

From Precautionary Principle to Nationwide Ban on Endosulfan in India

Ambalathinkal D DILEEP KUMAR* and Chelaton JAYAKUMAR**

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I. INTRODUCTION

January 2017 witnessed a remarkable judgement from the Supreme Court of India, in which it issued an order to disburse compensation to victims of endosulfan poisoning in the Kasaragod district in the southern Indian state of Kerala. Earlier, in 2011, the Supreme Court of India had banned the use, sale, production and export of the pesticide endosulfan throughout the country on the basis of Article 21 of the Constitution of India and the precautionary principle, as well as in consideration of the pesticide's harmful effects.¹ Although the alarm on the harm caused by endosulfan was brought to public attention from Kasaragod as early as 1979, it was only after nearly three decades of protests that a permanent remedy was finally obtained from the highest court of India.

Endosulfan, a highly hazardous organochlorine pesticide became a topic of burning discussion on the Indian subcontinent during the 1990s after stories of individuals and communities suffering from a vast array of hitherto unknown health impacts were widely reported from Kasaragod, the northernmost district of Kerala.² The main actor responsible for spraying of endosulfan was the Plantation Corporation of Kerala (PCK), owned by the Kerala Government. PCK had been spraying endosulfan aerially to control tea mosquito bugs in its 4,696 hectares of cashew plantations spread across 11 villages in Kasaragod³ without ensuring adequate safety precautions, until a lower court stopped it in 2001.^{4,5} From the late 1970s to 2001, PCK sprayed endosulfan two to three times a year without any investigation into its impacts.⁶

* Pesticide Action Network (PAN) India.

** Thanal – Chemical Safety.

¹ *Democratic Youth Federation of India v Union of India and others* [2011] Supreme Court of India(Civ) 213.

² Thanal, *Long Term Monitoring – The Impact of Pesticides on the People and Ecosystem: Part II Report – Preliminary Findings of a Survey on the Impact of Aerial Spraying on the People and Ecosystem* (Kerala: Thanal Conservation Action and Information Network, 2002).

³ Committee on the Endosulphan Health Hazards, Government of Kerala, 'Health Hazards of Aerial Spraying of Endosulphan in Kasaragod District, Kerala' (2003).

⁴ Silpa Satheesh, 'Development as Recolonization: the Political Ecology of the Endosulphan Disaster in Kasaragod, India' (2017) 49:4 *Critical Asian Studies* 587.

⁵ Thanal, *note 2*.

⁶ Government of Kerala, 'Report of the Committee to Study and Analyse Effect of Aerial Spraying of Endosulfan in the Cashew Plantations of PCK LTD in Kasaragod District' (2001).

An early study conducted by the Centre for Science and Environment detected the presence of endosulfan residue in human blood, cow's milk and environmental samples,⁷ revealing that endosulfan spraying by PCK had polluted the ecosystem, consequently harming both human and non-human lives in the area.

Multiple subsequent studies and assessments indicated that endosulfan was the probable causal factor for the peculiar and complex health implications noted among the community in Kasaragod, such as congenital anomalies, physical deformities, neurological disorders, impaired mental health, disorders related to hormonal irregularities, defective reproductive health, developmental health disorders, different types of cancers and respiratory and immune systems disorders.^{8,9,10}

After long-pending demands from the community, the government initiated a process to identify victims of endosulfan poisoning. As per a 2017 government record, 6,212 victims enlisted in this process,¹¹ although unofficial records suggest that more than twice this number suffered harmful effects from endosulfan exposure.¹² Fact-finding teams and studies could not find any other factors that could possibly cause similar health problems, such as exposure to other environmental or industrial contaminants. A committee appointed by the Kerala Government in 2001 concluded that 'the undulating nature of land, presence of large number of water bodies and human inhabitation in and near the plantations make the area unsuitable for aerial spraying of pesticides'.¹³

Despite the large body of research and evidence, the PCK Company continued to recklessly promote the use of endosulfan. They even went a step further and produced reports that attempted to discredit studies that established links between endosulfan exposure and health damage. They have also challenged the independent studies and assessments done by the Center for Science and Environment (CSE) and the National Institute of Occupational Health (NIOH) that established the causal link between endosulfan exposure and the unusual health effects in the Kasaragod community. Despite studies that proved the presence of endosulfan residue in human blood and environmental samples at alarmingly high levels, some scientists still denied evidence of contamination and continued to deem endosulfan a 'safe' pesticide, trying to protect corporate interests over public health and safety concerns.

Neither existing government institutions nor the Insecticides Act of 1968, which was adopted to 'regulate pesticides with a view to prevent risk to human beings or animals', did anything to protect the community in Kasaragod from being poisoned. A government

⁷ Centre for Science and Environment, 'Report on the Contamination of Endosulfan in the Villages', *Down to Earth* (28 February 2001).

⁸ *Ibid.*

⁹ National Institute of Occupational Health, *Final Report of the Investigation of Unusual Illnesses Allegedly Produced by Endosulfan Exposure in Padre Village of Kasargod District* (Ahemdabad: National Institute of Occupational Health (ICMR), 2002).

¹⁰ Thanal, *note 2*.

¹¹ TA Ameerudheen, 'We Want Justice: Victims of Endosulfan Poisoning in Kerala set to Start Hunger Strike' (30 January 2019), <https://scroll.in/article/911273/we-want-justice-victims-of-endosulfan-poisoning-in-kerala-set-to-start-hunger-strike> (accessed 3 February 2019).

¹² Joe Scaria, 'Kerala Endosulfan Victims Allege State Terrorism', *The Economic Times* (23 November 2010), <https://economictimes.indiatimes.com/news/politics-and-nation/kerala-endosulfan-victims-allege-state-terrorism/printarticle/6976895.cms> (accessed 9 January 2018).

¹³ Government of Kerala, *Note 6*.

committee known as the Dr Banerjee Committee, which was constituted in 1981 to review the use of certain pesticides, looked into the matter and, in 1991, permitted the continued use of endosulfan with the recommendation that ‘the Registration Committee should not allow the use of endosulfan near rivers, lakes, ponds and sea, which are expected to be polluted’.¹⁴ Yet, PCK kept spraying endosulfan near bodies of water and their catchment areas in Kasaragod.¹⁵ In 1999, another government committee found that the recommendations for restrictions on endosulfan issued by the Dr Banerjee Committee had never been implemented.¹⁶ Moreover, although the Central Insecticide Board and Registration Committee (CIB&RC) banned aerial spraying of pesticides in 1993, PCK illegally continued the practice until 2001. Despite relevant laws in place, the government systems for implementing and monitoring the necessary restrictions on the pesticide’s use to prevent environmental contamination and, in turn, safeguard public health, did not function properly. All these facts illustrate the failure of the Indian Government to implement effective regulatory measures on pesticides, which enabled the continued use of endosulfan with devastating results.

II. LITIGATION TO SEEK A BAN ON ENDOSULFAN

Although villagers and local journalists complained about illnesses and the impact of endosulfan in the region during 1979–1980,¹⁷ an organized protest was only initiated in the 1990s. In 1984, two panchayats¹⁸ passed resolutions banning the aerial spraying of endosulfan,¹⁹ but PCK and government agencies failed to take measures to control or stop the use of this toxic chemical. In the late 1990s, isolated villager protests started against the spraying of endosulfan. Only then did local arts and sports clubs as well as village libraries and community organizations start to realize the severity of the issue and began taking it seriously.

Many local environmental groups led by the Society for Environment Education in Kerala (SEEK), the Indian National Trust for Art and Cultural Heritage–Natural Heritage (INTACH), the National Alliance for People’s Movement (NAPM), Earth Society, and Kasaragod Paristhithi Samrakshana Samithi (KPSS) got involved in and supported the struggle of villagers. The Pesticide Action Network Asia Pacific, CSE and Thanal²⁰ also supported the struggle by providing technical and scientific information and assessments establishing the link between endosulfan and health issues. The Endosulfan Spray Protest Action Committee (ESPAC) led by local doctors, farmers, teachers and journalists was formed in 2000. Following this, the Ban Endosulfan District Coordination Action

¹⁴ C Jayakumar, ‘Status of the Endosulfan Disaster’, annex III in Kerala State Council for Science, Technology and Environment, *Report on Monitoring of Endosulfan Residues in the 11 Panchayaths of Kasaragod District, Kerala* (Thiruvananthapuram: KSCSTE, 2011).

¹⁵ Government of Kerala, Note 6.

¹⁶ Jayakumar, note 14.

¹⁷ Adithya Pradyumna, *India’s Endosulfan Disaster – A Review of the Health Impacts and Status of Remediation* (Kerala: Thanal, 2009).

¹⁸ Panchayat is the name for Local Self Governments at the village level.

¹⁹ Thanal, note 2.

²⁰ Thanal is a public interest research advocacy organization, based in Kerala.

Committee (BEDCAC) and Endosulfan Virudha Samithi were also formed, and joined forces to demand a ban on the pesticide. Despite the presence of these strong movements, the government did not react and the company continued its business under the cover of law. That was when litigation strategies started in earnest.

The very first legal intervention was initiated in 1998 with a petition filed by Leelakumari, a mother of two children who were suffering various health effects linked to endosulfan exposure. This petition was filed in the Munsif Court of Hosdurg (a lower court) demanding legal intervention to stop endosulfan spraying on the basis of Article 21 of the Indian Constitution (Right to Life and Personal Liberty). Leelakumari decided to approach the court after her appeals for intervention to the district authority for the Agriculture Department and the Kerala State Pollution Control Board (KSPCB) failed.

After hearing the matter, the lower court issued an order to temporarily stop the aerial spraying of endosulfan in Periya Panchayat in 1999. The court also restricted PCK from using other methods that might cause harm to private properties.²¹ PCK appealed to the High Court of Kerala, which sent the case back to the Munsif Court, asking it to re-hear the case and reach a decision. The Munsif Court passed final orders in 2001, upholding the right to life and property and restricting PCK from using endosulfan. Both in response to the legal battle and public demand, the District Collector of the area formally banned the aerial spraying of endosulfan in 2001.²²

III. DEMAND TO BAN ENDOSULFAN IN THE WHOLE OF KERALA STATE AND THEN NATIONWIDE

Following the endosulfan ban in PCK plantations in Kasaragod, further campaigns and legal actions were launched to achieve a statewide ban in Kerala. Responding to public demand, the Kerala Government suspended use of endosulfan in 2001. This move is considered to be the first response by a State Government in the country to protect public health from exposure to a pesticide. It was also the first instance of state-level action on pesticide regulation in India.²³ Accordingly, the Pesticide Manufacturers and Formulators Association of India (PMFAI) immediately challenged it.

In response to the challenge by PMFAI, the Thiruvankulam Nature Lovers Movement decided once again to use the law to achieve its objectives. It filed a Public Interest Litigation (PIL) case in the High Court of Kerala, demanding a state-level ban on endosulfan. The High Court directed the government to issue a decision based on certain provisions of section 27 of the Insecticides Act, which pertains to the prohibition of selling insecticides for reasons of public safety.²⁴ Following this, the Kerala Government issued an order that continued the prohibition of aerial spraying of endosulfan in the state. Although the prohibition was challenged again by PMFAI, the High Court decided to impose a

²¹ Thanal, *note 2*.

²² The Court of District Collector and District Magistrate, Kasaragod. Prohibitory order under section 133 (1) (G) of Cr. P.C (9 August 2001).

²³ Jayakumar, *note 14*.

²⁴ The Insecticides Act 1968 (India), http://www.cibrc.nic.in/insecticides_act.htm

temporary statewide ban on endosulfan use as a precautionary measure.²⁵ As a consequence, in 2005, the Central Agriculture Department withheld the use of endosulfan in the state of Kerala. Yet, overall, the ban has proven ineffective due to poor implementation.²⁶ During monitoring of the ban between 2008 and 2010, the KSPCB reported endosulfan residue in water sources. Therefore, in 2010 the KSPCB re-issued notification of the endosulfan ban throughout the state²⁷ under provisions of pollution control laws, including the Water (Prevention and Control of Pollution) Act of 1974 and the Air (Prevention and Control of Pollution) Act of 1981.

As soon as the state of Kerala and PCK were effectively entangled in litigation over the prohibition of endosulfan, affected people in Kasaragod started calling out for increased attention to remediation. This included a focus on providing steps for rehabilitation, mainly through medical monitoring, health care and compensation to victims. In 2005, the Endosulfan Relief and Rehabilitation Cell was formed under the Kasaragod District Administration to initiate comprehensive relief and remediation measures. In 2006, for the first time, the State Government acknowledged the suffering of endosulfan victims and offered them nominal compensation. Most, however, considered it far from adequate.²⁸ Therefore, the same year, the Kerala Government decided to go ahead with a Bhopal-model litigation to demand compensation for the victims.²⁹ In November 2011, the Kerala Government announced a comprehensive package for relief and rehabilitation for the victims and sought about US\$15.35 million in assistance from the Union Government of India.³⁰

The presence of endosulfan residue in water samples from Kerala reported by KSPCB in 2010 necessitated a nationwide ban, as it suggested that existing statewide bans did not work. Following a writ petition filed by the Democratic Youth Federation of India (DYFI) on 25 April 2011, the Supreme Court of India passed an interim order on 13 May 2011 to ban the use, sale, production and export of endosulfan throughout the country.³¹ The judgement specifically mentioned that the order to ban the pesticide was passed in consideration of various prior judgements under Article 21 of the Constitution of India (Right to Life and Personal Liberty) and particularly with the precautionary principle in mind. In another remarkable development, five and a half years after the ban order, the Supreme Court issued another order on 10 January 2017, directing the State Governments to release the entire payment of compensation, amounting to half a million Indian rupees for each of the affected persons, within three months from the date on which the order was issued.³²

²⁵ *Thiruvankulam Nature Lovers Movement v Plantation Corporation of Kerala* [2002] High Court of Kerala. OP Nos. 20716/2002, 17026/2002, 16300/2002 and 29371 of 2001.

²⁶ Savvy Soumya Misra, 'State of Endosulfan', *Down to Earth* (December 2010).

²⁷ Jayakumar, note 14.

²⁸ Krishnakumar, 'Lethal Impact', *Frontline* (4 December 2010).

²⁹ 'Compensation for Endosulfan Victims, State to Move Court' International Campaign for Justice in Bhopal (5 October 2006), <https://www.bhopal.net/compensation-for-endosulfan-victims-state-to-move-court/> (accessed 9 January 2018).

³⁰ Krishnakumar, note 28.

³¹ *Democratic Youth Federation of India v Union of India and others* [2011] Supreme Court of India (Civ) 213 of 2011. Order dated 13 May 2011.

³² *Democratic Youth Federation of India v Union of India and others* [2011] Supreme Court of India (Civ) 213 of 2011. Order dated 30 January 2017.

IV. ASSESSMENT: ADDRESSING ENDOSULFAN MASS POISONING UNDER EXISTING LEGAL PROVISIONS IN INDIA

The endosulfan mass poisoning as well as other pesticide poisonings happening in India underline the fact that the Insecticides Act of 1968 and the Insecticides Rules of 1971 have not been able to effectively protect Indian citizens and the environment from harmful effects of dangerous pesticides. A 2001 Kerala Government study noted that PCK had not been following the directions under Rule 43 of the Insecticide Rules of 1971. Provisions from other pollution control laws, such as the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981 and the Environmental Protection Act 1986 were not used to prevent the damages either. The authorities, especially the State and Central Pollution Control Board, did not regulate or even study the issue of endosulfan spraying, even after scientific studies showed high levels of endosulfan residue present in both human blood and environmental samples as early as 2001. It took another nine years for KSPCB to take action under the relevant provisions of these additional Acts.

Although the endosulfan mass poisoning happened in extremely rural areas of the Kasaragod district in Kerala in peninsular India, the protest triggered locally in response to it paved the way for taking the issue to both the state and national levels. Eventually, it even reached international forums like the Persistent Organic Pollutants (POPs) Review Committee of the Stockholm Convention and led to the launch of a successful campaign for a global ban and phase-out of endosulfan in 2011, the same year that the Supreme Court of India ordered a national ban on the deadly chemical.

While the legal battle succeeded in getting a national ban of endosulfan in India, it failed to achieve accountability for the parties responsible for the mass poisonings. Still, getting endosulfan bans issued by courts at all levels, from lower courts to the Supreme Court, is a great achievement. The failure to hold the responsible actors legally accountable has incurred costs for the public exchequer, which has been paying compensation to the victims. Notably, the 2017 Supreme Court order on compensation mentions the issue of liability by directing the state-level government to recover the amount of the compensation either from the concerned industry or from the Government of India. However, the State Government has made no effort to do so thus far. More importantly in the long run, the failure to hold the industry accountable means that companies are less likely to include the human health and environmental costs of their pesticide products on their corporate balance sheets, and are less likely to respect national and international laws controlling dangerous pesticide use.

The relief package announced by the Chief Minister of Kerala in 2013 included the establishment of a panel to examine the question of setting up a tribunal for providing compensation to the victims. The tribunal was to identify those who were responsible for the spraying of endosulfan in cashew farms in Kasaragod, and also to implement the recommendations of the National Human Rights Commission (NHRC) regarding the distribution of compensation.³³ However, even at the time of writing this article, the tribunal has not yet been established.

³³ Soma Basu, 'Relief Given at Last to Kerala's Endosulfan Victims', *Down to Earth* (2013), <http://www.downtoearth.org.in/news/-relief-given-at-last-to-keralas-endosulfan-victims-40742> (accessed 10 January 2018).

In the court order banning endosulfan in India, the Supreme Court emphasized that the ‘right to life, guaranteed under the Article 21 of the Constitution of India, is the most fundamental of all the human rights, and any decision affecting human life, or which may put an individual’s life at risk, must call for the most anxious scrutiny’. The victims of the endosulfan mass poisoning are still waiting for that scrutiny and for their most fundamental rights under the Indian Constitution to be respected. Even though the Supreme Court directed the Kerala Government to pay compensation to all the victims, it has not done so completely within a time-bound manner, as directed by the Court. Furthermore, community members disagree on the list of victims prepared by the government; they claim that the list is not comprehensive enough to include all the people who have been suffering for many years.

Demanding that compensation be disbursed to all victims yet to receive it, inclusion of newly identified victims to the official list, and demanding that any new victims discovered in the future also be added to the list, the victims group is organizing struggles and protests before the State government.³⁴ Thus, the endosulfan issue is far from being fully settled. Victims still have to stage hunger strikes and protests to achieve comprehensive inclusion of all victims on the list of those eligible for compensation, as well as for the compensation’s disbursement. Although challenging, the technical complexity of identifying victims must be resolved to make the list inclusive, with all those harmed by endosulfan to be compensated. In addition, efforts to prosecute the actors responsible for the endosulfan mass poisoning must be initiated to enforce their liability and accountability for such serious crimes.

³⁴ ‘Endosulfan Victims Warn of Hunger Stir’, *The Times of India* (17 January 2019), <https://timesofindia.indiatimes.com/city/kochi/endosulfan-victims-warn-of-hunger-stir/articleshowprint/67565672.cms> (accessed 19 January 2019).