



Poisoned by pesticides

By Kavitha Kuruganti

Occupational exposure to pesticides is routine among farmers and farm workers. For victims of pesticide poisoning, recovery is not easy. For medical practitioners treating poisoning cases, it is just another source of income. For the pesticide industry, it's business as usual. Meanwhile, the government chooses to turn a blind eye to the issue, preferring to blame the victims for their ignorance and negligence in wrongly handling pesticides



Farmers buying agricultural inputs: The pesticide industry insists that if pesticides are used as they should be, no harm will befall the user

Sammaiah was an agricultural worker in Eturunagaram, in Andhra Pradesh's Warangal district. One day in 2001, after having sprayed pesticides from 8 am to around 3 pm, he was proceeding to wash his hands when he collapsed. He died instantly. The post-mortem report stated that he had died of acute pesticide poisoning; the doctor said that the chemical had seeped into his skin from a towel that was wet with the pesticide he was spraying. He was spraying a mixture of endosulphan and bavistin, a fungicide. For a daily wage of Rs 30, Sammaiah lost his life.

Kattamma and Lingaiah from Gajulagattu village belong to the shepherd community. On September 24, 2004, after breakfast, Kattamma and her husband took their power sprayer out into the fields where they sprayed the DuPont pesticide Avaunt (indoxacarb) from morning until lunch, first on cotton and then on paddy. After lunch, they resumed spraying until 4.30 pm. Lingaiah then had a shower and lay down, complaining of a headache. At first, Kattamma thought it was because they had worked in the hot sun. But when she went to check on him later, she found him unconscious. She rushed him to the local medical practitioner who refused to treat Lingaiah, referring him instead to a bigger hospital. He was taken to a private hospital in Nekkonda and then to Warangal. Two days later, at around 8 am, Lingaiah breathed his last. The post-mortem report attributes the cause of death to pesticide exposure. The family incurred an expense of Rs 40,000 on Lingaiah's medical treatment.

Occupational exposure to pesticides and pesticide poisoning is routine among farmers

and farm workers. For victims of pesticide poisoning, recovery is not easy. Most victims, who are daily wagers, hush the matter up for fear of medico-legal implications. For families surviving a fatal case of poisoning, the loss of a breadwinner in the family is irreplaceable. For medical practitioners treating poisoning cases, it is just another source of income. For the pesticide industry, it's business as usual. Meanwhile, the government chooses to turn a blind eye to the issue, preferring to blame the victims for their ignorance and negligence in wrongly handling pesticides.

The exact extent of occupational pesticide poisoning is unclear, and no efforts are forthcoming from the government to begin any surveys to assess the problem. In India, regulatory and support infrastructure to prevent pesticide poisoning, deal with victims of pesticide poisoning, and promote ecological farming alternatives simply do not exist. And the pesticide industry denies that pesticide exposure and poisoning are issues to be contended with. Indeed, they attempt to silence voices that talk about the harmful and unmanageable effects of pesticides. The pesticide industry in India has filed defamation suits against several prominent activists and farmers advocacy groups.

Incidence of acute poisoning

In 2004, the Centre for Sustainable Agriculture (CSA), Secunderabad, and Modern Architects for Rural India (MARI), Warangal, documented a number of acute unintentional poisoning cases that were evident at a few select hospitals in Warangal. The study obtained information on the number of hospitalisations due to pesticide inhalation (unintentional), as opposed to pesticide ingestion (intentional). Data from one district hospital and six area hospitals revealed that 202 people had suffered unintentional poisoning in just a few months during that year. This could well be a case of under-reporting, as many people do not go to hospital or are referred to private hospitals. Eight deaths due to pesticide inhalation were reported.

There is very little India-specific data on the annual incidence of acute poisoning among agricultural workers, and the number of fatal cases amongst them.

A fact-finding report in January 2002, led by Toxics Link and Community Health Cell, entitled 'Killing Fields of Warangal: Farmer Deaths Due to Exposure to Pesticides in Warangal District', estimated that there could have been more than 1,000 people exposed in Warangal alone in the period between August and December 2001. The widespread poisoning that year was also documented by the Andhra Pradesh Rythu Sangam, a farmers union in the state of Andhra Pradesh.

Victimising the victim

The pesticide industry claims that if pesticides are used as they should be, no harm will

be fall either the user or the environment. Cases of pesticide exposure and death are a result of the victim's ignorance and negligence, not a reflection of poor regulation or accountability, say the industry, government, and even the medical and media communities.

Earlier studies have shown that users often have no knowledge of how to use pesticides safely. There is very little awareness about which pesticide to use, when, in what dosage, etc -- all of which forms an integral part of 'safe use'. Reports from many parts of India indicate that farmers indiscriminately use mixtures of pesticides and follow the 'extension advice' given to them by dealers and others.

There are no campaigns worth their name being taken up either by the government (agriculture department or health department) or the pesticide industry to educate farmers about the dangers of pesticides. The pesticide industry would have us believe that its products are safe and effective. The images put out in the mass media, including government-sponsored television programmes on agriculture, are those of sprayers using pesticides with ease and without any protective gear. This gives everyone the wrong impression about the 'safety' of pesticides. The fact that there are a lot of images and messages assuring people about the 'safe' nature of pesticides, and not enough about the dangers of using them, is worth noting.

There's no such thing as 'safe use' of pesticides

As numerous conversations with farmers and sprayers reveal, even if there were better awareness about 'safe' pesticide use, the reality of farming conditions make it almost impossible to follow the instructions closely. Firstly, the weather does not permit farmers to work comfortably in protective clothing. Also, many farmers cannot afford to buy and replace protective gear regularly. As is obvious, torn gloves could present a greater danger if the pesticide gets into the gloves and onto the skin of the sprayer. Similarly, leaking sprayers are a common sight. Faulty equipment exposes the sprayer to even more risk.

On top of it all, there are the social conditions in rural India. High levels of illiteracy prevent farmers and farm workers from reading the instructions on pesticide containers, even if they are properly spelt out. There have been cases where the instructions are not in the local language. Often, the instructions are hard to follow. For instance, "See a doctor immediately" is a difficult instruction given that doctors and medical facilities are often miles away or inaccessible for other reasons.

An agricultural worker hired on daily wages for a day's spraying cannot afford to choose his timings. He usually ends up spraying several tank-loads of pesticide throughout the day, including during the hot afternoons. Further, after finishing

spraying a row of crops along the wind direction, the worker considers it a waste of time walking back to the beginning of the next row in order that his spray follows the wind direction. So he ends up spraying against the wind; with a power sprayer this means that great jets of pesticide fall back onto the sprayer.

I have also come across instances where farmers have not revealed to the sprayer the particular pesticide that is being sprayed. In one case, a farmer in Kambalpalli village (in 2004) poured the pesticide Hinosan (Bayer's edifenphos), well-known among farmers for its toxicity, into another container to disguise the contents. He then gave the container to the sprayer to be mixed and used. This proved fatal for the sprayer.

There are other practical problems related to lack of adequate water, etc, in a field situation. Sometimes farmers/workers mix the liquid with their bare hands before filling their sprayer tanks. Sprayers often place their food in a corner of the field they are spraying; they later wash up with whatever little water is available and proceed to eat their food. Sometimes they do not get to have a proper bath at home either.

Existing social problems such as poverty and malnourishment further aggravate the situation. The feudal relationship between landowners and workers in many parts of the country means that the whole issue of pesticides and their effect on workers is neglected, even discounted.

Banned pesticides are still being manufactured and sold in India

India does not have a rational pest management or pesticide policy. While integrated pest management is the official policy, nowhere does the use of pesticides in the country reflect the adoption of such a policy. Although many countries have banned or severely restricted pesticide use, some of these pesticides continue to be produced and marketed in India. Indeed they top the list of most-used pesticides in the country. According to the WHO classification, these include several Class I and Class II pesticides (for example, phorate, edifenphos, aldicarb, triazophos, monocrotophos, methyl parathion, etc).

While talking about the many facets to this problem, the issue of aggressive marketing by the industry cannot be overstated. Even the most toxic pesticides are pushed, with dealers promoting those pesticides that give them the most margins. And so they offer farmers a variety of incentives including prizes in lucky draws, etc. In addition to wall posters, pesticides are marketed on popular vernacular television channels, in newspapers and through village-level campaigns.

Obviously, the aggressive marketing does not highlight the dangers of pesticide use, precautions to be taken, or symptoms to watch out for. Can we allow products that are

essentially poisonous to be marketed this way?

Farming without chemical pesticides is possible and viable

What is unconscionable is that toxic pesticides continue to be produced and promoted even though it has been proven time and again that with capacity-building and extension support, farming without the use of synthetic pesticides *is* possible.

This was demonstrated under a unique programme called Community Managed Sustainable Agriculture, on 10 lakh acres of land in 2008, when farmers used ecological practices and principles to grow their crops. The programme was supported by Andhra Pradesh's rural development department.

In the face of such alternatives, to argue in favour of chemical pesticides using outdated Malthusian arguments, and to continue using extremely toxic pesticides that endanger poor agricultural workers is unacceptable. It's time the government acknowledged this and provided proactive support to farmers so that they may shift to ecological, sustainable and healthy ways of farming.

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