

SALT



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SALT

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GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES

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Salt is the most significant of all the industrial minerals. Occurrence of rock salt in India is scanty. At the time of Independence, there used to be shortfall in production of salt and the same was met through imports. Since then, India has made tremendous progress in production of salt, achieving self-sufficiency in 1953 and even started exporting salt to other countries.

Common salt, when pure, is mineral halite which is an essential item for human consumption. The per-capita consumption of salt in the country is estimated to be about 14 kg, which includes edible and industrial salt. The current annual requirement of salt in the country is estimated to be 63 lakh tonnes for edible use (including requirement for cattles) and 118 lakh tonnes for industrial use.

"Salt is a Central Subject in the Constitution of India and appears as Item No. 58 in the Union List of the 7th Schedule, which reads:

- (a) "Manufacture, Supply and Distribution of salt by Union Agencies; and
- (b) "Regulation and control of manufacture, supply and distribution of salt by other agencies".

The Central Government is responsible for controlling and regulating all aspects of the Salt Industry. The Salt Commissioner's Organisation (SCO), Jaipur, Rajasthan, an attached office under the Ministry of Commerce & Industry (Department of Industrial Policy & Promotion), Government of India, is the Authority entrusted with the above task. The SCO is responsible for monitoring the production, distribution, quality, prices, supply and administration of Salt Cess Act, 1953 and the Rules, made thereunder.

RESERVES/RESOURCES

As per NMI database, based on UNFC system, the total reserves/resources of rock salt as on 1.4.2020 has been estimated at 12.78 million tonnes

in Mandi, Himachal Pradesh. The entire resources, fall under Remaining Resources category.

PRODUCTION AND STOCKS

The rock salt production which was only 486 tonnes during 2020-21 increased by 274% as compared to that in the preceding year. In the current year, production was reported by a single Public Sector mine from Himachal Pradesh (Tables-1 to 3).

Mine-head closing stocks of rock salt at the end of the year 2020-21 was 113 tonnes as against 3 tonnes in 2019-20 (Table-4).

The average daily labour employed in rock salt mines during 2020-21 was 22 as against 24 in the previous year.

India is the 3rd largest salt (common) producing country in the world after China & USA with a production of about 265.64 lakh tonnes during the year 2020-21.

Production of salt involves extensive use of renewable sources of energy. Weather conditions play an important role in production of salt.

Salt (common) is manufactured mainly by solar evaporation of sea water. Sea salt constitutes about 80% of the total salt produced in the country. Gujarat (81%) was the leading State followed by Rajasthan (8%) and Tamil Nadu (9%). Private Sector contributed significantly in the production of salt and accounted for 97.8% of the production. Public/Joint Sector contributed 1.4% and the rest was from the Co-operative Sector during 2020-21.

The major by-products recovered in the Salt Industry are gypsum, bromine, magnesium chloride, magnesium sulphate, ammonium bicarbonate, soda ash, caustic soda and soda bicarbonate. The average number of labourers employed in the Salt Industry during 2019-20 and 2020-21 were 91,711 and 91,139, respectively.

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Table – 1 : Producers of Rock Salt, 2020-21

Name & address of producer	Location of mine	
	State	District
Hindustan Salt Ltd, B- 427, Pradhan Marg, Malviya Nagar, Jaipur - 302 017 Rajasthan.	Himachal Pradesh	Mandi

**Table – 2 : Production of Rock Salt, 2018-19 to 2020-21
(By States)**

(Qty in tonnes; Value in ₹'000)

Country/State	2018-19		2019-20		2020-21 (P)	
	Quantity	Value	Quantity	Value	Quantity	Value
India	17	160	130	1447	486	14239
Himachal Pradesh	17	160	130	1447	486	14239

**Table – 3 : Production of Rock Salt, 2019-20 and 2020-21
(By Sectors/States/Districts)**

(Qty in tonnes; Value in ₹'000)

Country/State	2019-20			2020-21 (P)		
	No. of Mines	Quantity	Value	No. of Mines	Quantity	Value
India	1	130	1447	1	486	14239
Public Sector	1	130	1447	1	486	14239
Private Sector	-	-	-	-	-	-
Himachal Pradesh/Mandi	1	130	1447	1	486	14239

**Table – 4: Mine-head Closing Stocks of Rock Salt, 2019-20 & 2020-21
(By States/Grades)**

(In tonnes)

Country/State	2019-20	2020-21 (P)
India/Himachal Pradesh	3	113

MINING

In recent development, Drang Mohal (Bhatog) Rock Salt Mine, Village Mohal Bhatog, District Mandi, Himachal Pradesh, of M/s Hindustan Salts has started production and it produced 485 tonnes of rock salt during 2020-21. Mining is carried out by underground semi-mechanised method. The entire mining area is hill (Govt. waste land) region with no forest land cover.

USES

Salt, in addition to its culinary and domestic uses, is also used in meat packing, fish curing & its preservation, dairying, preservation & processing of hides, manufacturing of soaps, detergent & dyestuff, dyeing & finishing of fabrics, refrigeration, glazing earthenware, explosives, leather industries, bakery products, for soil stabilisation, in manufacturing artificial rubber and as wood

preservative. In agriculture, salt is used for treating hay and as a fertilizer for certain crops. In countries with cold weather conditions, salt is used in deicing, i.e., removal of snow and ice, from streets and highways.

Industrial Applications

Salt is an important raw material used in Chemical Industry. It is used in the production of basic chemicals like sodium carbonate (soda ash), caustic soda, hydrochloric acid, chlorine, bleaching powders, chlorates, sodium sulphate (salt cake) and sodium metal. These basic chemicals, in turn, are used in the preparation of various end-products, such as, soaps, detergents, chlorinated hydrocarbons and carbon tetrachloride. Other important applications where salt is widely used are in food processing; as freezing-point depressant in refineries & milk supply schemes; treatment of industrial wastes; purification of drinking water; and manufacture of synthetic indigo, explosives, papers, etc.

The rock salt produced from Mandi mines contains 67.81% NaCl which is not suitable for human consumption as the content of sodium chloride is low from the required 96% NaCl necessary for human consumption. However, this salt finds application as essential supplement in cattle feeds.

Iodised Salt

The SCO is the nodal agency for monitoring the production and quality of iodised salt at the production level and ensuring its equitable distribution in the country. Production of iodised salt continued its progressive trend and the Universal Salt Iodisation (USI), a programme under National Iodine Deficiency Disorder Control Programme (NIDDCP) reached new heights.

Iodised salt is produced by mixing potassium iodate with salt using spray, drip feed, dry mixing and submersion processes. Iodisation of salt is carried out in plants operated by Sambhar Salts Ltd (a subsidiary of Hindustan Salts Ltd), Kharagoda, Gujarat. SCO has facilitated establishment of 518 salt iodisation units including 119 refineries & washeries (152.39 lakh tonnes) with an annual installed capacity of 221.86 lakh tonnes up to March 2021. Production of 67.02 lakh tonnes of iodised salt during 2019-20 and 78.58 lakh tonnes in

2020-21 was reported. During the year 2020-21, the production of refined salt was 59.11 lakh tonnes as compared to 49.95 lakh tonnes during last year 2019-20, The Bureau of Indian Standards (BIS) has revised the specifications of iodised salt and formulated new specifications for refined iodised salt and Vacuum Evaporated iodised salt under IS 7224:2006. BIS has prescribed IS 797:1982 (Reaffirmed 2012) as specification of common salt for chemical industries.

Potassium Iodate Manufacture

Potassium iodate, used for fortifying salt with iodine is produced indigenously, however, iodine, the basic raw material for its production is imported. There are about 13 potassium iodate manufacturing units, registered with the Salt Commissioner.

Statewise production of salt (common) during the year 2020-21 is furnished in Table-5.

Table – 5: Statewise Production of Salt (Common), 2020-21 (By States)

States	2020-21
India	265.64
Andhra Pradesh	2.85
Goa	0.01
Gujarat	216.39
Karnataka	0.12
Maharashtra	0.70
Odisha	0.02
Rajasthan	21.56
Tamil Nadu	23.93
West Bengal	0.06

Source: Salt Commissioner, Govt. of India, Jaipur, Annual Report, 2020-21

CONSUMPTION

Salt is extensively used in various industries like Caustic Soda, Soda Ash, Soaps & Detergents, Chemicals, Water softening plants, dyes etc. The Chlor-Alkali Industries, however, are the major consumer of salt. Various industries in the country consumed 101.96 lakh tonnes of salt during the year 2020-21 as against 113.66 lakh tonnes in 2019-20.

TRADE POLICY

Exports of salt have been brought under Open General Licence (OGL) with effect from 25th August, 1987 vide Ministry of Commerce, New Delhi, Export Trade Control

Public Notice No. 26-ETC(PN)/87 dated 25th August, 1987. The Ministry of Commerce, Government of India, vide Notification No. 482(E) dated 25th July, 1991 has exempted certain categories of export from compulsory pre-shipment inspection.

As per Foreign Trade Policy (FTP) 2015-2020, exports and imports of rock salt and common salt (including iodised salt) under Heading no. 2501 are allowed as 'Free'.

FOREIGN TRADE

Exports

During 2020-21, the exports of salt (other than common salt) decreased by about 29% to about 8.26 million tonnes from about 11.68 million tonnes in the previous year. Exports were mainly to China (34%), Republic of Korea (22%), Japan (13%) and Qatar (8%), Indonesia (6%) & Vietnam (4% each). On the other hand, the exports of salt rock decreased by about 41% to 317.38 thousand tonnes in 2020-21 from 539.86 thousand tonnes in 2019-20. The exports were

mainly to Bangladesh (82%) UAE & Republic of Korea (9% each). Exports of salt (other) decreased by 29% to 7.94 million tonnes during 2020-21 from 11.14 million tonnes in the previous year. Exports were mainly to China (36%), Republic of Korea (23%), Japan (14%) and Qatar (8%) (Tables-6 to 8).

Imports

The imports of salts (other than common salt) increased by 50% to 98,042 tonnes in 2020-21 from 65,263 tonnes in the previous year. Imports were mainly from UAE (45%), Pakistan (4%) and Iran (44%) under Open General Licence (OGL). Similarly, import of salt rock also decreased by 13% to 52,651 tonnes in 2020-21 from 60,441 tonnes in 2019-20. The imports were mainly from UAE (63%), Pakistan (7%) and Iran (27%). On flipside import of salt (other) increased by 841% to 45,391 tonnes during 2020-21 from 4,822 tonnes in the previous year. The imports were mainly to Iran (64%), UAE (23%), UK&China (4% each) and Thailand (2%) (Tables-9 to 11).

**Table – 6: Exports of Salt (Other Than Common Salt)
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	11681705	13681149	8260913	10571743
China	4861999	5061355	2839885	3092014
Korea, Rep of	2059417	2406765	1835411	2363062
Japan	1329043	1624468	1105471	1389768
Qatar	584982	884589	639399	861159
Indonesia	572478	710003	460373	576752
Bangladesh	473100	574713	329621	459803
Taiwan	297473	284666	228390	272597
Nepal	37619	121911	49296	192792
Thailand	160028	181453	145698	181750
Vietnam	562459	578265	140820	175657
Other countries	743107	1252961	486549	1006389

Figures rounded off

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**Table – 7: Exports of Salt Rock
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	539856	558987	317376	489122
Bangladesh	310484	339612	260222	360285
UAE	313	5680	27511	34221
Korea, Rep of	-	-	27150	26485
USA	290	11466	574	15376
Singapore	66	2092	233	8903
UK	66	2856	166	3962
Australia	119	7345	125	3489
Japan	27	763	48	3286
Canada	61	2418	100	3178
Nepal	93	2008	272	2717
Other countries	228337	184747	975	27220

*Figures rounded off***Table – 8: Exports of Salt (Other)
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	11141849	13122162	7943537	10082621
China	4689364	4931138	2839883	3091734
Korea, Rep of	2059417	2406765	1808261	2336577
Japan	1329016	1623705	1105423	1386482
Qatar	584733	880953	639279	858864
Indonesia	572478	710003	460373	576752
Taiwan	297473	284666	228390	272597
Nepal	37526	119903	49024	190075
Thailand	160005	180386	145674	179196
Vietnam	562459	578265	140820	175657
Tanzania	130172	154293	128956	149275
Other countries	719206	1252085	397454	865412

*Figures rounded off***Table – 9: Imports of Salt (other than Common salt)
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	65263	466170	98042	645494
Iran	9773	40069	43373	201965
UAE	32014	117221	43728	195425
Belgium	172	77531	288	47028
USA	105	24012	260	33875
UK	1282	14934	1946	21871
Spain	135	66737	43	21104
Thailand	385	11048	703	20349
Germany	311	11352	684	18554
Malaysia	442	7255	908	18516
Pakistan	19535	66989	3730	17039
Other countries	1109	29022	2379	49768

Figures rounded off

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**Table – 10: Imports of Salt Rock
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	60441	226758	52651	252159
UAE	31839	116411	33342	139526
Iran	9050	37719	14293	71350
Malaysia	442	7255	908	18474
Pakistan	19037	62322	3514	12678
Germany	27	802	459	8461
Afghanistan	25	328	46	638
Poland	--	--	10	259
USA	--	--	++	249
Egypt	--	--	54	198
Turkey	20	152	24	166

Figures rounded off

**Table – 11: Imports of Salt (Other)
(By Countries)**

Country	2019-20 (R)		2020-21 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	4822	239412	45391	393335
Iran	723	2350	29080	130615
UAE	175	810	10386	55899
Belgium	172	77531	288	47027
USA	105	24012	260	33626
UK	1282	14927	1946	21852
Spain	135	66737	43	21068
Thailand	385	11048	703	20349
China	806	6849	1606	15275
Germany	284	10550	225	10093
France	11	2170	11	9935

Figures rounded off

FUTURE OUTLOOK

Sambhar Salts Ltd (SSL) approximately produces 2 lakh tonnes of raw salt every year. In addition, approximately 40,000 tonnes of processed salt are also produced.

Schemes are also under preparation to enhance further capacity of raw salt production to 10 lakh tonnes per annum.

Hindustan Salt Limited has awarded the long term contract through open tender in May-2021 for large scale commercial mining of rock salt at Mandi,

Wherein modern Trackless underground mining is proposed to be used to enhance production upto 50,000 MT/annum. This proposal forms a part of Hon'ble PM's vision of Atmanirbhar Bharat wherein it is planned to produce adequate quantity of Himalayan Rock Salt so that complete import of Rock Salt both from Iran and Pakistan gets stopped within 2 years, we also intend to install Salt Refinery for processing of Rock Salt with latest technology as part of contract.