

SALT



Indian Minerals Yearbook 2015 (Part- III : Mineral Reviews)

54th Edition

SALT

(FINAL RELEASE)

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

Indira Bhavan, Civil Lines,
NAGPUR – 440 001

PHONE/FAX NO. (0712) 2565471
PBX : (0712) 2562649, 2560544, 2560648
E-MAIL : cme@ibm.gov.in
Website: www.ibm.gov.in

July, 2017

44 Salt

Salt is the most significant of all the industrial minerals. Occurrence of rock salt in India is scanty. The only producer, Hindustan Salt Ltd, Jaipur has its mines located in district Mandi, Himachal Pradesh. The main source of common salt is sea water (about 82%). It is also obtained from sub soil brines by solar evaporation.

Common salt, when pure, is mineral halite which is an essential item for human consumption. Halite is colourless or white and may contain various tints.

"Salt is a Central subject in the Constitution of India and appears as item No. 58 of 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".

Central Government is responsible for controlling all aspects of the Salt Industry. 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 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.

RESOURCES

As per UNFC system, the total resources of rock salt as on 1.4.2010 are provisionally estimated at 16.03 million tonnes in Mandi, Himachal Pradesh. Out of the total resources, about 10.04 million tonnes falls under proved category and 5.99 million tonnes under probable category.

PRODUCTION, STOCKS AND PRICES

There was no production of salt (rock) in 2014-15 as well as in 2013-14 due to temporary discontinuance of mining operations. There were no mine-head stocks of salt at the end of year 2014-15. India is the 3rd largest salt (common) producing country in the world after China & USA with a production of about 269 lakh tonnes during the year 2014-15 which is about 17% more than previous year's production.

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 in vast coastal states. Gujarat was the leading state followed by Tamil Nadu, Rajasthan, Andhra Pradesh, Maharashtra, West Bengal, Karnataka, Odisha, and Goa. Private sector contributed significantly in the production of salt. About 93.2% of salt is produced by Private Sector. Public/Joint Sector contributed 1.3% and the rest 5.5% by Co-operative Sector during 2014-15.

The major by-products recovered in the Salt Industry are Gypsum, Bromine, Magnesium Chloride, Magnesium Sulphate, Ammonium bicarbonate and sodium bicarbonate. The average number of labourers employed in the salt industry during 2013-14 and 2014-15 were 85,403 and 104,060 respectively. Prices of salt are furnished in the General Review on 'Prices'.

MINING

Due to temporary discontinuance of mining activity from 2011-12, no remarkable development in mining of salt (rock) was noticed. Hindustan Salts Ltd and its subsidiary Sambhar Salts Ltd have their own mines at Mandi in Himachal Pradesh.

USES

Salt, in addition to its culinary and domestic uses, is also employed in meat packing, fish curing and its preservation, dairying, preservation & processing of hides, manufacturing of soaps, detergent and dyestuff, dyeing and finishing of fabrics, refrigeration, glazing earthenware, explosives, leather industries, bakery products, for soil stabilisation, in manufacturing artificial rubber and as a 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 controlling ice and snow on streets and highways.

Industrial Applications

Salt is an important raw material for 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 uses are in food processing and as freezing-point depressant in refineries and milk supply schemes, for the treatment of industrial wastes, in the manufacture of synthetic indigo, explosives, papers, purification of drinking water, 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 should be 96% NaCl (Min) for human consumption. Hence, it is generally used to feed cattle.

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. The programme is known as National Iodine Deficiency Disorder Control Programme (NIDDCP). The production of iodised salt was 64.54 lakh tonnes during the year 2014-15.

A portion of rock salt produced is iodised in order to meet the requirements of goitre-endemic areas in the country. 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), Kharagodah, Gujarat. About 700 plants including 122 refineries with an annual capacity of 21.4 million tpy produce over 6.4 million tonnes of iodised salt. 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 department.

Statewise production of salt (common) during the year 2014-15 is furnished in Table-1.

Table – 1 : Statewise Production of Salt (Common), 2014-15 (By States)

(Quantity in '000 tonnes)	
State	2014-15
Andhra Pradesh	500
Goa	2
Gujarat	21767
Karnataka	7
Maharashtra	159
Odisha	5
Rajasthan	2158
Tamil Nadu	2274
West Bengal	14

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

Figures rounded off.

CONSUMPTION

Industrial consumption of salt (common) increased marginally to 11.5 million tonnes during 2014-15 from 11 million tonnes in 2013-14. During the year 2014-15, human consumption of salt was reported at 6 million tonnes. The industrial consumption of salt is given in Table -2.

SALT

Table – 2 : Industrial Consumption of Salt 2013-14 and 2014-15 (By Industries)

Industry	(Quantity in '000 tonnes)	
	2013-14	2014-15
Total	11005	11493
Caustic soda & soda ash	8514	8927
Other Industries (Paper/Dye, foods, steel, oil, chemical etc.)	2491	2566

Source: Salt Commissioner, Govt. of India, Jaipur. figures rounded off.

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.

FOREIGN TRADE

Exports

Exports of salt (other than common salt) decreased marginally to 4.78 million tonnes in 2014-15 from 4.96 million tonnes during the preceding year (Table - 3) . Exports were mainly to China (40%), Japan (14%), Qatar (11%).

Imports

In 2014-15 , imports of salts (other than common salt) were at 41,300 tonnes as compared to 35,591 tonnes in the previous year. Imports were mainly from Pakistan (99%) under Open General Licence (OGL) (Table - 4).

Table – 3: Exports of Salt (other than common salt) (By Countries)

Country	2013-14		2014-15(P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	4956931	6562929	4776491	6390687
China	2241631	2855139	1931349	2127198
Japan	644927	915480	657718	1056083
Qatar	258223	404413	546594	801965
Korea, Rep. of	628425	848609	506150	609354
Vietnam	158447	174243	262799	405476
Indonesia	293653	295503	197361	292652
Bangladesh	324731	358717	212335	259558
Korea, D.P.R	101200	139539	97100	115704
Nepal	23280	94999	30365	108941
USA	842	15611	49751	105937
Other countries	281572	460676	284969	507819

SALT

**Table – 4: Imports of Salt (other than common salt)
(By Countries)**

Country	2013-14		2014-15(P)	
	Qty (t)	Value (₹' 000)	Qty (t)	Value (₹' 000)
All Countries	35591	120999	41300	114191
Pakistan	35244	86770	40873	94600
USA	85	9263	37	5366
France	20	6776	12	4885
Germany	84	8700	121	3313
China	30	375	102	2589
Israel	93	4666	28	1468
Spain	-	122	7	308
UK	2	2226	5	275
Belgium	++	3	1	248
Switzerland	-	-	1	212
Other countries	33	2098	113	927