

Quiet's wall crumbles into the sea

Coastal erosion is ruining the homes and livelihoods of Tamil Nadu fishing communities. It has also destroyed the compound wall of Quiet and is relentlessly moving north.

Until 2007 the fishing community of Chinnamudaliarchavadi and its neighbour, Auroville's Quiet Healing Center, were blessed with a gorgeous 70-metre wide beach which was used for drying fish, docking boats or recreation. Hardly three years later the beaches have completely gone, together with more than 25 homes in the village and the compound wall of the Healing Centre. Houses in Repos are now threatened. As the relentless coastal erosion moves up further north at an alarming rate, more fishing and beach communities in Tamil Nadu are critically affected.

What caused this disaster?

For thousands of years, huge amounts of sand have been released from the Cauvery Delta, south of Puducherry, into the Bay of Bengal. Left to its natural course, the Long Shore Drift – a self-regulating system of the waves moving sand up and down the beach – distributed the sand along the shoreline creating beautiful beaches and thriving fishing communities. The drift also established huge underwater sandbars that ran parallel to the coast and gave protection to the coast from tidal waves.

During the 9 months of the south-west monsoon, 600,000 cubic metres of sand move northwards. During the 3 months of the north-east monsoon, 100,000 cubic metres move from the north towards the south. The resulting net displacement of 500,000 cubic metres of sand per year is among the highest long shore drifts on the planet. This amounts to roughly the equivalent of 50,000 lorry loads of sand a year or 135 trucks full of sand every day!

Harbours block the movement of sand. They create massive accretion on one side and severe erosion on the other side of the breakwater. A perfect example is the famous Marina Beach in Chennai. The British build the Madras port at the northern end of the city which gave it the ever-widening Marina Beach; at the same time it caused continuing erosion north of the port. In those days there was not much habitation there; but today, people living north of Madras port suffer a lot due to heavy erosion and the resulting salinity of the groundwater.

Similarly, the Pondicherry harbour and its breakwater, constructed in 1989 at the southern end of the town, have blocked the stream of sand from the south. This has resulted in the erosion of the once beautiful and wide Pondicherry beaches. The amount of beach land lost because of this erosion has been calculated at 200 acres, a massive loss to the town of Pondicherry. This erosion was foreseen when the harbour was designed. A sand bypassing system was added to regularly shift the accumulated sand from the south to the north. But unfortunately, the required constant dredging and sand-bypassing was hardly ever done. Now it is even difficult for the fishermen to get into the harbour as it has silted-up. The construction of more groynes in the state of Puducherry and Tamil Nadu has brought erosion northwards. The results are devastating.

Solutions in sight?

A meeting of Aurovilians living in beach communities was held at Quiet in November. The Quiet team had invited PondyCAN! – Pondicherry Citizen's Action Network – with whom they have been working together for the last three years to see what can be done. PondyCAN!, which has been campaigning for the restoration of the Puducherry beaches for more than a decade, has lately intensified its efforts to find a satisfactory answer to this man-

BEACH EROSION PETITION

Members of the Residents' Assembly have signed a petition to the Governing Board and International Advisory Council members to persuade the Governments of Puducherry and Tamil Nadu to take speedy and adequate measures for restoring the beaches and protecting all affected areas.

made disaster. Recent developments give hope that a solution is within reach, if only the political will is there.

The National Institute of Ocean Technology and the Department of Ocean Management of the Anna University, Chennai, are presently studying the environmental impact along the Tamil Nadu coastline caused by the harbour and the construction of groynes and seawalls. Instead of the cur-



The beach in front of Quiet in August 2008. Left, in the distance, the Quiet compound wall.



The beach in front of Quiet in November 2010. The compound wall has crumbled.



The beach and houses in the village of Chinnamudaliarchavadi are disappearing

rent 'hard' solutions, which end-up either aggravating the already disturbed environment or moving the problem further up north, research institutes and government officials are nowadays increasingly thinking of 'soft' solutions, such as sand nourishment and geo-tubes.

Sand nourishment

Bringing the sand back is a realistic possibility. The Puducherry government, concerned that the harbour is silting up, has allocated Rs. 10 crores for dredging 2.7 million cubic metres of sand from the harbour mouth. This amounts to nearly 6 years' worth of sand which should have come northwards. Unfortunately, the Puducherry government plans to dump the dredged sand just adjacent to the harbour (on the northern side of the harbour mouth). If the Governments of Puducherry and Tamil Nadu can collaborate for the benefit of the people, by using a rainbow dredger or barges, this sand could be deposited in the critically-eroded and vulnerable areas, giving not only immediate relief to the affected coastal communities, but also laying the necessary base for further protection measures. Such a restoration project could become a pioneering model of beach protection for the whole of India, whose beaches and fishing communities are increasingly endangered. Sand nourishment is routinely

carried out in Europe, especially in Holland and Germany, by dredgers which work continuously. But this concept is not yet put into practice in India.

Geo-tubes

The second method is working with geo-tubes to combat erosion. This method, which is now being considered by the Tamil Nadu government, is similar to the one used at the Visakhapatnam Port. It uses huge geo-tubes of three metres diameter filled with sand, laid in rows along the shore over a stretch of one kilometre, which acts as an artificial reef that holds the sand in place.

The Pondicherry Government should act

"It is high time for the government of Puducherry to take up its responsibility for the environmental damage and human misery it has caused by blocking the natural flow of sand to Tamil Nadu," writes PondyCAN! in a press release. For unless urgent action is taken, the coastal villages and the Auroville beach communities may disappear soon.

Dianna

The problem of the disappearing beaches was earlier reported on in the November, 2002 and August 2007 issues of Auroville Today.

PHOTOS COURTESY QUIET HEALING CENTRE

In brief

Mother's words on Auroville

A compilation of almost 500 pages of letters, messages and interviews with The Mother about Auroville from early 1960s to November 17th 1973 is now available on-line at <http://www.forall-pourtous.org/auroville-in-mothers-words/>

Health Board

A Health Board has been established to facilitate coordination and communication among healthcare providers, administrative staff and services in Auroville and to organize the registration and list of recognized healthcare practitioners of the community.

Housing

The collective housing project 'Inspiration', which is next to Citadines, was opened on November 28th by Dr. Karan Singh, who also laid that day the first stone for Maitreye 2, situated next to the ongoing housing project of Maitreye. This project will have 27 apartments (16 singles, 6 couples and 5 families) and common facilities. The work is expected to take two years. Both these projects are funded by Government of India grants.

L'Avenir reported that though many appeals for individual housing come to it, there is a reluctance to allocate land for individual housing because informed decisions cannot be made till the base maps are re-adjusted to match reality, and a global view for development (infrastructure, land use, economy and collective priorities) emerges which would allow opening areas for individual housings. To help alleviate the problem of individual housing, L'Avenir appeals to the existing communities to open up and accommodate more people.

Preventing land encroachment

The Land Resource Management Group has asked Aurovilians who are able to build temporary housing (with a keel roof that may last 2-5 years) to look after Auroville land that is being encroached.

International Zone

L'Avenir has agreed to restudy the International Zone Plan approved by the former L'Avenir team in December 2009 in consultation with the IZ Group, following a request from the International Advisory Council which objected to the space allocated for some of the continents. The new study will also take into account ground realities have not been formerly considered

Solid waste

As a piece of land behind the former AuroAnnam Farm that the Eco Service had been using for its landfill for the past six or seven years was exchanged landfilling has come to a standstill and mountains of landfill waste are piling up at the Eco Service sorting shed. There is an urgent need to identify a new piece of Auroville land that can be used for this purpose.

Violence against women

The Women's Safety Task Force is running a two-month campaign to address violence against women. Volunteers are visiting guesthouses, communities, restaurants and shops in the local area to sensitize people about the growing problem of violence against women on the roads in and around Auroville.

Correction

The books of Georges van Vrekhem are available in the Seagull bookshop in the Visitors' Centre in Auroville.