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Items	Reserves	Remaining Resources	Total
A) <b>Total Resources 1-4-2015</b>	6502	63702	70204
(Th. tonnes)			
<b>Life Index (Years)</b>	:		796
B) <b>Mining Leases as on 31-3-2016</b>	:	<b>No. of Leases</b>	<b>Lease Area</b>
(Area in Hectares)		7	3027.06

C) **Mines Reporting Production** :

	No. of Mines		Production (tonnes)	
	2015-16	2016-17(p)	2015-16	2016-17(p)
<b>INDIA</b>	<b>4(4)</b>	<b>4(4)</b>	<b>69942</b>	<b>68137</b>
<b>Public Sector</b>	4	4	18514	24942
<b>Private Sector</b>	(4)	(4)	51428	43195
<b>Non-Captive</b>	4(4)	4(4)	69942	68137
<b>'A' Category</b>	3(1)	3(1)	60451	61445
<b>'B' Category</b>	1(3)	1(3)	9491	6692
<b>STATES</b>				
Andhra Pradesh	(1)	(1)	42409	37109
Kerala	2	2	5121	9260
Maharashtra	1(3)	1(3)	9019	6196
Odisha	1	1	13393	15572

D) **Production Trend** :

	2012-13	2013-14	2014-15	2015-16	2016-17(p)
<b>Quantity (tonnes)</b>	43736	67265	66273	69942	68137
<b>Value (Rs. '000)</b>	352062	408247	456050	509314	534098

E) <b>Closing Stock</b>	:	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17(p)</b>
Quantity (tonnes)		16939	15103	21239	24430	28531

F) **Employment** :

<b>No. of Persons Employed per Day</b>	1759	1723
<b>Percentage Share of Employment to Total for MCDR Minerals</b>	1.52	1.59

( ) : Figures in parentheses indicate associated mines with garnet and kyanite.

<b>G) Domestic Consumption Trend:</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
Quantity (tonnes)	19600	20900	28200	38100	24200

**H) Exports/Imports Trend:**

<b>Exports</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
<b>Quantity (tonnes)</b>	11151	28152	17304	15078	14064
<b>Value (Rs. crore)</b>	13.33	14.88	14.13	11.08	11.47
<b>Percentage Share to the Value of Exports of All Minerals</b>	0.01	0.01	0.01	0.01	0.01
<b>Imports</b>					
<b>Quantity (tonnes)</b>	74	110	116	214	24
<b>Value (Rs. crore)</b>	0.74	1.43	1.08	0.90	0.3
<b>Percentage Share to the Value of Imports of All Minerals</b>	++	++	++	++	++

**I) Exports/Imports by Country in 2016-17:**

<b>Exports</b>	<b>China P Rp</b>	<b>Nepal</b>	<b>Japan</b>	<b>Belgium</b>	<b>Germany</b>	<b>Others</b>
<b>Quantity (tonnes)</b>	6507	6384	480	234	125	334
<b>Value (Rs. crore)</b>	6.94	2.54	0.93	0.29	0.18	0.59
<b>Imports</b>	<b>Japan</b>			<b>USA</b>		
<b>Quantity (tonnes)</b>	22			2		
<b>Value (Rs. crore)</b>	0.21			0.09		

**J) Five Principal Sillimanite Mines in 2016-17 :**

<b>Name of Mine</b>	<b>Location of Mine</b>	<b>Address of Mine Owner</b>
Vatsavalasa#	Vill. Vatsavalasa & Tonangi Distt. Srikakulam Andhra Pradesh	Trimex Sands (P) Limited, Trimex Tower, No 1 Subbaraya Avenue, C P Ramaswamy Road, Alwarpet, Chennai – 600 018, Tamil Nadu.
OSCOM	Vill. Matikhala Distt. Ganjam Odisha	Indian Rare Earths Ltd., Plot No. 1207, V.S. Marg, Prabhadevi, Mumbai – 400 028, Maharashtra.
Chavara	Vill. Chavara Distt. Kollam Kerala	Indian Rare Earths Ltd., Plot No. 1207, V.S. Marg, Prabhadevi, Mumbai – 400 028, Maharashtra.
Pavri Kyanite Mine (Jamadi)*	Vill. Jamadi (Girola) Distt. Bhandara Maharashtra	Pavri Kyanite Mines, A-1 Indra Sagar, Ravindranath Tagore Marg, Civil Lines, Nagpur – 440 001, Maharashtra.
Chavara & Panama	Vill. Chavara & Panama Distt. Kollam Kerala.	Kerala Minerals & Metals Ltd., Sankaramangalam, Chavara, Karunagappally, Kollam – 691 583, Kerala.

**K) Contribution of above Mines in 2016-17 :**

<b>Quantity (tonnes)</b>	67637
<b>Percentage Share to All-India Production</b>	99

\* Associated with kyanite. # Associated with Garnet.



## SILVER\*

Items	Reserves	Remaining Resources	Total
<b>A) Total Resources 1-4-2015</b> :			
(Th. Tonnes) Ore	150444	361511	511955
Metal	7	23	30
 <b>Life Index (Years)</b> :			 31

<b>B) Mining Leases as on 31-3-2016</b> :	<b>No. of Leases</b>	<b>Lease Area</b>
(Area in Hectares)	N.A.	N.A.

**C) Production of Silver :**

	Production (kg)	
	2015-16	2016-17(p)
<b>INDIA</b>	<b>426443</b>	<b>460811</b>
<b>Public Sector</b>	122	169
<b>Private Sector</b>	426321	460642
<b>STATES</b>		
Karnataka	122	169
Rajasthan	426321	460642

**D) Production Trend :**

	2012-13	2013-14	2014-15	2015-16	2016-17(p)
<b>Quantity (kg)</b>	374046	349774	327647	426443	460811
<b>Value (Rs. '000)</b>	21234214	15778713	11947028	15212374	18320759

<b>E) Closing Stock</b> :	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17(p)</b>
Quantity (kg)	-	-	-	-	-

<b>F) Employment</b> :		
<b>No. of Persons Employed per Day</b>	-	-
<b>Percentage Share of Employment to Total for MCDR Minerals</b>	-	-

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\* Produced as a by-product.

<b>G) Domestic Consumption Trend:</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
Quantity (Tonnes)	N.A.	N.A.	N.A.	N.A.	N.A.

**H) Exports/Imports Trend:**

<b>Exports</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
<b>Quantity (Tonnes)</b>	38	31	5	24	28
<b>Value (Rs. crore)</b>	192.82	112.79	34.63	48.15	75.65
<b>Percentage Share to the Value of Exports of All Metals</b>	0.14	0.07	0.02	0.03	0.04
<b>Imports</b>					
<b>Quantity (Tonnes)</b>	2021	6512	7708	7428	3359
<b>Value (Rs. crore)</b>	10797.37	26973.65	27686.37	24435.80	12329.33
<b>Percentage Share to the Value of Imports of All Metals</b>	2.43	8.39	6.90	6.26	3.65

**I) Exports/Imports By Country In 2016-17 :**

<b>Exports</b>	<b>USA</b>	<b>UAE</b>	<b>Mexico</b>	<b>Canada</b>	<b>Philippines</b>	<b>Others</b>
<b>Quantity (Tonnes)</b>	16	4	1	1	1	5
<b>Value (Rs. crore)</b>	33.09	20.84	3.23	2.78	1.67	14.04
<b>Imports</b>	<b>Hong Kong</b>	<b>China P Rp</b>	<b>Korea Rp</b>	<b>Russia</b>	<b>UK</b>	<b>Others</b>
<b>Quantity (Tonnes)</b>	836	793	366	321	216	827
<b>Value (Rs. crore)</b>	3208.23	2956.54	1288.58	1157.58	751.9	2966.5

**J) Producers of Silver in 2016-17 :**

<b>Name of Smelter / Mine</b>	<b>Location of Smelter / Mine</b>	<b>Address of Producer / Mine Owner</b>
Chanderiya Lead & Zinc Smelter	Distt. Chittorgarh Rajasthan	Hindustan Zinc Ltd, Yashad Bhawan, Udaipur – 313 004, Rajasthan.
Hutti Gold Mines Co. Ltd.	Distt. Raichur Karnataka	The Hutti Gold Mines Co. Ltd, Hutti, Distt. Raichur – 584 115. Karnataka.

**K) Contribution of above Producers in 2016-17 :**

<b>Quantity (kg)</b>	460811
<b>Percentage Share to All-India Production</b>	100

## SULPHUR\*

Items	Reserves	Remaining Resources	Total
A) Recoverable Reserves 1-4-2015 (Th. Tonnes) Sulphur (Native)	-	210	210

Life Index (Years) : N. E.

B) Mining Leases as on 31-3-2016 (Area in Hectares)	No. of Leases N.A.	Lease Area N.A.
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C) Production of Sulphur :

	No. of Units <sup>§</sup>		Production (Tonnes)	
	2015-16	2016-17(p)	2015-16	2016-17(p)
<b>INDIA</b>	<b>10</b>	<b>11</b>	<b>441153</b>	<b>527539</b>
<b>Public Sector</b>	10	11	441153	527539
<b>STATES</b>				
Assam	4	4	4312	6559
Bihar	1	1	5561	8159
Gujarat	1	1	101743	100952
Haryana	1	1	178688	190946
Maharashtra	1	1	56670	48991
Orissa	-	1	-	86734
Uttar Pradesh	1	1	47836	46618
West Bengal	1	1	46343	38580

D) Production Trend :

	2012-13	2013-14	2014-15	2015-16	2016-17(p)
<b>Quantity (Tonnes)</b>	449004	390325	429258	441153	527539

E) Closing Stock	:	2012-13	2013-14	2014-15	2015-16	2016-17(p)
Quantity (Tonnes)		NA	NA	NA	NA	NA

F) Employment :

No. of Persons Employed per Day	-	-
Percentage Share of Employment to Total for MCDR Minerals	-	-

\* Sulphur is recovered as by-product from fertilizer plants and oil refineries. (Excluding units working under Pvt. Sector)  
 § No. of units reporting production of sulphur as by-product

<b>G) Domestic Consumption Trend:</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
Quantity (Th. Tonnes)	1961	1997	2027	1206	N.A.

**H) Exports/Imports Trend:**

<b>Exports</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
<b>Quantity (Tonnes)</b>	369960	577695	397399	628164	616472
<b>Value (Rs. crore)</b>	336.78	394.99	371.41	515.71	346.94
<b>Percentage Share to the Value of Exports of All Minerals</b>	0.21	0.20	0.21	0.30	0.17
<b>Imports</b>					
<b>Quantity (Th. Tonnes)</b>	1547	1290	1626	1433	1345
<b>Value (Rs. crore)</b>	1735.90	1100.29	1744.54	1417.26	875.14
<b>Percentage Share to the Value of Imports of All Minerals</b>	0.16	0.09	0.16	0.19	0.11

**I) Exports/Imports by Country in 2016-17:**

<b>Exports</b>	<b>China P Rp</b>	<b>Indonesia</b>	<b>S. Africa</b>	<b>Oman</b>	<b>Brazil</b>	<b>Others</b>
<b>Quantity (Tonnes)</b>	521873	60500	27039	2105	2019	2936
<b>Value (Rs. crore)</b>	288.57	34.01	14.03	2.13	2.24	5.96
<b>Imports</b>	<b>S. Arab</b>	<b>Qatar</b>	<b>UAE</b>	<b>Japan</b>	<b>Baharain Is</b>	<b>Others</b>
<b>Quantity (Th. Tonnes)</b>	548	313	244	70	57	113
<b>Value (Rs. crore)</b>	359.75	197.42	153.5	48.33	36.5	79.64

**J) Sulphur Producing Units in 2016-17 : (As By-Product)**

<b>Location of Unit</b>	<b>Address of Owner</b>
Panipat, Distt: Panipat, Haryana	Indian Oil Corpn. Ltd, (Refineries Division) Scope Complex, Core-II, 7, Institutional Area, Lodhi Road, New Delhi – 110 003.
Gujarat, Distt. Baroda, Gujarat	
Mathura , Distt. Mathura, Uttar Pradesh	
Haldia, Distt: Midnapur, West Bengal	
Barauni, Distt: Begusarai, Bihar	
Guwahati, Distt. Guwahati, Assam	
Digboi, Distt: Digboi, Assam	
Bongaigaon, Distt. Chirang, Assam	
Numaligarh Refinery Limited, Distt: Golaghat Assam	Numaligarh Refinery Limited, 122A , G.S. Road Christianbasti, Guwahati – 781 005.
Mahul, Distt. Mumbai Maharashtra	Bharat Petroleum Corp. Ltd., Bharat Bhawan, 4 & 6, Currimbhoy Road, Ballard Estate, Mumbai – 400 001, Maharashtra

**K) Contribution of above Units in 2016-17 :**

<b>Quantity (Tonnes)</b>	527539
<b>Percentage Share to All-India Production</b>	100

## TIN CONCENTRATES

Items	Reserves	Remaining Resources	Total
<b>A) Total Resources 1-4-2015</b> :			
(Tonnes) Ore	4419	83720749	83725168
Metal	154	102259	102413

**Life Index (Years)** : Very Large

<b>B) Mining Leases as on 31-3-2016</b> :	<b>No. of Leases</b>	<b>Lease Area</b>
(Area in Hectares)	14	300.17

**C) Mines Reporting Production** :

	No. of Mines		Production (kg)	
	2015-16	2016-17(p)	2015-16	2016-17(p)
<b>INDIA</b>	<b>6</b>	<b>6</b>	<b>13541</b>	<b>12120</b>
<b>Public Sector</b>	1	1	9268	10006
<b>Private Sector</b>	5	5	4273	2114
<b>Captive</b>	5	5	4273	2114
<b>Non-captive</b>	1	1	9268	10006
<b>'B' Category</b>	6	6	13541	12120
<b>STATE</b>				
Chhattisgarh	6	6	13541	12120

**D) Production Trend** :

	2012-13	2013-14	2014-15	2015-16	2016-17(p)
<b>Quantity (kg)</b>	47774	34862	24685	13541	12120
<b>Value (Rs. '000)</b>	24962	22791	18528	9231	7443

<b>E) Closing Stock</b> :	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17(p)</b>
Quantity (Kg)	46503	24718	8093	3683	59050

**F) Employment** :

<b>No. of Persons Employed per Day</b>	32	19
<b>Percentage Share of Employment to Total for MCDR Minerals</b>	0.03	0.02

<b>G) Domestic Consumption Trend:</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
Quantity (Tonnes)	N.A.	N.A.	N.A.	N.A.	N.A.

**H) Exports/Imports Trend:**

<b>Exports (Tin ores &amp; concs.)</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
<b>Quantity (Tonnes)</b>	-	8	-	-	-
<b>Value (Rs. crore)</b>	-	0.11	-	-	-
<b>Percentage Share to the Value of Exports of All Minerals</b>	-	++	-	-	-
<b>Imports (Tin ores &amp; concs.)</b>					
<b>Quantity (Tonnes)</b>	21	1	-	82	68
<b>Value (Rs. crore)</b>	1.41	0.04	-	5.80	3.73
<b>Percentage Share to the Value of Imports of All Minerals</b>	++	++	-	++	++

**I) Exports / Imports by Country in 2016-17 :**

<b>Exports</b>				
<b>Quantity (Tonnes)</b>	-			
<b>Value (Rs. crore)</b>	-			
<b>Imports</b>	<b>Lao Pd Rd</b>	<b>Thailand</b>	<b>Kenya</b>	<b>Guinea</b>
<b>Quantity (Tonnes)</b>	22	22	20	4
<b>Value (Rs. crore)</b>	1.12	1.22	1.11	0.28

**J) Five Principal Tin Concentrate Mine in 2016-17 :**

<b>Name of Mine</b>	<b>Location of Mine</b>	<b>Address of Mine Owner</b>
Bastar	Vill. Bastar Distt. Bastar Chhattisgarh	Chhattisgarh State Mineral Dev. Corpn. Ltd, Sona Khan Bhawan, Ring Road No.1, Raipur – 492 006, Chhattisgarh.
Bade Bacheli (17.087 Ha)	Vill. Bade Bacheli Distt. Dantewada Chhattisgarh	Precious Minerals & Smelting Ltd, Semi Urban Industrial Estate, Frezerpur, Jagdapur – 494 001, Chhattisgarh.
Bade Bacheli (36.067 Ha)	Vill. Bade Bacheli Distt. Dantewada Chhattisgarh	
Bade Bacheli (7.739 Ha)	Vill. Bade Bacheli Distt. Dantewada Chhattisgarh	
Bade Bacheli (5.314 Ha)	Vill. Bade Bacheli Distt. Dantewada Chhattisgarh	

**K) Contribution of above Mine in 2016-17 :**

<b>Quantity (Kg)</b>	12090
<b>Percentage Share to All-India Production</b>	99.75













<b>G) Domestic Consumption Trend:</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
Quantity (Tonnes)	140300	183300	196700	164200	153000

**H) Exports/Imports Trend:**

<b>Exports</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16(r)</b>	<b>2016-17(p)</b>
<b>Quantity (Tonnes)</b>	18765	19033	17864	16616	16700
<b>Value (Rs. crore)</b>	28.15	31.02	28.81	27.93	29.35
<b>Percentage Share to the Value of Exports of All Minerals</b>	0.02	0.02	0.02	0.02	0.01
<b>Imports</b>					
<b>Quantity (Tonnes)</b>	1288	1305	1948	2818	3483
<b>Value (Rs. crore)</b>	2.42	3.05	3.25	5.32	7.31
<b>Percentage Share to the Value of Imports of All Minerals</b>	++	++	++	++	++

**I) Exports/Imports by Country in 2016-17 :**

<b>Exports</b>	<b>Belgium</b>	<b>Japan</b>	<b>Germany</b>	<b>Turkey</b>	<b>France</b>	<b>Others</b>
<b>Quantity (Tonnes)</b>	8823	4203	1987	506	336	845
<b>Value (Rs. crore)</b>	16.32	6.52	3.69	0.56	0.75	1.51
<b>Imports</b>	<b>China P Rp</b>	<b>Spain</b>	<b>USA</b>	<b>Mexico</b>	<b>Germany</b>	<b>Others</b>
<b>Quantity (Tonnes)</b>	2169	1032	195	65	16	6
<b>Value (Rs. crore)</b>	3.15	2.28	1.29	0.28	0.21	0.1

**J) Wollastonite Mines in 2016-17 :**

<b>Name Of Mine</b>	<b>Location Of Mine</b>	<b>Address Of Mine Owner</b>
Kheratarla	Vill. Khera Distt. Udaipur Rajasthan	Wolkem Industries Ltd, P.B. 21, E-101, Mewar Industrial Area, Madri, Udaipur – 313003, Rajasthan.
Belkapahar	Vill. Khila Distt. Sirohi Rajasthan	Wolkem Industries Ltd, P.B. 21, E-101, Mewar Industrial Area, Madri, Udaipur – 313003, Rajasthan.
Kotra (22/01)	Vill. Kotra Distt. Ajmer Rajasthan	Renu Atre, C-378, Pardhan Marg, Malviya Nagar, Jaipur – 302017, Rajasthan.
Ramawas	Vill. Ramavas Distt. Ajmer Rajasthan	Renu Atre, C-378, Pardhan Marg, Malviya Nagar, Jaipur – 302017, Rajasthan.

**K) Contribution of above Mines in 2016-17 :**

<b>Quantity (Tonnes)</b>	166186
<b>Percentage Share to All-India Production :</b>	100