

## Uranium mining dilemma

— Divya Badami Rao

The Atomic Energy Commission (AEC) has been engaged in efforts to convince the people of Meghalaya to allow opencast mining of uranium in the West Khasi Hills region. In return for the rights to mine uranium, the government has offered a Rs. 800 crore compensation package to develop infrastructure. When such large quantities of money are involved, something serious must be at stake. In this case, there are two. On the one hand, the traditional uranium mines in the Singhbhum district of Jharkhand are unable to produce enough uranium to meet even the demand from existing nuclear reactors in the country, let alone future ones. On the other, local inhabitants are strongly opposed to the project. This is true not just in Meghalaya, but also in Andhra Pradesh, another state where uranium mining projects are being planned.

The list of groups and organisations that have consistently opposed the project includes the Khasi Students Union, Federation of Khasi, Jaintia and Garo People, Meghalaya People's Human Rights Council, and the Langrin Youth Welfare Association. Two political parties, Hill State People's Democratic Party (HSPDP) and Khun Hynniewtrep National Awakening Movement (KHNAM) also oppose uranium mining. They claim that even the exploratory work on uranium that started in 1992 has already started producing health impacts. Several children from Langpa Nongmluh and Phlangdiloin villages were reportedly taken ill and shoals of fish in the Kynshi and Rilang rivers died after the drilling commenced. These groups are convinced that workers will be exposed to health hazards if they engage in uranium mining.

The evidence from elsewhere suggests that the health of communities living around uranium mines and mills is indeed impacted adversely. The Uranium Corporation of India Limited (UCIL) has been running the mining and milling operations in Jaduguda since the mid-sixties. This has resulted in a higher degree of material prosperity. With the steady income of a regular salaried job in the mines or mills as against dependence on agriculture.

But there is a price to be paid. Uranium workers are exposed to an environment laden with dust caused by blasting and powdering of hard rock. This puts them at risk of developing silicosis, a painful disease of the lung that causes impairment of breathing. The concentrations of dust in the Jaduguda mines appear to be in excess of the permissible limit set by of the Occupational Safety and Health Administration of the USA. The limits set by the India mine safety authorities are weaker and have not been modified to account for more recent research which suggests that breathing such dust is more harmful than previously understood. Yet, diagnoses by UCIL doctors do not show even one case of silicosis or any work related diseases.

The health toll is paid not just by people working in the mines and mills but also their families and neighbours. One pronounced impact is congenital deformities: infants born with one or more birth defects. A statistical survey undertaken by the Sampoorna Kranti Vidyalaya along with local groups indicated that persons with congenital deformities are far higher in villages closer to Jaduguda in comparison with villages further away from the mining area, what are called control villages in the terminology used in such surveys. The control villages were chosen so that they match the villages near the mines and mills fairly well in terms of demographic indicators such as the age and sex distributions of the population, and the caste composition. Thus, a priori, one would expect roughly similar incidences of various health problems. This is indeed the case except for some specific problems, such as congenital deformities.

In the nearby villages, 35 men and 28 women were afflicted with one or more deformities. In the

control villages, on the other hand, the corresponding figures were only 7 men and 6 women. These congenital deformities are correlated with the start of mining operations – if you look at people above 35 years of age, those that would have been born before the Jaduguda mill was established, there is hardly any difference between the villages near the mining region and the control villages.

When it comes to deaths amongst children, of the nine children from villages closer to Jaduguda who died within the year of birth, eight were afflicted with congenital deformities. The six deaths that occurred in control villages were all caused by environmental reasons such as diarrhoea, fever, and premature birth.

Scientific tests and statistical health surveys conducted cannot easily establish the route through which mining causes these birth defects and health impacts. What these studies show with a high degree of certainty is that the incidence of birth defects and diseases has increased in the area due to the presence of uranium mining. UCIL predictably denies all reports but it has not substantiated this denial on scientific grounds.

The people of Meghalaya, recognising the dangers of uranium mining have put up a concerted and united effort to resist the Government's offers. Refusing to trade health for money, they have taken a strong and unwavering stance against the project. Despite the Atomic Energy Commission Chairman, Anil Kakodkar having held "talks" with Chief Minister Donkumar Roy, and Cabinet Secretary K M Chandrashekar "seek(ing) cooperation" from various NGOs and protesting groups, Deputy Chief Minister and leader of the Hill State People's Democratic Party, Hoping Stone Lyngdoh was quoted as saying "We will not allow anyone to start uranium mining until they can protect people from radiation. I don't want to see my own people dying due to radiation."

However, the Indian Nuclear establishment is not used to taking 'No' for an answer. Public Hearings held in connection with the Lambapur-Pedagattu and Seripally uranium mine and mill in Andhra Pradesh saw massive protests from residents in the area and yet the projects received the green go-ahead in the form of an Environmental Clearance from the Ministry of Environment and Forests.

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