

Over \$30 billion is spent on pesticides annually. A quarter of this total is spent in Asia, where sales were up by more than 10% in 2000. Thailand is the biggest spender in the South Asia Region, with pesticide sales equalling \$247 million. Across Asia, however, there are over 800 million people living in poverty. Out of desperation, farmers trust the sellers and promoters of the chemicals, those convincing them that pesticides will keep insects and weeds from destroying their crops, often farmers only means of income.



The Asia Pacific Crop Protection Association (APCPA) which represents such multinationals as Bayer, Cyanamid, Dow AgroSciences, DuPont, Novartis and Zeneca, claim their products are reducing famine by minimising crop damage by insects and weeds, and that they are saving lives through controlling disease-carrying insects.

The global pesticide market is dominated by ten companies, which between them take 80% of the \$32 billion worth of sales. The leading pesticide companies have merged with, or taken over other agrochemical corporations and expanded into seed industry and into genetic engineering.

These pesticides, however, are poisons that, when used improperly or without sufficient knowledge of their effects, endanger humans, animals and the environment. Moreover, hazards are created by residues from persistent organic pollutants (POPs) that build-up in the food chain and contaminate the environment. The chemical companies insist that pesticides, when they are used appropriately, can be safe and provide an inexpensive way to protect crops.

The conditions of use in most developing countries make it practically impossible to guarantee appropriate use. The availability of highly toxic chemicals, lack of information and knowledge of their hazards, aggressive marketing by industry as well as poverty, illiteracy, and lack of health facilities in the rural areas ensure that pesticides are a major threat to food security, health and the environment. In these conditions, farmers use what is available rather than what is appropriate.

73% of the imports into Thailand are WHO categories Ia and Ib, extremely toxic and highly toxic. In Cambodia, 84% of pesticides are moderately to extremely hazardous to human health. In developed countries these chemical are either banned, or they can only be used by licensed specialists who must carry out a number of stringent precautions. In SE Asia, however, the chemicals are freely used without precautions. Labels are often written in a foreign language or they fail to provide data on the active ingredient, application, date of manufacture or safe handling of the chemical.

## Global (dual) Standards: Exports/Imports of Chemicals

Many of the pesticides that are used in developing countries are banned in the developed countries where they are manufactured. Between 1992



and 1994, more than 344 million pounds of hazardous pesticides were exported from the US - at least 25 million pounds of this was forbidden for use in the country - the majority of which went to destinations in the developing world. There are many loopholes in the regulatory system. According to European legislation, only end products permitted in Europe can be exported. However, it is legal to export the starting product, the active ingredient, which is then manufactured into the end product in developing countries.

In places like Cambodia, struggling to rebuild its society after decades of civil war, the government is unable to regulate the flow of pesticides. Corporations like the German company Bayer say it is their policy not to export dangerous chemicals to countries lacking proper regulations. Bayer also claims it abides by the laws of the importing country and ensures that it does not export products that are outlawed in those countries. But how are banned category Ia chemicals still available across Asia?



*"The German chemist Gerhard Schrader in 1944 introduced a whole new class of insecticides, the organophosphates, with the discovery of parathion (or schraden, as it was known in Germany); work on parathion actually derived from Nazi chemical warfare work on neurotoxins but the discovery came relatively late during the war and organophosphates found no significant use for chemical warfare purposes" (Berenbaum, M.R., 'Bugs in the System: Insects and Their Impact on Human Affairs', p288, Addison-Wesley, 1995)*