



Indian Minerals Yearbook 2019

(Part-III: Mineral Reviews)

58th Edition

SALT

(FINAL RELEASE)

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES**

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25 Salt

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 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 at 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 1.4.2015

has been estimated at 16.03 million tonnes in Mandi, Himachal Pradesh. The entire resources, fall under Remaining Resources category.

PRODUCTION AND STOCKS

The rock salt production at only 17 tonnes during 2018-19 decreased by 64% 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 2018-19 were 3 tonnes as against 1 tonne in 2017-18 (Table - 4).

The average daily labour employed in rock salt mines during 2018-19 was 27 as against 25 in the previous year.

India is the 3rd largest salt (common) producing country in the world after China & USA with a production of about 300.33 lakh tonnes during the year 2018-19.

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 (81.29%) was the leading State followed by Rajasthan (8.57%) and Tamil Nadu (7.98%). Private Sector contributed significantly in the production of salt and accounted for 95% of the production. Public/Joint Sector contributed 1.5% and the rest 3.5% was from the Co-operative Sector during 2018-19.

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 2016-17 and 2017-18 were 1,05,037 and 88,843 respectively.

Table – 1 : Producers of Rock Salt, 2018-19

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

**Table – 2 : Production of Rock Salt, 2016-17 to 2018-19
(By State)**

(Qty in tonnes; Value in `'000)

State	2016-17		2017-18		2018-19 (P)	
	Quantity	Value	Quantity	Value	Quantity	Value
India	-	-	47	421	17	46
Himachal Pradesh	-	-	47	421	17	46

**Table – 3 : Production of Rock Salt, 2017-18 to 2018-19
(By Sectors/States/Districts)**

(Qty in tonnes; Value in `'000)

State	2017-18			2018-19 (P)		
	No. of Mines	Quantity	Value	No. of Mines	Quantity	Value
India	1	47	421	1	17	46
Public Sector	1	47	421	1	17	46
Private Sector	-	-	-	-	-	-
Himachal Pradesh/Mandi	1	47	421	1	17	46

**Table – 4: Mine-head Closing Stocks of Rock Salt, 2017-18 & 2018-19
(By State)**

(In tonnes)

State	2017-18	2018-19 (P)
India/Himachal Pradesh	1	3

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 produced 47 tonnes of rock salt during 2017-18. Mining is carried out by underground semi-mechanised method. The entire mining area is hill (Govt. waste land) 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 629 salt iodisation units including 132 refineries & washeries (141.90 lakh tonnes) with an annual installed capacity of 220 lakh tonnes up to March 2019. Production of 68.29 lakh tonnes of iodised salt during 2017-18 and 67.04 lakh tonnes in 2018-19 was reported. 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 Department.

Statewise production of salt (common) during the year 2017-18 is furnished in Table-5.

Table – 5: Statewise Production of Salt (Common), 2017-18 (By States)

(In lakh tonnes)

States	2017-18
India	289.49
Andhra Pradesh	4.19
Goa	0.01
Gujarat	233.00
Karnataka	0.10
Maharashtra	1.30
Odisha	0.03
Rajasthan	27.18
Tamil Nadu	23.62
West Bengal	0.06

Source: Salt Commissioner, Govt. of India, Jaipur, Annual Report, 2017-18

CONSUMPTION

Industrial consumption of salt (common) increased marginally to 11.81 million tonnes during 2017-18 from 11.58 million tonnes in 2016-17. During the year 2017-18, human consumption of salt was reported at 6.47 million tonnes. The industrial consumption of salt is reflected in Table -6.

Table – 6 : Industrial Consumption of Salt 2016-17 and 2017-18 (By Industries)

Industry	(Quantity in '000 tonnes)	
	2016-17	2017-18
Total	11582	11811
For production of Caustic soda & soda ash	9845	10800
Other Industries (Paper/Dye, foods, steel, oil, chemical etc.)	1737	1011

Figures rounded off

Source: Salt Commissioner, Govt. of India, Jaipur.

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 2018-19, exports of salt (other than common salt) increased considerably by about 28% to about 12.76 million tonnes from about 9.97 million tonnes in the previous year. Exports were mainly to

China (56%), Republic of Korea (13%), Japan (9%), Qatar (5%) and Vietnam (4%). Exports of salt rock decreased drastically by 67% to 123.9 thousand tonnes in 2018-19 from 377.5 thousand tonnes in 2017-18. Exports were mainly to China (49%) & Bangladesh (48%). Exports of salt other increased by 32% to 12.63 million tonnes during 2018-19 from 9.59 million tonnes in the previous year. Exports were mainly to China (56%), Republic of Korea (13%), Japan (9%) and Qatar (5%) (Tables-7 to 9).

Imports

The Imports of salts (other than common salt) increased by 17% to 78,712 tonnes in 2018-19 from 67,555 tonnes in the previous year. Imports were mainly from Pakistan (96%) and UK (2%) under Open General Licence (OGL). The imports of salt rock increased by 13% to 74,457 tonnes in 2018-19 from 65,856 tonnes in 2017-18. The imports were almost more than doubled from Pakistan. Import of salt other increased by 15% to 4,255 tonnes during 2018-19 from 1,699 tonnes in the previous year. The imports were mainly to UK (35%), Pakistan (24%) and China (15%) (Tables-10 to 12).

Table – 7: Exports of Salt (other than common salt) (By Countries)

Country	2017-18 (R)		2018-19 (P)	
	Qty (t)	Value ('000)	Qty (t)	Value ('000)
All Countries	9969604	9402718	12755391	14627309
China	5332232	4984610	7186574	8025620
Korea, Rep. of	1106492	912755	1600291	1500314
Japan	908176	760557	1089189	1136643
Qatar	513430	593038	660607	873199
Vietnam	223646	191660	501852	570292
Bangladesh	844771	673299	397523	524802
Thailand	120427	172820	256196	416323
Indonesia	298131	244642	368408	363321
UAE	139871	153422	159913	224188
Oman	33328	43096	103841	179410
Other countries	449101	672820	430996	813197

Figures rounded off

**Table – 8: Exports of Salt Rock
(By Countries)**

Country	2017-18 (R)		2018-19 (P)	
	Qty (t)	Value (` '000)	Qty (t)	Value (` '000)
All Countries	377504	292530	123913	188254
Bangladesh	375821	260027	59699	79064
China	1	106	61172	56787
Australia	117	7291	413	11382
USA	170	5496	285	10672
Angola	29	220	1021	5157
Nepal	444	2466	405	4776
UAE	68	1739	156	3314
Chile	++	1	34	2307
Qatar	220	3021	120	2123
Singapore	50	1516	47	2019
Other countries	583	10648	561	10652

Figures rounded off

**Table – 9: Exports of Salt Other
(By Countries)**

Country	2017-18 (R)		2018-19 (P)	
	Qty (t)	Value (` '000)	Qty (t)	Value (` '000)
All Countries	9592100	911018812631477	14439055	
China	5332231	4984504	7125402	7968833
Korea, Rep. of	1106481	912385	1600291	1500314
Japan	908163	760295	1089187	1136592
Qatar	513209	590017	660487	871076
Vietnam	223646	191660	501845	569676
Bangladesh	468950	413272	337825	445738
Thailand	120425	172759	256195	416268
Indonesia	298131	244642	368408	363321
UAE	139803	151683	159757	220873
Oman	33131	42474	103715	178502
Other countries	447929	646496	428365	767861

Figures rounded off

**Table – 10: Imports of Salt (other than
common salt)
(By Countries)**

Country	2017-18 (P)		2018-19 (P)	
	Qty (t)	Value (` '000)	Qty (t)	Value (` '000)
All Countries	67555	291750	78712	472879
Pakistan	66329	198927	75445	263757
Spain	++	17	128	65949
Singapore	++	15	70	41322
Germany	290	23170	328	22609
USA	85	49824	66	19442
UK	344	4735	1499	18124
Belgium	22	513	62	14481
Thailand	335	7916	256	6545
China	14	616	636	5744
Poland	3	521	25	5062
Other countries	133	5496	197	9844

Figures rounded off

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

Country	2017-18 (P)		2018-19 (P)	
	Qty (t)	Value (` '000)	Qty (t)	Value (` '000)
All Countries	65856	192944	74457	252361
Pakistan	65778	192218	74413	251651
Germany	44	637	44	706
UK	-	-	++	4
Afghanistan	34	89	-	-

Figures rounded off

**Table – 12: Imports of Salt Other
(By Countries)**

Country	2017-18 (P)		2018-19 (P)	
	Qty (t)	Value (` '000)	Qty (t)	Value (` '000)
All Countries	1699	98806	4255	220518
Spain	++	17	128	65949
Singapore	++	15	70	41322
Germany	246	22533	284	21903
USA	85	49824	66	19442
UK	344	4735	1499	18120
Belgium	22	513	62	14481
Pakistan	551	6709	1032	12106
Thailand	335	7916	256	6545
China	14	616	636	5744
Poland	3	521	25	5062
Other countries	99	5407	197	9844

Figures rounded off

FUTURE OUTLOOK

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

Plans have been drawn to revive abandoned infrastructure and salt production areas and enhance

the raw salt production from two lakhs TPA by 2017-18 and 10 lakh TPA in next three years time. Schemes are also under preparation to enhance further capacity of raw salt production to 10 lakh tonnes per annum.

India is the third largest salt producing country in the world after China and USA with global annual production being about 230 million tonnes.