SOLO WOMAN WALK-BATAPADY BEACH TO KANYAKUMARI-850+ KM-OCTOBER 5TH 2019 TO DECEMBER 6TH 2019-K2K THE COASTAL WALK

Solid Waste Across the Coastline of Kerala

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On October 5th, 2019, Janet Orlene set out on a solo coastline walk from Batapady beach near the border of Kerala to Kanyakumari. Backed by a team of 2, Pradeep Rajendran and Meghana Basavaraju, Janet covered the entire strip of coast meeting the unique terrains, people and solid waste patterns of Kerala.

Introduction

What I expected to see was completely different from what I saw. I expected to find a lot more sanitary napkins, thin plastic bags, more obvious chemical pollution and other textbook things that I've learnt all my life. Instead, the largest quantities of solid waste turned out to be in the form of slippers and shoes, plastic water bottles, diapers, medical waste and household waste. The chemicals I saw polluting the ocean were in the form of thin oily surfaces (often near ferries and the shipbreaking yards), mining wastes, sewage, etc.

This journey through all of the most beautiful coastal landscapes Kerala had to offer was an eyeopener in terms of human activity caused destruction. The coastline is one of the most powerful indicators of the human-caused environmental crisis.

What this report aims to show are the observations I made during the walk down the coastline of Kerala.

Note:

*Although not mentioned otherwise, one of the largest polluters across Kerala shore are diapers.

*Slippers, Shoes, Medical Waste are the other surprising but largely occurring pollutants.

*Household wastes, Plastic bottles and other forms of plastic pollutants are mainly found in areas with a higher density of population.

*Several areas showed biosphere damage with symptoms such as washing up of several species, jellyfish bloom, invasive flora and oft-spoken about, unseasonal weather changes and damage to the fish population.

Intent and purposes

This report intends to look at the visual observation of solid waste made while walking continuously down the coastline of Kerala over 2 months as a district basis as well as one area that stood out in terms of the intensity of solid waste on the coastline or effort to curb the same in each.

^{*}This report has not been formally edited.* | 4th July 2020 | Authored by Janet Orlene Report on Solid Waste along the coastline of Kerala - Thrissur

Index

Introduction	2
Intent and purposes	2
Index	3
OVERVIEW OF VISUALLY NOTED SOLID WASTE THROUGH THE COASTLINE OF THRISSUR	
Thrissur	3
Chavakkad	3
Chavakkad DATA OF VISUALLY NOTED SOLID WASTE THROUGH THE COASTLINE OF THRISSUR Thrissur	5
SUGGESTIONS FOR THRISSUR:	7
Conclusion	8

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Thrissur

Several areas along the coastline of Thrissur were covered with waste. A large section was of plastic gunny sacks used for construction purposes, diapers, slippers, soles of shoes and other plastic waste. Thrissur district also showed severe signs of coastline damage due to erosion including many homes partially or completely torn down by the currents.

In each case, many coconut trees had been washed away and remains of homes filled (sometimes to the ceiling) with sand. At Chavakkad and beyond, the devastation only grew.

Large quantities of **rubble** (Both housing and sea wall), plastic sacks, microplastics from broken and eroded trash littered below the sea walls that stretched kilometres.

Chavakkad

Rekha, the only deep-sea licenced fisherwoman's home, was near Puzhimuth at Chavakkad. Her neighbours' home is filled up to the ceiling with sand. Plastic bags, possibly months or even years old have got trapped in between the layers of sand brought in by Cyclone Ockhi and the years of erosion occurring severely in the area. She tells us about how the seas have also become rougher with time. Walking down from her home, we see many trees uprooted and washed away by the sea as well as more and more homes destroyed. Plastic is still thrown into the sea by many households though. They wash back up to the same destruction creating a very post-apocalyptic scene. Many piles of slippers and plastic covers can be found here.

A large number of **microplastics** here are also cause for alarm. In the few piles of shells that I saw gathered, there were many broken pieces, some much smaller than the shells but this is also found all along the coastline, deeply buried into the sand.

DATA OF VISUALLY NOTED SOLID WASTE THROUGH THE COASTLINE OF THRISSUR



Visual Data based Key:

- 1 almost nil/nil
- 2 Scattered
- *3* Scattered with points of rubbish heaps
- 4 Heavily distributed / stepping in it often
- **5** unable to avoid waste without stepping on it

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Thrissur

Name of Village / City	Chemical Pollutants (Oils/ Industrial pollutants)	Household Waste (Plastic/Paper/ Packaging)	Biological (Flora and Fauna parts or Whole)	Medical Waste (Tablets / Bottles / Syringes)	Tourism industry based (Plastic or Paper based solid waste)	Sewage
Punnayur	1	2	1	2	1	2
Chavakkad	1	2	1	1	2	2
Kadappuram	1	3	1	1	2	1
Chettuva	1	3	1	1	1	2
Engandiyoor	1	3	1	1	2	1
Vadanappally	1	2	1	2	1	2
Snehatheeram	1	2	1	1	2	1
Palapetty	1	2	1	1	1	2
Padinjare Vemballur	1	2	1	1	1	1
Eriyad	1	2	1	2	1	1
Azhikode	1	3	1	2	2	2

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SUGGESTIONS FOR THRISSUR:

- 1. There are several areas which are fighting the issue of solid waste as a community. Modelling around these villages could make a significant impact on the dwindling energy of those constantly working towards change as well as inspire those who are impacted but struggling with effective initiatives. Education programs and training can be run through them as well *Environment Preservation based Model Villages*.
- 2. Most villages and cities showed a deep connect through stories and mythology with the ocean. Some places were far more transactional where the ocean was a job and a place to sell. These had far more solid waste issues, callousness, industrial damage and so on than the areas with the stories. As Kadalamma holds reverence across religions and the protection of Sacred Groves have been successful across Kerala, *Sacred Coastal Zones* would help set up biodiversity protection programs for the ocean.
- 3. The fisherfolk of Thrissur are open to *training and clean up based programs*. They collect quite a bit of plastic in their nets while fishing every day. This is often dumped on the shore. If it isn't picked up by the sanitation workers, it gets washed back into the ocean.
- 4. **Diapers need to be incinerated as medical waste**. Often they litter the ocean and spill out non-biodegradable contents as they break down. This also contributes to microplastic waste and general solid waste issues across the coast.

Conclusion

Solid waste is one of the largest factors in the dip in the number of fishes over the years People are knowledgeable about the impacts of solid waste dumping The largest issues in coastal waste dumping include:

- Medical waste
- Slippers
- Diapers
- Household Waste
- Bottles (glass and plastic)
- Fishing industry waste nets, fishing lines,thermocol

There seem to be two major forms of solid waste dumping on the coastline in accordance to the conversations we had:

- 1) Despite solid waste management programs- Where one finds it easier to dump solid waste due to lack of education about the negative impacts of pollution, lack of concern, a belief that plastic "melts" in the ocean and degrades, cheaper (in terms of medical waste dumping or another industrial dumping), or apathy.
- 2) Lack of solid waste management programs Good examples of these are Anchuthengu and South Thiruvananthapuram(The Valiathope, Vallakadavu, Valiyathura, Beemapally cluster) who have had no choice but to turn their homes into a large dumping ground. It is also much harder for the solid waste programs to be practised as easily as other areas due to the maze-like paths and roads, perhaps, this discourages implementation.

But, there is still hope. The coastal community is impacted deeply by environmental crises regularly whether it comes to their livelihood, their futures or their very existence. They are aware of erosion, overfishing, solid waste issues and how it ties back to the activities of people. They are also aware of how their household wastes, bottles do not allow effective breeding or movement of fish in their areas. There are often local people making an active effort in their villages to make an impact in any way and are welcome to both change and help.

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