Disclosed: Lies about endosulfan

The fortnightly newsmagazine Down To Earth (DTE) carries a shocking expose on the Central government's "unseemly haste" to give a clean chit to the pesticide endosulfan, used in the district of Kasaragod in Kerala and seen as the cause of horrendous abnormalities in people living there

Thiruvananthapuram, April 5, 2004: Down To Earth's April 15, 2004 article, "Lies, damned lies and endosulfan", has detailed information about the extent of manipulation of data and misinformation that was used by the expert group, known as the O P Dubey Committee, to base its conclusion, that "there is no link between the use of endosulfan in PCK (Plantation Corporation of Kerala) plantations and health problems reported from Padre". The magazine also points to the Union government's undue haste in accepting the panel's recommendations, when the report of the committee is not based on consensus. Down To Earth has learnt of dissent within the committee, with key scientific members opposed to the report's findings.

The eight-member committee was set up in 2002 to determine whether endosulfan was responsible for the numerous health problems prevalent in the villages of Kerala's Kasaragod district. Details uncovered by DTE shows that the scientific study done by the Tamil Nadu-based accredited private laboratory, Fredrick Institute of Plant Protection and Toxicology (FIPPAT) (now known as International Institute of Bio-technology and Toxicology), used by the Dubey committee to support its conclusions, was doctored. Not only was damning evidence against endosulfan suppressed, facts and figures were deliberately manipulated and misreported. DTE's investigation points to an authority-industry nexus and will doubtlessly ruffle a few feathers. "But this did not deter us in our quest to get to the bottom of the matter, because we believe that truth withheld is truth denied," said DTE managing editor Pradip Saha, briefing journalists in the capital Thiruvananthapuram.

The report completely ignores the plight of the people of Padre village - the worst affected area in the state - who doctors find suffer from an abnormally high incidence of disease and physical and mental disabilities. A report prepared by the Ahmedabad-based National Institute of Occupational Health (NIOH) in 2001, at the behest of the National Human Rights Commission, noted the presence of alpha and beta endosulfan -- the pesticide's isomers - in soil, water as well as human blood samples collected from the region. This implies that the pesticide persists in the environment. The report also found that the samples of blood collected from Padre showed high levels of endosulfan as compared to samples collected from the control village of Meenja Panchayat. In its considered view, "endosulfan was the causative factor" for health problems in the village.

On the other hand, FIPPAT reported that there were no endosulfan residues in human blood and only negligible amounts of the pesticide in the environment. It also asserted that there were no alpha and beta residues in its samples, which were collected from Padre months before NIOH.

But DTE is in possession of a copy of the FIPPAT's analytical report, dated June 4, 2001, which shows that the institute had actually found both alpha and beta endosulfan residues in human blood samples. It, however, chose not to disclose this information and fudged its data. The institute underreported the levels of residues found in the environment, too. Although FIPPAT had come across traces of alpha and beta endosulfan, it conveyed the impression that the isomers had broken down

quickly to form endosulfan sulphate - a metabolite of the pesticide. The aim of this manipulation: to show that the pesticide is not persistent.

For instance, in the blood samples numbered HB 18, FIPPAT calculated and reported the total endosulfan residues to be less than 0.001 parts per million (ppm). But when the actual figures arrived at the by the institute are used and formula applied, the total residue level works out to 186 parts per billion (ppb) of endosulfan (alpha+beta). Significantly, the NIOH had found a maximum level of 78.74 ppb of the pesticide's residues in blood samples collected from Padre.

The Dubey panel summarily dismissed the NIOH study, observing that its findings were "not in conformity with the known and accepted properties, chemistry and toxicology of endosulfan". Instead, the committee endorsed FIPPAT's residue analysis. Unsurprisingly, the industry also supported the methodology adopted by FIPPAT and has rejected the NIOH report. Clearly, the industry is aware that the NIOH study can prove the clincher in exposing endosulfan, a fact that will give legal and moral ammunition to the victims for demanding compensation.

DTE is also in possession of minutes of the committee, which reveals that NIOH had responded in detail to all queries raised by industry and repeated by the committee chair, assistant director general (plant protection) at the Indian Council for Agricultural Research (ICAR), O P Dubey. For instance, it has explained to the panel as well as the industry that levels of endosulfan residues in water were lower than those in human blood because pesticide exposure occurs through a variety of mediums. On how the chemical reached Padre village - located about 4 km from the plantation - NIOH highlights the topography of the area, with streams and a valley where people live. It uses data from independent remote sensing to demonstrate the downward movement and persistence of endosulfan.

The undeniable fact is that people of Padre are definitely suffering. There is a high incidence of disorders of the central nervous system, congenital anomalies, cancer and reproductive disorders. But the industry claims that these diseases are not similar to the mechanism of toxicity of endosulfan; that is, it cannot be the cause of such disorders. The Dubey committee report concurs but does not even bother to offer any explanation for the people's ailments. But the research by DTE shows that there are several toxicity studies, conducted on laboratory animals, which have found that exposure to endosulfan on a long-term basis leads to similar effects.

Strangely, the Dubey committee's final report was submitted to the Union government despite a consensus not being evolved within the panel. For its part, the government acknowledged in an ongoing case in the Supreme Court that it had accepted the panel's findings. Its affidavit bizarrely went on to add: "... endosulfan was being misused for catching fish by the local people." The government informed the court that as this was the possible cause of the problem, it had ordered for instructions to be included on the label that the pesticide should not be used near water sources.

What prompted us to reopen a matter that had been given a silent burial by the authorities? DTE editor Sunita Narain puts the issue in perspective: "We have highlighted the factual discrepancies because these decisions concern the integrity of our scientific institutions. This story is in public interest. It is for the people of Padre and voiceless others suffering similar injustices."

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