



Indian Minerals Yearbook 2014

(Part-III: MINERAL REVIEWS)

53rd Edition

SALT

(ADVANCE RELEASE)

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. 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 District 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 2013-14 as well as in 2012-13 due to temporary discontinuance of mining operations. There was no mine-head stocks of salt at the beginning and end of the year 2013-14. During this year the production of salt (common) was affected due to wide spread rain during the manufacturing season in all salt (common) producing states. Heavy rain during September/October 2013 in Gujarat has delayed season resulting loss of production. The loss was partly compensated by bringing additional areas under salt production. However, India is the 3rd largest salt (common) producing country in the world after China & USA with a production of about 230 lakh tonnes during the year 2013-14.

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, Odisha, Karnataka, West Bengal and Goa. There are about 11,974 salt manufacturers engaged in production of common salt in an extent of about 6 lakh acres land in the country.

The major by-products recovered in the Salt Industry are Gypsum, Bromine, Magnesium Chloride and Magnesium Sulphate. The average number of labourers employed in the salt industry during 2012-13 and 2013-14 were 108,786 and 85,403 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).

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 777 plants including 112 refineries with an annual capacity of 22 million tpy produces over 5.8 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 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 2013-14 is furnished in Table-1.

Table – 1 : Statewise production of Salt (Common) 2013-14 (By States)

(Quantity in '000 tonnes)

States	2013-14
Andhra Pradesh	443
Goa	2
Gujarat	18095
Himachal Pradesh	-
Karnataka	15
Maharashtra	145
Odisha	19
Rajasthan	1701
Tamil Nadu	2586
West Bengal	11

Figures rounded off.

Source; Annual Report, Salt Department.

CONSUMPTION

Industrial consumption of salt (common) decreased marginally to 11 million tonnes during 2013-14 from 11.4 million tonnes in 2012-13. During the year 2013-14, human consumption of salt was reported at 5.54 million tonnes. The industrial consumption of salt is given in Table -2.

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Table – 2 : Industrial Consumption of Salt 2012-13 and 2013-14 (By Industries)

(Quantity in '000 tonnes)

Industry	2012-13	2013-14
Total	11438	11005
Caustic soda/soda ash	8626	8514
Misc. Industries (Paper/Dye, foods, steel, oil, chemical etc.)	2812	2491

figures rounded off.

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

TRADE POLICY

Export of salt have been brought under Open General License (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) increased marginally to 4.95 million tonnes in 2013-14 from 4.60 million tonnes during the preceding year (Table - 3). Similarly a quantity of 59.61 lakh tonnes of common salt valued at ₹ 844.40 crore was exported during 2013-14 as against 50.04 lakh tonnes valued about ₹ 679.44 crore in the previous year.

Imports

In 2013-14, imports of salts (other than common salt) were at 35,591 tonnes as compared to 40,274 tonnes in the previous year. Imports were mainly from Pakistan under Open General Licence (OGL) (Table - 4).

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

Country	2012-13		2013-14	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
All Countries	4597507	5282193	4956931	6562929
China	1269358	1572703	2241631	2855139
Japan	876867	908973	644927	915480
Korea, Rep. of	282000	272923	628425	848609
Bangladesh	1025843	932502	324731	358717
Indonesia	367952	353037	293653	295503
Qatar	304220	432615	258223	404413
Vietnam	257608	360430	158447	174243
Korea, Dem. Rep. of	-	-	101200	139539
Oman	2522	11243	56521	79120
Nepal	8605	24295	23280	94999
Other countries	202532	413472	225893	397167

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

Country	2012-13		2013-14	
	Qty (t)	Value (₹' 000)	Qty (t)	Value (₹' 000)
All Countries	40274	98849	35591	120999
Pakistan	36004	77566	35244	86770
USA	60	12345	85	9263
Germany	94	4006	84	8700
China	128	1612	30	375
France	++	2	20	6776
Czech Republic	3	155	16	971
Israel	16	865	93	4666
Italy	6	353	7	330
Denmark	-	-	6	387
UK	1	160	2	2226
Other countries	3962	1785	4	535