

In Cambodia only a very few of the chemicals sold have labels written in Khmer. Nearly all were labelled in Thai or Vietnamese; a clear indication of the origin of the commercial pressure.

Children and the Community

While the direct, acute, and avoidable poisoning of rural farmers is the most obvious and shocking problem caused by pesticides, the more general and long term effects upon children and the general community although less obvious, cannot be ignored. Some chemicals threaten mothers and their unborn children because of teratogenic or embryotoxic effects. Children are particularly vulnerable to pesticide exposures because of their distinctive diet and play activities. In communities where toxic chemicals are kept throughout the household and released indiscriminately into the ground, air and water, children are at serious risk. Besides field run-off into



water sources, in some places toxic pesticides are even used to 'harvest' fish, further increasing the overall pesticide 'load' on the environment and increasing the risk of health problems for the community.

Safe Use or Hazard Reduction?

Perhaps ironically, the same chemical industry that for decades has allowed toxic chemicals to be sold as obat ('medicine' in Indonesian) is now promoting a 'safe use' campaign. While newer and less hazardous chemicals are being developed and marketed by the industry, the extremely toxic formulations remain popular, profitable, and highly hazardous under normal conditions of use in poor rural farm communities.

The Global Crop Protection Federation launched the Global Safe Use Campaign in 1991. Training includes protective clothing, 'safe' ways to dispose of bottles, prevention and treatment of poisoning. Serious questions have been raised above the need for the campaign, its efficacy and the motivation of the industry which has sponsored it⁴. The campaign starts with the assumption that pesticides are needed and that if used properly, they can be safe. This approach fails to recognise some important features of agricultural reality. First, structural constraints (e.g. poverty, education) prevent poor rural communities from having access to the equipment and information necessary for 'safe use'. At present, nearly everywhere pesticides are used, they pose a risk to human health and the environment. Secondly, pesticides, besides

being extremely hazardous, are NOT agronomically or economically justifiable under many prevalent conditions in tropical agriculture. In many cases in rice, pesticides, not pests, cause the problems due to resistance and resurgence. A study by the International Rice Research Institute shows that the net economic benefit of pesticides in tropical rice is Negative⁵. And while the lowest risk position in tropical rice production is to use no pesticides, it has also been proven that pesticide use can be reduced by over 80% from current practice in vegetables without loss in yields.

The rational approach would call for immediate hazard reduction through greatly decreased use of all pesticides to a much lower and more agronomically sound level. Subsequently consumers, governments, farmers, and supporting institutions and if possible industry can work to also remove the older, most toxic chemicals which put both crops and people at risk.

Farmers and IPM proponents cannot do this work alone. The unacceptable levels of risk to crops, to the environment, to consumers, and to rural communities must be recognised by broader society, hence allowing a concerted program of regulatory enforcement, consumer pressure, public awareness, and training programs in ecologically sound agriculture for farmers to be pursued.

"It is not my contention that chemicals never be used. I do contend that we have put poisonous and biologically potent chemicals in the hands of persons largely or wholly ignorant of their potential harm" (Rachel Carson, *Silent Spring*, 1964)

Further Information

Web Sites

- www.toxictrail.org - this site contains links to other websites and documents including those listed below
- Pesticide Action Network Asian and Pacific www.poptel.org.uk/panap/
- Three UN organisations, ILO, WHO and UNEP, produce a series of 'International Chemical Safety Cards'. The card for Methyl parathion is at: www.cdc.gov/niosh/ipcs/ipcs0626.html. Cards are also available for other extremely hazardous chemicals used by farmers in Cambodia such as Mevinphos (ipcs0924) and Monocrotophos (ipcs0181)

Video Tape

- 'Toxic Trial', 2001, produced by TVE for BBC, available on request from the FAO Community IPM Programme
- 'The Shadow of Poison', produced by Puskat Audio Visual Studio, Yogyakarta, Indonesia, 27 minutes

Sample Documents

1. Jeyaratnam, J. *Acute Pesticide Poisoning in Asia: The Problem and its Prevention*, World Health Statistics Quarterly, Vol 43, No. 3, 1990
2. Sodavy, P, Sitha, M, Nugent, R and Murphy, H. *Farmers' Awareness and Perceptions of the Effect of Pesticides on their Health (in Cambodia)*, FAO Field Document, April 2000
3. Misa Kishi, Norbert Hirschhorn, et.al. *Relationship of pesticide spraying to signs and symptoms in Indonesian farmers*. Scandinavian Journal of Work and Environmental Health, 1995, 21:124-33.
4. Murray, D and Taylor, P, *Claim No Easy Victories: Evaluating the Pesticide Industry's Global Safe Use Campaign*, World Development Vol. 28, No. 10, pp. 1735-1749, Feb 2000
5. Rola, A.C and Pingali, P.L., *Pesticides, Rice Productivity and Farmers' Health*, International Rice Research Institute (IRRI) and World Resources Institute, 1993