

## SALT FLATS OF MANAURE

<b>Sector</b>	Ministry of Commerce, Industry and Tourism.	
<b>Thematic axis/ subsector</b>	Infrastructure.	
<b>Entities/Areas</b>	Ministry of Commerce, Industry and Tourism. MinCIT. Mayor's Office of Manaure.	
<b>Strategy of the National Development Plan to which it is aimed at</b>	1. Productive Transformation, Internationalization and Climate Action 2. Regional convergence.	
<b>Target SDGs</b>	6. End of Poverty 7. Affordable and non-polluting energy. 8. Decent work and economic growth. 9. Industry, Innovation and Infrastructure.	
<b>Description of the Project</b>	Purpose of the project	Enhance the capacities installed in Salinas de Manaure to exploit the maximum mining capacity of the salt mines.
	Objectives	1. Improve and optimize existing infrastructure to improve salt productivity.  2. Modernize plant and equipment to increase the efficiency of the complex.  3. Generate self-sufficiency in salt consumption in the country.  4. Contribute to the generation of formal jobs through increased production.  5. Improve the quality of life of the inhabitants of the municipality.  6. Potentiate tourism in the region through the ancestral process of salt exploitation.
	Geographic Area of Influence	Municipality of Manaure, Department of La Guajira.
	It is included in the NDP goals:	Yes <u>x</u> No__ Yes
	Structuring Phase	<b>Phase II</b>

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	Goal: (km), (panels etc)	4700 hectares enabled for salt production and tourism development.
	Located in a protected area or with indigenous/ Afro-descendant communities:	<u>Yes</u> <u>x</u> <u>No</u> <u>Which</u> <u>Indigenous</u> Wayuu <u>Communities</u>
<b>Duration by Phases</b>	<p><b>Phase I:</b> Phase I of the Project is expected to contemplate the execution of the following activities in order to guarantee the start-up and operation of the seawater supply system to the Salinas de Manaure Society, contemplating at least the execution of the following activities:</p> <p>Duration Phase I: 8 months.</p> <p><b>Phase II:</b> Enabling of the other pumping stations, hydraulic networks of the pumping system, construction of the multipurpose dock (industrial and commercial).</p> <p>Duration Phase II: 8 months.</p> <p><b>Phase III:</b> Construction of tourist infrastructure such as: interpretation center, sighting tower, beach management, popular economy modules.</p> <p>Duration Phase III: 8 Months</p>	
<b>Contributions</b>	Total Value	61,000,000,000,000 COP \$ 61,000,000,000 COP
	National Contribution	61,000,000,000,000 COP \$ 61,000,000,000 COP
	Contribution from Territorial Entities	\$ 0
	Private Contribution	\$ 0
<b>Opportunity to Investment</b>	<p>Five salt mines operate in Colombia: Manaure and Galerazamba, in the Caribbean; Nemocón and Zipaquirá, in Cundinamarca; and Upín, in Meta.</p> <p>The first two produce sea salt obtained from the solar evaporation of salt water, the others produce salt from the exploitation of salt rock, Manaure being the salt mine with the largest capacity in the country.</p> <p>Colombia is a country with geographic and climatological potential for salt production, but with low participation in this industry, due to the lack of innovation and infrastructure</p>	

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that would allow it to be competitive in international markets.

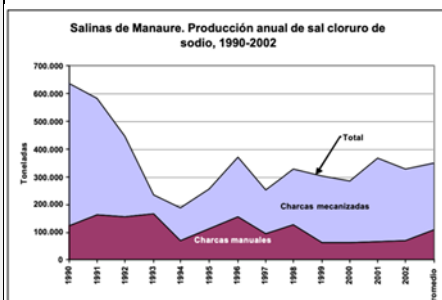
- Capacity 1 million tons/year
- 70% of the country's supply capacity
- Optimal geographical and climatological conditions 4,700 hectares in production fields.
- 3,600 ha of storage tanks
- 275 hectares of crystallizers.
- Decrease in salt generation capacity.
- Top 10 countries with the highest production capacity.

### Market Analysis

Salt consumption in Colombia is approximately 700 thousand tons, of which we only produce 74% on average, however, the production capacity of salt mines such as Manaure is over 34%.

Salt from Manaure is sold especially for food and industrial use, which together make up 84% of the total, and the remaining 13% is for livestock.

120 thousand/ton \* 1.4 million tons (production capacity) = COP 168 billion l/year production capacity.



Reservas, capacidad instalada, producción y utilización de las salinas en Colombia, 2002

Centro de producción	Método de explotación	Reservas probadas	Capacidad instalada Toneladas Nocturno	Producción en toneladas 2002	Utilización capacidad instalada (%)
Salinas marítimas de Manaure	Cristalización por evaporación natural del agua de mar.	Recurso considerado inagotable	1.000.000	326.880	32,7
Salinas de Zipaquirá	- Mina subterránea para disolución: 40% - Lixiviación In Situ: 60%	250 millones de toneladas	360.400	169.764	47,1
Salinas marítimas de Galerazamba	Cristalización por evaporación natural del agua de mar.	Recurso considerado inagotable	23.000	8.903	38,7
Salinas de Nemocon	Lixiviación In Situ: 100%	8 millones de toneladas	21.900	10.950	50,0
Salinas de Upi	Aprovechamiento afloramiento natural de salmuera	9 millones de toneladas	10.950	9.885	90,3
<b>Total</b>			<b>1.416.250</b>	<b>526.382</b>	<b>37,2</b>

Fuente: CNE S.A. - VELNEC S.A., Op Cit. Para Manaure: IFI- Concesión Salinas.

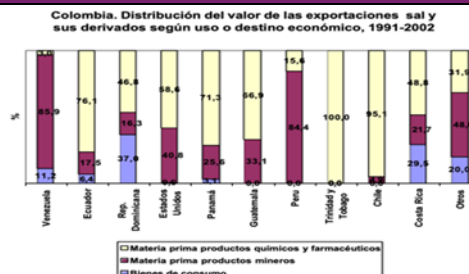
#### • International market:

The trade balance of salt and its derivatives in Colombia is in deficit. In the period during the last decades the import/export ratio is 9 to 1, of which 82.5% were industrial raw material for chemical and pharmaceutical products, 11.4% raw material for the food industry and 6.1% products for food consumption.

The main products purchased in the foreign market were: sodium hydroxide in aqueous solution or caustic soda (63.7%), table salt (6.0%), baking soda (3.8%), and potassium hydroxide (2.7%), among others. Imports of food salt came especially from Peru (80.2%) and imports of raw materials for the chemical and pharmaceutical industry from the United States (63.7%) and Venezuela (9.3%).

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Origen del producto	Precio de la sal	Fletes	Total
Colombia			
Salinas de Manaure (La Guajira)	15.10 <sup>(1)</sup>	12.00	27.10
México			
Salinas Las Coloradas	5.25	17.00	22.25
Brasil			
Diamante Branco- Alcalis Brasil	5.25	16.00	21.25
Venezuela			
Salinas de Araya	10.00	12.00	22.00
El Caribe			
Cargill – Isla de Bonaire <sup>(2)</sup>	18.50	11.00	29.50



### Financial Projections

The production capacity of the Manaure Salt Mines is approximately 1.2 million tons per year, which represents in current market values of industrial sea salt (without procedures that increase its commercial value) an income for the company of 216,000 million pesos per year, which can be increased by approximately 38% if the mineral is processed and added value is given to the product.

### Sustainability and ESG considerations

The growing tourist demand for nature destinations and their importance in the world's ecosystems have led to an increase in environmental awareness and the added value of these places, especially in the periods following the Covid-19 pandemic.

This has generated an opportunity for social, economic and environmental development for the territories and their inhabitants, who in most cases and taking into account their environmental, social, ethnic, cultural, connectivity and accessibility conditions that contributed to the conservation of their territory, have not had the same opportunities generated by the dynamics of massive and/or industrialized development, typical of the large central cities.

### Risk Assessment and Mitigation

During the middle of the last century, salt production in the country was an important economic bastion for the department of La Guajira and the country, reaching a considerable production of this mineral (0.8 tons of sea salt and 1.3 million tons of salt); however, it was seriously affected by the variations of administrative, commercial and industrial policies in the country, which caused an abrupt fall of about 50% according to the Center for Regional Economic Studies of the Bank of the Republic.

To this end, the Ministry of Commerce, Industry and Tourism proposed through the filing of bill 399 of 2024, which has as its objective the mechanisms for the rescue, capitalization and business reactivation of the Salinas Marítimas de Manaure - SAMA Ltda.

Within the framework of this important draft law and the respective corporate reorganization, the possible risks must be established as well as the mitigation mechanisms and strategies, which must respond to the methodologies and respective matrices established by the competent sectors such as the Ministry of Mines and Energy, where different classes of risk are foreseen, as well as their respective identification, analysis, impacts, evaluations and actions for their mitigation, control and

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	follow-up.
<b>Project Team and Experience</b>	<ul style="list-style-type: none"> <li>• <b>Ministry of Commerce, Industry and Tourism.</b></li> </ul> <p>It is a national entity in charge of business growth, foreign investment, foreign trade, economic, industrial and tourism development of the country to improve the quality of life of citizens and entrepreneurs, through the formulation, adoption, leadership and coordination of policies and programs.</p> <ul style="list-style-type: none"> <li>• <b>Super Intendencia de Sociedades.</b></li> </ul> <p>The Superintendency of Companies is a technical agency, attached to the Ministry of Commerce, Industry and Tourism, with legal personality, administrative autonomy and its own assets, through which the President of the Republic exercises the inspection, surveillance and control of commercial companies, as well as the powers granted by law in relation to other entities, legal entities and individuals. Its purpose is to promote the development of innovative, productive and sustainable companies, contributing to the growth and business preservation of the country.</p> <ul style="list-style-type: none"> <li>• <b>Salinas de Manaure SAMA Ltda.</b></li> </ul> <p>Las Salinas de Manaure is a mixed economy company of the territorial order, as a unit of economic exploitation, an agent of reindustrialization of the economy and a source of employment generation and social development for the municipality of Manaure and the department of La Guajira.</p> <p>The company, of which the indigenous communities and the inhabitants of the municipality are an integral part, has more than 70 years of experience and a social vocation in the exploitation and commercialization of salt.</p>
<b>Contact information</b>	<b>Tourism Infrastructure Area - Vice-Ministry of Tourism.</b> wmartinez@mincit.gov.co
<b>Additional Information</b>	<p>Salt production in Manaure is carried out through the solar evaporation method, which consists of treating seawater in sedimentation ponds, where the salt water is concentrated in sodium chloride and finally crystallizes producing a high purity salt cake, which is extracted by various methods, currently the complex has an approximate area of 4,000 hectares, extending from the urban area to the northeast to the village of El pájaro to the southwest, distributed as follows: The infrastructure of these salt flats is made up of two modules dedicated to the concentration of brine: San Juan, which</p>

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	comprises 1,955 hectares, and San Agustín, with 1,770 hectares and 275 hectares distributed in ponds and a population center.
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