

THE DISASTER

A reaction to the tragedy at Bhopal

The saddest fact about the Bhopal tragedy—quite apart from the horror of the numbers involved—is that it was man-made. And the people who were responsible were **Not** the ones who suffered. As one newspaper put it, "Man-made disasters, like natural ones seem to show a particular affinity for the poor." Why did it happen? Who were the victims? These questions have a bearing upon distinct social and political realities in India in particular and the world in general, that have been forged for us by our ruling classes.

Consider our perspective for industrialisation for instance. We have borrowed not only the capitalist framework of development but begged and borrowed the capital technology of the industrial nations. Third world countries which have historically been the plundergrounds of today's advanced nations, have been put into a peculiar dilemma—the workers and the poor still have to fight for a decent living and a decent wage in a labour surplus economy, sometimes to the exclusion of struggling and fighting against other destructive forms which industrial capitalism has unleashed. Moreover, workers are first taught to despise safety equipment and regulations, as mere obstructions in 'productive' efficiency and then when they suffer, they are told it is because of their carelessness. And to compound it, workers are forced to live with occupational hazards—they are undertrained, safety systems and procedures are substandard. Issues relating to health and safety are overwhelmed by wage negotiations or depoliticised.

In other words, it is built into capitalism that health of workers or of others may be affected is a low priority investment area that eats into profits 'unnecessarily' (See SHR 1:3). In advanced industrial countries, there are groups—workers and environmental lobbies—which fight this tendency tooth and nail. But here in India it takes a Bhopal to jerk us into a state of elementary environmental consciousness and that too at such a huge loss of life.

And yet the events that led up to the disaster form a familiar story in many third world countries. A multinational company with a lot of political clout works hand in glove with a corrupt, heavily bribed government to safeguard its profits despite the laws and regulations of the land. Hostile administrators are transferred, and factory inspectors bribed. And

then there are other advantages such as what Union Carbide gained—cheap underpaid labour from slums and bastis around. Whatever happened to the industrial siting and zoning laws?

There has been much written about the tragedy, and some issues have become controversial. But some facts are indisputable. Without a doubt there was insufficient safety design built into the plant. Proper foolproof safety means precisely the ability to take care of such emergencies. But in Bhopal the scrubber was meant for smaller amounts of gas, and the water sprinkler system was inadequate. Why were there no computerised warning systems here? In American and European facilities, even storage areas have elaborate arrangements of automated sprinklers, foam generators and so on. We are scapegoats and victims precisely because our ruling class wants us to be. And then there were operational lapses. If slip blinds were not inserted at the right points or if some crucial valves were left open, it is dominantly the ideology of carelessness as subtly cultivated by the management because it helps in two ways—one, disregard for 'cumbersome' safety apparatus or rules enhances the pace of 'productive' work and two, in an accident a concrete 'careless' act can be identified and the blame put on the worker responsible for it. And what of the process and plant design? A textbook (David and Stanley, see box) says that out of the three methods for producing isocyanates, only the one using phosgene is 'economically viable'. Obviously, if regard for the environment and people's health were to be a major criteria, there would be far fewer hazardous processes. Union Carbide had changed over to the MIC route for manufacturing the pesticide from the less profitable 'chloroformate' route even though the latter did not have MIC as a storable intermediate and was therefore that much less hazardous. It is ultimately a question of choice and very often, of the many alternative routes available, the cheapest and hence the most profitable is termed 'economically viable'.

The Information Monopoly

There is not much information available in 'open' literature on MIC and its effects on biological systems. The one source which could have provided this information was Union Carbide which either maintained a stoic silence or issued deliberate misstatements

to the public. Unfortunately the confusion was further intensified by our 'experts' who issued absurd and incorrect statements. And those who could have provided relevant information were instructed to be silent. In fact, by dramatising operations like the 'neutralisation' of MIC, scientists further complicated the situation. Rather than providing information and assurances backed by facts, our scientist-politician combine preferred to dramatise the situation and mystify technology. A demand for information and public access to records and to data is an important component of the demands put forward by a number of people's groups working on environmental and health issues. We have to work to pursue and support these demands.

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Here is a brief list of references which might yield information.

1. Toxicity of MIC and its quantitative determination in air (German) *Arch. Toxikol.* 20 (4) 235-41, 1964
 2. *Packet guide to chemical hazards.* U. S. Department of Health (lists properties, symptoms, first aid etc.)
 3. *Industrial Hygiene and Toxicology* Second edition, Patty, Clayton and Clayton (for other isocyanates like toluene di-isocyanate — TDI)
 4. *High Polymers.* David and Staley, Vol XVI. John Wiley 1969 (for TDI)
 5. (For experimental work on isocyanates) *Ann. Occup. Hyg* 8. 1965
 6. *The dictionary of organic compounds.* Chapman and Hall
- Poss-Bhopal reports/studies published to far :
1. *Bhopal City of Death.* Eklavya, El/208, Arera Colony, Bhopal Rs. 3/- 62 pp
 2. *Bhopal Gas Tragedy.* Delhi Science Forum, B-1, 2nd floor, J Block, Saket, 48 pp New Delhi 110 017 Rs. 5/-
 3. *Human responses to isocyanate exposure* by R. V. S. V. Vadlamudi and V. A. Shenai of Department of Chemical Technology, University of Bombay in *Science Age*, January 1985. The same issue carries three other articles on Bhopal.

(Contd. from page 145)

The Telegraph, 18 Aug. : About 6,000 junior doctors in all the 7 medical colleges in U. P. are on indefinite strike in protest against the alleged police assault on doctors of the Swaroop Rani Hospital in Allahabad.

Professional bodies in health care

Times of India, 25 July : Should doctors working full-time as medical advisors to pharmaceutical companies be allowed to hold office in professional associations of physicians? The issue is being hotly debated following attempts by two doctors from multinational companies to seek election as presidents of two such bodies. The issue is of particular relevance in view of the coming

election of the Association of Physicians of India, the largest organisation of medical specialists with a membership of 4,000. The post of president is being contested by two professors of medicine from Bangalore and Bhopal respectively and by Dr. Paul Anand, a full-time director of medical research of Glaxo Laboratories. Six months ago Dr. A. S. Kochar from the same company had sought elections as president of the American College of Chest Physicians (ACCP), but the attempt had failed on procedural grounds.

Indian Express, 21 Aug : A complaint has been registered against an alleged quack who was operating as a qualified medical practitioner. His credentials

were first suspected by the manager of a bank which had granted the 'doctor' a loan. The Maharashtra Medical Council sources say that for each such case detected many others may go unnoticed.

Free Press Bulletin, 7 Sept : A doctor who is a Congress (I) MLA and the chairperson of the Maharashtra Small Scale Industries development Corporation has had his name struck from the registers of the Maharashtra Medical Council for negligence and violation of medical ethics a year ago, continues to practice. The complaint had been registered by a patient whose left leg had been crippled following a wrongly administered injection in the knee cap.

Compilation : AJ, PP

The news items have been compiled from the files of the Centre for Education and Documentation, Bombay. We request readers to send us relevant items, especially from the regional press.

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