The Sinking Island- Munroe Thuruthu

What is the issue?

Munroe Thuruthu, in Kollam district, Kerala is slowly going under water, and its fleeing residents join the swelling ranks of climate refugees.

Where is Munroe Thururthu?

- Munroe Thuruthu (13.4 sq. km.) is a string of eight islets at the confluence of the Ashtamudi Lake and the Kallada River.
- It was named after Colonel John Munroe, the British Resident of erstwhile Travancore State.

What are the primary problems faced by the people in the area?

- **Inundation of Land and Houses:** In low-lying Pattamthuruthu, one of the islets in the island's mid-western part, the houses are inundated by the sea water.
- The water which enters their houses leaves the walls damp and turns the yard into a brown pool of filth.
- The land is being reclaimed by water.
- The pool of water also acts as a breeding ground for vectors and creates an unhygienic environment for the residents and children in particular.
- **Connectivity:** It is a major problem for the residents.
- Access to the only school in the region and hospital is a great challenge.
- **Scarcity of Drinking water**: Another problem on the island is the scarcity of drinking water.
- During high tide, the public water supply system stops functioning and water has to be transported in canoes.
- **Impact on the society**: Families, find it difficult to get a good matrimonial alliance due to the lack of basic facilities in the region.
- The island lies barely 20 km from Kollam city and it presents a stark contrast to the bustling business centre.
- Environmental Refugee: There has been a steady exodus from Munroe island, which currently has only 2,200 families, and is dotted with abandoned houses in varying stages of decay
- The island currently has 9,800 residents and in the past it was over 15,000.
- The island can also be seen as the first casualty of global warming in Kerala,

creating a band of environmental refugees

How and to which extent the problem affected the resident's livelihood?

- Munroe Thuruthu is used to be a hub of coconut farming.
- But over the years, saline intrusion has stripped the soil of its fertility.
- Now the coconut trees on the island are mostly barren stumps.
- The local coir industry too collapsed due to a shortage of the raw material.
- Many farmers then turned to aquaculture.
- But the recent floods have wrecked the island's fragile ecological balance.
- The floods caused a sudden change in the physico-chemical parameters of the water, making it a less suitable environment for many species.
- Then the change in the salinity level led to the vanishing of plankton which, in turn, will affect fish production in future.

What are the causes for the island sinking?

- **Construction of Thenmala dam**: It is located 70 km away and constructed in the 1960s under the Kallada Irrigation Project.
- The dam blocked the flow of fresh water as result sediments from the Kallada River was also stopped.
- It was the main determinant of the land's fertility.
- Now, the whole area has turned saline.
- **Tidal Surge:** The threat of tidal surge became aggravated after the Indian Ocean tsunami in 2004.
- The whole island island called Ekkappuram is completely submerged.
- According to a report prepared in 2016-17 by the Government Engineering College, Thrissur, the 2004 tsunami caused a sudden rise in the volume of building settlements, affecting the life of islanders

What is the scientific explanation for the phenomena?

- While several studies have tried to pinpoint the reason for the island's steady sinking, none has come up with a fully satisfactory explanation.
- The National Centre for Earth Science Studies (NCESS), based in Thiruvananthapuram, has been monitoring the island for the past one year.
- An NCESS study has found that the total water-holding capacity of Ashtamudi Lake has decreased by 15% in the last 17 years.
- As munroe's canal system is not properly maintained once the astronomical tide from the Neendakara harbour ,40 km away, reaches Ashtamudi, water gets trapped in the island.
- Global warming and climate change are also seen as the main forces driving the steady inundation.

What is to be done to tackle the situation and revive the livelihood hope of the people in the region?

- The concept of disaster-proof amphibious houses that can either be floating type or built on stilts is seen as a way to build a stable dwelling unit.
- Under normal conditions, the structure stays on the ground.
- But when flooding happens, it rises over the level of water.
- Many experts had suggested that the entire island be divided into different zones based on vulnerability and those residents of only specific areas are rehabilitated in safer locations.
- The island can also be marketed as a model showcasing the terrifying consequences of global warming.
- The area still holds the potential to be a tourist destination.
- Shikara rides on the river are very popular and mangroves and migratory birds are another attraction.
- The potential shouldn't be tapped to meet the ever increasing demand.
- However, the stress should be laid mostly upon the responsible and eco tourism.

Source: The Hind

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