

The snow plains of Ramanathapuram

An overview of the place

During drive through the Sikkal-Valinokkam road, one can see vast expanses of salt pans on either side of the road. Heaps of salt stand tall and make the majority of the view here.

Forming a part of the Gulf of Mannar Biosphere Reserve, Valinokkam (situated in Ramanathapuram district, which is about 80 km from Rameswaram) is home to one of the biggest salt pans of Tamil Nadu. Close to these saltpans is a huge water body- Brahmankulam.

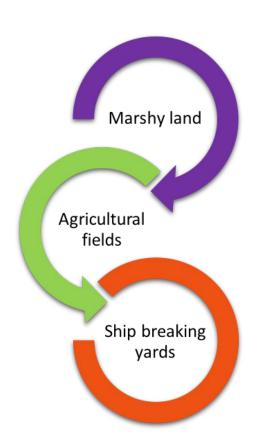
The saltpans and the waterbody now house a large variety of water birds and waders due to which it has been proposed as a potential bird sanctuary (Raveendran Natarajan & H.

Byju pers. comm.).

A dive into the history

Before the lands were converted to saltpans, the areas near Brahmankulam served as sites to break ships apart (Raveendran Natarajan, pers. comm.). However, even before they served as one, these areas mainly had unused lands or agricultural fields (H. Byju, pers. comm.) which initially were lands of marshy vegetation.

The place held a lot many shore birds and several small mammals (H. Byju, pers. comm.). This abundance was exploited by the communities of the region who practiced rampant hunting (Raveendran Natarajan, pers. comm.).



The gradual conversion of land and its use till the 1970s.







The birth of the saltpan

It was not until the 1970s that saltpans came into existence. This is when the Tamil Nadu government converted a significant portion of these lands into saltpans (Raveendran Natarajan, pers. comm.). More recently, since 2011, an additional area of 2,320 acres has gone under the hammer of development (TNSC 2018). This area includes unused land area and other agricultural lands in the area. Today, Tamil Nadu is the second largest producer of salt in India, after Gujarat (TNSC 2018; TOI 2019).

Scenes since the rise of the saltpans From the birds' points of view

While the shanks (red/green), sandpipers (marsh/ green), gulls, little stints, plovers (Little Ringed/ Kentish), and terns (Gull-billed) are found making merry in the salt pans, birds like egrets, Eurasian Curlew, and pelicans are found taking refuge in the water-laden reservoirs (Raveendran Natarajan & H. Byju, pers. obs.). Thus, the saltpans provide nesting and breeding sites for thousands of such heronry birds. They also make major wintering grounds for migratory birds (Nammalwar & Ramesh 2006). During the early 1990s, these saltpans saw over 1,500 Greater Flamingos and other waders (Balachandran 2006). From being an area, which supported thousands of flamingos, Valinokkam now hosts these pink visitors in very small numbers which could be due to the lack of food available to them (Raveendran Natarajan, pers. comm.). Nevertheless, there has been an increase in the number of other shorebirds found here.

From the agricultural point of view

The salt pans here are present at a lower elevation (Magesh & Krishnakumar 2019) than the nearby agricultural lands in the area. This along with the seasonal monsoons that Ramanathapuram receives regulates the salinity in the agricultural lands. Thus, at present,

these saltpans don't have much impact on the agricultural lands in this area. Having said this, it will show impacts in the long run (H. Byju, pers. comm.)

Conclusion

Although these saltpans are artificial in nature, they do provide habitats for lots of large wading birds and migrant shorebirds in high numbers (Pandiyan et al. 2021). This makes them worthy enough to be recommended as plausible bird sanctuaries. It also provides livelihoods for a lot of people. But on the other hand, the conversion of this land to salt producing areas has led to drastic changes in the landscape, and it has caused the complete loss in the fertility of lands which were converted to salt brines. Though it doesn't affect the nearby agricultural lands right now it will have adverse effects on them in the long run. Many of the small mammals that were previously hunted by these communities are not found much (H. Byju, per. comm.).

Acknowledgement

We thank Raveendran Natarajan of Iragukal Amritha Nature Trust for sharing valuable information on the saltpans of Rameswaram. Our sincere gratitude to H. Byju for further elaborating us on the same.

References

Balachandran, S. (2006). Conservation needs for the coastal bird habitats of Gulf of Mannar. Database on Gulf of Mannar Biosphere Reserve. National Research and Monitoring Moderation Workshop (p. 88) http://tnenvis.nic.in/writereaddata/DATABASE%20ON%20GULF%20OF%20MANNAR%20FINAL%20.pdf

Magesh, N.S. & S. Krishnakumar (2019). The Gulf of Mannar Marine Biosphere Reserve, Southern India. *World Seas: An Environmental Evaluation*, 169–184. https://doi.org/10.1016/b978-0-08-100853-9.00012-9

Nammalwar, P. & R. Ramesh (2006). Present status on conservation and management of mangrove habitats in the islands of Gulf of Mannar region, Tamil Nadu. *Database on Gulf of Mannar Biosphere Reserve*. National Research and Monitoring Moderation Workshop, 48 pp. Pandiyan, J., S. Mahboob, K.A. Al-Ghanim, F. Al-Misned, Z. Ahmed, G. Karthikeyan & M. Govindarajan (2021). Factors determine the population characteristics of migratory shorebirds and their prey species in the coastal saltpans. *Estuarine, Coastal and Shelf Science* 260: 107490. https://doi.org/10.1016/j.ecss.2021.107490
R, A. (2019, June 12). Chennai: Government looks away as salt industry

R, A. (2019, June 12). Chennai: Government looks away as salt industry slugs it out. The Times of India. https://timesofindia.indiatimes. com/city/chennai/govt-looks-away-as-salt-industry-slugs-it-out/articleshow/69747260.cms (accessed on 12 January 2023) TNSALT Corporation. (2018, n.d.). http://tnsalt.com/tnsalt-new/(accessed on 13 January 2023)

Aishwarya S Kumar & Swaathi Na, RHATC Fellows 2022–23, Zoo Outreach Organisation, Coimbatore, TN, India.