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The Unending Fallout of Unilever's Thermometer Factory in Kodaikanal

By [ATUL DEV](#) | August 18, 2015



Margaret Anthonydas, a resident of Kodaikanal and a former employee of Hindustan Unilever's thermometer factory, is a single mother of three young sons. One of her sons, Nitish, is 15-years-old and has been brain-damaged since birth.

Amirtharaj Sreelaxmi

On 3 February 2015, Paul Polman, the chief executive officer of Unilever—a British-Dutch multinational consumer goods company—came to meet Prime Minister Narendra Modi in New Delhi. The conglomerate was allegedly keen on investing in one of Modi's pet projects: the Swachh Bharat Abhiyan, a national campaign by the government of India that aims to provide 4041 statutory towns with health and sanitation facilities. A day later, national newspapers reported that the company had promised to spend 100 million euros—around Rs 700 crore—on Swachh Bharat by the end of 2020.

During an interaction with the media that followed his meeting with Modi, Polman said that Unilever, unlike its competitors, was already a “Make in India”—a catchphrase for another one of Modi's initiatives designed to transform India into a global manufacturing hub—company since it had 40 operational factories in the country. He went on to add that India presented an attractive opportunity for Unilever and that he was “involved in issues on a new climate economy,” since the country “could grow one per cent faster if it is able to solve the problems of planetary boundaries such as climatic change and water availability.”

But Polman's words were a marked contrast to the role Hindustan Unilever (HUL), the Indian subsidiary of Unilever, played in Kodaikanal—a popular hill station in Tamil Nadu where the company's now defunct thermometer factory had already done its part in damaging India's “climate economy”.

For more than a decade now, several activists and non-governmental organisations have been attempting to spread awareness about the mercury contamination caused by Unilever's plant in Kodaikanal. However, the issue began attracting media attention only recently, following a music video that gained traction on social media. The public interest in Kodaikanal's plight may be nascent, but its predicament is not. For the past nine years, Unilever has been fighting a case against the Ex-Mercury-Employees Welfare Association that was formed by the factory's former workers for exposing them to mercury and contaminating the ecologically sensitive area of Kodaikanal.

During another interview in March this year, Polman had spoken of how corporate organisations needed to “bring back ethical values,” as he expressed his concern for “the voices that can't be heard”. Unilever's own record in compensating its employees in Kodaikanal and decontaminating the town of mercury has been subject to intense scrutiny and criticism. Even as HUL continues to reiterate its commitment to a *Swachh Bharat*—a clean India—the company is battling allegations of having done very little to save either its workers or the environment. The only public statement from Polman about the Kodaikanal

factory came in the form of an incoherent tweet, after #UnileverPollutes started trending on Twitter in the first week of August. Dismissing the accusations that were being levelled at Unilever, he said that they were “determined to solve” the issue, but needed “facts not false emotions.”

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Almost two decades ago, in 1997, Wilbert Britto, then a 17-year-old resident of Kodaikanal, joined HUL's thermometer manufacturing plant as a contract labourer. Having dropped out of school after the eighth grade, Wilbert did not have a lot to do with his time. “The constant rebukes from my husband prompted him to join the factory,” Esther Rani, Wilbert's mother, told me when I met her in Kodaikanal on 28 July. Employment opportunities have always been scant at the hill station, and young Wilbert was excited about landing a job at the only industrial unit in town. His work, Rani explained, consisted of an assortment of odd jobs at the factory: cleaning the premises, picking broken thermometers off the ground, fixing broken pipes, and such. “I am on contract right now, but soon I will get a permanent job,” Rani remembered him telling her affectionately.

It wasn't long before Wilbert began complaining of headaches. He took medicines but they didn't help. “He started tying a handkerchief around his head very tightly and always looked stressed,” said Rani, who didn't think much of the frequency of the headaches and attributed it to exhaustion caused by work. As the headaches became more persistent and increasingly painful, Wilbert was unable to continue and quit the factory by 1999. “He started driving a taxi,” Rani told me, “the work was infrequent, but he felt better.” The headaches, however, continued.

Four years later, in early 2003, Wilbert came back home from work and went to sleep in the evening. “He was always exhausted, but that day he looked completely debilitated,” Rani recalled. He woke up complaining of nausea and walked towards the bathroom. Before he could reach it, he collapsed on the kitchen floor. The memory of that evening is etched in Rani's mind: “It was around six in the evening, and the rain was coming down hard. The lights were out. I got the gas lamp, and found him vomiting blood.” Upon rushing him to a nearby hospital, Rani was told by doctors that both of Wilbert's kidneys had failed. Subsequent X-ray tests revealed a cloud of mist around his lungs, but the doctors weren't sure of what it was. Wilbert died at the age of 23, six months later, on 23 October.

Having lost their only child, Rani and her husband, Edward Britto, now live in a small rented house that is two flights of stairs beneath the level of the tapered street leading to it. When I had met the Brittos in July, they had shifted thrice since Wilbert's death. Six months of dialysis, along with the hospital fees, cost the family everything it had and more. “I sold all my jewellery during that time, then we sold the house, and then the land where the house was,” Rani told me, sobbing. “We sold the cows too,” she added, “We have lost everything.” The cause of Wilbert Britto's death was not linked directly to his work in the HUL factory by the medical authorities, but his symptoms are consistent with that of hundreds of former workers at the factory. The Ex-Mercury Employees Welfare Association has recorded over 500 such cases among those who were employed at the plant.

The primary component in the manufacturing of thermometers is mercury; its adverse health effects are both well documented and diverse. “Exposure to metallic mercury usually results in a multitude of problems,” Rakhai Gaitonde, an independent public health researcher based in Chennai, told me over the phone. “It disturbs the nervous system, causes kidney damage, skin problems, acute headaches, tremors, and there is a chronic inflammation of the gums, so teeth fall,” he said.

It has now been established by committees—both independent and those appointed by the government—that this toxic substance was shoddily handled in the plant owned by Unilever. According to data submitted to the Madras High Court, 45 employees, who worked for varying durations at the factory that was operational for 18 years, have died. Of these, 33 deaths have been attributed to diseases that are related to exposure to mercury. Among the 575 other factory workers who have been enlisted by the Ex-Mercury Employees Welfare Association, health issues such as respiratory diseases, headaches, shivering, giddiness, skin diseases, dental problems and infertility are common.

In 2001, the factory was shut down by the Tamil Nadu Pollution Control Board (TNPCB) for infringement of environmental laws; but as a Supreme Court appointed monitoring committee noted in its report in 2004, the “workers affected by mercury poisoning and an environment contaminated with mercury remain as living heritage” of the factory. The monitoring committee concluded that HUL was liable for paying the entire cost of restoration and that the TNPCB should take an advance of Rs50 crore from the company to begin the process. It also urged the company to set up a health clinic in Kodaikanal. HUL, which has an annual advertising budget of Rs 2200 crore, never obliged.

Through a statement on its website that begins, “Our Code of Business Principles commits us to conducting our operations with honesty, integrity and openness,” HUL continues to deny that it exposed its workers to mercury in the factory. A report by a committee appointed by the ministry of labour and employment in the Government of India in 2011, that consisted of medical and toxicology experts, stated the opposite. This committee visited the site in October 2011 and did a medical examination of the factory's former workers. “There is a [sic] prima facie evidence,” the labour and employment ministry committee wrote in the conclusion of its report, “that not only the ex-workers of the HLL [HUL was known as Hindustan Lever Limited until 2007,

when it changed its name to Hindustan Unilever Limited], Kodaikanal, but also their new born children have suffered on account of mercury exposure such as tremor [sic], knee pain, loss of memory, loss of teeth, irregular menstrual period for women, infertility, skin problems, premature delivery of baby by pregnant women and children having ailments like mental retardation, deformity of organ, birth defect, like blue baby were also noticed.”

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This thermometer factory was set up in Kodaikanal in 1983, with second-hand equipment from the United States, where it was run by the cosmetics giant Chesebrough-Pond's. The rising environmental awareness in the USA through the 1960s and 1970s precipitated a set of regulations that focussed on making industries accountable for the damage they caused—chemical contamination, wildlife damage and environmental degradation among others. Some industrialists fought these regulations by trying to subvert the policy, some shut shop. Chesebrough-Pond's relocated its thermometer plant to Kodaikanal as an export-oriented unit, and handed over the control of this unit to its subsidiary, Pond's India. Following its global acquisition of Chesebrough-Pond's in 1986, Unilever acquired the factory in 1997.

Located on St Mary's road in Kodaikanal, this factory is surrounded by Pambar Shola—a thick bio-diverse forest that was designated a sanctuary by the Tamil Nadu government in 2003—and situated on a ridge that has rivers on either side. According to a story published in *Frontline*, it imported about five tonnes of mercury per year, made thermometers, and sent them back to the USA. The plant produced an estimated 165 million thermometers before it was closed down.

During the course of my reporting, I visited the factory site and surrounding areas in Kodaikanal with Nityanand Jayaraman, a Chennai-based activist who had been involved in the protests that eventually caused the factory to shut down in March 2001. Since then, Jayaraman, along with other activists and organisations, has been trying, unsuccessfully, to get HUL to compensate its workers and decontaminate the factory site. When I reached Kodaikanal on 27 July, he was there to record the personal histories of families who had been affected by the factory.

“The company”—as the locals address the factory—has a way of making its way into casual conversations in Kodaikanal inconspicuously. The tragedies that these exchanges reveal are concealed by the ease with which they are conveyed as engaging personal anecdotes. During my trip there, Jayaraman and I met Poomari, a 52-year-old domestic worker, at her house. She spoke to Jayaraman in Tamil—a language that I do not understand. Nothing about the tone of the conversation, or the snatches that I could comprehend, told me that she was narrating the circumstances of the death of her husband, R Marimuthu, who used to work in the factory until 1984. The only indication, if any, was when someone brought a picture of Marimuthu to the table-sized porch we were sitting at. Later, Jayaraman translated what Poomari had told us.

“Since I was pregnant, nobody told me he was sick,” Poomari said, as she recalled how she first realised her husband was ill in 1984, “When I looked at the blood he was coughing up I thought it was only ulcers.” A few days later, when she saw her husband vomiting blood, she took him to the hospital along with her father-in-law and two-year-old son. “We went there on a Monday,” she told us, “and on the next Monday, we brought his dead body back.” Marimuthu was in his early twenties; Poomari didn't know what his job at the factory was. What she did know was that the family “never received a single *paisa* from the company.”

The accounts of those who had worked at the factory in its early years, and are still alive, seem to suggest that concerns regarding the safety of the factory's workers did not seem to be a high priority for the company. S Raja Mohammad, who worked in the factory from 1984 to 1989 and is now the general secretary of the Ex-Mercury Employees Welfare Association, said that the workers “were provided with a cotton uniform, a cap, and a mesh cloth to cover their mouth.”

He also recalled a statutory warning for workers to wash their hands before they ate. In a thermometer manufacturing unit where workers were constantly exposed to a toxic substance such as mercury, these measures were as effective as an umbrella in acid rain. “For about six months in 1984, engineers from America were present in the factory; they advised us to bathe before leaving the factory, but once they left, even the bathing stopped,” Mohammad said.

Mohammad worked as a quality controller in the factory. He would go to different sections of the factory premises and supervise the work. “Did you also go to the mercury exposed area?” I asked. A line-map of the factory compound provided to the GoI committee by HUL in 2011, marked some blocks in the factory as “Non Mercury.” “There were no divisions, no area was unexposed; it was merely an administrative term,” he replied. Mohammad quit his job in 1989 due to the incessant headaches he began suffering from. He told me, “There was not a single day I'd go to sleep without *tailam*—medicinal oil.”

Among the dozen or so workers I met, KP Murugaiah, a sixty-year-old resident who had worked at the factory for nearly all of its 18 years, stood out. Murugaiah started out as a construction worker for Rs 10 per day when parts of the factory were still being built in 1984. By the time the factory was shut down in 2001, Murugaiah was making Rs 4600 per month and had risen to the post of a “junior sergeant.” “I was a supporter of the company, and trusted the people who had given me a job,” Murugaiah said, before adding, “I always believed in loyalty.”

Murugaiah too struggles with health problems and is now a member of the Ex-Mercury Employee Welfare Association. "Look at my leg," he said; pulling up the right leg of his trousers, "it is like the skin of a snake." Murugaiah's leg was covered with patches of dead skin. His daughter, who was born in 1987, has the same problem, "but only worse." Murugaiah's teeth started falling at some point in 2000; now he has no molars left, and can't chew. Despite these ailments, he told me that he would not have quit the factory had it not been shut down. As he put it, "Whatever it was, it was work."

Murugaiah's account laid bare HUL's systematic disregard for safety and its subsequent attempts to evade accountability. "The company doctors who came to examine the workers told us repeatedly that it is a safe place to work," he said. The problems he faced, the doctors told him, had nothing to do with his work at the factory.

In matters pertaining to the thermometer factory, Unilever likes to point out that it got the ownership of the factory only in 1998. However, documents submitted to the Gol-appointed committee noted that Unilever got full financial control nearly a decade earlier, in 1989. Unilever's website also mentions that that both Pond's India and HUL had significant overlaps in speciality chemicals and export businesses, besides a common management pool since much before 1998.

According to Mohammad and Murugaiah, both of whom were employed by the factory when its ownership was passed from Pond's to HUL, the change had no impact on the safety standards in the factory. Murugaiah told me that workers were made to bury mercury scrap beneath the ground in the factory premises, leading to contamination of the soil. "Chemical was everywhere," he recalled, "It would get mixed with water around the sink area and form technicolour trails around the compound."

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In December 2000, Navroz Mody, a Kodaikanal-based activist, who was then a board member of the Palni Hills Conservation Council, noticed two sacks of broken thermometers in the shop of a local scrap dealer named Theravium. Mody, who lived on St Mary's road, only a short walk away from the factory, sensed something. "See, since I only saw a couple of sacks, I thought it could have been from a hospital," he told me over the phone. "But I sent someone to check in any case," he added. The person Mody had sent to Theravium's shop told him that he saw "tons and tons" of broken thermometers lying there.

"I only bought drums and bottles and such, but people at the company [HUL] said they would only sell the other items to me if I bought their glass waste; they were giving it at throwaway prices, so I didn't think it was a bad deal," Theravium told me when I spoke to him on 28 July. He purchased over seven tonnes of broken thermometers in between 1998 and 1999, and transferred the waste through multiple rounds on his carrier to his shop in Moonjikal, a crowded neighbourhood in Kodaikanal. The HUL employees that Theravium was in touch with never told him that the waste he was ferrying contained mercury. Surprised that no wholesaler wanted to buy the thermometers, Theravium took the scrap back to the factory. But, "the company didn't take it back either," he said. These broken thermometers occupied his shop for about two years, and were moved around without protective gear. Two of the six people who used to work at his shop are dead. Theravium, now in his sixties, has lost all his teeth; his son, barely 30, has no molars left.

Later in December, Jayaraman and a friend, also found the waste the factory had been dumping in its backyard, where the slope of the Pambar Shola forest begins. As we walked past the factory, Jayaraman said that it "was decided [when he and Mody found the dump in the factory's backyard] that we should have pictures and video as evidence, we thought the company might deny dumping its waste in the forest." The company denies the charge.

As I stood at the high floor of St Mary's church that is located close to plant, I could see the factory compound. To go inside, the guard told me, I would have to get written permission from the company. My vantage point afforded me an aerial view of the building, and the dilapidated factory didn't seem out of place in the surrounding forest. Damp foliage carpeted its tapered roofs, affording it the appearance of a deserted resort. I could clearly hear the Pambar River that babbled down below. The setting was oddly captivating at that point, but the testimonies I had heard earlier that day were a reminder that the place had not always been this benign.

Between January and March 2001, Jayaraman and Mody, who were old friends, got in touch with other activists and mobilised ex-workers with the intention of increasing awareness about the factory's operations. In February, the Tamil Nadu Alliance Against Mercury (TAAM) was formed; and by March, Greenpeace—the international environmental organisation—had come on board. On 7 March 2001, Jayaraman estimated that around 400 people consisting of ex-workers, locals, and the representatives of these groups, marched to the factory and demanded that it be shut down.

This event finds mention on Unilever's website under the Sustainable Living section—a program launched by the company in 2010 to "help more than 1 billion people improve their health and well-being"—where it exonerates itself of the entire fiasco. "In March 2001," the statement reads, "Greenpeace and others brought to Hindustan Unilever's attention the fact that glass scrap containing mercury had been sold to a scrap dealer about three kilometres away." The statement notes that, "HUL immediately closed the factory and launched an investigation."

Unilever's statement is not entirely accurate. While production in the factory was stopped immediately after the protests, the decision to shut the plant was not immediate, and neither was it voluntary. The factory was actually forced to shut down on 23 March by the TNPCB for violating environmental laws. Murugaiah was still working in the factory then and he vividly remembers the 15 days that followed the protest, just before the factory was forced to desist from operations permanently. "We had to dig up the waste that was buried in the ground; broken thermometers were to be bagged and placed in a store room," he recounted. Murugaiah recalled in particular, the puddles of mercury that he witnessed as the digging was underway. "Only trusted workers were let inside [the factory premises]; and there were company people that I hadn't seen before, dressed in suits," he said.

In October 2002, HUL admitted just as much to a Hazardous Waste Management Committee (Working Committee) appointed by the TNPCB in 2001. "Around Feb-March," the company said that it had "without permission excavated the flooring of the factory and removed highly contaminated soil from below."

The factory never produced another thermometer, but the mercury still hangs in the air. According to Mahendra Babu, who worked at the factory until 1989, workers would regularly use vacuum cleaners to suck the spill overs back from the floor. The silver liquid of mercury turns into vapour at room temperature. Apart from the dangers it may result in if inhaled, the vapour can also pass through skin and enter the blood stream. Airborne vapour can fall back on the ground with raindrops, settle into water bodies and form methyl mercury. This methyl mercury may then be consumed by fish and go up the food chain. It stays in the environment.

In August 2001, as Unilever has mentioned in its statement, five silt traps were constructed "to prevent discharge of soil from the factory site to the Pambar valley, the only direction in which the water flows out of the site." After leaking mercury into the atmosphere for 18 years, this preventive measure, as Unilever declared in the same statement, "was completed in time for the 2001 monsoon season."

A study published in June 2015 by SIPCOT Area Community Environmental Monitors (SACEM), an initiative that trains villagers to fight pollution, measured the levels of mercury in samples from the plant and through the sediment collected from areas surrounding the factory. The study found that the lichen collected from the Levange path in Pambar Shola Reserve Forest contained 53 milligram of mercury per kilogram (mercury per kg). According to the report, mercury density over 1 mg per kg indicates that the atmosphere is highly contaminated. Other samples from the Shola forest and two other sites close to the factory didn't have figures as alarming as this one, but they displayed signs of toxicity nonetheless.

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Decontaminating the factory site and its surrounding area from mercury was a hugely important task. In its statement, Unilever mentions the 290 tons of contaminated materials such as soil and scrap that it sent back to the USA for recycling in 2003. This was done under the close supervision of the working committee that was formed by the TNPCB.

In 2001, after the protests, HUL also engaged an independent international environmental consultant, URS Dames & Moore, to conduct a contamination and risk assessment study. During its first meeting with the TNPCB-appointed working committee in March at the Kodaikanal township hall, HUL submitted a preliminary report prepared by Dames & Moore. This report found that the Kodai Lake had not been impacted by mercury and that the people who had worked at the site had not suffered from any adverse health effects due to the factory's operations. The study was commissioned and paid for by Unilever.

However, the report acknowledged that the soil at the site had been severely contaminated. This situation, the report stated, needed to be remedied. Unilever, being a British-Dutch company, had two different standards to pick from. It picked the Dutch standard of removing all soil contaminated with mercury over 10 mg per kg, as opposed to the British standard, which would mandate that the company remove all the soil that was contaminated with more than 1 mg per kg. Even that requirement was later relaxed to 25 mg per kg in 2008. The company did not notify either the locals in Kodaikanal or the forest department in Tamil Nadu. "By our estimates," said Shweta Narayan, a legal researcher in the case filed against HUL in Madras High Court, "the new standard of decontamination will leave at least 100 kg of mercury in the ground."

The company's decision to only decontaminate soil that contained mercury higher than 25 mg per kg was prompted by a study conducted by two Indian consulting services—the Environmental Resource Management (ERM) and the Government of India's National Environmental Engineering Research Institute (NEERI). In 2004, the five-member Supreme Court monitoring committee had asked the TNPCB to appoint an independent consultant to review the clean-up procedures. The TNPCB, instead, allowed HUL to appoint ERM and NEERI; both these groups were contracted by HUL.

"Since the entire site of HLL is covered with thick vegetation and population of trees," NEERI argued, "if a clean-up criteria of 10 mg/kg is selected, an additional 3881 MT [metric ton] of soil will have to be excavated and treated, which may disturb the ecology of the site." This agreement was made public only in 2008, when the TNPCB issued an order that allowed HUL to initiate its cleaning procedure according to the relaxed standard. "We took the issue up with Department of Environment of the

state government, and they put a stay on the work order," Narayan told me. This is where the case rests. HUL is yet to begin decontamination of the site, since there has been no agreement on the standard for decontamination.

The monitoring committee appointed by the Supreme Court had also asked the TNPCB to ensure the presence of representatives from the local community during the negotiations around the procedure to be adopted for the clean up of the site, and the decontamination itself. The TNPCB did not adhere to this requirement either. The documents that were shown to the Gol-appointed committee noted that the removal of machinery from the factory only involved representatives from NEERI.

The lack of transparency in the TNPCB's procedures relating to the thermometer factory did not go unnoticed. A report titled *Double Standards*, prepared by TAAM in 2010, notes that "Transparency in TNPCB's proceedings on the Unilever matter ended in September 2005, when a Scientific Experts committee was formed ostensibly to approve the clean-up protocol. All subsequent meetings were behind closed doors. Reports were not shared, and decisions were taken without ever officially dissolving the two other oversight committees."

Answering a string of questions for a story published by Tehelka in 2010, HUL described why the company did not see any conflict of interest in paying a body that is supervising the decontamination of the site, "HUL is paying for all the costs of the clean-up and remediation at the site. The consultancy service rendered by NEERI was paid by HUL in line with this principle. There is no conflict of interest since NEERI is not the decision-making authority. NEERI provides scientific expertise as an independent expert for the remedial measures. Decisions are taken by TNPCB."

The statement came two months after the *Double Standards* report. As the annexures submitted by Narayan to the committee appointed by the Gol noted, "Hindustan Unilever had hired NEERI directly, and with NEERI playing judge, jury and executioner, the company was able to downgrade clean up criteria from the originally declared 10 mg/kg."

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In February 2015, when Polman met Modi, it had been more than a decade since the Supreme Court monitoring committee had asked HUL to clean up Kodaikanal. The meeting, however, wasn't about the fate of the workers, or decontamination of Kodaikanal; Polman's chat with the prime minister was about the Swachh Bharat Abhiyaan.

Modi's pet project is a huge business opportunity for a consumer-goods behemoth such as Unilever. While promoting Lifebuoy—a brand of soap marketed by HUL—the company declared that it "aims to change the hygiene behaviour of 1 billion people by promoting the benefits of handwashing with soap." With Pureit Innovation—HUL's range of water purifiers—it is going to "provide innovative solutions and new technical models to address the immediate need for safe drinking water." Under the banner of Domex—a toilet cleaner—it has promised to build "100,000 toilets in India, by 2020.

Through its collaboration with the Swachh Bharat Abhiyan, HUL will also be making inroads into the rural market of India and expanding its consumer base considerably. As senior executives at the company have pointed out, it has been trying to push the Swachh Bharat mission under different names long before Modi. Several analysts have predicted that the organised market for consumer goods will double if branded products can penetrate rural Indian households. "Reckitt [Benkiser] and HUL together own most of the household cleaning brands in India. They, among other players, are likely to get a sales boost from the Swachh Bharat Mission," Abneesh Roy of Edelweiss, a financial services group, told Business Standard last year.

Given the scale of HUL's business, compensation and decontamination are probably not a financial issue for the corporate. But the damage to its image, were it to own up to its role in polluting Kodaikanal, would be a setback to its Swachh Bharat initiative. For Unilever, the admission that its malpractices resulted in the death of over 30 of its employees, along with the contamination of a river and sanctuary, would be in direct conflict with the idea of a company that claims it is working to change millions of lives for the better.

This is why there is little clarity on how long it may take before those who were affected by the mercury from the thermometer factory in Kodaikanal are compensated. As a representative from HUL pointed out in his response to shareholder queries about the Kodaikanal factory in June 2015: "Our spirit is of resolution; the matter is in Madras High Court."