



Background

Salinity is a global phenomenon affecting the environment as well as livelihoods of the populace dependent on nature, thus making it a complex issue. But only in recent years the seriousness of this problem has become widely known. The problem is massive, hard to comprehend and harder still to stop. India has a long coastline of 7,500 km, including the two groups of islands in the Indian Ocean. Gujarat has the longest coastline of 1,666 km in India, covering about 1,500 villages. Over the last two decades, a process of rapid seawater ingress is observed along the coastal belt. This has adversely affected groundwater aquifers making them unfit for human consumption. The entire coast had a sweet water regime, until the end of 1960s. Due to the imbalance between the sea water on land and saline water in the sea, salinity increased in the state. Over a period of time, the magnitude and intensity of the problem have been increasing fast, mainly due to over exploitation of groundwater, encouraged by agricultural and industrial growth.

Need to address salinity

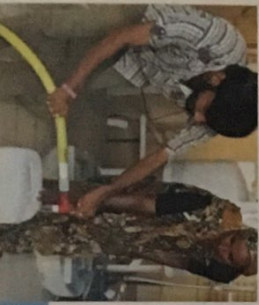
Salinity exacts many economic and environmental costs. These include reduction in agricultural productivity, acute crises of potable drinking water in villages, less water for irrigation and industrial use, distress migration, decline in cattle population and loss of biodiversity in both, terrestrial and aquatic systems. Prolonged use of saline water for agriculture has led to a decline in agricultural productivity and decreased soil fertility. This has rendered the land unsuitable for future cultivation. Due to human interventions that have disturbed the natural ecosystems, salinity has taken a disastrous shape.

Focus areas

- **Water Resource Development**
Water Resource Development proves to be an alternative solution to salinity management as it helps in water harvesting and recharging. CSPC has helped evolve low cost community-based solutions of water harvesting and recharging including construction of check dams, farm ponds, well ceiling, farm bunds, well renovation, percolation well and tanks, bore well recharge, check dam repairing and deepening, pond deepening and repairing and so on.
- **Agriculture**
It is imperative to offer alternate solutions to declining agriculture in the coastal belt than to explore new means of livelihood. Agriculture and horticulture interventions like promotion of salinity tolerant crops, horticulture crops, demonstration of vegetable plots, less water intensive crops have been taken up by CSPC. This has resulted in promoting sustainable farming practices with a focus on salinity management.
- **Drinking water and sanitation**
Consumption of contaminated drinking water, improper disposal of solid and liquid waste and lack of personal hygiene has been the major causes of diseases in rural areas. This needs to be addressed collectively through a well designed strategy. Hence, new solutions, technological as well as institutional, are important for solving the problems in a sustainable, socially acceptable as well as cost-effective manner. CSPC has taken up initiatives of enhanced community-based decentralized water storage and supply systems, identification of local intervention for enhancing alternative ground water resources, exploring possibilities of piloting non-conventional sources of energy for powering water supply systems and improved sanitation measures at the individual as well as village level.
- **Non farm-based livelihoods**
Fishing is a traditional occupation of those living along the coastline. Many of the fishermen have vast experience in fish farming, but they lack the essentials of technical know-how and the scientific basis of fish culture. Thus, it is imperative for them to know about the basic principles of fish farming/aquaculture. Fishing and related activities not only provide livelihood to fisher folks but also to others in the fishing industry, including boat builders, trap and net makers, packers, distributors and retailers. Hence, it is important for the social, cultural, economic and political stability in the coastal areas.

Key functions

- **Being a knowledge bank on coastal salinity issues**
As a knowledge centre on salinity, it is essential to develop a detailed database, new research ideas and innovative concepts for field-level piloting; gather and document various processes and learnings generated from ongoing field projects; compile research studies and other resource material. To focus on the issue more seriously, adopt an integrated approach and find appropriate solution; working as knowledge bank on issues related to salinity forms the core function of CSPC.
- **Networking and developing linkages with government and other agencies**
To tackle the salinity issue with a holistic approach, the collective efforts of the government, civil society organisations and experts need to be simultaneously pooled in at macro as well as micro levels. These efforts should then lead to the formulation of an appropriate policy for salinity control and prevention, at the state and national levels. CSPC plays a pivotal role in developing a network with civil society organizations, the government, experts and the community, ensuring that they all work in the same direction.
- **Piloting area-specific innovations and community approaches for addressing salinity related issues**
CSPC along with its local partners has ideated area-specific pilots to strengthen and sustain the livelihoods of coastal communities. Unique community approaches are adopted for better involvement, implementation and sustainability. As community forms the nucleus of any development action, their participation and sustenance is ensured in all the initiatives promoted and supported by CSPC.
- **Operating as the nodal agency for Kharash Vistarothan Yojana (KVY)**
CSPC operates as the nodal agency for the KVY programme. The partners across coastal districts implement various area-specific activities on water and land resource development, drinking water security, agriculture development and non-farm based interventions. CSPC coordinates, provides technical support and monitors the quality of implementation of the projects. To ensure quality implementation, CSPC collaborates with external resource persons and technical research institutions. CSPC develops synergies between various initiatives of government and non-government agencies while networking and coordinating the efforts of the various partner organisations.





Genesis of Coastal Salinity Prevention Cell

Coastal Salinity Prevention Cell (CSPC) is a joint initiative of the Aga Khan Rural Support Programme (India), Ambuja Cement Foundation and Sir Ratan Tata Trust. CSPC is a not-for-profit company registered under section 25 of the Companies Act 1956.

The overall philosophy of the CSPC is to promote greater interaction and learning between practitioners, researchers and policy makers so that the unique problem of coastal salinity is understood, solutions tried out and analysed and policies and programmes modified or formulated to scale up the solutions.

CSPC aims to address the issue of salinity by developing and strengthening various initiatives of the government and civil society organisations, thereby enhancing the quality of life of coastal communities in the state. The Water Resources Department, Government of Gujarat has recognised CSPC as a coordinating cell for the steering committee formed to address the salinity ingress problem in the state.

Khharash Vistarothan Yojana (KVY)

Salinity is a regional and multi-dimensional issue. Therefore, it demands a multi-sectoral response, going beyond one village, taluka, district or organisation. To fight against this acute problem, Sir Ratan Tata Trust (SRTT), along with its partner organisations, launched the Khharash Vistarothan Yojana (KVY) initiative in 2002. It was earlier known as the Gujarat Coastal Salinity Prevention and Mitigation Initiative.



Reach

CSPC works in the coastal districts of Gujarat – Ahmedabad, Anand, Amreli, Bharuch, Bhavnagar, Jamnagar, Junagadh, Porbandar, Kutch and Rajkot – where it reaches out to 142,995 households in 450 coastal villages through 17 partners.

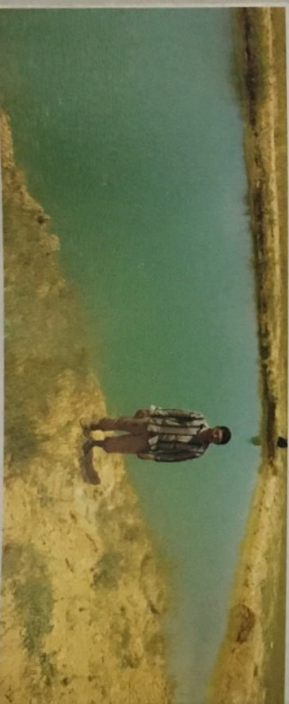


Our Partners

- Government departments
- Non government organisations
- Research institutions
- Corporate bodies
- Communities

Future direction

CSPC has emerged as a key influencing agency on issues related to coastal salinity. CSPC will continue to provide inputs to strengthen partner organizations, networks and the government. By mainstreaming problems related to salinity, CSPC will invoke larger dialogue and developmental interactions on sustainable ways to address problems of salinity ingress prevention and mitigation.



Coastal Salinity Prevention Cell

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COASTAL SALINITY PREVENTION CELL

Evolve sustainable approaches for prevention and mitigation of salinity ingress, whilst enhancing livelihood resilience of communities affected by salinity in coastal villages of Gujarat



COASTAL SALINITY PREVENTION CELL
Khharash Vistarothan Yojana
Supported by Sir Ratan Tata Trust

