
<u>Export</u>					
Asia					
China	6,235	6,500	5,723	1,400	2,104
Hong Kong	-	-	-	2,200	-
India	1,596	2,106	1,716	25	-
Japan	2	-	-	-	-
U.A.E.	-	104	-	-	-
Vietnam	24	120	-	-	-
Australia / Oceania					
Australia	-	-	-	78	-
Europe					
Spain	-	176	-	-	-
South America					
Brazil	-	24	-	-	-
Total Export	7,857	9,030	7,439	3,703	2,104
Value(Million Baht)	197.8	250.4	237.1	135.7	69.7
<u>Import (Zirconium Ore)¹</u>					
Total Import	81,932	40,659	38,529	43,565	6,416
Value (Million Baht)	958.0	521.1	586.0	906.3	324.4

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

NUMBER OF ACTIVE MINES BY KIND OF MINERALS

	2015	2016	2017	2018	2019
Andesite	3	3	3	3	3
Antimony	-	-	1	0	0
Ball clay	4	4	3	3	3
Barite	6	7	6	5	6
Basalt (industrial rock)	36	39	41	41	39
Calcite	7	6	9	13	13
Cement clay	20	23	27	28	25
Ceramic clay	6	6	7	7	7
Dolomite	21	17	17	19	16
Feldspar	20	18	16	14	13
Fluorite	2	3	3	3	2
Glass sand	11	14	16	18	18
Gneiss	1	1	1	1	1
Gold	4	4	1	-	-
Granite (dimension stone)	22	19	15	12	7
Granite (industrial rock)	20	19	21	24	28
Graywacke	1	1	1	1	1
Gypsum	47	50	52	45	35
Iron	12	5	6	5	5
Kaolin	29	25	20	18	15
Lignite	5	3	2	3	2
Limestone (cement)	17	14	13	13	14
Limestone (construction)	201	198	193	198	191
Limestone (dimension)	3	3	3	1	1
Limestone (others)	16	15	17	12	10
Manganese	3	3	3	2	2
Marble	19	17	15	14	12
Marl	4	4	4	4	4
Perlite	3	4	3	4	3
Phosphate	1	1	1	-	-

NUMBER OF ACTIVE MINES BY KIND OF MINERALS

	2015	2016	2017	2018	2019
Pyrophyllite	3	2	2	2	2
Quartz	7	8	7	4	2
Rhyolite (industrial rock)	1	1	1	1	1
Rock salt	3	3	4	5	6
Sand stone (dimension)	10	10	3	1	1
Sand stone (industrial rock)	3	4	5	9	10
Shale	6	6	5	6	6
Talc	1	1	1	1	1
Tin & Tin-Tungsten	3	4	2	2	2
Travertine	2	2	2	2	2
Wolfram	1	1	1	1	1
Zinc	1	1	1	-	-
Total	585	569	554	545	510

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

	2015	2016	2017	2018	2019
Andesite	30	30	30	29	25
Antimony	-	-	5	-	-
Ball clay	344	120	80	80	78
Barite	130	137	98	105	87
Basalt (industrial rock)	704	674	694	982	956
Calcite	74	52	76	155	182
Cement clay	410	426	429	316	347
Ceramic clay	68	67	79	117	93
Dolomite	302	304	315	296	257
Feldspar	263	254	224	247	188
Fluorite	35	71	70	177	53
Glass sand	98	123	139	124	117
Gneiss	7	7	7	7	8
Gold	329	333	-	-	-
Granite (dimension)	251	220	184	126	108
Granite (industrial rock)	600	720	771	612	705
Graywacke	28	28	28	16	14
Gypsum	902	972	972	900	692
Iron	213	50	65	85	73
Kaolin	322	263	198	209	204
Lignite	1,560	1,649	1,648	1,641	1,561
Limestone (cement)	873	868	916	1,046	1,099
Limestone (construction)	4,101	3,986	3,891	4,241	4,399
Limestone (dimension)	6	6	6	4	4
Limestone (others)	432	501	456	302	315
Manganese	26	32	25	24	24
Marble	317	238	213	274	264
Marl	27	33	34	18	25
Perlite	73	65	54	55	49
Phosphate	60	67	43	-	-

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

	2015	2016	2017	2018	2019
Pyrophyllite	29	25	15	7	7
Quartz	107	98	79	79	29
Rhyolite (industrial rock)	43	43	43	47	47
Rock salt	124	128	131	133	133
Sand stone (dimension)	53	54	20	6	7
Sand stone (industrial rock)	56	60	70	107	148
Shale	153	149	109	100	88
Talc	9	6	6	2	4
Tin & Tin-Tungsten	234	213	133	185	165
Travertine	8	5	17	15	14
Wolfram	9	14	51	46	71
Zinc	225	148	65	-	-
Total	13,635	13,239	12,489	12,915	12,640

Mineral Production of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Mineral Fuels and Energy										
Lignite	15,150,549	14,544.5	16,978,601	16,299.5	16,258,637	15,608.3	14,851,950	14,257.9	14,071,710	13,508.8
Total		14,544.5		16,299.5		15,608.3		14,257.9		13,508.8
%		22.86		18.58		20.22		18.50		18.22
Iron and Ferro Alloy										
Iron ore	16,483	30.4	-	-	135	0.2	-	-	17,660	33.5
Manganese (metallurgical grade)	9,000	39.6	9,150	24.1	8,020	38.9	4,000	21.2	4,800	25.5
Tungsten										
- Scheelite	42	5.9	42	11.8	82	26.6	48	15.2	41	16.3
- Wolfram	19	3.5	15	4.9	32	10.0	79	24.9	30	11.6
Total		79.4		40.8		75.7		61.3		86.9
%		0.13		0.05		0.10		0.08		0.12
Base Metals										
Antimony ore	-	-	32	0.9	-	-	-	-	-	-
Copper metal	-	-	-	-	-	-	-	-	-	-
Tin concentrates	72	28.3	92	43.8	541	264.8	75	35.0	73	30.4
Zinc ore	181,025	2,440.8	175,632	2,388.2	7,877	158.5	-	-	-	-
Total		2,469.1		2,432.9		423.3		35.0		30.4
%		3.88		2.77		0.55		0.05		0.04

Mineral Production of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Precious Metals and Precious Stone										
Gold metal (unit : gram)	3,305,225	4,210.4	4,292,946	6,039.9	-	-	-	-	-	-
Silver metal (unit : gram)	21,047,075	366.0	35,953,635	712.5	-	-	-	-	-	-
Total		4,576.4		6,752.4		-		-		-
%		7.19		7.69		-		-		-
Light Metals and Rare Earth										
Ilmenite	-	-	-	-	8	0.1	41	0.4	117	1.1
Total		-		-		0.1		0.4		1.1
%		-		-		-		-		0.06
Cement Industrial Minerals										
Anhydrite	876,024	552.6	1,340,213	889.9	1,392,693	896.1	1,517,228	904.2	1,419,587	838.8
Cement Clay	4,792,683	431.3	4,506,878	405.6	4,254,783	387.2	5,837,807	525.4	7,455,441	671.0
Gypsum (unground)	11,267,144	7,040.4	10,460,598	6,910.0	9,253,951	5,960.7	9,680,429	5,767.1	8,367,700	4,903.7
Limestone	73,271,282	9,968.8	70,422,450	17,605.6	68,023,847	17,006.0	64,302,502	16,075.6	65,273,761	16,318.4
Marl	-	-	-	-	8,200	0.7	28,707	2.4	34,575	2.9
Shale	6,277,143	893.4	7,590,072	1,897.5	6,505,772	1,626.4	6,715,747	1,678.9	4,953,083	1,238.3
Total		18,886.5		27,708.6		25,877.1		24,953.6		23,973.1
%		29.68		31.58		33.52		32.37		32.34
Ceramic Industrial Minerals										
Ball clay	81,245	44.7	136,646	75.2	157,093	86.4	579,565	318.8	332,786	183.0
Ceramic Clay	514,044	282.7	371,686	204.4	357,982	196.9	485,853	267.2	378,086	207.9
Dolomite	2,432,853	1,089.9	3,034,860	1,669.2	2,988,336	1,643.6	3,440,193	1,892.1	2,850,844	1,568.0

Mineral Production of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Ceramic Industrial Minerals										
Feldspar										
- Potassium (unground)	2,820	4.8	3,200	5.4	-	-	-	-	-	-
- Sodium (unground)	1,329,096	930.4	1,163,947	814.8	1,385,925	970.1	1,117,803	782.5	1,251,143	875.8
Glass sand	1,191,612	838.3	1,102,699	1,091.7	17,563,088	1,738.7	1,557,218	1,541.6	1,248,032	1,235.6
Kaolin										
- Filler	-	-	-	-	-	-	13,771	26.2	11,638	22.1
- Unwashed	655,196	252.3	830,393	319.7	401,450	154.6	403,225	155.2	551,674	212.4
- Washed	102,763	98.7	101,618	97.6	103,659	98.6	96,666	92.8	80,776	77.5
Quartz										
- Ground	3,006	2.3	-	-	-	-	-	-	-	-
- Unground	94,480	70.9	33,840	25.4	11,700	8.8	67,802	50.9	14,000	10.5
Total		3,615.0		4,303.4		4,897.7		5,127.3		4,392.8
%		5.68		4.90		6.34		6.65		5.93
Dimension Stone										
Gneiss	-	-	-	-	485	1.9	1,180	4.7	-	-
Granite	5,159*	29.8	5,524*	32.0	5,367*	34.9	5,114*	32.2	18,668*	117.3
Limestone	24	0.1	-	-	43	0.1	3,765	7.5	4,087	8.2
Marble	12,351*	98.1	12,104*	49.6	16,656*	68.3	7,681*	34.6	12,226*	55.3

Mineral Production of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Dimension Stone</u>										
Sandstone	4,540	3.1	560	0.4	2,460	1.7	826	0.6	-	-
Serpentine	400	0.0**	-	-	-	-	29,384	4.4	117,473	17.6
Travertine	1,350	2.7	2,600	5.2	1,969	3.9	1,628	3.3	2,494	8.5
Total		133.8		87.2		110.8		87.3		206.9
%		0.21		0.10		0.14		0.11		0.28
<u>Industrial Rock</u>										
Andesite	873,022	126.7	815,115	163.0	1,174,854	234.9	1,264,963	252.9	985,751	197.2
Basalt	12,877,048	1,851.2	13,547,442	2,709.5	12,772,085	2,554.4	14,301,581	2,860.3	12,686,356	2,537.3
Granite	8,074,501	1,162.3	9,458,745	1,891.8	9,035,991	1,807.2	11,280,995	2,256.2	13,864,234	2,772.8
Graywacke	983,031	112.5	1,055,349	211.1	1,607,696	321.5	1,276,366	255.3	1,432,288	286.5
Limestone	96,631,193	11,180.6	100,456,800	18,082.2	100,960,229	18,172.8	107,652,039	19,377.4	104,992,869	18,898.7
Marble (fragment)	1,027,183*	333.8	1,003,472*	469.6	762,762*	396.6	1,195,441*	621.6	312,469*	162.5
Perlite	17,200	14.7	15,690	23.5	5,800	8.7	5,600	8.4	15,000	22.5
Quartzite	91,164	10.0	16,320	3.3	164,383	32.9	-	-	-	-
Rhyolite	893,249	98.3	833,793	125.1	696,503	104.5	637,499	95.6	1,153,507	173.0
Sandstone	335,260	35.8	836,574	125.5	369,530	55.4	762,529	114.4	1,209,088	181.4
Total		14,925.9		23,804.6		23,688.9		25,842.1		25,231.9
%		23.46		27.13		30.68		33.53		34.04

Mineral Production of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals										
Barite										
- Chemical grade (ground)	4,075	23.8	2,232	13.8	1,563	14.8	1,647	15.9	1,757	17.0
- Drilling mud (ground)	127,591	496.9	155,799	606.8	105,000	489.3	52,694	246.1	31,557	147.4
- Unground	38,955	57.8	65,070	96.6	41,391	61.5	13,149	19.5	330	0.5
Bentonite	-	-	-	-	-	-	-	-	-	-
Calcite	1,281,765	610.8	1,452,235	1,089.2	1,456,747	1,092.6	1,467,822	1,100.9	1,440,030	1,080.0
Dickite	-	-	-	-	-	-	-	-	5,000	3.0
Dolomitic Marl	-	-	-	-	-	-	6,920	2.4	1,585	0.6
Fluorite (metallurgical grade)	15,095	112.4	20,100	120.2	5,500	26.8	16,700	80.9	17,747	85.6
Limestone	6,723,692	917.9	6,465,749	1,616.4	7,519,555	1,879.9	9,261,332	2,315.3	8,909,080	2,227.3
Phosphate	-	-	-	-	8,000	3.3	-	-	-	-
Pyrophyllite	45,500	27.3	96,800	58.1	54,000	32.4	50,920	30.6	6,500	3.9
Rock salt	1,385,911	2,148.6	1,390,548	2,711.6	1,497,223	2,919.6	1,487,364	2,900.4	1,580,390	3,081.8
Talc (unground)	6,768	4.1	7,126	4.3	7,436	4.5	7,756	4.7	8,064	4.8
Total		4,399.6		6,317.0		6,524.7		6,716.7		6,651.9
%		6.91		7.20		8.45		8.71		8.97
Grand Total		63,630.2		87,746.4		77,206.6		77,081.6		74,083.7

:- * = Cubic Meter :- 0.0** = denoting the amount of less than 0.05 million baht

Mineral Export of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Iron and Ferro Alloy</u>										
Iron ore	15,770	33.7	57,668	61.3	9,178	18.6	37,582	73.4	216,643	413.5
Manganese (metallurgical grade)	144,991	199.0	31,954	79.5	39,963	78.7	73,638	115.0	144,199	397.3
Tungsten										
- Scheelite	18	10.5	18	6.6	40	14.1	66	30.2	36	17.3
- Wolfram	-	-	-	-	-	-	-	-	15	0.7
Total		243.2		147.4		111.4		218.6		828.8
%		1.40		0.73		0.86		1.70		6.26
<u>Base Metals</u>										
Antimony ore	3,710	208.9	3,906	95.4	1,399	21.6	2,022	86.8	3,624	64.9
Copper metal	-	-	-	-	-	-	-	-	-	-
Tin										
- Final slag	-	-	1,018	36.4	957	47.8	526	42.9	1,716	80.9
- Hard head	-	-	421	137.0	192	70.8	138	21.7	341	30.1
- Metallic residue	-	-	-	-	-	-	-	-	-	-
- Tin-lead alloy	5	2.0	4	2.0	28	13.6	12	5.2	2	1.1
- Tin metal	7,499	4,271.2	7,824	4,989.2	7,614	5,345.5	8,112	5,424.9	8,862	5,411.1
- Tin slime	1	0.7	-	-	-	-	-	-	-	-
- Tin dross	2	0.8	-	-	2	0.8	-	-	-	-
- Copper dross	-	-	59	23.2	-	-	12	4.8	21	10.1
- Copper powder	-	-	-	-	1	0.4	-	-	-	-
- Bismuth Slime	-	-	-	-	1	1.7	3	4.6	710	10.6

Mineral Export of Thailand 2015 - 2019

*Quantity : Tonnes
Value : Million Baht*

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Base Metals</u>										
Zinc										
- Zinc alloy	193	12.3	382	26.1	1,050	92.7	987	83.4	1,158	93.8
- Zinc metal	1,030	69.8	3,284	220.6	799	68.1	2,324	234.1	643	46.2
Total		4,565.7		5,529.9		5,663.0		5,908.4		5,748.8
%		26.18		27.46		43.97		45.82		43.39
<u>Precious Metals and Precious Stone</u>										
Garnet	-	-	-	-	6,868	43.5	4,600	46.5	539	2.7
Gold metal (unit : gram)	3,305,225	4,210.4	4,292,946	6,039.9	-	-	-	-	-	-
Silver metal (unit : gram)	21,047,075	366.0	35,953,635	712.5	-	-	-	-	-	-
Total		4,576.4		6,752.4		43.5		46.5		2.7
%		26.25		33.53		0.34		0.36		0.02
<u>Light Metals and Rare Earth</u>										
Columbite-tantalite	-	-	-	-	-	-	-	-	-	-
Ilmenite	320	2.0	276	2.4	-	-	8	0.1	20	1.4
Leucoxene	2,293	54.4	5,985	148.8	3,994	127.6	1,278	45.8	1,193	40.4
Monazite	1,260	61.0	2,620	110.9	2,150	216.4	865	85.7	162	13.4
Rutile	432	15.3	226	7.7	965	21.2	364	7.8	29	1.0
Struverite	64	12.6	100	20.7	298	65.2	128	41.3	-	-
Xenotime	-	-	-	-	30	1.5	-	-	-	-
Zircon	7,857	197.8	9,030	250.4	7,439	237.1	3,703	135.7	2,104	69.7
Total		343.1		540.9		669.0		316.4		125.9
%		1.97		2.68		5.20		2.45		0.95

Mineral Export of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Cement Industrial Minerals</u>										
Anhydrite	1,034,970	674.3	1,350,250	880.2	1,449,160	896.2	1,528,207	913.3	1,366,080	797.7
Gypsum										
- Ground	1,612	6.4	1,435	6.1	6,880	11.1	62,620	45.1	97,290	63.5
- Unground	7,821,617	5,011.3	6,460,030	4,329.6	5,731,950	3,663.7	5,633,845	3,622.8	5,194,388	3,141.1
Total		5,692.0		5,215.9		4,571.0		4,581.2		4,002.3
%		32.64		25.90		35.49		35.53		30.21
<u>Ceramic Industrial Minerals</u>										
Ball clay	26,461	120.6	13,338	63.9	13,850	61.1	21,853	97.9	12,858	56.3
Dolomite										
- Ground	-	-	4,640	7.4	820	0.2	40	0.4	814	0.9
- Unground	1,213,054	469.3	1,261,885	547.4	1,080,416	487.2	1,269,600	508.7	1,168,785	394.4
Feldspar										
- Potassium (ground)	-	-	-	-	-	-	-	-	-	-
- Potassium (unground)					37,350	30.7	-	-	-	-
- Sodium (ground)	770,117	707.9	638,497	569.4	660,876	579.5	699,913	593.4	1,135,031	1,396.7
Kaolin										
- Filler	-	-	66	0.5	136	1.2	284	2.7	602	3.7
- Washed	12,070	67.7	13,785	82.1	17,340	100.8	15,850	93.2	17,513	95.6
Total		1,365.5		1,270.7		1,260.7		1,296.3		1,947.6
%		7.83		6.31		9.79		10.05		14.70

Mineral Export of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Industrial Rock</u>										
Granite (industrial rock)	458,800	111.3	149,995	36.1	419,320	93.3	212,100	35.8	444,261	89.9
Gravel (industrial rock)	419	2.4	144	0.8	528	2.4	250	1.0	270	1.2
Limestone (industrial rock-constructi	606,353	251.1	611,270	271.0	546,023	219.6	237,996	236.4	423,654	187.1
Sand stone (industrial rock)	-	-	-	-	-	-	5,000	2.0	-	-
Total		364.8		307.9		315.3		275.2		278.2
%		2.09		1.53		2.45		2.13		2.10
<u>Other Industrial Minerals</u>										
Barite										
- Chemical grade (ground)	6,745	84.9	16,506	94.2	3,094	22.8	1,731	18.4	1,230	12.3
- Drilling mud (ground)	15,844	68.4	26,541	69.9	9,939	53.8	5,452	32.8	527	3.5
- Unground	2,666	4.0	6,331	31.8	3,674	18.8	-	-	-	-
Diatomite									72	0.1
Fluorite (metallurgical grade)	22,470	121.8	32,174	174.2	20,723	111.5	38,479	186.2	45,683	256.3
Limestone (industrial rock-others)	825	1.8	387	1.6	14,905	28.3	3,652	8.7	16,809	30.9
Pyrophyllite	1,260	4.4	852	3.2	2,762	9.7	1,606	6.3	3,215	12.3
Total		285.3		374.9		244.9		252.4		315.4
%		1.64		1.86		1.90		1.96		2.38
Grand Total		17,436.0		20,140.0		12,878.8		12,895.0		13,249.7

Mineral Consumption of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Mineral Fuels and Energy</u>										
Lignite	15,369,157	14,754.4	16,869,269	16,194.5	16,240,637	15,591.0	14,417,889	13,841.2	13,973,815	13,414.9
Total		14,754.4		16,194.5		15,591.0		13,841.2		13,414.9
%		27.06		20.75		20.26		19.54		18.82
<u>Iron and Ferro Alloy</u>										
Iron ore			-	-	-	-	-	-	192,441	434.9
Manganese (metallurgical grade)	684	2.8	2,566	10.6	30	0.2	2,310	12.3	-	-
Total		2.8		10.6		0.2		12.3		434.9
%		0.01		0.01		-		0.02		0.61
<u>Base Metals</u>										
Antimony ore	-	-	2	0.1	-	-	-	-	-	-
Tin										
- Tin metal	2,930	1,613.0	3,132	1,976.2	3,564	2,430.6	2,545	1,545.2	1,945	1,137.9
- Tin-lead alloy	-	-	-	-	-	-	-	-	-	-
Zinc										
- Zinc alloy	26,791	2,084.6	23,697	1,908.9	17,675	1,877.1	-	-	-	-
- Zinc metal	27,662	1,947.5	33,063	2,390.7	14,604	1,430.2	-	-	-	-
Total		5,645.1		6,275.9		5,737.9		1,545.2		1,137.9
%		10.35		8.04		7.46		2.18		1.60
<u>Cement Industrial Minerals</u>										
Anhydrite	-	-	-	-	102	0.1	-	-	4,546	2.6
Cement clay	4,760,412	428.4	4,278,942	385.1	3,142,781	282.9	5,786,258	520.8	8,630,270	776.7
Gypsum (unground)	3,792,611	2,382.3	4,077,140	2,707.2	3,798,078	2,449.5	4,207,417	2,506.2	4,051,629	2,370.7

Mineral Consumption of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Cement Industrial Minerals (cont.)</u>										
Limestone	68,188,880	9,343.5	70,790,395	17,697.6	73,124,917	18,281.2	66,707,813	16,677.0	64,324,112	16,081.0
Marl	4,900	0.4	5,000	0.4	10,600	0.9	41,451	3.5	26,259	2.2
Shale	5,996,646	850.5	7,615,048	1,903.8	6,527,217	1,631.8	4,997,367	1,249.3	5,146,264	1,286.6
Total		13,005.1		22,694.1		22,646.4		20,956.8		20,519.8
%		23.85		29.08		29.42		29.59		28.78
<u>Ceramic Industrial Minerals</u>										
Ball clay	261,677	143.9	915,326	503.4	153,677	84.5	284,563	156.5	357,420	196.6
Ceramic clay	373,642	205.5	361,182	198.7	341,762	187.9	337,964	185.9	478,769	263.3
Dolomite	1,525,810	699.4	2,263,982	1,245.2	2,195,261	1,207.4	2,225,240	1,223.9	1,713,149	942.2
Feldspar										
- Potassium (unground)	14,200	24.1	1,185	2.0	-	-	-	-	-	-
- Sodium (ground)	54,530	76.3	24,080	33.7	16,254	22.8	32,598	45.6	32,762	45.9
- Sodium (unground)	159,779	111.8	229,618	160.7	496,357	347.4	441,345	308.9	857,771	600.4
Glass sand	991,337	658.6	918,481	909.3	1,383,058	1,369.2	1,529,709	1,514.4	1,208,333	1,196.3
Kaolin										
- Filler	-	-	-	-	-	-	13,818	26.3	11,558	22.0
- Unwashed	532,137	204.9	849,767	327.2	326,956	125.9	344,578	128.8	516,491	198.8
- Washed	127,965	122.8	113,947	109.4	115,224	110.6	102,802	98.7	94,636	90.9
Quartz										
- Ground	3,366	2.5	-	-	-	-	-	-	-	-
- Unground	70,350	52.8	20,320	15.2	30,011	22.5	15,818	11.9	14,290	10.7
Total		2,302.6		3,504.8		3,478.2		3,700.9		3,567.1
%		4.22		4.49		4.52		5.23		5.00

Mineral Consumption of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Dimension Stone</u>										
Gneiss	70	0.3	5	0.0**	-	-	-	-	-	-
Granite	4,977*	28.4	4,718*	27.4	3,873*	25.2	1,352*	8.5	2,059*	12.6
Limestone	24	0.1	-	-	43	0.1	1,549	3.1	4,536	9.1
Marble	12,752*	101.3	11,400*	46.7	12,381*	50.8	7,131*	32.1	20,344*	91.5
Sand stone	4,510	3.1	560	0.4	1,260	0.9	1,035	0.7	705	0.8
Serpentine	400	0.0**	-	-	-	-	11,892	1.8	-	-
Travertine	2,200	4.4	3,600	7.2	1,990	3.9	1,326	2.7	2,493	8.5
Total		137.6		81.7		80.9		48.9		122.5
%		0.25		0.11		0.10		0.07		0.17
<u>Industrial Rock</u>										
Andesite	837,262	121.6	789,284	157.9	890,965	178.2	1,040,277	208.1	1,349,235	269.8
Basalt	12,055,712	1,734.7	12,927,838	2,585.6	12,822,093	2,564.4	12,486,969	2,497.4	12,165,390	2,433.1
Granite	7,893,062	1,142.9	8,392,556	1,678.5	8,926,182	1,785.2	11,570,394	2,314.1	12,342,111	2,468.4
Grawacke	942,630	107.7	819,237	163.8	1,546,315	309.3	1,343,459	268.7	1,414,867	282.9
Limestone	95,625,701	11,034.3	98,770,644	17,778.7	98,991,214	17,818.4	101,353,466	18,243.6	102,616,090	18,470.9
Marble (fragment)	1,016,419*	330.3	1,003,471*	469.6	769,531*	400.2	1,283,400*	667.4	2,561,204*	1,331.8
Perlite	12,200	10.6	12,190	18.3	7,300	10.9	5,500	8.3	5,000	7.5
Quartzite	98,208	11.0	20,424	4.1	174,096	34.8	-	-	-	-
Rhyolite	869,788	96.5	797,212	119.6	735,682	110.4	658,032	98.7	906,240	135.9
Sand stone	331,271	35.2	814,095	122.1	362,027	54.3	554,836	83.2	1,140,380	171.1
Total		14,624.8		23,098.2		23,266.1		24,389.5		25,571.4
%		26.82		29.59		30.23		34.43		35.87

Mineral Consumption of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals										
Barite										
- Chemical grade (ground)			-	-	-	-	-	-	1,091	10.6
- Drilling mud (ground)	88,061	343.0	155,179	604.4	105,000	489.3	54,221	253.2	30,745	143.6
- Unground	18,050	26.8	37,017	54.9	22,320	33.1	4,522	6.7	2,199	3.3
Bentonite	-	-	-	-	-	-	-	-	-	-
Calcite	1,357,864	634.1	1,504,067	1,128.1	1,443,368	1,082.5	1,408,695	1,056.5	1,448,141	1,086.1
Diatomite			-	-	-	-	-	-	5,000	4.5
Dickite			-	-	-	-	-	-	3,969	2.4
Dolomitic Marl	-	-	-	-	-	-	10,634	3.7	11,495	4.0
Fluorite (metallurgical grade)	-	-	204	1.2	1,640	7.9	500	2.4	200	1.0
Limestone	6,568,305	900.4	6,970,446	1,742.6	6,514,668	1,628.7	8,487,771	2,121.9	9,042,913	2,260.7
Phosphate	-	-	120	0.1	8,370	3.5	590	0.2	-	-
Pyrophyllite	45,488	27.3	71,220	42.7	67,816	40.7	32,374	19.4	33,061	19.8
Rock salt	1,397,168	2,124.5	1,339,851	2,612.7	1,475,405	2,877.0	1,491,766	2,908.9	1,528,522	2,980.6
Talc (unground)	6,765	4.1	8,382	5.0	7,312	4.4	7,844	4.7	7,962	4.8
Total		4,058.5		6,191.7		6,167.1		6,377.6		6,521.4
%		7.44		7.93		8.01		9.00		9.15
Grand Total		54,532.6		78,051.4		76,967.8		70,877.0		71,289.9

:- * = Cubic Meter :- 0.0** = denoting the amount of less than 0.05 million baht

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Mineral Fuels and Energy</u>										
Anthracite	166,002	667.6	181,673	777.4	138,649	573.2	173,288	760.8	125,723	566.5
Bituminous coal	10,617,077	25,968.2	10,172,204	23,061.7	9,903,771	25,517.0	7,877,106	21,389.1	8,146,105	21,748.6
Coal Solid Fuels from Coal	11,083,001	18,241.0	11,335,865	17,816.0	12,135,732	23,170.2	16,781,738	31,069.9	13,009,892	22,297.6
Coke	23,462	286.3	30,079	338.5	32,747	448.9	18,049	335.3	19,205	330.0
Lignite	30,366	46.0	91,721	120.1	198,926	209.4	245,458	231.2	382,846	347.2
Peat	12,441	105.4	15,975	133.6	20,844	177.7	17,369	148.2	18,164	132.8
Total		45,314.5		42,247.3		50,096.4		53,934.4		45,422.7
%		73.11		73.00		75.77		74.07		73.04
<u>Iron and Ferro Alloy</u>										
Chromite ore	2,177	27.9	2,268	28.7	2,298	37.7	2,352	48.8	1,289	19.8
Cobalt ore	0*	0.0*	-	-	0.3	0.2	0*	0.2	0.3	0.3
Columbite	319	143.1	25	9.8	291	107.4	377	209.0	357	167.4
Iron ore	1,567	11.0	2,768	13.0	-	-	-	-	-	-
Iron pyrites	330	4.6	321	5.0	265	4.1	442	7.4	1,647	11.8
Manganese ore	18,562	41.1	21,027	37.5	36,428	60.5	71,362	108.0	135,616	203.8
Molybdenite ore	11,007	755.5	11,293	967.0	13,599	916.4	12,385	1,810.4	14,946	2,562.5
Nickel ore	0.1	0.1	7.1	2.6	2	0.9	2	1.2	135	2.9
Tungsten	-	-	-	-	-	-	-	-	-	-
- Scheelite	-	-	-	-	-	-	-	-	-	-
- Wolfram	-	-	-	-	-	-	-	-	-	-
- Other tungsten	0.4	0.8	0*	0.0*	553	4.8	-	-	-	-
Total		984.1		1,063.6		1,132.0		2,184.8		2,968.7
%		1.59		1.84		1.71		3.00		4.77

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Base Metals</u>										
Aluminium ore	24,157	251.4	33,712	264.5	24,325	271.3	22,213	288.9	20,453	248.7
Antimony ore	6,134	378.4	4,143	90.3	2,184	63.2	1,914	54.5	3,989	60.5
Copper	18,818	815.4	19,868	619.9	299	3.9	384	3.9	142	1.2
Lead ore	1	0.0*	42	0.7	85	1.3	104	5.9	98	11.0
Tin ore	5,742	1,731.6	7,870	2,738.3	10,877	4,237.0	12,261	4,494.3	10,559	3,586.3
Zinc ore	82,710	1,902.7	32,306	757.3	0.1	0.0*	318	2.6	3,414	12.6
Total		5,079.5		4,471.0		4,576.7		4,850.0		3,920.2
%		8.20		7.73		6.92		6.66		6.30
<u>Precious Metals and Precious Stone</u>										
Emery	20,363	185.0	7,725	76.5	5,908	66.9	6,578	66.8	5,427	53.1
Silver ore	12	1.3	11	0.7	19	1.3	8	0.7	-	-
Total		186.3		77.2		68.2		67.5		53.1
%		0.30		0.13		0.10		0.09		0.09
<u>Light Metals and Rare Earth</u>										
Ilmenite ore	99	3.2	222	6.8	150	4.9	112	4.1	120	4.8
Niobium and Vanadium ore	13,605	1,100.0	16,278	1,657.7	6,771	1,137.3	21,771	2,086.3	22,344	1,242.7
Titanium ore										
- Rutile	5,220	169.5	4,108	129.8	2,423	75.9	2,278	82.8	4,937	210.5
- Leucoxene	2,798	97.4	2,960	96.9	4,382	145.1	5,080	184.4	5,760	225.4
- Ilmenite	1,040	15.7	1,040	15.0	960	13.5	1,020	14.3	1,400	17.7
- Other Titanium ore	1,704	22.8	26	0.7	21	0.7	5	0.2	864	43.3

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Light Metals and Rare Earth (cont.)</u>										
Tantalite	387	693.0	208	360.8	658	904.5	685	1,188.0	495	695.6
Thorium ore	-	-	-	-	0.1	0.2	-	-	-	-
Xenotime	40	0.5	-	-	-	-	-	-	-	-
Zirconium ore	81,932	958.0	40,659	521.1	38,529	586.0	43,565	906.3	6,416	324.4
Total		3,060.1		2,788.8		2,868.1		4,466.4		2,764.5
%		4.94		4.82		4.34		6.13		4.45
<u>Cement Industrial Minerals</u>										
Anhydrite	-	-	0*	0.0*	-	-	0*	0.0*	0*	0.1
Gypsum	258	5.5	227	3.8	214	4.4	267	5.4	340	6.6
Limestone	2,844	7.6	76,654	27.5	374,399	93.7	4,054	10.9	1,527	14.2
Total		13.1		31.3		98.1		16.3		20.8
%		0.02		0.05		0.15		0.02		0.03
<u>Ceramic Industrial Minerals</u>										
Andalusite, Kyannite and Sillimar	2,926	32.6	5,849	64.5	4,324	46.5	3,196	38.6	4,402	48.9
Attapulgit	186	7.3	152	6.4	163	5.5	86	2.9	32	0.5
Ball Clay	8,246	43.0	16,815	98.3	25,594	156.9	24,895	149.5	27,961	175.0
Dolomite	1,495	21.6	785	7.9	1,078	25.6	1,549	30.5	1,349	18.4
Feldspar										
- Potassium	34,389	116.2	27,416	97.9	-	-	-	-	-	-
- Sodium	1,645	7.0	2,051	8.7	-	-	-	-	-	-
- Other Feldspar	14,403	84.0	7,658	57.1	-	-	-	-	-	-

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Ceramic Industrial Minerals (cont.)</u>										
Kaolin										
- Ceramic	73,587	181.5	23,810	193.3	20,539	174.4	23,250	181.0	28,916	176.0
- Paper	3,600	39.5	4,371	49.8	4,781	51.8	4,875	49.6	5,818	58.2
- Others	65,872	675.7	73,499	729.1	68,343	658.5	92,688	777.4	79,004	669.9
Lucite, Nepheline and Nepheline S	414	5.9	409	12.4	556	16.5	740	24.6	537	14.5
Mullite	1,961	30.1	1,959	34.0	2,548	44.6	2,623	50.8	2,040	34.0
Quartz	9,978	95.2	15,578	137.4	37,216	229.2	16,867	143.3	18,576	130.2
Silica sand	144,273	250.3	143,315	277.3	190,852	380.1	156,550	477.9	150,830	446.1
Total		1,589.9		1,774.1		1,789.6		1,926.2		1,771.7
%		2.57		3.06		2.70		2.65		2.85
<u>Dimension Stone</u>										
Ecaussine	-	-	-	-	0*	0.0*	3	3.5	-	-
Granite	112,695	492.4	114,134	465.4	98,569	373.4	82,568	351.3	133,251	366.4
Marble	55,610	565.7	60,462	588.8	59,121	720.1	54,231	669.2	45,128	598.7
Sandstone	6,847	12.1	14,182	11.2	14,871	16.1	8,023	17.9	8,097	12.5
Serpentine	-	-	-	-	-	-	-	-	27	0.0*
Slate	94	1.3	188	2.2	51	0.5	116	1.7	132	1.5
Travertine	-	-	0*	0.0*	-	-	-	-	-	-
Total		1,071.5		1,067.6		1,110.1		1,043.6		979.2
%		1.73		1.84		1.68		1.43		1.57

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes

Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
<u>Industrial Rock</u>										
Basalt	25,122	199.5	40,860	298.3	90,726	235.0	201,574	177.7	131,889	131.9
Flint	31,214	13.3	19,705	14.1	303,909	90.3	414,793	111.7	484,595	115.5
Pumice stone	5,005	49.7	4,727	53.2	4,829	48.0	6,332	55.9	5,699	48.7
Vermiculite, Perlite and Chlorites	4,831	43.9	5,239	55.0	4,827	45.5	4,286	41.3	3,736	37.1
Total		306.4		420.6		418.8		386.6		333.2
%		0.49		0.73		0.63		0.53		0.54
<u>Other Industrial Minerals</u>										
Apatite (ground)	448	2.7	1,110	4.4	2,066	7.6	1,695	7.3	875	3.9
Asbestos	36,513	659.2	33,898	527.3	41,060	616.2	40,453	574.6	40,171	512.2
Barite	98,358	183.6	86,651	163.0	81,133	177.1	90,092	197.0	161,560	274.1
Bentonite	104,547	717.4	107,644	758.0	120,287	776.6	127,807	776.4	137,667	763.2
Calcite	-	-	30	0.1	216	0.5	304	0.6	1	0.0*
Chalk	96	5.4	76	1.3	41	1.1	58	1.1	45	0.8
Epsomite	-	-	-	-	-	-	49	0.4	58	0.5
Fireclay	484	8.2	1,756	19.1	1,975	18.2	1,709	16.5	1,248	12.8
Fluorite	498	8.7	1,517	10.3	2,962	22.3	1,994	16.2	11,658	45.5
Graphite	4,435	113.9	5,359	132.9	6,767	141.5	4,571	127.1	6,626	147.2
Kieserite	10,496	63.0	5,853	30.4	8,425	35.0	4,451	25.2	3,082	17.9
Magnesite	3,456	42.5	3,232	37.5	4,303	42.0	3,396	36.7	2,346	31.1
Mica	5,501	167.2	5,979	176.2	5,828	180.0	6,162	164.8	5,835	150.7
Orpiment	166.0	1.2	14.4	0.7	15.0	0.7	706	4.0	1,136	7.2

Mineral Import of Thailand 2015 - 2019

Quantity : Tonnes
Value : Million Baht

Mineral	2015		2016		2017		2018		2019	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Other Industrial Minerals (cont.)										
Phosphate										
- Ground	0.1	0.0*	0*	0.0*	0*	0.0*	0*	0.0*	-	-
- Unground	0*	0.0*	250	1.2	1	0.2	1	0.5	1	0.5
Potash	-	-	-	-	-	-	-	-	-	0.0*
Pyrophyllite	0.1	0.0*	-	-	-	-	140.0	0.9	20.0	0.1
Rock salt	-	-	-	-	-	-	-	-	963.0	7.0
Steatite	491	12.2	495	14.8	1,501	22.3	1,269	19.5	855	12.7
Sulphur	122,771	759.3	96,241	405.3	56,255	274.4	51,049	330.5	70,509	338.1
Talc	134,349	1,625.0	137,350	1,646.5	140,289	1,634.2	141,898	1,643.5	145,985	1,627.7
Witherite	193	2.7	253	3.8	125	2.1	75	1.3	125	2.1
Total		4,372.2		3,932.8		3,952.0		3,944.1		3,955.7
%		7.05		6.80		6.00		5.42		6.36
Grand Total		61,977.6		57,874.3		66,110.0		72,819.8		62,189.9

:- 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 2015-2019

unit: Thousand Baht

Mineral	2015	2016	2017	2018	2019
Andesite (Industrial rock)	6,864.31	11,329.83	10,984.60	13,141.55	56,235.23
Anhydrite	26,341.59	36,694.07	35,320.16	41,973.14	11,707.34
Antimony	-	4.62	-	-	-
Ball clay	6,631.75	22,556.50	3,915.36	8,270.38	8,606.01
Barite					
- Chemical grade (ground)	479.07	473.23	413.99	725.59	1,058.15
- Drilling mud (ground)	10,326.50	12,988.19	7,753.64	5,660.69	2,947.42
- Unground	4,971.62	6,462.05	3,894.90	3,147.50	154.47
Basalt (Industrial rock)	72,376.31	111,903.52	107,278.62	108,960.63	99,568.75
Bentonite	260.40	-	-	-	-
Calcite	23,180.86	46,154.47	47,516.31	46,329.00	44,968.78
Cement clay	18,613.16	21,009.58	17,631.17	22,216.41	34,609.45
Ceramic clay	8,686.48	7,863.02	7,614.24	7,474.90	11,323.03
Copper Metal	-	-	-	-	-
Diatomite	-	-	-	-	93.24
Dolomite	55,665.70	65,082.80	68,208.39	92,772.92	99,881.80
Dolomitic Marl	6.37	5.73	14.70	128.83	172.39
Feldspar					0.00
- Potassium (ground)	133.44	110.88	50.88	38.54	0.00
- Potassium (unground)	967.37	21.15	-	-	-
- Sodium (ground)	6,857.79	8,142.04	7,356.54	5,298.94	1,283.81
- Sodium (unground)	32,808.32	20,935.57	34,775.97	36,442.42	51,371.58
Final Slag	-	61.04	58.36	-	-
Fluorite	16,346.67	19,421.87	8,396.30	13,517.19	17,213.32
Garnet	-	-	-	-	88.20
Glass sand	30,455.43	46,758.85	65,396.63	55,784.18	54,895.62
Gneiss (Dimension stone)	17.60	5.92	19.20	126.40	78.80

Mineral Royalty of Thailand 2015-2019

unit: Thousand Baht

Mineral	2015	2016	2017	2018	2019
Gold Metal	333,447.48	519,865.28	-	-	-
Granite					0.00
- Dimension stone	1,083.11	1,605.07	1,062.20	1,380.47	2,235.95
- Industrial rock-construction	49,055.74	74,615.55	76,453.35	103,165.54	111,883.96
- Industrial rock-ceramic	-	448.00	-	320.00	-
Graywacke	916.44	7,891.04	12,146.72	9,539.60	11,416.95
Gypsum	297,944.55	274,757.14	246,463.94	253,447.10	308,731.11
Ilmenite	-	-	955.00	555.05	-
Iron Ore	789.81	327.60	2,169.30	2,286.48	25,453.75
Kaolin					
- Filler	1,055.49	2,091.85	2,097.60	1,425.23	1,311.51
- Unwashed	8,130.59	11,976.61	4,695.77	5,380.49	8,093.26
- Washed	5,427.58	4,944.95	4,430.05	4,177.75	4,344.13
Lead	-	-	74.22	5,621.31	0.00
Lignite	588,546.59	647,780.02	623,642.07	553,646.94	536,594.50
Limestone					
- Dimension stone	-	-	3.44	212.54	252.79
- Industrial rock-construction	462,674.06	761,127.29	759,963.57	783,810.18	760,944.89
- Industrial rock-cement	662,104.02	1,240,760.86	1,280,736.45	1,235,989.97	1,250,658.31
- Industrial rock-others	40,472.13	65,755.48	69,499.65	93,388.89	90,774.29
Manganese (Metallurgical grade)	78.77	867.18	390.68	614.70	2,898.74
Marble					
- Dimension stone	2,173.48	1,720.28	4,062.51	1,991.98	2,323.82
- Fragment	10,939.57	18,598.38	14,444.54	19,205.55	31,419.38
Marl	288.66	142.80	322.32	202.30	171.36
Monazite	-	359.17	138.43	112.44	516.32
Other Stone	5,519.56	4,817.48	4,964.44	5,823.50	6,452.70

Mineral Royalty of Thailand 2015-2019

unit: Thousand Baht

Mineral	2015	2016	2017	2018	2019
Perlite (Industrial rock)	419.70	986.40	2,988.00	330.00	312.00
Phosphate	4.49	9.65	137.45	4.83	0.00
Potash	-	-	1.23	-	-
Pyrophyllite					
- Industrial grade	1,091.71	1,800.48	1,682.40	816.72	794.02
- Hand carved grade	-	-	-	-	5.19
Quartz	2,221.05	830.76	1,413.45	1,464.19	1,140.84
Quartzite	48.29	163.39	1,392.77	-	-
Rock salt	85,000.60	104,910.00	116,050.39	117,956.20	121,030.34
Rutile	-	-	70.67	215.46	-
Sand Stone					
- Dimension stone	191.45	112.22	265.17	343.47	47.61
- Industrial rock	3,127.68	7,393.38	2,253.35	5,993.86	6,692.27
Serpentine (Industrial rock)	-	-	-	-	-
Scheelite	994.40	1,331.81	2,400.03	3,520.44	995.72
Shale (Industrial rock-cement)	65,474.54	156,182.64	111,038.62	99,621.74	98,949.62
Silver Metal	36,533.86	71,630.57	-	-	-
Struverite	-	987.90	1,294.94	984.15	776.60
Talc	165.89	171.02	167.04	185.47	193.54
Tin	3,162.83	5,330.61	34,138.93	11,320.77	11,965.33
Travertine (Dimension)	208.83	304.68	356.73	385.38	674.64
Wolfram	60.98	791.40	-	960.99	720.75
Xenotime	-	-	-	-	-
Zinc Metal	48,694.39	70,710.64	25,990.89	-	-
Zircon	-	265.67	100.13	226.72	198.38
Total	3,040,038.99	4,502,350.18	3,837,058.39	3,788,637.63	3,897,231.97

Total Values of Mineral of Thailand 2015-2019

Million Baht

	2015	2016	2017	2018	2019
PRODUCTION	63,630.3	87,746.4	77,206.6	77,081.6	74,083.7
CONSUMPTION	54,532.6	78,051.4	76,967.8	70,877.0	71,289.9
IMPORT	61,977.6	57,874.3	66,110.0	72,819.8	62,189.9
EXPORT	17,436.0	20,140.0	12,878.0	12,895.0	13,249.7

