Nuclear Lives: Uranium Mining, Indigenous Peoples, and Development in India

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India’s nuclear programme has suffered from a shortage of uranium. As elsewhere in the world, the main uranium deposits are located on lands belonging to indigenous or tribal peoples. This paper discusses the unfolding controversy relating to uranium mining in the West Khasi Hills of Meghalaya. The government-owned Uranium Corporation of India has for long been trying to get access to the deposits of uranium, but has failed due to local opposition. During the past two years the government has stepped up its efforts to allow mining in Meghalaya and seeks to win over local people with promises of development. Although a reasonable proposition for some, there is also a strong opposition to this, usually citing either health reasons or issues having to do with ethnic sovereignty and indigenous rights. Allowing uranium mining, it is argued, would lead to the loss of indigenous lands and open the region to a large-scale influx of non-tribal people.

The entire production cycle for a nuclear weapon – from uranium mining, to plutonium production, to weapons testing, to nuclear waste storage – produces human and environmental costs that are borne by particular bodies in particular places (Masco 2006:12).

India is a rising nuclear power. With the nuclear tests in the Rajasthan desert in 1998, India came fully out of the closet, showing the world that it was indeed a nuclear weapons state. Besides its arms programme, India also has an ambitions nuclear power programme.

1 Introduction

According to plans, by the year 2020 India is to generate 20,000 megawatts from nuclear power. This would mean roughly a five-fold increase from the present capacity. Besides the existing 17 nuclear plants, six new ones are under construction. A major hurdle for these ambitions, however, is the shortage of fuel, i.e., uranium. This, it is said, causes the existing plants to run at only half of their installed capacity (Joshi 2008). Up to now, as a non-signatory to the international Nuclear Non-Proliferation Treaty, India has been barred from importing uranium. But with the signing of nuclear cooperation deals signed with both France (September 2008) and the United States (US) (October 2008), this de facto embargo has been lifted, and India will get access to both nuclear technology and fuel. And if these two countries can, it is not unlikely that the major uranium exporters like Canada and Australia will also follow and open their doors for export to India. The only hitch here is that the international collaboration is exclusively for civil uses.

Hence, India needs a domestic supply of uranium for its nuclear weapons programme. So far, the richest uranium deposit is found in a faraway corner of the state of Meghalaya, in north-east India (close to the border of Bangladesh). The government-owned Uranium Corporation of India (UCIL) has been trying for more than a decade to get access to this source but has failed due to stern local opposition. During the past two years the Indian government has stepped up its efforts to allow mining in Meghalaya and seeks to win local people over with promises of development packages in exchange for uranium. Roads, schools and hospitals will be built and new jobs created, the national government assures. In addition, the state government will earn substantial annual revenue from the mining project. Saying yes to uranium mining is thus presented as a choice for development. If some people in Meghalaya find this a reasonable proposition, there nonetheless remains a vocal and influential opposition to the uranium mining project in the state.

This paper was first presented at the Fourth Afrasia International Symposium, Ryukoku University, Japan, November 2008.

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In this paper, I will discuss various aspects of this unfolding controversy. As we will see, those who oppose the mining project usually cite either health reasons – risks relating to radioactive contamination of the environment – or issues having to do with ethnic sovereignty and indigenous rights. In the case of the latter, allowing uranium mining, it is argued, would lead to the loss of indigenous lands and open the region to a large-scale influx of non-tribal people from the plains. This would further undermine the position of the indigenous people of the state and hence threaten their long-term cultural survival. With regard to health risks, the opposition points to the suffering of the tribal people living in the vicinity of the uranium mines at Jadugoda in the state of Jharkhand and, further, to the experiences of indigenous people elsewhere in the world where uranium mining has taken place. Most of the world’s uranium deposits are indeed located within indigenous territories, as for example in the case of the US, Canada and Australia. To provide a sense of how arguments are put in the debate, I begin by recounting discussions I had during my stay in Meghalaya in the spring of 2006.

2 A Matter of Development

H S Shylla, the chief executive member of the Khasi Hills Autonomous District Council (KHADC) at the time, greeted me with a friendly handshake as I entered his spacious office in Shillong. He was in a good mood, just returning from a visit to the Jadugoda uranium mine in Jharkhand and several other atomic energy institutions elsewhere in India. The trip was part of a series of study tours organised by the ucil with the aim of informing politicians, government officials, landowners, and other concerned citizens of Meghalaya about the benefits of nuclear energy and dispelling the fears expressed with regard to the proposed mining of uranium project in the state. Shylla was highly impressed by the advances India had made in the field of nuclear science, which he had learned about during the tour. He had received a dvd with a PowerPoint presentation that was running on his laptop. He showed me a few of the slides that concerned different uses of nuclear technology, for example, in medicine, in food preservation, and not least in power generation. He also showed me the radiation detector that had been presented to him and made a joke to one of his colleagues, saying that they should have a display in the office showing the current radiation level.

He was fully convinced that radiation was harmless and that all talk about health risks was baseless. As he put it, radiation is there in nature itself and we are all being exposed to it as background radiation. Coming to the issue of uranium mining in Meghalaya, he explained that it would be opencast mining, which would minimise the radiation exposure of the workers. In Jadugoda, the mining is done deep under the surface, but even then the people working in the mines for 20 to 30 years showed no sign of being affected by radiation. The workers there were all perfectly healthy, he argued. Why then should we have problems with radiation here, he asked rhetorically, as if this contentious issue were of no concern.

Shylla told me that the District Council had given its support to the proposed mining project. It was a matter of saying yes to development and giving the local people a chance to cash in on the precious resource nature had bestowed upon them. As Shylla put it, “How can poverty and uranium go together – people in the area are sitting on millions and yet they are poor.” To emphasise his point, he told me that the uranium deposit was considered the best in India if not in Asia as a whole. And, as he has put it elsewhere, people would benefit not only in Meghalaya but also in the entire nation, and those in Meghalaya should be proud of their “contribution to the country’s nuclear strength”. Indeed, on visits to Meghalaya both then President A P J Abdul Kalam and Prime Minister Manmohan Singh had stressed the national importance of the project. In view of this, one can understand Shylla’s optimism and apparent confidence that the mining will eventually be realised. Shylla also said that the landowners were in favour of the project, that ucil has financed a road project in the mining area, and that the construction work had already started. “It is now up to the state government”, he concluded – “It is they who have the final say in the matter”.

The day after our interview, Shylla told the press that the non-governmental organisations (ngos) opposing uranium mining were “anti-development and anti-national” and “should be put behind bars”. But the anti-mining camp seemed nevertheless to be gathering strength, spearheaded by the influential Khasi Students’ Union (ksu) along with the Hynniewtrep Environment Status Preservation Organisation (hespo), the Meghalaya People’s Human Rights Council (mphrc), and the Langrin Youth Welfare Association. One of the main figures within this camp is the veteran politician Hopingstone Lyngdoh. Lyngdoh explained to me, when we met in April 2006 (just a few days after my meeting with Shylla), that his aversion to the use of nuclear energy goes all the way back to the atomic bombs in Hiroshima and Nagasaki. As he learned about this terrible event, he realised the intimate link between nuclear energy and nuclear weapons. Being a resolute opponent of nuclear weapons, he became equally critical of the use of nuclear energy. Hence his opposition to the proposed uranium mining project in Meghalaya.

3 Opposing Uranium

According to Hopingstone Lyngdoh, the history of uranium in Meghalaya goes back to the 1950s when the atomic energy mining division came for the first preliminary explorations. New explorations followed in the 1970s and 1980s, eventually leading to the discovery of uranium deposits in a number of different places. The village of Domiasiat in the West Khasi Hills was one of these sites, and it was close to the place where the Atomic Minerals Directorate finally started explorative mining and processing of the ore to produce the so-called yellowcake. Lyngdoh said that he had opposed these activities from the very beginning in his capacity as an elected member of the legislative assembly and the khadc, the latter being a body put in place after the Indian independence to ensure tribal self-rule in the hill areas of north-east India. Lyngdoh spoke of how he had started to receive information from people in and around Domiasiat about fish that were dying in the nearby rivers and of dogs and cows that were going mad. Strange diseases had also begun to emerge. It was then that he started to mobilise people against the uranium mining on a larger scale.
Because of the vigorous protests they managed to organise, the exploratory mining was stopped and all operations in Domiasiat were shut down in the 1990s. Lyngdoh said that 650 tonnes of contaminated tailings (mining waste) had been left unprotected at the mining site. Eventually, the Directorate was made to put the waste back in the pits and seal them with concrete. But by then it was already clear that the atomic energy authorities were determined to pursue their mining plans. As Lyngdoh explained, he and the others active in the campaign had been under strong pressure ever since to alter their stand and allow the mining to proceed, but if anything, he has only become more convinced in opposing the project. Over the years he has had contact with other organisations around the world that pursue a similar struggle against nuclear energy/weapon in all forms. He mentioned the terrible fate of the Navajo Indians in the US, whose lands had been devastated by prolonged uranium mining, leading to deaths and enormous suffering for the people, who often had no option but to continue living in a contaminated environment. Preventing the same thing from happening in Meghalaya was another major reason for Lyngdoh to oppose uranium mining.

While the threat of uranium mining has been hanging over Meghalaya for a long time, the central government and the atomic energy lobby appeared more determined than before to go ahead with the project, according to Lyngdoh. Now, he explained, it is a matter of convincing people of the benefits of mining, and this is done to a large extent with the help of bribes. Large sums, he said, had been handed out to landowners and people in decision-making positions. In this connection, Lyngdoh mentioned the study tours arranged by ucui. for people to visit the mining sites at Jadugoda (supposedly involving monetary “gifts”). Major projects commonly involve illicit flows of money, but whether kickbacks have been paid in this case is of course hard to tell. Be that as it may, the nuclear lobby has clearly had some success in convincing certain key groups of the benefits of the project. This has not, however, seemed to dampen Lyngdoh’s commitment to prevent uranium mining, no matter what.

The question of whether to mine or not to mine the rich near-surface deposit of uranium in the West Khasi Hills has been haunting the state quite directly, since the early 1990s. H S Shylla and Hopingstone Lyngdoh are two important persons in this controversy. As is obvious from the above, their positions are irreconcilable. There seem to be no points of convergence, no openings for a real dialogue between the proponents and opponents. For example, ucui. and other representatives of the atomic energy sector are claiming, like Shylla, that radiation does not pose any problem in the project. Mining would be carried out in a scientific manner, taking all precautions to protect the health of labourers as well as local villagers and the environment more generally. The opponents argue, like Lyngdoh, the very opposite.

Both camps use the existing uranium mining facilities in Jadugoda to prove their case. The first group argues that the health record of labourers and people living in the vicinity of the mines reveals no increase in cancer or other ailments that could be related to the mining and milling operations. This is what Shylla had been saying since his visit, as did Prestone Tyngsong, the minister of mining and geology in Meghalaya at the time. At a press conference, Tyngsong told the gathered audience that the feared health hazards from radiation were unfounded. As evidence he mentioned that he had seen parents sending their children to the school inside the ucui. premises, a risk they would not have taken had there been any “health hazards.” Tyngsong’s predecessor, Deborah C Marak, said similarly after her visit to Jadugoda in 2004 that she was convinced that uranium mining has “no adverse effect on human life”. She backed this claim with assurances by then President Kalam, saying that she trusted him, as a famous nuclear scientist, rather than the ngos rallying against mining.

Shylla has referred several times to the Supreme Court decision to turn down a public interest litigation (PIL) filed in 1999 relating to alleged health effects caused by radiation waste in Jadugoda, and he has accused the anti-uranium campaigners of contempt of court because they continue to stress the health risks involved in uranium mining. And indeed, the latter camp continues to refer to reports that speak of premature deaths of labourers, high frequencies of cancer, miscarriages, sterility, children born with various deformities, and high infant mortality in the Jadugoda area. The award-winning documentary Buddha Weeps in Jadugoda has been screened during meetings as part of the anti-mining campaign.

This film gives a chilling portrait of the gross negligence, arrogance, and cynicism of the ucui. authorities vis-à-vis the local adivasi or tribal population. Villagers pass through and graze cattle in and around the tailing ponds that should be properly fenced and secured. Nuclear waste from nuclear facilities else-where in the country is also dumped in these ponds. Children play with scrap from the mine and mill areas, leaking barrels with highly radioactive material are lying around unprotected in public areas, labourers work in the mine without proper safety equipment. Trucks carry the uranium ore uncovered on public roads, passing through villages, leaving a cloud of dust behind them. Villagers speak of their failing health, deaths, and misery, and medical experts working in the area confirm that many of their ailments are directly linked to their continued exposure to radiation. The representatives of ucui. interviewed in the film dismiss all such claims, insisting that these ailments are related to poor hygiene and nutrition standards and to high alcohol consumption among the male population in the area. One villager, a man in his early thirties, sums up their wretched conditions by stating that the mining of uranium and bauxite found on their lands has become a “curse” for them. Many people who have visited Jadugoda convey a similar message, of a place marked by sorrows and sufferings.

Representatives from the principal anti-mining organisations that were part of a delegation from Meghalaya to Jadugoda in 2004 returned with such a view. Dino D G Dympep, the Secretary General of the MPHRC, told me that they were treated like VIPs during the visit but were not allowed to move around freely. Some of them nevertheless managed to slip out and interact independently with the local people. Dympep showed me some pictures of children with various deformities, photographs they had taken during their unauthorised detour. In a letter to the Chief Minister of Meghalaya, Dympep, with ksu, President
Samuel Jyrwa and Hespo General Secretary S S Syiem, wrote that the villagers spoke about various health problems, above all congenital deformity, something the visitors could also see for themselves. They further claimed that there were no traces of the development facilities that UCIL had said at one time or another would come along with the mining. Instead, they asserted, the mining project would lead to a large-scale influx of outsiders, which would pose a “threat to our culture, customs and traditions”. They concluded by stating (in boldface type in the letter):

...we as organisations which have been opposing the proposed uranium mining from the very beginning of its inception. Now after visiting Jadugoda and seeing the reality behind we are more convinced of our previous stand and...we will not part even an inch of our ancestral land to the foreigners who we consider that they are our enemies.16

The last sentence marks an important discursive twist, portraying the UCIL as a foreign impostor. Such a sentiment is commonly expressed by protesters, who portray the uranium mining issue in terms of “us” (the Khasi people) versus the “foreigner”, the outside exploiter represented by the Indian state.17 The Khasis will stand to suffer, while the benefits will go elsewhere. This trope is central to the autonomy discourse in north-east India more generally, commonly evoked in debates about extraction of the region’s natural wealth. While proponents of uranium mining stress that it will bring development to the state, the opposition portrays the uranium mining as a matter of “calculating the incalculable”, and violation of indigenous rights.

In sum, the opposition to uranium mining draws on several registers of protest. On the one hand, it is a matter of a particularly hazardous form of mining that poses great risks for human health and environmental contamination. On the other hand, it is a matter of ethnic sovereignty, of keeping land and resources in the hands of the community, of protecting livelihoods and customs endangered by the foreseen influx of outsiders. Consequently, for some it is a matter of choosing a different type of development or, as a lady protester put it, “We do not want the development that comes from uranium”.18

4 The Geography of Trust

Radiation is an evasive phenomenon. It is invisible and without any smell. For lay persons, it is more or less impossible to evaluate risks relating to radiation. Those who oppose uranium mining in Meghalaya obviously do not trust the assurances by UCIL and other government bodies that the radiation exposure from mining would be negligible and hence pose no threat to human health. Again, one can point to two main arguments. The first is that uranium mining in itself, regardless of how it is carried out, will contaminate the environment and have a negative effect on human health for generations to come. The other is more concerned with UCIL’s expected performance, questioning whether the necessary precautions and safety measures will be applied. Here it is argued that UCIL is more interested in getting the uranium out at the lowest possible cost, hardly bothering about the well-being of a few tribals in the area. The fact that the mining will take place in a far-off corner of Meghalaya, and safely away from the gaze of the national press, adds to such fears.

That radiation affects human beings, that it attacks living cells and can cause cancer, is an undisputed fact. But when such dangers appear – i.e., what type of exposure, at what levels, for how long, under what circumstances, and so forth – is less than clear. Most countries have their own regulations concerning permissible doses or levels of exposure, and various international bodies issue such recommendations as well. The recommendations differ greatly, have been readjusted over time, and are a matter of dispute.19 It goes without saying that none of the recommended safe levels can claim undisputed scientific backing. In the end, all types of environmental or health regulations are settled politically, reflecting a compromise or balance between safety concerns and the economic and other interests involved in pursuing the activity in question.

That the nuclear industry, in many countries tied to the military interest of developing nuclear weapons capacity, has a major influence on how safety standards are being set and enforced seems obvious. It is a particular feature of nuclear activities that a vast time span must be considered in assessing the various risks. In the case of nuclear waste storage, for example, we are talking about almost inconceivable periods of tens of thousands of years. All risk assessments, as Ulrich Beck (2002:41) puts it, are a matter of “calculating the incalculable”. But with things like nuclear waste disposal we are up against completely “unpredictable” and “uncontrollable risks” (ibid).20 In addition to the temporal aspect, radiation effects are also unbounded in space. The European Committee of Radiation Risk states in a recent report that the present cancer epidemic is a consequence of exposures to global atmospheric weapons fallout in the period 1959-63 and that more recent releases of radioisotopes to the environment from the operation of the nuclear fuel cycle will result in significant increases in cancer and other types of ill health (ECRP 2003, para 10).

Chernobyl is a chilling reminder of this. The credibility of the nuclear industry took a severe blow with this accident, but to the surprise of many, the industry seems to be flourishing again as much as it did before. Part of this can be explained by rising oil prices and nuclear energy’s new image as a “green technology” that will help combat climate change.21

Still, the public distrust of the nuclear industry appears to be significantly higher than with other industrial sectors. Most people prefer not to have any nuclear installations in their “backyard”, regardless of official assurances that these are perfectly safe.22 The type of distrust expressed by people in Meghalaya regarding the alleged safety of uranium mining can be observed more or less universally, and this also holds for related activities in the nuclear chain. The other main site in India where UCIL hopes to start mining uranium is in Andhra Pradesh, and these plans have also unleashed massive protests in that state. Similarly, in the US, Canada and Australia, uranium mining evokes fierce protests, not least among the indigenous peoples on whose lands most of the deposits are located.23

The Navajo nation has called for a total ban on mining on its lands. In 2006, the Navajo hosted the Indigenous World Uranium Summit with indigenous delegates participating from various parts of the world. In the declaration of the summit, the main
demand was a global ban on uranium mining and related activities on native lands. The summit also recalled the declaration issued in Salzburg at the World Uranium Hearing in 1992, that uranium and other nuclear materials must remain in their natural location. “Leave it in the ground”, that is.24 The Green Party in Canada, for example, has lined up with indigenous and environmental organisations demanding a uranium mining ban on the basis that it is “extremely hazardous to the environment and health of mine workers and public”.25 The anti-nuclear movement is increasingly building up transnational alliances, turning the “not-in-my-backyard” politics into a “not-in-anyone’s-backyard” principle, as Harvey (1996:391) put it in a discussion on grassroots environmental justice movements.

Around the world there are also citizens’ group pursuing litigation against states or private companies for compensation for injuries inflicted by radiation exposure.26 The most disturbing cases are those related to nuclear weapons tests, as on the islands of French Polynesia and Micronesia or in desert areas of the US or in the former Soviet Union. Contamination from these tests has shattered the lives of entire communities. However, victims often find it hard to make their case.27 The psychological “impact” is rarely recognised, and health effects often appear decades later and are hard to prove. As put by Valerie Kuletz (2001:251) in a study on nuclear politics in the US:

It is relatively easy for institutions responsible for the release of radioactive contaminants to hide it because it often takes time for the effects to reveal themselves. This time gap has been used by the United States and other governments to deny causal links between cancer (occurring ten or twenty years hence) or deformities (which occur in subsequent generations) and radioactive contamination.

An additional problem is that victims often lack independent health data to back their cases, having to rely on the investigations and medical records of the agencies that have carried out the operations or caused the contamination. In the case of nuclear test sites, such records are often security classified, hence completely sealed off from public scrutiny. Organisations and persons that seek to gather such information independently commonly face charges of being “unpatriotic” or of working on behalf of foreign intelligence agencies (in the case of Russia, see Garb and Komarova 2001). When India made its controversial nuclear tests in Pokharian, a desert area in Rajasthan, in 1998, the national press erupted in what Piyush Mathur (2001) calls “nuke journalism”, celebrating this as a great moment in which the nation was showing its strength and technical superiority, hailing the nuclear scientists as heroes.28 (A P J Abdul Kalam was the leading scientist who orchestrated the tests, an achievement that most likely scientists as heroes.29 As the nuclear authorities, to cite Mathur again (2001:12), “flatly denied any radiation leakage owning to the May 1998 test”, it is hardly surprising that the more mundane activity of extracting and processing uranium is similarly claimed to cause no harmful radiation exposure for labourers and local villagers. But can the authorities be trusted? Considering the lack of independent health monitoring of Indian nuclear establishments, there is an obvious confidence gap here. The anti-mining organisations in Meghalaya have also made this point, stating, with reference to the situation at Jadugoda, that the ucn officials “effectively act as legislature, judge, jury, and police over their own activities”.30

The complete denial that there could even be a legitimate concern for radiation hazards – say, if something goes wrong – reveals a managerial arrogance that resonates badly with the norms of democratic governance. During a public debate in Shillong, S K Malhotra from the Department of Atomic Energy brushed aside the expressed health concerns as a mere “fear psychosis”, saying these were based on fictions and not facts.31 But if we look at how uranium mining is perceived and debated elsewhere in the world, such a position seems obsolete. Canada, along with Australia, is the largest supplier of natural uranium in the world. Health Canada (2004: para 5.4.2), the federal agency responsible for health monitoring, gives the following account of the health concerns of uranium mining:

Whether or not mining is conducted in open pits or underground, there are environmental hazards and impacts to workers and general public that need to be considered. These include radiation hazards from radon gas, radium, thorium, and non-radioactive contamination from dust and heavy metals such as arsenic, lead and nickel. After uranium ore is mined, it is processed into yellowcake, a complex semi-refined concentrate of uranium. …External gamma radiation, tailings, slurry, and wastewater are the main areas of health concern at this stage.

Here the concerned state agency acknowledges the potential health risks of uranium mining and processing, which at least opens up a space for critical debate and democratic decision-making.

5 A Gleaming Future?

Meghalaya is a small state with a population of only about 2.2 million people, the majority belonging to one of the three dominant indigenous communities: the Khasi, the Jaintia and the Garo. India’s high levels of economic growth during the last decade have largely bypassed this remote part of the country. Meghalaya and the other states in the north-east remain among the poorest in India. Most people still depend on subsistence agriculture. The region is richly endowed, however, with natural resources like forests, water and minerals. The timber industry boomed during the 1980s and 1990s, depleting the forests to such an extent that the Indian Supreme Court imposed a complete moratorium in 1996. This was a hard blow for the cash-starved states of the north-east.

In Meghalaya it is now mineral extraction that provides the main source of revenue for the state. Uranium mining would
naturally be a welcome addition here. But the downside of this extractive industry is its weak links to the rest of the economy; it remains a kind of enclave that seems to generate little overall economic development in the state. The mineral industry also has a most decisive impact on the environment. Bodies of water being polluted, forests are being cut down and agriculture lands rendered barren. The much appreciated wildlife and flora of the state are similarly under acute threat. Large-scale opencast mining for uranium will add to such pressures, of course, and radiation contamination will subsequently be added to the list of environmental concerns in the state.

The question that people in Meghalaya have started to ask is whether they really stand to gain from the reckless use of nature that mineral extraction implies. The Ministry of Environment and Forests in New Delhi gave the required environmental clearance for the uranium mining project in December 2007, saying that the area was primarily wasteland and that no ecologically sensitive areas like national parks and wildlife reserves would be affected.33 It is now the Meghalaya state government that stands in turn to give its verdict. Since I conducted my interviews in 2006, a new coalition government has come into power in Meghalaya (in March 2008). It is hard to tell what this implies for the uranium mining issue.

The new government continues the process, initiated by the previous Congress-led government, of all-party consultations and at the moment there are two appointed expert commissions that will submit their findings before any decision is taken on the matter. Hopingstone Lyngdoh is the deputy chief minister in the new government (despite the fact that his party, HSPDP, secured only two seats in the election). With this, the anti-mining lobby is at least represented at a central level of the state government. But again, Lyngdoh is not alone, and the other major parties in the government seem less convinced that mining necessarily spells disaster. The chief minister of the new government, Donkupar Roy, has for example launched the idea that uranium mining could be approved if a nuclear power plant were to be built in Meghalaya or any other north-eastern state. Here one also has to consider the possibility that the central government steps in and avails itself of provisions under the Atomic Energy Act of 1962 to sanction the project, since uranium falls under the category of a strategic mineral. Such a measure, however, could easily backfire and instigate new waves of separatist violence. The central government agencies involved have also consistently stated that mining will not be carried out against the wishes of the people in Meghalaya.

The strategy applied, as mentioned earlier, is instead to convince people of the benefits of nuclear-driven development. As part of that, the Directorate of Atomic Energy is now to look into the feasibility of building a nuclear plant in Meghalaya or adjoining states in the north-east. It is hard to take such a suggestion seriously; to begin with, this is a seismically active region that has had several major earthquakes. In the plain areas of the region, there are severe floods almost yearly that destroy bridges and roads, disrupting communications with the Indian mainland. Further, the north-east has a vast hydropower potential that the central government is already pushing to exploit or “tap” in a big way. Add to these factors the volatile political situation, the presence of a large number of well-armed rebel groups and permeable international borders, and the north-east seems a highly unlikely location for high-security installations like nuclear power plants. In short, neither the natural conditions nor the economic and political ones seem to favour this idea.

During the course of my research in Meghalaya, I have several times ended up in private discussions relating to the societal dilemma of whether or not to go for uranium mining. Here I have never tried to conceal my aversion to “nuclearism”33 in its different forms. I share many of the worries expressed by the anti-mining movement. Going by the past experiences of indigenous peoples around the world, uranium mining and other activities relating to the nuclear cycle do seem to spell trouble. As mentioned earlier, the Navajo people and other native American people in the US have been exposed to the most extreme form of radiation contamination through extensive uranium mining, nuclear arms testing and nuclear waste disposal on their lands. This largely suppressed history is the subject of a brilliant study, The Tainted Desert: Environmental and Social Ruin in the American West (1998), by anthropologist Valerie Kuletz. She writes, “[M]any of the Indians interviewed for this book feel that their families and their lands have been sacrificed” (1998:284-285). Without assuming that uranium mining in Meghalaya will amount to something comparable, I do think that the us experience is worth reflecting on. With an overarching national interest in developing military and civil nuclear capacity, the costs borne by people in the margin might after all be considered a small sacrifice.

NOTES
1 The interview with H S Shylla took place in Shillong, 11 April 2006.
2 Before Shylla assumed office, the District Council had declined to grant final permission to the uranium mining project. For example, Shylla’s predecessor, the late David Lyngwie, maintained a much more ambivalent stand, as he told me during several of our meetings. See also “Keep off! Uranium Rich Meghalaya Tells Mining PSUs”, Down to Earth, 31 July 2003.
5 The Atomic Minerals Directorate is responsible for exploration, while the Uranium Corporation of India (UCIL) carries out the actual mining and milling operations.
6 Lyngdoh has been a member of the legislative assembly since 1956, sitting altogether for 49 years. In addition, he has been member of the Executive Committee of the District Council for 36 years and was a member of the Indian Parliament in 1977-79. Lyngdoh said that he had now withdrawn to a large extent from politics and saw himself more as a social worker. This did not come to pass, however, and in 2008 he was back as the deputy chief minister of the new coalition government that came into power after the state legislative assembly election in March 2008.
7 There are three autonomous district councils in Meghalaya, one for each of the major indigenous peoples of the state, i.e., the Khasi, Jaintia and Garo people.
8 Interview with Hopingstone Lyngdoh in Shillong, 15 April 2006, and with H S Shylla, 11 April 2006.
10 Quoted in “Government to Hold Rally on Uranium Mining in December”, The Shillong Times, 11 November 2004.
11 The public interest litigation (PIL), No 188 of 1999, was filed by advocate B L Wadehra against the Union of India and others. As far as I have been able to make out, the Supreme Court dismissed the PIL on the basis of an affidavit by the Chairman of the Atomic Energy Commission stating that it had taken adequate steps to contain the radiation arising out of the uranium waste. To claim, like Shylla, that the Supreme Court has thereby established that uranium mining poses no health risks seems highly questionable. But as I have been unable to access the Supreme Court decision, I leave this for others to evaluate.
12 See “People’s Notice against Anti-uranium Campaign”, The Shillong Times, 4 May 2006; and “We...
Shillong, 10 September 2004, signed by Dino D Gymprey, Meghalaya People's Human Rights Council (MPHRC), and Samuel Jywa, Khadi Students Union (KSU). The letter is based on a meeting that the KSU and MPHRC organised in Umdothum village with land owners and tradi-
tional heads in the project area. About 40 partic-
ients also signed the letter.

See “An Open Interactive Discussion on Uranium Mining and Its Effects: A Proceeding”, 15 July 2004, posted on the Mines and Communities
.org/Country/india/urani.htm (accessed 18 Nov-
ember 2004).

See “Row Over Uranium Mining in Meghalaya” in
Down to Earth, 31 January 2008.

I borrow the term “nuclearism” from Kuletz
(2001), who uses it to refer to various aspects
of the nuclear chain like the production of nuclear energy, development and testing of nuclear weap-
ons, storage of nuclear waste and so on.

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