

Abstract

**REPORT AND RECOMMENDATIONS OF THE HIGH POWER COMMITTEE
ON THE EXTENT OF DAMAGES CAUSED BY THE COCA COLA PLANT
AT PLACHIMADA, PALAKKAD DISTRICT**

Though Palakkad district in Kerala, where the Coca Cola plant is situated is considered as the 'rice bowl of Kerala', a part of the district falling in the rain shadow region of the Western Ghats is drought prone. Plachimada, where the Hindustan Coca Cola Beverages Private Limited (HCBPL) factory was set up had been classified 'arable'. The villagers are predominantly landless agricultural labourers with almost 80 percent of the population depending on agriculture. It is natural that an industrial plant with heavy consumption of water set up in a socially and economically backward and drought prone area would disrupt the ecological balance and adversely affect the life and livelihood of the people.

The Coca Cola factory situated in an area of around 34 acres of land has been drawing water from 6 bore wells and 2 open wells. There are varying estimates of factory's demand for water. According to the 2002 report of Dr. R.N. Athavale, a consultant for Coca Cola, the factory would require at full capacity 6.35 lakh litres per day. The interim report says that the Plant would use roughly 5 lakh litres per day. The waste water released was to the tune of 1.5 to 3 lakh litres per day.

The extraction of over 5 lakh litres of water daily has upset the natural balance and adversely affected availability of water. Bore wells and shallow open wells dried up. The quality of water deteriorated with reported increase in salinity and hardness of ground water. The toxic chemicals in the waste water have contaminated the ground water making it unsuitable for irrigation.

The Company had obtained a license from Perumatty Grama Panchayat for installing 2600 HP electrical motor for running the Coca Cola bottling plant. However, no license has been obtained from the Panchayat for installing motor for drawing water, though the Company was extracting water from the bore wells and open wells without any license obtained from the Panchayat.

The committee has found that the operation of the factory has caused excessive depletion of the groundwater resource. We have also found that it has caused the pollution of the ground water and it will take years to mitigate the pollution

Besides the problems created by drawal of huge quantity of water, the solid waste (ETP sludge) from the factory exacerbated the crisis. Part of this material was dumped in landfill sites within the factory compound. Large quantities of it were trucked out and disposed off in the farmlands all around and far off places. The factory had impressed upon the peasants that it was good manure. The sludge had no nitrogen content but dangerous levels of cadmium and high levels of lead makes it a hazardous waste. Too much of cadmium in the soil has lead to the leaching into the wells. The presence of excess cadmium in the farmland has lead to nutrient imbalance in the soil. The farmlands, which had apparently very good soil structure got deteriorated in due course.

Farming households have suffered a steep decline in yield to less than half the levels of what obtained before 2000. Further, the number of coconut palms assigned for toddy tapping also declined to nearly half during this period, since tapping contractors selected only the irrigated trees. Ninety-one percent of the farming households reported that owing to reduction in crop productivity, their agricultural income declined drastically. So they had reduced employment of hired labour. Consequently, the number of days of employment of agricultural labour dwindled. Of the 916 workers who moved to other villages in search of work, 72% reported that they experienced severe unemployment in their own village since 2000. In other words, migration was forced upon most of them.

The fodder and water in Plachimada and surrounding areas were contaminated with copper, cadmium, lead and chromium, more than the admissible level by the World Health Organization (WHO). The Kerala Agricultural University (KAU) has found that the fodder, milk, meat and egg samples collected from Plachimada area contain the above elements, at a toxic level and that would explain not only the loss of animals and birds but also the reduction in the productive capacity of the animals. Production of milk, meat and egg declined which in turn affected the household income and health of the people.

There is abundant evidence to conclude that the operation of the Plant has exacerbated the drinking water crisis of the Plachimada Panchayat by excessive pumping and over-extraction of ground water. Further, it polluted drinking water by its careless and irresponsible disposal of sludge and treated effluents. Particularly hard hit are the dalits, tribals, women and children of the surrounding area. As the water supply deteriorated, the women had to travel about 5 kms to fetch drinking water. This has resulted in loss of wages for these women. Serious damage caused by the contamination of aquifers and springs had adversely affected agriculture yield and productivity.

The deterioration in the quality and quantity of groundwater and the consequential public health problems, displacement and migration of labour and the destruction of the agricultural economy are the main problems identified in Plachimada which have been caused and contributed by the Coca Cola Factory. The people living in the vicinity of the Company have been the worst affected. The problems were further aggravated by the deterioration of agricultural lands by depositing the hazardous wastes at the behest of the Company. During the rainy season, these deposits have spread into paddy fields, canals and wells, causing a serious health hazard. The Company abandoned this practice and began pumping dirty water into dry bore holes that had been drilled on the site for the disposal of solid waste. This polluted the aquifers.

In 2003, the District Medical Officer advised the people of Plachimada that their water was polluted and unfit for consumption. The natural water resource at Plachimada has been ruined beyond immediate replenishment. It will take decades for natural replenishment. At present water in the open wells in the area, which were the sources of drinking water, is unfit for drinking. All these point to the gross violation of pollution control laws, basic human rights and the right to life as guaranteed in Art. 21 of the Constitution of India.

HCBPL has neither acknowledged the existence of any of these problems nor shown a readiness to appreciate the truth behind these findings. On the other hand the Company has always been eager to downplay public agitation against these human problems. But the fact that the Company has violated a number of

provisions in the various laws is irrefutable. Some of the major Acts which have been violated by HCBPL are as below:

- (1) Water (Prevention and Control of Pollution) Act, 1974
- (2) The Environment (Protection) Act ,1986
- (3) The Factories Act, 1948
- (4) Hazardous Waste (Management and Handling) Rules , 1989
- (5) The SC-ST (Prevention of Atrocities) Act 1989
- (6) Indian Penal Code
- (7) Land Utilization Order, 1967
- (8) The Kerala Ground Water (Control & Regulation) Act, 2002
- (9) Indian Easement Act, 1882.

The fact that Coca Cola factory at Plachimada has caused immense damage to the environment and people and their livelihood and health is supported by impeccable evidence. In fact any other finding can only be a figment of imagination. Though the Company is liable to be proceeded against the various sections of several Acts, an institutional mechanism to address each representation of the victims is necessary for achieving speedy justice.

Two recommendations put forth in this Report are:

Government may constitute by legislation a Claims Tribunal for the adjudication of disputes relating to compensation due to water and air pollution, loss of agricultural crops and animals, diseases affecting human beings in the surrounding area due to the excess drawl and pollution of groundwater and surface water by the Company.

The other option is to approach the Central Government to constitute an Authority under section 3 (3) of the Environment (Protection) Act, 1986. The Authority can be vested with all the powers necessary to deal with the situation created by the

Company as was done in Tamil Nadu to deal with issues arising from the tanneries and other polluting industries.

The Committee has come to the conclusion that the Company is responsible for these damages and it is obligatory that they pay the compensation to the affected people for the agricultural losses, health problems, loss of wages, loss of educational opportunities, and the pollution caused to the water resources. The value of water extracted and depleted has not been calculated though it needs to be compensated. These calculations are only indicative in nature and should not be treated as the outer limit of compensation to be claimed which has to be arrived at by the dedicated adjudicating agency to be created. However, on an estimation based on available inputs, the following amounts could be claimed as reasonable compensation.

Agriculture loss:	Rs. 84. 16 crores
Health damages:	Rs. 30. 00 crores
Cost of providing water:	Rs. 20.00 crores
Wage loss and opportunity cost:	Rs. 20.00 crores
Cost of pollution of the water resources:	Rs. 62.10 crores
Total:	Rs. 216.26 crores

RECOMMENDATIONS

The recommendations and observations of this Report can be summed up as follows:

- The Coca Cola Company at Plachimada has been causing environmental degradation by over extraction of ground water and irresponsible disposal of the sludge.
- The Coca Cola Company is culpable under several laws in force.
- The water resources of the area have been affected and the water scarcity has been compounded.
- By passing off the sludge as manure, the Company has not only misguided the farmers but has become responsible for the soil degradation, water contamination and consequential loss of agriculture.
- There has been a steady decline in the agriculture production in the area.
- The production of milk, meat and eggs also has suffered.
- Metals like cadmium, lead and chromium have been detected in the sludge and this has affected the health of the people.
- The general health of the people has been affected with skin ailments, breathing problems and other debilities.
- Low birth weight of children has also been noticed.
- Environment of the Village has acutely been damaged by polluting water and soil.
- Drinking water has become scarce and women have to walk long distances and this has deprived them of their wages, and this needs to be compensated.
- Children have dropped out of the school on account of the social, health and economic factors caused by the pollution caused and this opportunity cost has to be compensated.
- The Grama Panchayat has been providing drinking water in tanker lorries ever since the wells and water bodies have been rendered useless by the Company by its extraction of water and disposal and effluents.
- The actual economic loss on account of the depletion of water resources has not been quantified but its proxies have been used.

- The compensation that could be claimed on various losses has been calculated as below:

Agriculture loss:	Rs. 84. 16 crores
Health damages:	Rs. 30. 00 crores
Cost of providing water:	Rs. 20.00 crores
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- There are sufficient provisions under the existing laws to claim this compensation of these damages from the Company under the 'polluter pays principle'.
- However it is desirable to set up a dedicated institution to adjudicate the individual claims. Such a dedicated mechanism could either be a Tribunal under Art. 323 B of the Constitution of India to be legislated by the state legislature or an Authority under section 3(3) of the Environment (Protection) Act, 1986 to be created by the Central Government.
- Once Government decides on a suitable mechanism and it comes into being, individual claims will have to be assessed and actual compensation decreed and the polluter Company made to pay it.
- The company located in this drought-prone area, should not resume its operation.
