

# Indian Minerals Yearbook 2022

(Part-II: Metals & Alloys)

## 61<sup>th</sup> Edition

### **SILVER**

(ADVANCE RELEASE)

#### GOVERNMENT OF INDIA MINISTRY OF MINES INDIAN BUREAU OF MINES

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## 15 Silver

Cilver is soft and lustrous metal that is grouped in the category of noble metals. Its brilliant white colour, malleability and resistance to atmospheric oxidation have enhanced its value as a highly desired precious metal which is used in many industrial applications. Apart from its monetary and decorative uses, silver is known to have the highest electrical conductivity amongst all metals that enhances its potential in modern age applications, viz, for printed electric circuits, coating for electronic conductors and in alloys of gold & copper for electrical contacts. Its chloride and iodide are light-sensitive and hence used in photographic material. Silver is typically used (in paste form) on solar cells. It means the photovoltaics (PV) market has become one of the most important areas of silver demand. These two major uses have contributed to the increase in supply of scrap of silver contained products. Silver, which is the least expensive of the precious metals, is the whitest element and has the highest electrical and thermal conductivity among all the metals.

In India, there are no native silver deposits except the small and unique Bharak deposit in Rajasthan. It occurs generally with lead, zinc, copper (especially their sulphide ore) and gold ores and is extracted as a by-product from electrolysis or chemical methods. It was usually extracted by melting silver-bearing lead ore (ore containing argentiferous galena).

Silver is recovered as a co-product as well as a by-product in the country. Silver was recovered in the past as a co-product in gold refining at KGF Complex and Hutti Gold Mines in Karnataka and as a by-product in smelting and refining of lead, zinc and copper concentrates at Chanderiya and Debari smelters in Rajasthan, Tundoo and Moubandar (Ghatsila) smelters in Jharkhand and at Visakhapatnam smelter in Andhra Pradesh. The present production of silver comes from

Chanderiya lead-zinc smelter of HZL and from gold refinery of HGML.

In addition, Hindalco extracts silver as a byproduct during smelting of imported copper concentrates at Dahej in Gujarat.

#### RESERVES/RESOURCES

As per the NMI database, based on UNFC system, the total reserves/resources of silver ore in the country as on 1.4.2020 has been estimated at about 568.64 million tonnes. Out of these, 170.44 million tonnes were placed under 'Reserves' category and 398.20 million tonnes under the 'Remaining Resources' category.

The total reserves/resources of silver in the country as on 1.4.2020 in terms of metal content was estimated at 30,267 tonnes, of which 7,707 tonnes are under 'Reserves' and 22,560 tonnes are under the 'Remaining Resources'. By States, Rajasthan accounted for about 86% reserves/resources in terms of ore while Karnataka with 5%, Jharkhand with 4% and Andhra Pradesh 3% Were among the States next in the order. Madhya Pradesh, Uttarakhand, Odisha, Meghalaya, Sikkim, Tamil Nadu and Maharashtra together shared 3% of the ore reserves/remaining resources (Table-1). As per reserves & resources summary of HZL 2021-22, grade of silver was 58 gram/tonne under Total Reserves category, 66 gram/tonne under Measured and Indicated Resources category and 60 gram/tonne under Inferred Resources categories.

#### **PRODUCTION**

Silver is recovered as a by-product from lead & zinc concentrates, copper slime and as a coproduct of gold refining. As per Annual Report of HZL 2021-22, silver refining capacity is 800 tonnes per annum. HZL is also currently operating a plant for processing and refining of zinc, lead and silver at SIDCUL, Pantnagar, Uttarakhand since 2011. This facility does not add to the overall smelting capacity.

Table -1: Reserves/Resources of Silver as on 1.4.2020 (P) (By Grades/States)

(In tonnes)

Proved   Probable	Ctod Condo		Re	Reserves					Remainii	Remaining Resources				T. +c+0
STD21   STD21   STD22   STD2	State, Glade	Proved	Pr	obable	Total	Feasibility	Pre-fe	asibility	Measured	Indicated	Inferred	Reconnaissance		Resources
Classical Health   Classical H		SIDIII	STD121	STD122	<del>(</del> ¥)	S1D211	STD221	STD222	S1D331	SID552	S1D333	SID334	(g)	$(A^+B)$
Colonial Colorial Colonial C	All India: Total													
Fradesh  14.84	Ore	61604192	67971000 4		170446020		18445543 5	53914460 4	1320000	70926000	211261729		98197732	568643752
Pradesh  1	Metal	2155.3	4981.73	570.04	7707.07	172.2	824.44	663.67	3881.88		12442.92	0	22560.84	30267.91
Pradesh         Pradesh         0	By State													
Principle   Prin	Andhra Pradesh													
Lind	Ore	0	0	0	0	0	0	00005691	0	0	0		16950000	16950000
Lange   Color   Colo	Metal	0	0	0	0	0	0	128.13	0	0	0	0	128.13	128.13
hka         0         0         0         0         0         0         0         23840000         0         23840000         0         23840000         0         23840000         0         23840000         0         23840000         0         23840000         0         0         5.22         0         5.23         0         5.23         0         0         5.22         0         5.23         0         0         0         0         0         0         0         0         5.23         0         2.23         0	Jharkhand													
Hay         1 A South Libration         1 A	Ore	0	0	0	0	0	0	0	0	0	23840000		23840000	23840000
Pradesh         0         69462         0         1490000         2254150         0         3313612         225           Pradesh         4.43         1         0         5.43         0         0.48         0         0.39         3.42         0         4.29           Pradesh           0         0         0         0         0         0         0         3216000         0         4.29           shtra         0         0         0         0         0         0         0         150.61         9.25         0         159.86           shtra         0         0         0         0         0         0         0         150.61         9.25         0         159.86           shtra         0         0         0         0         0         0         0         150.60         0         0         159.86           shtra         0	Metal	0	0	0	0	0	0	0	0	0	5.22	0	5.22	5.22
Pradesh         4.43         1         5.43         0         69462         0         1490000         2254150         0         3813612         25           Pradesh         0         5.43         0         0.48         0         0.48         0         4.29         0         4.29           Shtra         0         0         0         0         0         0         0         150.61         9.25         0         159.86           Shtra         0         0         0         0         0         0         0         150.61         9.25         0         159.86           Shtra         0         0         0         0         0         0         0         150.61         9.25         0         159.86           Shtra         0         0         0         0         0         0         0         159.86         0         159.86           Shtra         0 <t< td=""><td>Karnataka</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Karnataka													
Pradesh         1         0         5.43         0         0.48         0         0.39         3.42         0         4.29           Pradesh           0         0         0         0         0         0         0         3216000         3           shtra         0         0         0         0         0         0         150.61         9.25         0         159.86           shtra         0         0         0         0         0         0         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0	Ore	17480000	4640000	0	22120000	0	0	69462	0	1490000	2254150	0	3813612	25933612
Pradesh           0         0         0         0         0         0         0         150.60         1120000         0         159.86         3216000         3216000         3216000         3216000         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         159.86         0         0         159.86         0	Metal	4.43	1	0	5.43	0	0	0.48	0	0.39	3.42	0	4.29	9.72
shtra         0         0         0         0         0         0         0         2096000         1120000         0         3216000         331600         3316000         3316000         331600 </td <td>Madhya Pradesh</td> <td></td>	Madhya Pradesh													
shtra         6         0         0         0         0         150.61         9.25         0         159.86           shtra         10         0         0         0         0         0         150.61         9.25         0         159.86           aya         0         0         0         0         0         0         0         0.23         0         0.23         0         0.23           aya         0         0         0         0         0         0         0         0         0.23         0         0.23         0         0.23           aya         0	Ore	0	0	0	0	0	0	0	0	2096000	1120000	0	3216000	3216000
shtra         0         0         0         0         0         0         0         235000         0         235000           aya         0         0         0         0         0         0         0         0         0.23         0         0.23           aya         0 <td>Metal</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>150.61</td> <td>9.25</td> <td>0</td> <td>159.86</td> <td>159.86</td>	Metal	0	0	0	0	0	0	0	0	150.61	9.25	0	159.86	159.86
aya         0         0         0         0         0         0         0         255000         0         255000         0         255000         0         255000         0         255000         0	Maharashtra													
aya       0	Ore	0	0	0	0	0	0	0	0	0	235000	0	235000	235000
aya       0       0       0       0       0       880000       0       0       880000       880000       880000       880000       88         0       0       0       0       0       0       0       0       19.8       0       19.8       19.8       19.8       19.8       19.8       19.8       19.8       19.8       19.8       19.8       1749500	Metal	0	0	0	0	0	0	0	0	0	0.23	0	0.23	0.23
0 0 0 0 0 880000 88 0 0 0 0 0 0 0 19.8 0 19.8 0 0 0 19.8 174 0 0 0 0 960500 119000 0 670000 0 1749500 174 0 0 0 0 0 0 64.91 6	Meghalaya													
0 0 0 0 0 19.8	Ore	0	0	0	0	0	0	0	0	880000	0	0	880000	880000
0 0 0 0 0 960500 119000 0 0 670000 0 1749500 0 0 0 0 0 27.34 3.4 0 0 64.91	Metal	0	0	0	0	0	0	0	0	19.8	0	0	19.8	19.8
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Odisha													
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ore	0	0	0	0	0	002096	119000	0	0	000029	0	1749500	1749500
(contraction)	Metal	0	0	0	0	0	27.34	3.4	0	0	34.17	0	64.91	64.91
														(contd.)

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Table - 1 (concld)

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(A)	<del>-</del>
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$000\ 40870828\ 148326020\ 2330000\ 17049200\ 36712218\ 39420000\ 64730000\ 182142579$	44124192 63331000 40870828 148326020 23
.73 570.04 7701.64	
0 0 0	0 0 0
0 0 0	0 0 0
0 0 0	0 0 0
0 0 0	0 0 0
0 0 0	0 0 0
0 0 0	

Figures rounded off

#### **SILVER**

During the year 2021-22, the production of silver at 6,47,140 kg decreased by 8% as compared to the previous year. The production of silver from gold refining was 127 kg in 2021-22 as against 120 kg in 2020-21. One Private Sector and one Public Sector

undertaking reported production of silver during 2021-22 (Tables- 2 to 4).

In addition, Hindalco Industries Limited reported production of 66,497 kg and 40,582 kg silver from imported copper concentrates in 2021-22 and 2020-21 respectively.

Table - 2: Principal Producers of Silver, 2021-22

N 1 11 C4 1	Name of Bland	Location of	the plant
Name and address of the producer	Name of Plant	State	District
Hindustan Zinc Ltd,	Chanderiya	Rajasthan	Chittorgarh
Yashad Bhavan,			
Udaipur- 313 004,			
Rajasthan.			
The Hutti Gold Mines Co. Ltd,	Hutti	Karnataka	Raichur
Hutti, Distt-Raichur-584 115,			
Karnataka			

Table – 3: Production of Silver\*, 2019-20 to 2021-22 (By States)

(Quantity in kg; Value in ₹'000)

	2019	-20	2020	-21	2021-	22 (P)
State	Qty	Value	Qty	Value	Qty	Value
India	609340	25616104	705796	42664424	647140	42123586
Karnataka	187	8066	120	7244	127	8168
Rajasthan	609153	25608038	705676	42657180	647013	42115418

<sup>\*</sup> Excludes by-product recovery of silver by Hindalco Industries Ltd at Dahej, Gujarat from imported copper concentrates

Table – 4: Production of Silver\*, 2020-21 and 2021-22 (By Sectors/States/Districts)

(Qty in kg; Value in ₹'000)

C /D:	20	20-21	2021	-22 (P)
State/District	Qty	Value	Qty	Value
India	705796	42664424	647140	42123586
Public sector	120	7244	127	8168
Private sector	705676	42657180	647013	42115418
Karnataka/Raichur	120	7244	127	8168
Rajasthan/Chittorgarh	705676	42657180	647013	42115418

<sup>\*</sup> Silver as a by-product:

i) In Karnataka, it is recovered at Raichur while refining of gold at Hutti and Uti gold mines.

ii) In Rajasthan, it is recovered at Chanderiya, lead-zinc smelters of HZL.

iii) Excludes by-product recovery of 66,497 kg and 40,582 kg silver from imported copper concentrates in 2021-22 and 2020-21, respectively.

Country

Argentina

Australia

Bolivia

Chile

China

Mexico

Poland

Russia

USA

Peru

Kazakhstan

#### RECYCLING

Recycling, a significant factor in the supply of many of the metals used in our society, provides environmental benefits, such as, energy saving, reduced emission associated with energy saving etc. Photographic wastes, spent catalysts and electronic scrap are the major sources of materials for silver recycling. Other recyclable silver-bearing materials include dental alloys, jewellery and silverware. Cell phones have become one of the major sources for recycled silver recovery.

As per USGS Report entitled "Recycled Cell Phones—A Treasure Trove of Valuable Metals", references on data offered by the Falconbridge Ltd, indicate that one tonne of obsolete cellphones (exclusive of batteries) contains an average 3.14 kg of silver metal.

As per World Silver Survey 2022 report, Global silver recycling rose by almost 7% in 2021, to an eight year high of 173.0 moz (5,382 tonnes). Every key segment of scrap supply rose except photography, which suffered further structural losses. Industrial scrap benefited from growth in ethylene oxide (EO) change-outs and electrical supplies. It was also observed that, higher silver prices contributed to a rise in jewellery and silverware scrap supply especially from India.

#### WORLD REVIEW

The total reserves of silver in metal content is estimated at 5,50,000 tonnes. Peru (18%), Australia (17%), China (13%), Poland (12%), Russia (8%), Mexico (7%), Chile (5%), Bolivia & USA (4% each) are the major countries having silver reserves (Table-5).

Mexico, Peru, China, Poland, Russia, Australia, Chile, Bolivia and Kazakhstan are the main producers of silver. The total world mine production of silver in metal content was reported at 26,156 tonnes during the year 2021 which decreased by 1% as compared to 26,542 tonnes in the preceding year. Mexico was the leading producer with 23% share in the total production followed by China & Peru (13%), Poland (6%) and Chile, Australia, Bolivia & Russia (5% each). World mine production of silver is furnished in Table- 6.

Table - 5: World Reserves of Silver (By Principal Countries)

Reserves World: Total (rounded off) 550000 6500 1092000 22000 26000

(In tonnes of silver content)

71000

37000

98000

65000

45000

23000

NA

Other countries 64200 Source: USGS Mineral Commodity Summaries, 2023. 1:One tonne (1,000 kilograms)=32,150.7 troy ounces, a: For Australia, Joint Ore Reserves Committee-compliant

To provide a generalised view of the development in various countries the country-wise description sourced from the latest available publication of 'USGS' 2018 Minerals Yearbook, 'Silver [Advance Release]' is furnished below.

reserve were 27,000 tonnes.

#### **Argentina**

In 2018, silver production in Argentina increased by 3% to 1,024 tonnes from 2017 owing to increased production from Yamana Gold Inc.'s Cerro Moro Mine, which produced 128 tonnes of silver after beginning commercial production on June 26. SSR Mining Inc.'s Puna operations decreased by 39% to 117 tonnes of silver in 2018 from 192 tonnes produced in the previous year.

#### Australia

In 2018, silver production in Australia increased by 12% to 1,254 tonnes from 1,120 tonnes (revised) in 2017. South32 Ltd's Cannington silver mine produced 416 tonnes of silver in 2018, an 11% increase from 2017 production of 375 tonnes. MMG Australia Ltd's Rosebery Mine produced 91 tonnes, a 25% increase from 73 tonnes in 2017, and the Dugald River Mine began operations in 2018, producing 28 tonnes. BHP Group Ltd's Olympic Dam Mine produced 30 tonnes, a 43% increase from 21 tonnes in 2017.

Table – 6: World Mine Production of Silver (By Principal Countries)

(In Kilograms of metal content)

Country	2019	2020	2021
World:Total	28387186	26541528	26155877
Mexico	7485602	7424554	6097500
China	3443128	3405800	3511554
Peru	3860306	2723879	3309647
Poland	1455000	1423000	1522000
Chile	1309321	1575794	1383041
Australia	1325089	1337344	1329718
Bolivia	1152628	929909	1289456
Russia	1407000	1380000	1213000
Kazakhstan	1022068	1035181	1004789
USA	981000	1030000	1000000
Other countrie	s 4946044	4276067	4495172

Source: BGS World Mineral Production, 2017-21.

(a):- Smelter and/or refinery production.

c:- Years ended 31 March following that stated.

#### **Bolivia**

Silver production in Bolivia in 2018 was 1,191 tonnes, essentially unchanged compared with 1,196 tonnes (revised) in 2017. During 2018, the San Bartolomé Mine produced an estimated 136 tonnes of silver. In February 2018, Coeur and its subsidiaries completed the sale of Empress Minera Manquiri, S.A. (the operator of the San Bartolomé Mine) to Ag-Mining Investments, AB Production of silver at the San Vincente Mine was 110 tonnes in 2018, a slight decrease compared with 112 tonnes in 2017.

#### Canada

Most of the silver in Canada was produced as a co-product or by-product of other metals in 35 mines. Silver production in Canada was 353 tonnes in 2018, a 4% decrease from 366 tonnes (revised) in 2017. This decrease was attributed to a decrease in production at Teck's Trail operation, Vale S.A.'s Sudbury operations, Glencore plc's Kidd Creek Mine and Agnico Eagle Mines Ltd's LaRonde operations. Teck's Trail operation had an incident of fire in its silver refinery, reducing refined silver production by 311 tonnes (47%) from 2017. Vale's Sudbury operations produced less silver owing to reduced throughput. Glencore's Kidd Creek and Agnico

Eagle's LaRonde operations had lower ore grades in 2018

#### China

Silver production in China was 3,574 tonnes in 2018, a slight increase from that in 2017. About 90% of the silver produced in the country was produced as a by-product of copper, lead, and zinc mining, and about 9% was from primary silver mines. In 2017, increased attention to environmental protection by the Government led to decreased lead and zinc production, resulting in a decrease in silver production. In 2018, some mines met the new Government requirements and increased silver production.

#### Mexico

In 2018, Mexico was the leading producer of silver in the world with production of 6,049 tonnes, a slight decrease from the 6,109 tonnes in 2017. At Minera Fresnillo ple's Herradura Mine, higher grades of ores, improved recovery rates, and the ramp up of the San Julian operations increased silver production. Minera Frisco, S.A.B de C.V.'s production decreased by 240 tonnes (8%), owing to a decrease in throughput with the cessation of operations at the Porvenir and San Felipe open pit mines.

#### Peru

In 2018, Peru was the second-leading producer of silver in the world with a production of 4,160 tonnes, a 3% decrease from that in 2017. The leading silver producer was Compañía de Minas Buenaventura S.A.A. with production from the following mines-Uchucchacua (480 tonnes), Cerro Verde (142 tonnes), Tambomayo (122 tonnes), El Brocal (121 tonnes), Julcani (77 tonnes), Yancocha (33 tonnes), Tantahuatay (25 tonnes), Mallay (16 tonnes), Orcopampa (10 tonnes), and La Zanja (7 tonnes). Of the 1,030 tonnes of silver produced by Buenaventura mines, 836 tonnes was attributed to the company because of the partial ownership of El Brocal (61.43%), La Zanja (53.06%), Yanacocha (43.65%), Tantahuatay (40.10%), and Cerro Verde (19.58%). Silver production at Uchucchachua decreased by 10% to 480 tonnes in 2018 from 535 tonnes in 2017 because of reduced ore grades and two temporary shutdowns, one in August and one in December.

#### Russia

In 2018, Russia was estimated to have produced 2,040 t of silver compared with 2,030 tonnes (revised) in 2017. Silver production as a by product in gold mines in Russia increased by 392 tonnes (32%). However, this increase was offset by a 50-tonnes decrease in production at Polymetal International plc's Dukat and Lunnoune silver mines, which had lower ore grades in 2018.

#### FOREIGN TRADE

#### **Exports**

Exports of silver decreased manifold to 89 tonnes in 2021-22 as compared to 615 tonnes in the preceding year. Exports were mainly to UK (46%), USA (27%), Germany (8%). Exports of silver-clad base metals also decreased to 2,979 kg during 2021-22 from 6,026 kg in 2020-21. Exports of Semi-manufactured silver decreased manifold to 77 tonnes in 2021-22 as compared to 569 tonnes in the preceding year. Exports of silver-unwrought

were 10 tonnes during the year 2021-22. Similarly, exports of silver powder were two tonnes during the year 2021-22 (Tables-7 to 11).

#### **Imports**

Imports of silver increased drastically by 198% to 4,422 tonnes in 2021-22 as compared to 1,484 tonnes in the preceding year. Imports were mainly from the UK (39%), Hong Kong (35%), Russia (6%), China (4%) and Kazakhstan & Switzerland (3% each).

Imports of silver-clad base metals also increased to 4,862 kg in 2021-22 as against 500 kg in the previous year. Imports were mainly from China (82%) and Thailand (15%).

Imports of semi-manufactured silver were at 4,092 tonnes during the year 2021-22 as compared to 1,195 tonnes in the previous year. Besides, imports of silver unwrought were at 304 tonnes during the year 2021-22 as compared to 279 tonnes in the previous year. Imports were mainly from Singapore (20%) and UK (19%). In 2020-21, imports of silver powder increased to 26 tonnes in 2021-22 from 10 tonnes reported in the previous year (Tables-12 to 16).

Table - 7: Exports of Silver (By Countries)

	20	20-21 (R)	202	1-22 (P)
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	615	33934966	89	3633631
U K	479	29198348	41	2507513
USA	66	987913	24	392109
Germany	5	90279	7	156453
Italy	1	28768	4	121278
Taiwan	++	8533	1	62057
Puerto Rico	-	-	2	60282
Canada	34	1820793	3	59246
Turkey	1	49527	1	38948
Denmark	-	-	3	35311
Poland	++	25360	1	30910
Other countries	29	1725445	2	169524

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Table – 8 : Exports of Silver-clad Base Metals (By Countries)

	2020-	21 (R)	20	21-22 (P)
Country	Qty (kg)	Value (₹'000)	Qty (kg)	Value (₹'000)
All Countries	6026	23892	2979	14664
Sri Lanka	5269	18053	2785	11118
USA	5	103	162	3426
Australia	4	15	30	119
Germany	18	472	2	1
Saudi Arabia	730	5245	-	-
Mauritius	++	3	-	-
Singapore	++	1	-	-

Table – 9: Exports of Silver: Semi-manufactured (By Countries)

Country	2	2020-21 (R)	20	21-22 (P)
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	569	33851111	77	3512744
U K	479	29198154	41	2507513
USA	20	906204	13	325417
Germany	5	90279	7	156453
Italy	1	28768	4	121126
Taiwan	++	8533	1	62057
Canada	34	1820793	3	58334
Turkey	1	49527	1	38948
Denmark	-	-	3	35311
Poland	++	25360	1	30910
Sweden	2	32397	1	25163
Other countries	27	1691096	2	151512

Table – 10: Exports of Silver: Unwrought (By Countries)

	2020	-21 (R)	2021	-22 (P)
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	45	13671	10	4177
USA	45	13353	10	2680
Canada	-	-	++	802
Bhutan	-	-	++	385
Nepal	++	9	++	87
Italy	-	-	++	86
New Zealand	++	72	++	72
Australia	++	6	++	44
Botswana	-	-	++	20
Cambodia	-	-	++	1
U K	++	194	-	-
Other countries	++	3 7	-	-

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Table – 11 : Exports of Silver: Powder (By Countries)

	20	20-21 (R)	20	21-22 (P)
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	1	70184	2	116710
USA	1	68356	1	64012
Puerto Rico	-	-	1	51711
China	-	-	++	443
Hong Kong	-	-	++	169
Canada	-	-	++	110
Italy	-	-	++	66
Israel	++	65	++	58
Australia	-	-	++	53
New Zealand	-	-	++	45
Netherland	-	-	++	19
Other countries	++	1763	++	2 4

Figures rounded off

Table – 12 : Imports of Silver (By Countries)

	20	020-21 (R)	20	21-22 (P)
Country	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	1484	59602766	4422	244542763
UK	213	8572283	1736	97563798
Hong Kong	630	25251729	1547	86656215
Russia	140	5599051	250	14013300
China	86	3882315	189	10441947
Kazakhstan	-	-	144	8344177
Switzerland	21	725252	142	8018583
Singapore	43	1986814	90	5198263
Uzbekistan	-	-	60	3263901
Italy	46	1766814	74	2928731
USA	37	1364430	81	2584295
Other countries	268	10454078	109	5529553

Table – 13: Imports of Silver-clad Base Metals (By Countries)

Country	2020-21 (R)		2021-22 (P)	
	Qty (kg)	Value (₹'000)	Qty (kg)	Value (₹'000)
All Countries	500	7518	4862	22436
Chsina	-	-	4000	9812
Thailand	120	2252	750	9696
USA	10	356	112	2928
Italy	300	3939	-	-
Germany	19	516	-	-
Malaysia	5	314	-	-
Japan	4 6	141	-	-

Figures rounded off

Table – 14: Imports of Silver: Semi-manufactured (By Countries)

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	1195	48096027	4092	227283914
UK	213	8571878	1677	94225764
Hong Kong	494	20179854	1491	83447086
Russia	140	5595929	250	14012470
China	86	3876130	189	10441947
Kazakhstan	-	-	144	8344177
Switzerland	1	31001	115	6454827
Uzbekistan	-	-	60	3263901
Singapore	7	496734	27	1672428
USA	27	864966	46	1619823
Italy	27	652430	42	997451
Other countries	200	7827105	51	2804040

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Table – 15: Imports of Silver: Unwrought

(By Countries)

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	279	11350070	304	16957397
Singapore	30	1457232	62	3522024
U K	++	405	59	3338034
Hong Kong	136	5071875	56	3209129
Italy	19	1111913	32	1929978
Switzerland	20	694251	27	1563756
South Africa	-	-	18	1027078
Germany	7	424407	27	915578
USA	8	481223	12	849822
UAE	3	153326	7	390979
Indonesia	-	-	4	186829
Other countries	56	1955438	++	24190

Figures rounded off

Table – 16: Imports of Silver: Powder (By Countries)

Country	2020-21 (R)		2021-22 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	10	156669	26	301452
Brazil	2	79950	2	152275
USA	2	18241	23	114650
Germany	++	20037	++	28328
Singapore	6	32848	1	3811
Italy	++	2471	++	1302
Russia	++	3122	++	830
Japan	-	-	++	256

#### **FUTURE OUTLOOK**

Silver has the dual usefulness of being a precious metal as well as an industrial metal. World over, silver is primarily traded for its industrial applications, however, Indian silver imports are largely consumed for jewellery and silverware. India is among the top 5 silver consumers in the world. About 60% of silver consumption in India is from the rural population who views it as a solid saving commodity. India does not produce silver in a significant scale and most of the silver has to be imported. Moreover, silver demand has been on the rise in major growing economies including India during the past few years. New industries, such as, medicine, manufacturing etc. are scaling up their demand for silver, and this may soon translate to higher levels of imports.

However, the counter-narrative is that notwithstanding the Government's initiative for infrastructural boost, the benefits for industrial demand would be only to modest levels as the high inventory levels of semi-fabricated products across the supply chain would offset any demand escalation of silver. Housing projects (driven by a new government initiative) is another potential demand escalator for electrical equipment which would in turn influence the damand for silver.

Capitalising on india's potential for growth, it would be pragmatic for india to build its own silver powder producing facilities mainly in order to facilitate the projected growth in domestic solar generating power capacity.