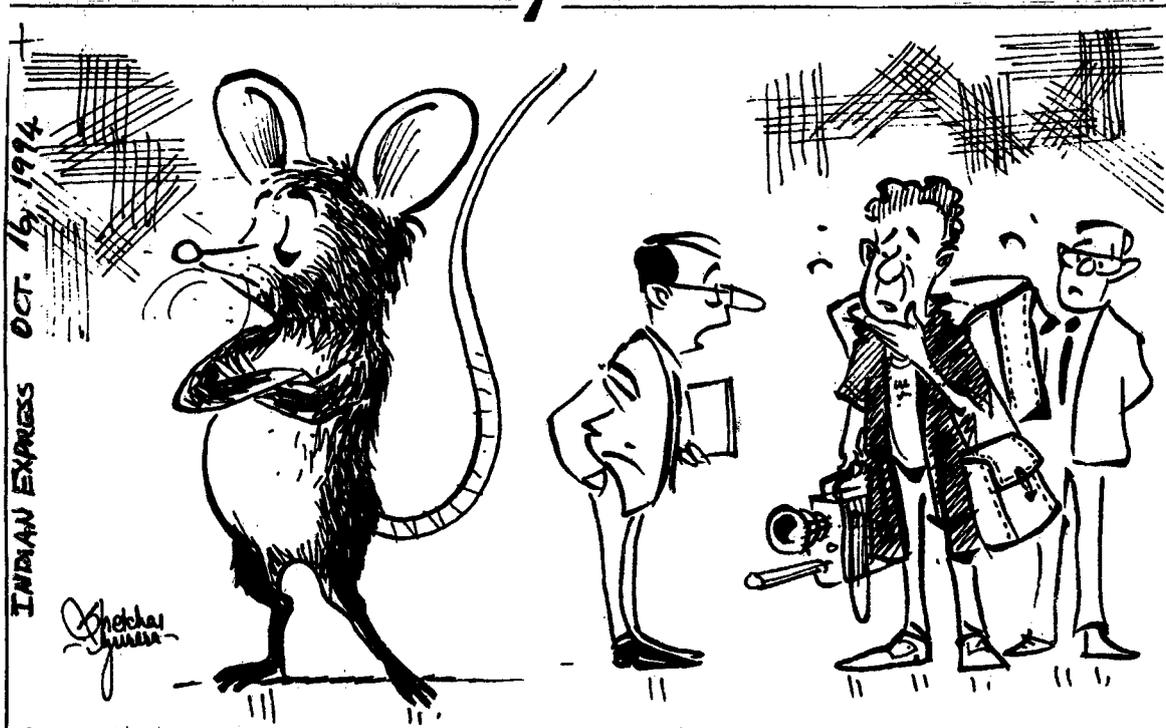


PLAGUE IN INDIA: COULD A FUTURE OUT-BREAK BE PREVENTED?

September-October, 1994

# The Day of the Rat



Dear Peter,

A friend of mine in Delhi once said, that people here don't kill rats when they find them. The rat has a special place in the major religious culture here. It is the vehicle of Ganesh, the Elephant-headed God, of prosperity and wisdom. If someone caught a rat in one neighborhood, it would be put securely in a bag without causing any harm to it, and eventually it is released into freedom in another neighborhood or place in town. If a person killed a rat in a temple of worship, he or she will have to replace it with a similar size rat-made-of-gold! But, early last August, the rat lost status, after it was implicated in the outbreak of bubonic plague in Mamala village, in Maharashtra state. And Bombay City authorities began recruiting rat-Killers.

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## Hiring rat-killers

I was visiting in Bombay, in August, when one morning I read an interesting advert for jobs, rat-killers, in one local newspaper. The response was unbelievable- an unprecedented record number of applicants, far exceeding places available, many of them high school-leavers and some university graduates.

"University graduates?", I asked myself in surprise. "It is not easy to find employment here, even if you have a university degree", said a friend of mine, who is studying at a university in Bombay. "You could make a real fortune if you became a rat-killer", he continued. For every rat killed, five rupees is paid.

A rat-killer is required to kill a minimum 25 rats per day. At the end of the day's work he or she must bring the 25-dead rats to the base office, the rats are counted and if the number is correct, they are burnt immediately, to ensure that no fraud occur if someone else wanted to cheat by taking a dead rat killed by another rat-killer. A successful rat-killer could make up to 125 rupees per day or 3,750 rupees per month- a real fortune in a time of crisis. Some people in other low-income professions make only 500 rupees a month-which doesn't make ends meet.

## Why so many rats in cities?

From my observation of sanitary conditions in Delhi and Bombay, both cities will need some truly sustained public health attention if proliferation of disease-vectors of various kinds are to be prevented. On the other hand, Surat city where pneumonic plague killed many people in September has the worst record of filth in the country. The Frontline magazine (October 21, 1994) had this to say:

"28% of Surat's population (1.7 million) lives in slums. The growth of urban living facilities and civic amenities remain far behind that of Surat's population. The roads remain unpaved in new neighborhoods, all surface water is thoroughly polluted, sanitation and drainage is in dismal state. Eighty percent of the slum population use open spaces, canals and river banks, roads and rail tracts and other places than latrines for defecation. Early in September floodwaters were in the town and carcasses were left to rot in open spaces after the water receded. Public housing and public health were not municipal priorities at all".

### SURAT:

GARBAGE GENERATED: 1,250 tonnes  
 GARBAGE CLEARED: 1,000 tonnes  
 SEWAGE GENERATED: 130 million litres  
 SEWAGE COLLECTED: 70 million litres  
 MUNICIPAL BUDGET: Rs 170 crore

The "plague city" is also the diamond capital of India and one of the top 10 contributors to the national exchequer. The municipal corporation does not have an annual deficit. But Surat does not care for its 10 lakh slum people, mostly migrants, who provide the labour for this rich, and filthy, city.

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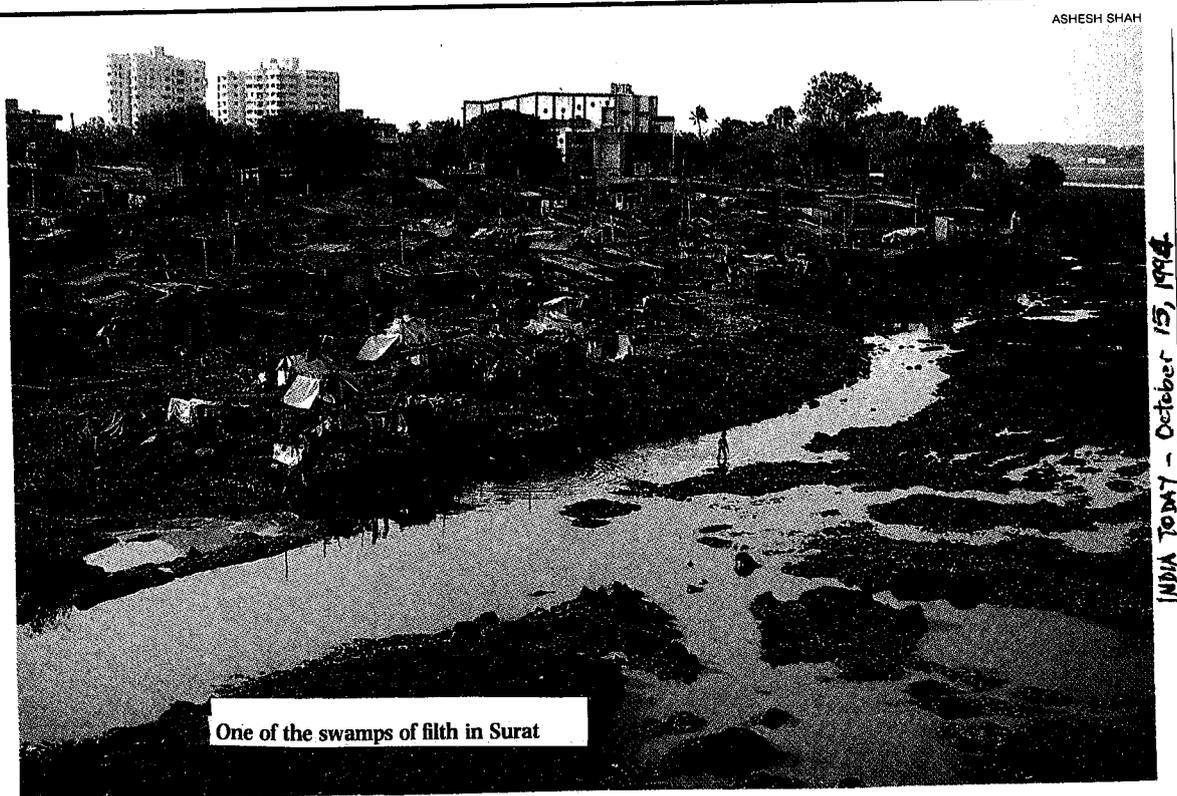
OCTOBER 31, 1994 ♦ INDIA TODAY

## Public reaction to plague

When the first news of the plague outbreak came through from Surat, Delhi became a city of masked faces- many people were

wearing face masks. People were scared. But what was interesting of all, was the reaction of authorities concerned- the plague out-break was seen as the malicious work of some foreign country. And the foreign media was blamed also for exaggeration of news. The national media was not spared too- it was also blamed for irresponsible reporting and were said to be not patriotic enough.

Introduced from outside or not, however, I could not understand whether the presence of uncollected garbage or overflowing sewers seen in some major cities in India, were of the making of a foreign country. Perhaps, the reasons that led to the plague epidemic are really domestic in nature, as one health official put, " we have systematically demolished the public health care system. India's total expenditure of health is only 1.5 percent of its gross domestic income as against World Health Organization's recommendation of a minimum of 5 percent".



ASHESH SHAH

INDIA TODAY - October 15, 1994

One of the swamps of filth in Surat

The reaction of some medical professionals in Surat was even more surprising- about 1000 doctors (said to be a quarter of the fraternity) and other medical workers run away from town. Medicines were disappearing from local pharmacies, especially tetracycline, the anti-biotic used for treatment of patients sick with plague. Badly needed medicines also found there way into the black market too.

#### Tourism

This was dealt a knock-out blow. In Kochi (Cochin), Kerala

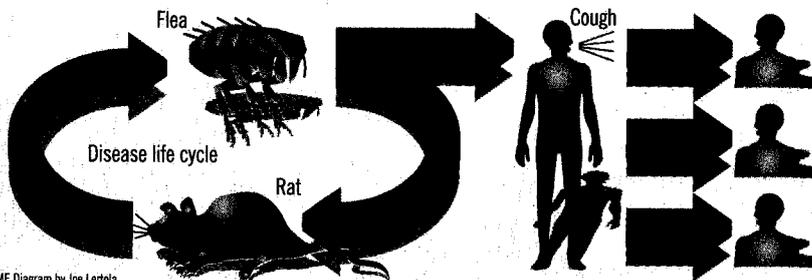
**BOUNTY HUNTER:** A rat catcher in Bombay adds another trophy to his day's roundup in an intensified search-and-destroy mission



SHERWIN CRASTO-AP

### HOW THE PLAGUE SPREADS

Plague is caused by the bacteria *Yersinia pestis*, which is carried by rats and the fleas that live on rats. When an infected flea bites a human, it can transmit the disease. Pneumonic plague occurs when the disease spreads to the lungs and can be passed from human to human through the air by coughing or heavy breathing.



TIME Diagram by Joe Lertola

State, hotel occupancy fell to 30% as many of the tour-packages from abroad were cancelled. In October, while I was on a study visit in Alleppey, a hotel offered me accommodation for one-half the actual summer rate.

The epidemic also stranded many Keralans from returning to their work places in the Oil-rich countries of the Gulf, after international airlines stopped flights to India. Many workers were afraid that they were going to lose their jobs there.

### Back in Trivandrum

Already rat poison-zinc phosphide- was on sale in the markets of this health-conscious state. In Trivandrum, you don't see much garbage scattered around as in other cities- it is a relatively clean town compared to local standard. Thanks to high literacy. People here are reasonably aware of hygiene and public health.

One thing I noticed here (and in places I visited) is how much the plague epidemic had undermined the pride of some citizens. Many will ask you, "do you like India?". The responses tend to be philosophical in nature, "never mind the plague, it could have happened anywhere else in the world, or don't you see I live here in this wonderful town where there is nothing like Surat here? I always wondered how much such responses could do in restoring self-confidence. But, one Keralan, thought the plague epidemic could be a blessing in disguise. He said, "the out-break of pneumonic plague in Surat has brought into focus our unsanitary and inhuman living conditions. The curse of the plague can also turn out to be a blessing, if only we have 'eyes to see', ears to hear' and the 'will to work' harder (Business India, November 7-20, 1994).

As I followed up on the plague news, I thought the local press was doing a good job of reporting. They expose the underbelly of the real issues involved, in a far greater detail than even the foreign press. The question is, will authorities take seriously the importance of such revelations of truths about living and health conditions in some cities in India? Although the plague menace has reduced, I did not see any real changes for the better in places where plague had hit hard. The status quo goes on. And the threat of plague or other epidemics is still there. But, wouldn't it be beneficial to take measures now to prevent future epidemics from happening? The need for primary prevention is very obvious!

Thank you.

Yours sincerely,



Bacete O. Bwogo