

Evolution and Challenges of Waste Disposal in Cochin Municipal Corporation before Brahmapuram Waste Treatment Plant

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Abstract

Urbanisation, growth in population and change in lifestyle has increased garbage production. Unplanned development of the city and lack of civic sense has made solid waste management a serious threat to Urban local bodies. The failure on the part of local self-governing bodies in implementing their statutory function of Solid Waste Management and lack of civic sense had intensified the garbage crisis. This study focuses on evolution and challenges of waste disposal in Cochin corporation before the establishment of a solid waste treatment plant at Brahmapuram. The study mainly narrates the history of waste disposal at various landfills and civil resistance since the formation of Cochin corporation. The study observed that civil resistance had affected the decision making of urban local governments. For the purpose of study information is collected through interviews of stakeholders and newspaper reports.

Keywords: *Solid Waste Management, Waste, Landfills, Civil resistance*

1. Genesis and Demography of Cochin Municipal Corporation

Cochin, now named Kochi, is the headquarters of Ernakulam district. Cochin Corporation was formed in 1967, incorporating the three Municipalities of Fort Cochin, Mattanchery and Ernakulam. Areas within Kochi Municipal Corporation consist of mainland Ernakulam, Willington Island, Fort Cochin-Mattancherry, Bolgatty, Gundu and Vypeen Island. In 1967 the village Panchayats of Edapally, Vennala, Vyttila, and Palluruthy merged with Municipalities of Ernakulam and Mattancherry to form Corporation of Cochin with an extent of 94.88 sq km.

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Demography- As per 2001 Census Cochin Corporation had a resident population of 597,470 spread over an area of 94.88 sq km. Now according to the 2011 census report there are 677,381 residents within 94.88 sq km. The density of population is 6287 per sq km which is highest among the urban centers of the state. The average density of urban population in Kerala is 2457.

2. Evolution and Issues of Waste Disposal in Cochin Municipal Corporation

Initially waste disposal was not a major problem for the people in Kochi. It was largely a private affair with individuals and households responsible for their own waste as waste was biodegradable. Cochin corporation after its establishment in 1967 took over the responsibility of waste disposal. The Corporation purchased a number of trucks and hired workers to collect and dispose of waste. There were a number of dumpsites around the city from where waste was collected and transported to the main dumping yard at Kalloor. However, as the city grew in its size and population, a centralised approach to waste disposal was required. Rapid urbanisation, growth in population and change in lifestyle increased the trash production, coupled with unplanned development of the city and lack of civic sense made waste disposal a major threat to the Corporation.

3. Waste Dumping at Cheranalloor and Civil resistance

Cochin corporation dumped its urban waste at Cheranalloor, a village situated at the outskirts of Cochin city from 1997 to 2004. Cheranalloor is a low lying area surrounded by the branches of Periyar river on its three sides. The dumping yard was very close to Kothadu river, a branch of Periyar, and a harijan colony just 150 meters away from the dumping yard. The effluents discharged from the dumping area polluted the

river water and caused serious health problems to the people living near to the dumping yard. Consequently people approached the High Court of Kerala seeking direction against dumping of hazardous waste. The Pollution Control Board (PCB) was indicated as one of the respondents in the petition filed by the residents of Cheranalloor.

3.1 Report of Pollution Control Board

The report submitted by the PCB before the High Court explained about the gravity of environmental pollution caused by the waste dumping at Cheranalloor. The report disclosed that the dumping yard was very close to Kothadu river, a branch of Periyar from where the Corporation pumped drinking water to Cochin city and nearby places. During high tide the polluted water can reach about 16 km within six hours where the pumping station in Aluvay is situated. In short the water pumped to Cochin city was highly contaminated by the toxic discharge from the dumping yard. The PCB also stated that the land being water logged, is not suitable for dumping waste as it causes water pollution. Moreover, the Corporation did not get clearance from PCB for the disposal of Solid Waste at Cheranalloor, which was a violation of Rule 3 of the Environmental Protection Act. The Corporation also went against the rules mentioned under Water (Prevention and Control of Pollution) Act that envisages no person shall allow pollutants to enter inter water course or stream. Hence PCB recommended that the Corporation should refrain from dumping waste at Cheranalloor to avoid further pollution problems.

3.2 Direction and Verdict of the Kerala High Court

The Court in its verdict held that the Cochin Corporation committed a naked violation of section 331 of Kerala Municipality Act 1994, as Corporation did not make prior

notification before waste dumping at Cheranalloor. The Court also pointed out that the Corporation violated Coastal Regulation Zone Notification, since the rule prescribed that there shall be no landfilling to be done on at least 100 meters from high tide line.

3.3 The High Court of Kerala issued following directions to the Corporation on waste disposal at Cheranalloor

- The Corporation was given three months time to dump the waste from July 1997. The Court made it clear that the time limit of three months shall not be extended as the issue is affecting the health of the people.
- There should be proper landfilling done with at least 60cms of red earth covering the waste.
- Appoint a Health Inspector and other officials to attend to the hygienic problems arising due to waste dumping.
- The Corporation was directed to take steps to issue notification as envisaged under section 331 of Kerala Municipality Act (1994) and obtain clearance from PCB.
- Take speedy measures to find out a scientific waste management method for disposal of solid waste from the city within one year from the date of verdict.

4. Environmental Pollution and Human Rights Issues

The Corporation, violating the court verdict and the prohibition order of the Pollution Control Board, continued to dump solid waste at Cheranalloor for about seven years from 1997. The continuous dumping of waste caused environmental threats and health hazards to the residents. People living in nearby places experienced unbearable stench from the dumping yard that caused health concerns. The leachate from the waste polluted the well water and there was colour change and smell. The

river water too became extremely toxic to use. Many water borne diseases spread in the area especially during the rainy season. Skin and eye itching were common in the area.

Environmental degradation was also high in the area. Apart from air and water pollution, there was also pollution of soil and land since the toxic chemicals from the waste deteriorated soil fertility and productivity which affected the agriculture of the area. There was also a decline of aquatic organisms due to the chemicals and other toxic substances from the dumping yard that mixed with the river water causing concern for the fishing community. Thus agriculture and prawn farming, the traditional occupation of the area, got adversely affected.

The right of the people to live in a healthy and clean environment was denied, which was an infringement of Right to Life coming under Article 21 of the Indian Constitution. The Right to Life is just not mere animal existence, but to live with human dignity. But the people of Cheranalloor were denied the right to live with dignity as they were forced to live in unhygienic surroundings. They were denied safe potable water to drink, fresh air to breathe, and a clean and healthy environment to live in. Their right to livelihood too was violated. In short, there was a gross violation of the human rights of the people.

Ultimately the people of Cheranalloor formed an action council with the motive to end waste dumping and a human chain was formed by the residents to protest against Cochin Corporation. Finally, due to civil resistance and the direction of the Ombudsman, Cochin Corporation was forced to stop dumping of city waste at Cheranalloor, thus putting an end to seven year long indiscriminate waste disposal.

5. Dumping of waste at Willington Island

Following it Cochin Municipal Corporation shifted the operation to Willington Island close to the Airport at Naval Base. The low-lying land, a part of proclaimed backwater, was used for the dumping of waste, on a short term agreement with Navel authorities. But this practice finally stopped when Navel authority raised the issue of security, as planes were hit by the birds scavenging on the heap of waste which was not scientifically landfilled.

Lack of a dumping yard forced the corporation to give tender to contractors who miserably failed to take garbage out for final disposal and Kochi's waste management became acute as trash piled up in every nook and corner of the street and bye lanes.

6. Intervention of High Court

As the removal of solid waste was stopped, a PIL was filed by Mr. Dijo Kappan (Managing Trustee Center for Consumer Education) in the High Court, showing the failure of the Corporation in implementing the rules mentioned under the Solid Waste Management and Handling Rules 2000. The High Court on January 5, 2006 directed the corporation to dump the garbage on the site owned by the corporation at Brahmapuram for landfilling until a waste possessing plant is set up there.

On the wake of the decision made by the High Court, Cochin corporation made an attempt to dump the waste at Brahmapuram. But local residents of Brahmapuram resisted this move of the municipal corporation and stuck to their stand that they wouldn't allow waste dumping at Brahmapuram until the waste treatment plant was finished. In such circumstances, the Corporation had to drop the idea of waste disposal at Brahmapuram.

The next option was to dump the waste on the land owned by Kerala State Housing Board, that's around 120 m away from the northern side of Kerala High Court. A mass petition was filed by a group of women lawyers raising the issue of foul smell emanating from the dumping site near the High Court. The Court severely criticised the corporation's continuous failure in waste disposal and warned the corporation that it would consider taking action under section 64 of the Municipality Act for dissolving the Council. In the counter affidavit filed before the court the corporation authorities stated that the land at Brahmapuram could not be used as a dumping yard since it was located on the banks of the river Kadambarayar. But the Court did not accept it.

7. Waste Disposal at Brahmapuram and Public resistance

As per the direction of the High Court the Corporation Council decided to shift garbage to Brahmapuram where the corporation owned 37.33 area of land. The land filling is to be done in the remaining 14 areas of land, leaving 23 areas of land for the construction of the plant. But the 14 areas of land were not at all suitable for landfilling as it was marshy land lying very close to the river.

The situation became very volatile as the people in Puthenkurish, Vadavucode Panchayat, particularly in Brahmapuram, were up in arms against the move of the civic body to dump urban waste there. There was stiff resistance from local people who organised mass rallies and called for a Hartal in the area. Under such a situation the Corporation dumped their waste at Challipadam in Brahmapuram.

The foul smell emitting from the garbage caused health problems to the residents and 30 persons were admitted to Government Hospital at Vadavucode .Unable to stand the stench blowing from over 100 trucks loaded of decaying

garbage dumped in the area 53 families residing at Challipadam had to flee their home. They are said to be the first group of people in the country ever to take shelter in a refugee camp in a nearby school because of unbearable smell coming from the dumping yard. Following the stiff resistance from the people at Brahmapuram the Corporation decided to give up its confrontationalist stand and abandoned waste disposal at Brahmapuram.

8. Intervention of District Administration in Waste Management

Under the situation of failure of Cochin Corporation in effective waste management, an all-party delegation consisting of Cochin Corporation Councillors and representatives of the people of Brahmapuram met the Chief Minister seeking an intervention in the issue. The meeting decided against the dumping of waste at Brahmapuram till the construction of a Solid Waste Management Plant was completed. The responsibilities and power of waste management were taken from the municipal body and handed over to the district administration as a step to solve the crisis. The collector was also directed to constitute a monitoring committee for setting up of the plant at Brahmapuram. The responsibility of the Corporation was to supply the workers and provide funds as demanded by the district administration.

The district administration identified six places for dumping the trash, and placed it before the High Court for its approval and accordingly the district administration was allowed to dump waste at Chatyat Pachalam land owned by Goshree Island Development Authority. But the waste dumping in the area was forced to stop following the protest of local people as students of a school near to the dumping site were taken to the hospital due to health problems caused by the foul smell from the dumping site.

The non-removal of waste gave rise to the fear of an outbreak of epidemics as heaps of raw waste had piled up in the city. The High Court took up the matter and gave blanket permission to the district collector to take all necessary measures to clean up the city. Following this direction the district administration took over the land at Ambalamedu owned by FACT at Kuzhikkala, for garbage dumping. When there was local resistance, the district administration adopted tough measures and declared prohibitory orders under section 144 Criminal Procedure Code.

The district machinery succeeded in cleaning 5000 tonnes of waste from the city and for easy removal of garbage, the district collector declared a holiday for schools and Government offices. The dumping at Ambalamedu continued till 2008 until a solid waste treatment plant got established at Brahmaipuram. Till then the task of waste management was handled by the district administration.

9. Conclusion

Thus the city of Kochi had always faced a garbage macro crisis caused by the functional flop and maladministration of Kochi Municipal Corporation. This lack of efficiency in waste management along with the absence of civic sense and community feeling among Cochinites further intensified the garbage crisis. But this uncivic scene and mismanagement of waste has always affected the urban poor who are in the periphery of the city. The urban poor suffer due to flooding of their dwelling places as the drainage system is clogged by solid waste especially non degradable ones. Thus urban poor become the victim of waste created by the urban rich. Apart from this urban waste is always dumped in areas where urban poor live. Almost all the dumping sites selected by the corporation of Kochi are either a rural area where poor people live or an area which is environmentally fragile. The

indiscriminate and unscientific dumping of waste had seriously affected the health and environment of Cochinites.

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