#### **URANIUM MINING**

# Moving to Catastrophe

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[2011 was E F Schumacher's centenary year. Progressive groups in Kerala and elsewhere wrote and held programmes on his vision. In 'Small is Beautiful', Schumacher expresses his deep suspicion of nuclear power. He will always be a deep source of inspiration for environment activists the world over.

Social activists also lost Shyamolee di last year, who brought out through her films and documentation the effects of uranium mining at Jaduguda]

INDIA'S ELITE AND MAINSTREAM media is pushing hard for nuclear power. The Fukushima disaster in March 2011 has not deterred this lobby. They lost no time in proclaiming that the same kind of accident would not happen here, that Indian nuclear technology is "safe".

Nuclear power is also seen as the answer in times of climate change, as it is carbon-emissions-free. India needs the energy to "grow", and with oil and coal becoming increasingly expensive, "there is no option" but to go for large-scale nuclear power. The question that is not asked is: do people need the current kind of growth that leaves out millions and widens inequality? Or, is it judicious to have lower growth that provides meaningful work to all? The first focuses on creating jobs mainly in urban India, emptying out the rural economy and society and creating energy-inefficient cities. The second revolves around the creation of a modest rural-driven economy with happier people, living more in harmony with nature. As Schumacher said of India, it is hard to understand why the government visualizes the creation of huge capacities in cement, steel and electricity for putting a man to work.

It is true that the US, with a population of 5 percent of the world, accounts for a fifth of the world's energy consumption. In comparison India's energy consumption is about a sixth of that of the US. The position of the mainstream media and the ruling elites is-if the US and Europe have been consuming such high levels of energy over two hundred years to be able to live the way they do today, why should Indians deny themselves, or allow them to deny India, the "right" to raise its energy consumption levels and live the way they do? In the context of climate change talks, the argument is expressed in terms of the 'right to pollute'—the developed world accounts for 70 percent of the stock of greenhouse gas emissions in the atmosphere, so they should vacate that space for emerging economies. They should clean up their systems of production, not India and China or for that matter Brazil.

India's responsibility to climate change shall be expressed in the form of a switchover to nuclear energy, goes this argument. Sounds neat, except that nuclear power is not clean energy at all. Nor is it safe, Fukushima or no Fukushima in the immediate future.

## INDIA'S NUCLEAR PLANS

What is the emerging scenario on nuclear power in India? A recent article in *The Hindu Businessline* (November 2, 2011) spells out the plans of the nuclear establishment. Nuclear power accounts for just about 2 percent of total power generated with an installed capacity of 4780 MW. The atomic energy establishment plans to push that to 20,000 MW by 2020. Really a grandiose plan!

"The Centre has, in principle, given a nod for 5 new greenfield sites in the states of Haryana, Andhra Pradesh, Madhya Pradesh, Gujarat and West Bengal. The Nuclear Power Corporation of India Limited (NPCIL) is going in for bigger format reactors of the indigenous 700 MW and imported 1000 MW types... For the latter, it is in discussion with GE & Westinghouse of US, Areva, some other French companies, and Russians, who are already in the process of completing two 1000 MW units in Kudankulam, Tamil Nadu," the article says.

"Interestingly, the Department of Atomic Energy (DAE), which was emboldened with the India-US agreement, the civil nuclear pact with France, Canada, the shifting mood among the Nuclear Suppliers Group towards technology as well as assurances of fuel supply, came out with a much bigger plan in October 2010, to raise the installed capacity to 63,000 MW by 2032.

"The fuel scenario isn't too bright either. A couple of years ago, it turned bleak, with no new mines, and complete dependence on output from Jaduguda in Jharkhand... However, the post India-US agreement, some welcome consignments of supply from France and Kazakhstan saved the situation.

"However, to meet the demands of the ambitious 2020 target, a combination of domestic and imported uranium is a must. The Uranium Corporation of India Limited, which mines uranium for the programme, has been pitching hard to expand its activity to Andhra Pradesh, Gulbarga in Karnataka, Meghalaya and within Jharkhand. But here again, there are land issues and groups protesting against the projects.

"The DAE pins big hopes on its project in Tummalapalle in Kadapa district of AP. It announced a massive find of uranium reserves in the village, estimated to be 49,000 tonnes in July. This would be enough to support around 8000 MW capacity for 40 years. It is estimated that a 700 MW plant would require 100 tonnes per year. DAE is confident that the plant will become operational shortly. At present, it has only two functional mines, both in Jharkhand, and the total estimated reserves of uranium are 1,70,000 tonnes," the article says.

### **GROWING PROTESTS**

In May last year, the Uranium Corporation of India held a "public hearing" at Jaduguda, inviting the views of the public on expansion of its mining activities in the region. The hearing was a farce: activists and the public were not allowed. The venue was shifted from a football ground as stated in the public notice, to a site within the UCIL premises. Even journalists were

not allowed inside. The women blocking entry were visibly the employees or wives of employees, wearing sarees that were probably given by UCIL.

There was no hearing. The pollution control official disappeared from the venue in a car, and went to the UCIL guest house. Journalists' queries were not entertained.

The UCIL has suppressed critics by co-opting them. Permanent employees get handsome salaries, up to Rs 25,000 per month, which is enough for them not to risk their job. In an environment where livelihoods are so insecure, there are perhaps fewer takers for an argument that looks at the long-term effects of radiation.

In Kudankulam, fisherpeople's protests against an upcoming reactor received adverse media coverage. It parroted the official line that the movement is an international conspiracy against India. The Nuclear Power Corporation's Chairman and Managing Director, S K Jain, said that anti-nuclear groups from Finland, France, Australia, Germany and the US had joined the locals in the campaign. Why cannot civil society groups join hands as governments and business people do, without inviting suspicion?

### **IDEOLOGICAL CONSENSUS**

The proponents of nuclear energy cut across ideology. What are the arguments they advance?

Let's take the sort of position associated with CPM. They would say: 'We need a self-reliant nuclear power programme, for which we have the technological potential and even access to natural resources. There are untapped uranium mines in India. There are 'friendly' countries like Russia to help out with the rest. It is another matter that Australia, a US ally, is ready to assist us, but we should avoid getting into the US axis for this, as it would compromise our independence and put us on adversarial terms with China. The US 'nuclear deal' is all about making us buy equipment and stuff from US allies, which we should rather avoid. An indigenous nuclear power programme is then about securing our energy and military needs'.

The Right is also agreed that nuclear power is required for the satisfaction of India's booming growth and energy needs. However, it is more comfortable with the US giving India the technology and resources. China is the threat, not so much US.

Both, the Right and Left believe that the 'nation' needs energy to produce more goods in the future. They agree that India needs a deterrent (read bomb) to prevent the people from becoming overrun by the US like Iraq or Libya (Left argument), or being taken over by China and/or Islamic countries, chiefly Pakistan (Right argument).

But what is it that these two camps don't say? They do not take the voices of people's movements into consideration, whether it is at Kudankulam or Jaduguda. They have been dismissive of the agitation at Kudankulam. The Right says that it is inspired by agents of the Church and the West, who don't want to see India put up its own nuclear programme. The Left

says quite the same thing - that the agitations are inspired by "imperialist" elements, the agents of which are foreign or Church-funded NGOs.

The real convergence goes beyond ideas to attitude. The two camps believe that the concerns of some people would have to be sacrificed to serve larger goals, more so when they are not valid or genuine. Just a simple question: would the ideologues have said this, if they were staying in Kudankulam or Jaitapur? If nuclear power—or for that matter, any energy project—is so safe, why not have reactors in the middle of large cities where they live? For them, the people staying in Jaduguda, Kudankulam or Jaitapur are not entitled to feelings of fear, helplessness or suspicion. Therefore, nuclear waste can be dumped in some rural backyard that they do not need to know, so long as it is not their backyard.

The smarter ones are 'scientific'; they trot out or demand 'data'. Where is proof that nuclear power is unsafe, they ask. The numbers of killed and diseased after Chernobyl and now Fukushima have been overestimated, they say. Nuclear power is a better option than coal and oil and is a major hope amidst climate change; studies of health damage due to radiation leaks are likely to have been funded by the fossil-fuel lobby.

The basic problem, some of them argue, is that the nuclear power industry is not transparent. Or, as they say nowadays, 'Systems are not in place. This leads to lesser accountability and greater possibility of mishaps.' (Perhaps, they should stay near a plant and get that accountability process started.)

In other words, nuclear power is full of exciting possibilities against which the level of risk fades into the background. They would have come up with some fantastically minuscule number to indicate the probability of accident.

But if the reactor dome goes up into the sky, where would these experts be? In today's times, there is more reason to suspect technology, data and 'scientific opinion' than ever before. The track record of the science establishment is not impressive at all. Yet, 'science' has its blind followers, including those from the old Left.

But, talking their language, it can be said that nuclear power is very expensive. It can cost up to Rs 30 a unit, taking into account the huge capital and decommissioning costs. The article points out: "The reactors at the Tarapur Atomic Power Station are around 40 years old, while the Rajasthan, Madras and Narora plants also are inching close to 30 years. If the average life cycle of a reactor is 40 years, then the NPCIL is sure to have more than half a dozen of the existing 20 operational plants ready for decommissioning by 2020. This will bring in additional costs and challenges of decommissioning as well." Who said that renewable energy, such as photovoltaics, is unviable?

### **ENERGY INEQUALITY**

Is it absolutely necessary to take risks to meet the 'needs of the country' or its people? Apart from the ethics of using an abstract category (like 'country') to escape personal responsibility for

risks, there is also the question of what the total needs of a country should be taken to be. While every household should get electricity in this time and age, the lives and livelihoods of ordinary people should not be put at risk only so that some people can have airconditioners or other fancy appliances at home. The inequality in energy consumption should be addressed before the Manmohan Singhs build more nuclear plants, thermal power stations and dams.

Those who argue for the right to emit in the context of the climate change debate refer to India's per capita energy consumption, while glossing over the inequality in energy use. The rich should pay more for their energy.

Precious coal and oil are used to feed urban needs, whereas solar power and other forms of energy, in their infancy, are left for rural India. As Girish Sant of *Prayas* argues, this should be reversed. Coal should be used to light up homes of the poor. There would be less wastage. Let the rich in urban areas pay more for power made out of photovoltaics, so that they make these forms of energy viable. Once they pay more for their energy, their wastage could come down.

### **UNEXPLORED AREAS**

The anti-nuclear movement must address the issues arising out of the politics of energy use in India, as Shyamolee di did. A health study that looks at the change in population over time in Jaduguda and the other impacts of radiation is perhaps needed.

In the area, trucks carrying uranium ply about without being covered. But there are only muted voices of protest, such is the control of UCIL over the region. The propaganda of the nuclear establishment needs to be challenged as it further builds up in the days to come.  $\Box\Box\Box$