



KAM SALT SUB-SECTOR PROFILE

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The main rationale of the KAM Salt sector profile is to highlight key action areas to address challenges hampering the growth of the sector as we aim to transform Kenya into a industrial led economy

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01 ➤ Message from the KAM Salt Sub Sector Chair



Kenya's Salt Industry dates as far back as 1920, when it was introduced in Fundisa, Coast Region by Germans. The Sub-Sector has since grown to 4 salt companies with established salt works along the Magarini salt belt area in Kilifi County. These are Ken Salt Ltd, Krystalline Limited, Malindi Salt Works Limited and Kurawa Industries Ltd. Ken Salt Ltd, Krystalline Salt and Malindi Salt Works have fully integrated refining factories.

In Kenya, the Salt Sub-Sector is actively involved in community support programs. They have continued to support the communities not only by providing relief food before and during COVID-19 period, but also by supporting education programs including giving scholarships to the needy students and building schools in strategic locations thus increasing classrooms and other education facilities for the people in Magarini Sub County. Over 100 students have so far received secondary school fees scholarships by one of the salt companies, support with water projects and dispensaries besides continuously providing material support to their communities.

Salt processing has the potential to grow our economy and create more jobs. Its role cannot be underscored as the country works towards achieving its development goals including Vision 2030 and the Big Four Agenda (Manufacturing, Food & Nutrition Security and Affordable Healthcare). Unfortunately, a number of factors continue to hinder the sector from operating at full capacity and fully meeting its market demands both locally and regionally. Some of these challenges include the Mining Act 2016 that classifies salt as an ordinary mineral. This subjects it to levies and royalties, national and county government fees and charges, land ownership and illegal salt harvesting. The Association developed the KAM Salt Sub-Sector Profile to give our input on the state of the sector, the challenge facing it and interventions that shall enable it to thrive as we aim to achieve a 15% contribution to the Gross Domestic Product (GDP) for the manufacturing sector. We hope that government shall consider our proposals, to enable the sector to grow and thrive, in turn, create job and wealth for many.

Kibiti M. Kirimi
KAM Salt Subsector Chair

02 ➤ Message from the KAM Chief Executive



Salt is one of the most widely used substances in the world. It plays a crucial role, not only in the manufacturing sector, but also in the domestic front and in the health sector. We use it to season our food, thus providing us with critical nutrients such as sodium and chloride ions in our diet.

In industry, it is used for the chemical synthesis of more than 50 per cent of chemical products (European Salt Producers Association). It is also used in the manufacturing of commodities such as glass, paper, rubber and textiles as well as in water softening systems for industry and domestic use. Salt is an essential raw material for the production of chlorine and caustic soda.

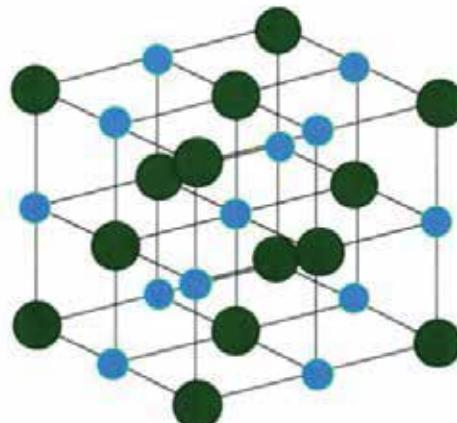
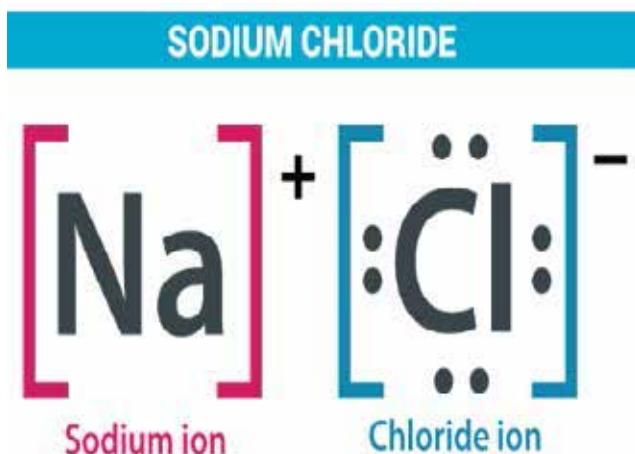
Kenya's Salt Sub-Sector has a combined capacity to produce 850,000 metric tonnes of salt annually and directly employs 1,100 and approximately 3,000 during the raw salt harvesting season. Within the value chain, the industry creates jobs for over 100,000 people including traders.

Despite its critical role in our economy, the Salt Sub-Sector is yet to achieve its full capacity. It has the potential to serve as a gateway to other sectors, in which salt is used as a raw material or intermediate product. The Salt Sub-Sector Profile highlights these challenges and solutions to remedy them to enable it to thrive and increase its contribution to our country's economic growth. We hope that government will look into these hinderances to growth, to enable the sector to thrive.

Phyllis Wakiaga
KAM Chief Executive

I. INTRODUCTION

Common salt, also known as Sodium Chloride (NaCl), is one of the most widely used substances on Earth. It is a compound that contains 39% sodium and 61% chlorine by weight (Dennis, 2010).



The sodium chloride crystal structure. each atom has six nearest neighbours with octahedral geometry. This arrangement is known as cubic close packed (ccp)

Light Blue = Na^+
Dark Green = Cl^-

Sodium Chloride Crystal Structure

1.1 Uses Of Salt

According to Dennis S. Kostick , there are about 14,000 direct and indirect uses of salt. However, only about 6% of the salt manufactured in the world is used in food. The remainder, 12% is used in water conditioning processes, 8% goes for de-icing highways and 6% is used in agriculture. The rest (68%) is used for manufacturing and other industrial processes.

a) Household

The most familiar use of salt is as a food preservative and additive. It is an excellent carrier of iodine in the form of potassium iodide.

According to Kenyan standard KS 229 2009 part 4.1, salt iodization is mandatory in the country. Additionally, FDEAS 35: 2012 part 5.1 states that food grade salt shall be fortified with potassium iodate to conform to the iodine levels provided for in the standard.

b) Industrial use

- In the leather tanning industry, hide processors and leather tanners use salt to cure, preserve and tan hides.
- In commercial dye manufacturing, salt is used to fix and standardize dye batches in the textile industry.
- In the pulp and paper industry, salt is used to manufacture chlorine and caustic soda. In paper making, caustic soda is used to process wood fibers and chlorine is used to bleach the pulp. Sodium chlorate, also made from salt, is replacing chlorine as the primary chemical for bleaching pulp.
- It is also a raw material in the industrial manufacturing of various chemicals such as sodium carbonate and sodium hydrogen carbonate among others.
- Used in glass production: According to the history of glass, sodium carbonate (Na_2CO_3) lowers the melting point of silica to a more manageable 1200°C , but it also makes the glass water soluble. Sodium sulfate, sodium chloride, or antimony oxide can be added to prevent the creation of air bubbles in the glass mixture.

c) Others

- In cold countries, it is used to prevent the buildup of ice on roads, bridges etc. The lowest temperature at which sodium chloride will melt ice (the eutectic point) is -21.12° (-6.02°), at a concentration of 23.3% NaCl. Salt works best at temperatures near 0° (32°) because melting occurs quickly with a relatively small amount of salt.
- Salt is also used in metal processing and secondary aluminum making, to remove impurities.
- Rubber manufacturers use salt to separate rubber from latex.
- Salt is used as a filler and grinding agent in pigment and dry-detergent processes.
- Ceramics manufacturers use salt for vitrifying the surface of heated clays.
- Soap makers separate soap from water and glycerol using salt.
- Oil and gas drillers use salt in well drilling muds to inhibit fermentation, increase density and to stabilize drilling in rock salt formations.

¹ Dennis S. Kostick, is a mineral commodity specialist for the U.S. Geological Survey, compiled the following information on salt

2. SALT INDUSTRY IN KENYA

There are five salt companies with established salt works along the Magarini salt belt area in Kilifi County.. These are Ken Salt Ltd, Krystalline Limited, Malindi Salt Works Limited, Kurawa Industries and KEMU Salt Packers Production Ltd. Three of the five companies have fully integrated refining factories. The three are Ken Salt Ltd, Krystalline Salt and Malindi Salt Works.

2.1. Ken Salt Limited.

Kenya has a long history of salt production. It dates back in 1970s with research and exploration along Magarini, Gongoni areas in Kilifi County.

In 1974, the Government established Salt Manufacturers Kenya Ltd which was a joint venture with an Italian company called Saltec International Limited. The company's goal was to develop the first sea salt works in Kenya. A refinery was set up in Changamwe, Mombasa. This was to leverage on the proximity to Mombasa Port to boost commodity export especially to the neighboring EAC countries. The Company was later privatized in 1993 and changed its name to Ken Salt Ltd.

2.2. Krystalline Salt Limited

The second company "Krystalline Salt Limited" was established in 1984. It started primarily as a salt manufacturer with sales and distribution as a support function. In 2007, the Company achieved a milestone by acquiring Mombasa Salt Works (formerly called Fundisa Salt, the oldest salt works in Kenya, started by Germans in 1920). Krystalline has its corporate office in Nairobi, Kenya. The salt works, refinery and packing operations are located 20km from Malindi town in Gongoni and Marereni, all on Malindi-Lamu road. Their sales and distribution operations are carried out from Changamwe.

2.3. Malindi Salt Works

Malindi salt works started operations in February 1979 under a 665.0 ha piece of land. It later received an extension with 40.28 hectares. Actual salt works operations started in 1984. The Company has fully established works for salt harvesting, refinery and packaging operations.

2.4. Kurawa Industries

Kurawa salt works is located at Kurawa, Kanagoni about 70 Km North of Malindi Town and was established in 1977. It specializes in salt extraction on 595.2 hectares. The raw salt is sold to other companies with refinery for processing. However, the company intends to put up a refinery in a near future



3. SALT PROCESSING IN KENYA

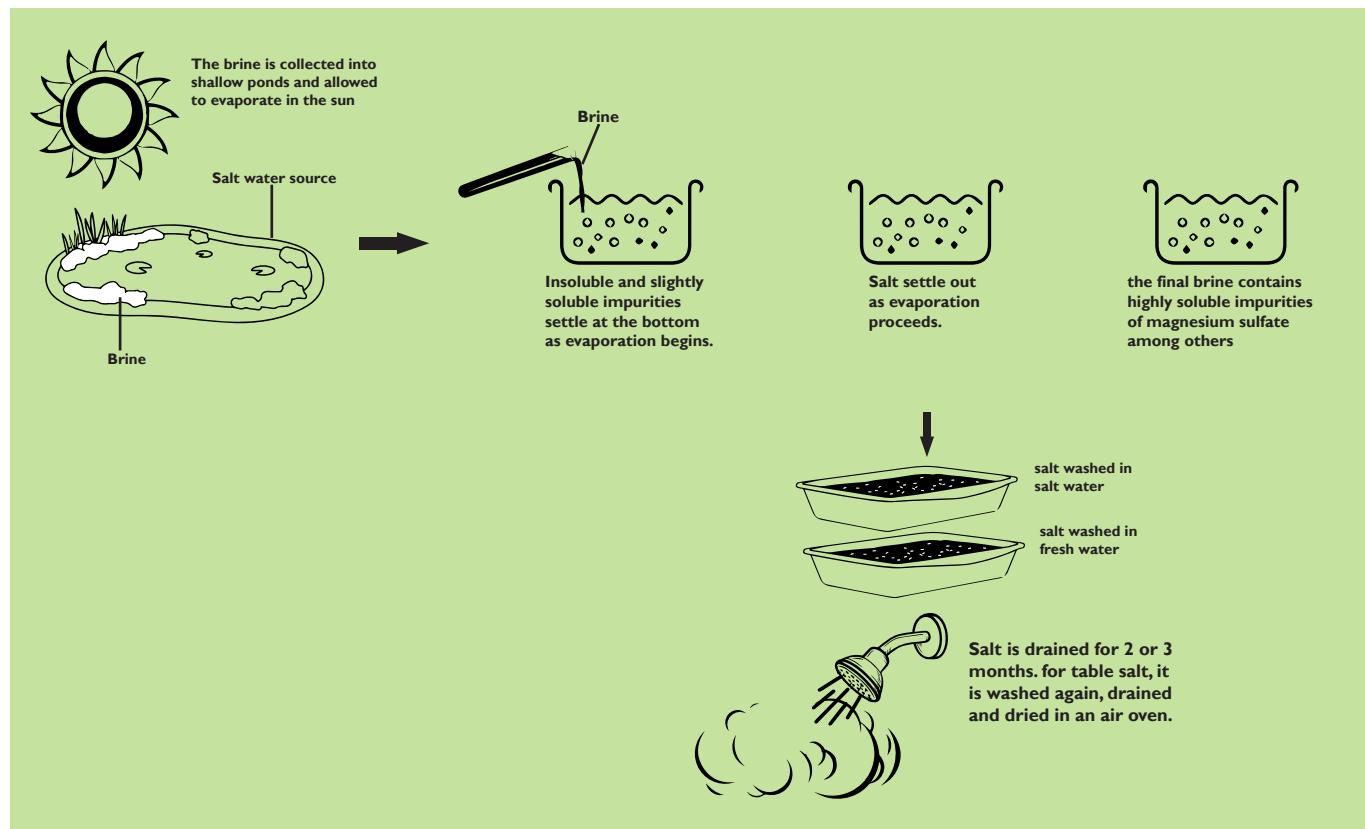
In Kenya, the main method of obtaining Edible Salt is by “Evaporation of Sea Water” also known as solar salt production method. Solar salt production is the process in which naturally occurring salt water from sea is channeled into a series of shallow, interlocking ponds. For about 60- 75 days (subject to weather conditions), the water moves through the sequence of ponds that allow evaporation of water to create brine solutions until the most saturated brines evaporate to form “salt crystals”. This production method produces high-quality, high-purity salt, ranging between 99.6% and 100% purity. The process comprises of five key components: abstraction of brine; impounding of brine in reservoirs; concentrating in condensers; precipitating salt in pans and stock piling or salt heaps. (Table I). Figure I shows a summarized salt making process by use of natural sun.

Table I Stages of solar salt production method

STAGE 1	Abstraction of brine or sea water The sea water is captured via natural creek during high tide.
STAGE 2	Impounding of brine in reservoirs The first pond is fed with sea water (raw material) through pumping. The sea water captured at sodium chloride concentration of between 2.5 - 3.5 parts per million.
STAGE 3	Evaporators Sea water flows from pond to pond and brine concentration rises continuously through natural evaporation. The evaporation (or concentration) of brine is achieved by exposure to solar radiation and with the help of the prevailing microclimate in the area, especially of wind, air temperature, humidity and duration of sunshine. Insoluble impurities such as sand and clay and slightly soluble impurities such as calcium carbonate settle to the bottom.
STAGE 4	Condensers Brine is continuously pumped or moved by gravity flow to another pond where calcium sulfate settles out as evaporation continues. The remaining brine is moved to yet another pond where the salt starts to settle out as evaporation proceeds and precipitation starts. Here brine is concentrated up to saturation point in terms of NaCl.
STAGE 5	Crystallizers These are basins where salt is crystallized and produced via further evaporation of the brine. It's circulated and evaporated to 25 parts per million (25Be) when the brine is ready for precipitation and by 28.5Be salt is ready for harvesting. Sea salt is harvested at a crystal thickness of 1-1.5 inches.
STAGE 6	Salt crushing and harvesting Crystallized salt is thus crushed and scooped up and harvested. It is then washed with highly concentrated salt water. This water contains so much salt that it cannot hold any more, so the salt is washed free of any contaminants.
STAGE 7	Washing Salt is washed with highly concentrated salt water. This water contains so much salt that it cannot hold any more, so the salt is washed free of any trace impurities without dissolving. The washed salt is removed from the salt water, rinsed with a small amount of fresh water, and piled into huge stack.
STAGE 8	Refining Salt is rewashed in salt water and fresh water, drained then dried in a hot air oven at about 365°F (185°C). This salt is about 99.8% pure and can be used for food processing.
STAGE 9	Iodization Processed table salt is iodized by adding a small amount of potassium iodide to provide the trace element of iodine to the diet. This helps to prevent goiter, a disease of the thyroid gland
STAGE 10	Packaging Iodized table salt is then packaged and shipped to customers ready for use.

In Kenya, salt harvesting is purely through solar evaporation, in the sense that no chemicals are added during the production of salt. The average number of ponds depends on the degree of salinity and the required output. The circulation and evaporation takes between 60 and 75 days for the maximum amount of salt to start dropping at the bottom of the crystallizers ready for harvesting.

Figure 1: Solar Salt Process.



Source: Own Conceptualization

3.1. Salt Production

Globally, China is the largest salt producing country in the world, followed by USA and India. In 2016, China, USA and India produced 58M, 42M and 19 M tonnes respectively (Table 2). China and United States produce about 40% of world's entire production. Within the African continent, Egypt, Tunisia, Namibia, Botswana, South Africa and Morocco are the largest African salt producing countries. The salt produced in these countries has a wide reach and potential to make the greatest impact on iodized salt coverage in the region

Table 2 Top 10 salt producing countries in 2016 (Tonnes)

Rank	Country	Production in Tonnes
1	China	58 Million
2	USA	42 Million
3	India	19 Million
4	Germany	12.5 Million
5	Australia	12 million
6	Chile	11 Million
7	Mexico	10.5 Million
8	Canada	10 million
9	Brazil	7.5 Million
10	Ukraine	6.1 Million

Source: www.countriesnow.com

4. INDUSTRY CAPACITY

There are five salt producing companies in Kenya, with established salt works along Magarini salt belt area in Kilifi County. The companies are Ken Salt Ltd, Krystalline salt Limited, Malindi Salt Works Limited, Kurawa Industries and KEMU Salt Packers. Three of the five companies have fully integrated refining factories. The three are Ken Salt Ltd, Krystalline Salt and Malindi Salt Works. The industry has the capacity to produce 850,000 MT per year (Table 3) and are currently operating at an average of 60% of installed capacity.

Table 3 : Installed capacity 2019

COMPANY		INSTALLED CAPACITIES
1	Kurawa Industries	100,000
2	Malindi Salt works	120,000
3	Krystalline Salt Company	360,000
4	Ken Salt Co. Ltd	270,000
TOTAL		850,000

Data source, KAM Salt sub sector database, 2019

4.1 Raw salt harvesting season in Kenya

Kenya's raw salt harvesting is seasonal and weather dependent. Table 4 shows the calendar that exerts significant influence on salt production patterns, particularly when harvests are disrupted by the rainy season hence creating deficit. Salt harvesting is mainly done in February, March and September Ceteris Paribus (other things equal or held constant).

Table 4: Kenya calendar for raw salt harvest season

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

Source: Authors conceptualization

4.2 Employment

In terms of employment, the salt industry in Kenya directly employs 1,100 and about 3000 on contract especially during raw salt harvesting season. Within the value chain, the industry creates jobs for over 100,000 people including traders. There being no other industry in the salt belt, the community is indirectly supported by the salt industries.

4.3 Salt export

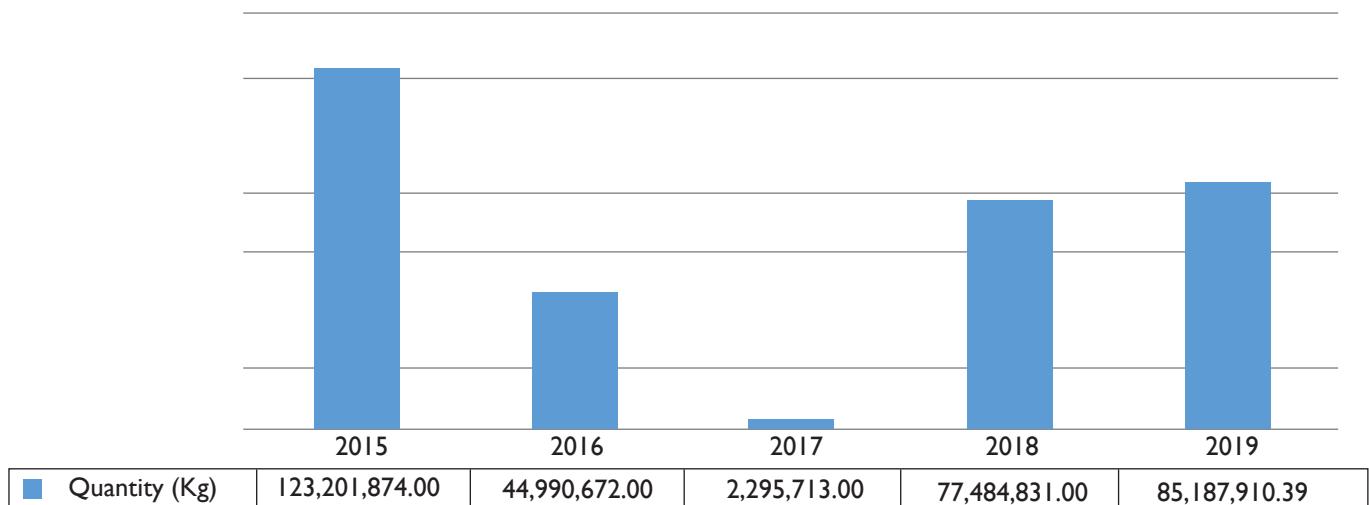
According to the sub-sector data base, the EAC market accounts for 65% of Kenya's total export with Uganda alone taking lion share of 60%. Kenya's refined salt export increased by 32% from 2009 to 2017 and declined by 20% in 2019. The decline is attributed to competition from imported finished production into the export market among other challenges within the market.

4.4 Imports

During unfavorable weather seasons, the companies rely on imported raw salt for further processing. Importation is often done after companies have exhausted local sources. Even though data for imported salt is not disaggregated (between raw and finished as both fall under single tariff number 2501.00.00), importation decreased from 123,201,874 Kgs in 2015 to 2,295,713 Kgs in 2017 and later increased from 77,484,831 Kgs in 2018 to 85,187,910 Kgs in 2019. This is because of seasonality of raw salt harvesting in the country which is dependent on weather conditions. In case of prolonged rainfall period, raw salt harvesting reduces.

² KEMUS is currently under receivership

Figure 2: Salt Imports (HS CODE 2501.00.00) in Kgs, 2015-2019



Data source- KRA

4.5 Import Source of countries

Table 5 shows the top key sources of imported salt and cumulative quantities between 2015 and 2019. The leading sources of Kenya's salt imports are Australia and India. The two account for 91% share of quantity of salt imported in the country between 2015 and 2019.

Table 5 : Country of origin for imported salt : 2015-2019

S/N	COUNTRY OF ORIGIN	QUANTITY (KG)	% SHARE OF QUANTITY
1.	Australia	89,244,240	67.02%
2.	India	32,409,799	24.34%
3.	Egypt	4,660,479	3.50%
4.	Pakistan	2,751,857.86	2.07%
5.	Netherlands	1,103,982	0.83%
6.	China	845,550	0.63%
7.	New Zealand	743,050	0.56%
8.	Israel	399,752	0.30%
9.	Germany	231,625.40	0.17%
10.	Turkey	135,950	0.10%
11.	Greece	122,000	0.09%
12.	United Arab Emirates	121,285	0.09%
13.	Others	391,430	0.29%
	Total	133,161,000	100.00%

Data source: KRA

4.6 Import duty rates

It is instructive to note that both raw and finished salt are imported under one tariff (2501.00.00). This is clearly a case of tariff misalignment given that both raw and finished salt fall under the same tariff and attracting a tariff rate of 25%, Table 6.

Table 6 : Salt import duty rate

Tariff	Description	Rate
	Salt (including table salt and denatured salt) and pure sodium chloride, whether or not in aqueous solution or containing added anti-caking or free-flowing agents; seawater.	25%

Data source: EAC CET , 2017

4.7 Other levies and fees

Levies/tax (Name)	Amount (KSh)	Institution payable
NEMA audit permits	Ranging from 200,000 – 320,000 (depending on factory size)	NEMA
Waste MATERIAL transport (Excluding Brine)	Ranging from 5,000 – 10,000	NEMA
Healthy and safety certificate	15000	DOSH
Land use certificate	Varying as per the land size	Ministry of Lands
Land rates		Kilifi county
Royalties	2/= per metric tonne (MTM) depending amount of salt produce per county)	Ministry of Lands
Food hygiene license	9,000 Kilifi (differs with number persons involved per company) 4,000 Mombasa(differs with number persons involved per company)	Kilifi County Mombasa County
Food handlers certificate	400 per staff 700 per staff	Kilifi County Mombasa County
Salt Cess	200 per tonne (was increased from 60 to 200) in the Finance Act,2018	Kilifi County
Single business permit	Ranges from 80,000 -100,000 (varies)	Kilifi & Mombasa County
Forest rates	25,000 per acre	Kenya Forest Service
Mangrove user license	500,000 per acre	Kenya Forest Service
Sea water charges	50 cents per litre of water used in the ponds Plus 135,000 annual fees	Water Resources Authority
Fire and ambulance certificate	1,700	Kilifi County Government

Source: Sub-sector members databased and National and Government pieces of legislations

5. KEY CHALLENGES FACING SALT INDUSTRY

ISSUES	DETAILS	RECOMMENDATION	RESPONSIBLE AGENCY
Mining Act (2016)	The Mining Act was enacted in 2016 to give effect to Article 60 of the Constitution of Kenya which provides for the principles of land policy, Article 62(1) (f) providing for all minerals and mineral oils that form part of public land to vest and be held by the national government in trust for the people of Kenya, as well as to ensure that implementation/fulfilment of Article 69 of the Constitution on environmental sustainability among other areas. Salt is captured in the mining Act 2016 and attracts loyalties among other levies prescribed in Act.	Review of edible salt classification under the Mining Act as an edible mineral requiring specific provisions different from other minerals of "high value". Specifically, Amendment of the First Schedule to the Act to remove salt from the list of ordinary minerals considering its attribute as a food ingredient.	Ministry of Petroleum and mining Industry players
Salt Cess	The County Government of Kilifi through the County Finance Act 2018 increased salt cess charges from Ksh 60 per tonne to Ksh 200 per tonne. This has increased the cost of business by 233% on a single cost item.	- Review salt cess fee from Ksh 200 per tonne to KSh 100 per tonne - County Government of Kilifi to waive the accumulated cess arrears.	Kilifi County Government
Land rates by Kilifi County	In 2008, The Kilifi Municipal Authority increased land rates for all salt companies and the rates vary among the companies, resulting in increased cost of doing business . This was done without the required land valuation roll as required by the National and Kilifi County Ratings Act that provides for all ratable properties to be included in a lands valuation roll. This was adopted by Kilifi County Government after its formation in 2013.	- The Kilifi County Government to revert to old rates and develop a framework to review the rate in consultation with the industry. - Meanwhile, the county Government of Kilifi to consider waiving the accrued amount to the salt companies.	Kilifi County Government
Sea water charges by Water Resource Authority.	Following enactment of Water Act in 2006, WRMA (Water Resource Management Authority) now referred to as Water Resource Authority was legally mandated by the water act 2006 to charge for the use of seawater abstracted for the salt extraction with effect from 1st October 2007 when water charges were gazetted. The salt companies are required to pay WRMA 50 cents/m ³ for raw water they abstracted for their use until 19/4/2017 when the Water Act of 2016 was amended to expressly remove the obligation to obtain a permit or pay water use charge with regards to abstraction and or use of seawater to extract salt. Further, salt firms are also obligated to pay a fixed permit fee of Kshs 135,000/- per year to WRMA from 2007 to 2017.	The salt sub sector proposal is for Water Resource Authority to waive the accrued arrears and the review of the Water Act to stop charging for the sea water used by salt companies in making salt.	Water Resources Authority
Squatters challenges	Land ownership remains a controversial matter along the salt sub sector. Efforts have been made to compensate and resettle the squatters. Inventories of the squatters are available. However, more squatters keep encroaching their land over time and political influence worsens the situation. The National Land Commission (NLC), through Section 14 of the National Land Act, commenced a public inquiry in 2015- 2016 in an attempt to address issue of ownership, compensation, boundaries and access roads.	- NLC and the National government must speed up the compensation and resettlement process. In addition, the beacons and any other pending demarcation should be finalized to control any further encroachments by squatters or salt companies. - National Land Commission should carry out public forums to educate the community on the basis of the decisions taken in the gazette notice in regard to determination of review of grants and disposition of public land	National Land Commission Kilifi County Government

Illegal salt harvesters	Salt companies are faced with challenges do with illegal salt harvesters or artisanal miners. Such individuals invade and build ponds next to company's ponds as they syphon brine from the salt company's ponds that they use to produce salt.	- Address the squatters challenge - Enforcement of land ownership provisions	NLC
Protective Equipment for salt harvesting	The protective equipment offered by the salt companies as per the prescribed standard by Directorate of Occupational Safety and Health Services (DOSH) are not conducive for the salt environment and therefore when workers are issued with those equipment, some decide not to use them, subjecting themselves to harm.	Review and establish an appropriate standard for the PPEs to be used for salt harvesting.	DOSH KEBS
Forest rent and special user license by KFS	Kenya Forest Service charges forest rent (Ksh 20,000 per Acre) and Mangrove User License (Kshs 500,000 annually) to salt companies on account that salt companies use water that passes through the Mangrove forest zone along the salt belt.	A review of the Forest Act to exempt salt companies from being required to pay for the forest rates and mangrove special user license since they have title to the land and are paying land rates on the same.	Ministry of Lands Kenya Forest Services







SUPPORT

COMMUNITY SUPPORT PROGRAMS

Apart from employing over 10,000 people (permanent, causals and seasonal workers), the sector is heavily involved in supporting the salt belt community through implementation of several programs. Some of these initiatives are highlighted below/per company

I). Krystalline Salt Limited

Krystalline Salt is active member of United Nations Global Compact movement since 2013. UNGC is a voluntary initiative taken by companies to ensure that their process, procedures and systems align with the four UNGC principles of Labour, Human Rights, Environment and Anti-corruption.

A. Support on education

- In 1988, Krystalline Salt constructed a primary school in Marereni as part of their commitment to contribute towards improving the standards of education that are available. Located in a neighboring community, construction began first with 2 classrooms. In 2003, they finished building an administration block as well as 15 additional classrooms. A water tank was also provided above the gate of the school along with a fence that was put up in 2016. To date, the company continues to contribute annually to the school in the form of school furniture and books or any other services..



Figure 1:A view of Multi-purpose dining hall constructed Krystalline Salt Marereni secondary

- The company has also constructed two classrooms at Mapimo Boys Secondary school in Gongoni and the classrooms the company named Kaysalt Elimu Building. The classrooms will help in reducing congestion which was earlier experienced prior to construction of the classrooms.
- Support with books and desks - aside from Marereni Primary school, other schools have also benefited by receiving books and desks from Krystalline Salt Limited in 2015. These schools include Calvary Academy, Midodoni Primary, Hilltop Academy, Boyani, Great Hope Academy, Nzuri Petals Academy, Dhome Academy and Rama Junior Academy schools.

B. Water provision

- **Mineral water:** In 2013, the company invested in a Reverse Osmosis Water Treatment system plant within their Gongoni facility. The treatment system provided clean drinking water to the communities serving about 12,000 people.
- **Midodoni Dam:** KSL built a dam in February 2012 in Midodoni area on a two acre land donated by Mr Samuel Barofa. The dam serves about 10,000 villagers in 9 villages namely Midodoni A and B, Mandokeni, Kadzuhoni, Dodoma, Msambthe weni, Karimapaka, and Mbuyu wa Kombo



- **Mjanaheri Self Help Water Project:** In partnership with Mjanaheri Self Help Water Project Group, the company has fully funded the construction of a borehole that is a source of clean fresh water at Timboni, Gongoni for the benefit of the Communities in Magarini. Timboni area has been the major source of fresh water where water tankers fetch water to supply to Communities as far as Marereni and Kanagoni.



C. Support on health

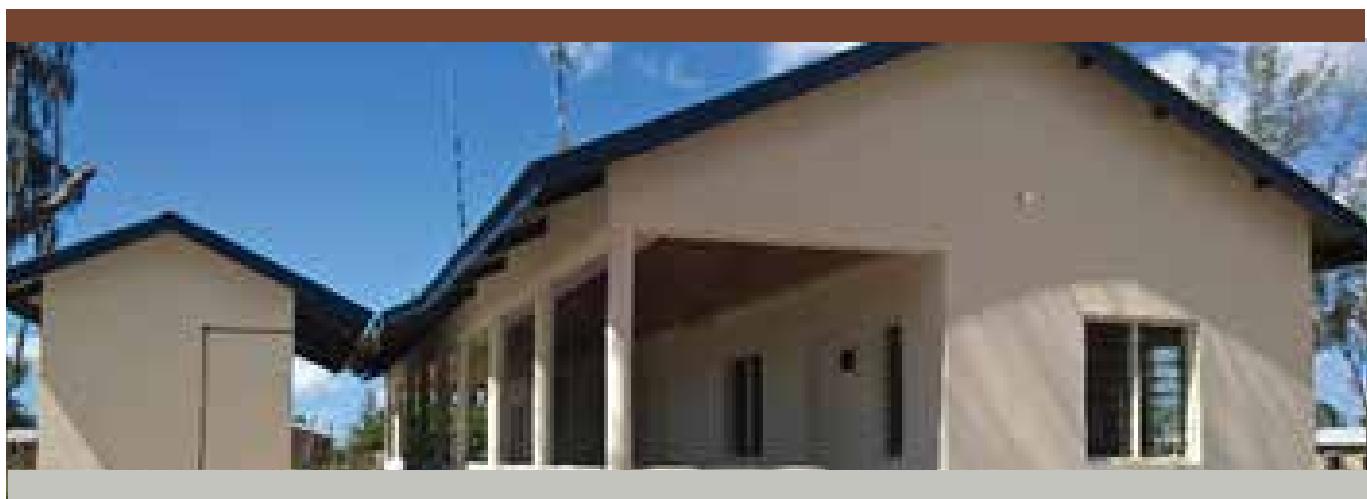
- **Marereni Dispensary:** In 1988, the company built the first maternity ward in Magarini allowing doctors and nurses to work hard at keeping the risks associated with child birth to a minimum. In 2005 and 2015 two more blocks were constructed. This was mainly to facilitate better storage and distribution of drugs and equipment.



Figure 2: Pharmacy Block at Marereni Dispensary constructed by KSL

- **Marereni Dispensary:** In 1988, the company built the first maternity ward in Magarini allowing doctors and nurses to work hard at keeping the risks associated with child birth to a minimum. In 2005 and 2015 two more blocks were constructed. This was mainly to facilitate better storage and distribution of drugs and equipment.

Figure 3: A view of Marereni Dispensary out-patient block constructed by KSL



The company continues to provide annual medical kits to the facility, and now it is one of the recognized dispensaries in Kilifi County. The company has also constructed a modern Out-Patient Block at the Dispensary which was launched in 2018. With this additional facility, the service delivery at the Dispensary has improved. The building serves to improve the facility's status after its recent upgrade to a health center.



Donation of medicine to Marereni Dispensary

- **The Girl Child Network:** In 2013 the company partnered with Girl Child Network in order to improve the lives of as many girls and women as possible, encouraging their education, health, as well as their independence as individuals. The company began the partnership by supporting the medical clinics across Kenya. In 2017, in partnership with County Government of Kilifi the company donated 1,800 sanitary towels for all the girls studying in Magarini Sub-county Secondary Schools.



Figure 4:Donation of sanitary towels

- **Nyeri's health Camp:** On the 1st and 2nd of December 2014 the company conducted a medical camp with Girl Child Network, The Ministry of Health, and the County Government of Nyeri. The camp took place at Nyeri Town Health Centre.
- **Meru Mums:** In Meru (Girls School) Krystalline Salt sponsored an event that aimed to educate single mothers and other women on sexual abuse. During this event counselling and khangas (clothing) were also provided to those present.
- **Eye, jiggers and ringworm camp:** Shree Cutch Satsang Swaminarayan Temple in conjunction with Kwale Eye centre sponsored a 6 days free eye, jiggers and ringworm camp in Kilifi and Tana River counties. The company supported this noble exercise by hosting the health care providers and providing space for consultation, treatment and operation of the patients. 3,887 people were screened for eye problems, out of which 344 were operated on for cataract while others receiving treatment and eye glasses. 511 patients were treated for jiggers and 5972 treated for ringworm, 63 more patients were identified for further special treatment and cataract operations.

D. Other Support

- **Out-Grower Program:** In 2013, as part of their focus on the environment, the company commenced on tree planting exercises in Marereni and Gongoni. Over 1 Million casuarina trees have already been planted both in Marereni and Gongoni. In addition, the company has planted over 1,650 bamboo trees in Gongoni. The company has established an Out grower program with local farmers for the purpose of growing trees through engaging 86 farmers in the program from the local community. The company's contract with the out-grower farmers also included provision of fruit trees in an effort to improve on food security in the area. The company also managed to plant more trees in 2017 by making an agreement with Marereni Primary and Secondary schools to plant casuarina trees along their boundaries. The company has planted approximately 1,940 casuarina trees within the schools' compound.



Figure 5:A section of Biomas plantation at Marereni by KSL



- **Conservation Efforts:** In 2017, the company was awarded with the Certificate of recognition in Tree Growing and Forest Conservation by the Kenya Forest Service. The award was presented by the First Lady, Her Excellency Margaret Kenyatta. The company was awarded as 1st Runners-up in the category of Best Industry Players.

- **Planting Mangroves:** Krystalline Salt Limited took part in a mangrove tree planting exercise held at Robinson Island. The main aim of this initiative was to maintain the mangrove belt along the coastline. This program was implemented in 2006 and 2007 and was organized by the local communities of Robinson Island whom the company took pride in collaborating with. On the World Wetlands Day of 2018 (2nd February), the company brought together Community Based Organizations and Governmental Regulatory Bodies to help us in commemorating the Day. Part of the group included the Salt Sub-sector Corporate Social Responsibility Committee.

The company managed to plant a total of over 7000 mangrove seedlings of different species. Similarly in 2020 the company also planted 1000 species of mangroves in collaboration with NEMA, Beach Management Unit and WRA .



Figure 6: Planting of Mangrove tree in a section of the Company's land

- **Food For Life Program:** The company partnered with the Hare Krishna Temple in 2017 and joined the Food For life Program. The event was aimed at giving students from impoverished backgrounds food. The company also provided the students with solar lamps at the event, seeing at how most of the families did not have sufficient lighting at home making it harder for students to do their homework or study.



Gifting of solar lamps to school kids

- **Provision of relief food and other emergency support:** Over the years, the company has collaborated with the National and County Governments to donate food stuff and clothing to vulnerable individuals affected by natural calamities. In May 2018, a significant number of people residing within the vicinity of River Sabaki were displaced as a result of a burst of its banks. The company came to the aid of these people through provision of food stuff and clothing. In the same year, students of Galana Secondary School were faced with a disastrous event where a fire breakout raged through their dormitories resulting in destruction of property. The company came to the aid of the students by donating 100 mattresses to the school.



Food and clothing donation to residents of Sabaki area



Cake cutting during christmas celebrations in 2019

- **Recreation Activities:** In 2013 the company partnered with Talanta Kenya, who organized a Christmas event for almost 3000 homeless children. During the event, children came together in an open and conducive environment to enjoy nature, play, and share a meal. This occasion has become an annual event for the company. In the same year, the 'watoto pamoja' event was held by Thera-pies for Kids and Krystalline Salt sponsored the event which was a great success. Over 350 families having children with disability attended the event. Recreation activities
- **The K.K. Patel Cup:** In December 2015, the company was glad to fund Adu Ward Sports Committee and Gongoni sub-location football committee through sponsorship of the tournaments they had planned for the festive season



- **Western football Tournament:** Annually, the company sponsors football tournaments within Vihiga Town. The tournaments are held between the local football teams. The company sponsors the tournaments by providing cash prizes and trophies to the winning teams. In 2017, the tournament was graced by the presence of the late legendary sportsman Mr.Joe Kadenge.
- **Covid 19 support:** This year, when the globe was struck with an unfortunate pandemic, the company in association with other salt companies, donated food hampers to the people of Magarini Sub-county. The hampers were targeted to feed 5,000 needy and vulnerable families. Similar efforts have been extended to their staff who continue to receive food packages to help cushion them in this period of uncertainty. In addition, weekly distribution of soap to their employees is done as an emphasis to the constant and regular need to continue practicing hand hygiene at home.



2) Ken Salt Limited

A. Support on Education

- **Scholarships to needy students:** Over the years, the company has supported 65 students in secondary school and post-secondary at a rate of 3 million every year; 9 students in teacher profession training colleges
- The company offers industrial attachment to students preferably from the community who meet the qualifications and also offering educational visits with guided support for student from the entire country to learn the process and science of manufacturing salt.



B. Water Provision



Figure 8: Earth dams at Kibaoni –Fundissa location contracted by Ken Salt Limited



C. Other Support



Figure 10:A view of Assistant Chief's office at Kibaoni constructed by Ken Salt Ltd



Figure 11: Ken Salt Ltd together with Salt Companies distributing food to area communities during Covid-19 lock down period. The hampers were targeted to feed 5,000 needy and vulnerable families.

3) Malindi Salt Works

A. Support on Education



The Company supported Kambi ya waya Primary School by constructing a storey building of eight (8) classrooms and two (2) staff offices.



Construction of 2 classrooms at Kibaoni Pry School



Constructed a 4-door toilet at Kinyaule primary school,



Provided 10 beds at Fundisha Secondary School



Malindi salt works issuing Bursaries to Students in Msumarini Village

B. Support on health care

- Malindi salt works constructed the first dispensary at Kambi ya Waya, a doctor's staff house and a water tank.



An overview of Kambi ya waya Health Centre and Doctor's house

C. Provision of water

The Company provides water to the community through water buzzers that benefits the surrounding schools, police stations and dispensaries. The company has three storage tanks and the community is allowed access to the water free of charge.

4) Kurawa Industries CSR Activities

A. Support to education

- Kurawa Industries built and furnished Kurawa Kanagoni secondary school. There was no other secondary school in the area when the company agreed to build and furnish 4 class rooms for form 1 to form 4



- The Company donated fifty (50) bags of cement for the construction of Mtoroni Primary School. It gave out desks to 3 primary schools in the areas

B. Other support

- Provision of free drinking water - The company provides water to the community by use of water buzzers
- Community Support during pandemic period - Kurawa industries donates food stuff to the community during draught and other pandemics and emergencies.
- Kurawa industries Donated cash towards the construction of Gongoni Cultural center gate



References

1. Kenya National Bureau of Statistics (KNBS), Economic Survey 2020
2. Kenya National Bureau of Statistics, Statistical Abstract (2017,2018,2019)
3. Kenya Revenue Authority report 2020
4. Kenya National Commission of Human Rights Audit report 2018
5. Global Alliance for Improved Nutrition (GAIN),2013: Salt production and tradein Africa: https://ign.org/newsletter/idd_nov13_salt_trade.pdf
6. USGS (US Geological Survey, Ref. 8.2),

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