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A People's History of Anti-Nuclear Struggles

By: G. Ananthakrishnan

The failed promise of nuclear energy in India and the desperate struggles of people across the country who fear their lives could be affected by having a hazardous technology in their backyard are the theme of a collection of essays by researchers and teachers.

India's nuclear energy complex has largely remained shielded from public scrutiny in spite of its development-oriented origins in a newly independent country and its perceived potential to generate an endless amount of inexpensive power. The pursuit of nuclear power has been a long and expensive – and a traumatic experience for remote villages and communities.

It is these struggles of people across India, who could be affected by having a hazardous technology in their backyard, which are the theme of *People Against Nuclear Energy*, a collection of essays by researchers and teachers edited by Ajmal Khan A.T.

The sites of these agitations against new nuclear plants and the expansion of uranium mines are spread across many states. The social character of these protests is varied – as can be seen in the different classes the protestors come from in different places, and the presence or absence of collaborative strategies.

The issue has attracted the support of intellectuals, science activists, and the middle class in Kerala; fishermen and local communities in Tamil Nadu; farmers in Gujarat and Haryana; fisherfolk, villagers, and environmental groups in Maharashtra and West Bengal; and tribals in Andhra Pradesh, Telangana, and Jharkhand. Over the years, several lives have been lost to state violence, the police have played along with repressive measures, environmental impact assessment procedures have been brazenly flouted, and hundreds of false cases have been foisted on the people.

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It is but natural that mass agitations have taken place in India against its disruptive nuclear programme. But, as the authors demonstrate, political parties in the country have often tried to opportunistically cash in on these protests even while backing the establishment paradigm of development and nationalism. Some political parties that were initially opposed to nuclear power plant projects have reversed their stand. Others, emboldened by election victories, have used repressive tactics and violence to break public resistance. The stories of affected communities in this volume paint a depressing picture of Indian democracy.

It has to be noted that the economic rationale for nuclear power has weakened over time. There are now no-risk and low-cost alternatives such as solar and wind power and these enjoy a large share in the total power generated.

In “[Wrong Ends, Means, And Needs: Behind the U.S. Nuclear Deal with India](#),” Zia Mian and M.V. Ramana point out that Homi Bhabha in 1962 had hoped to produce 25,000 MW of nuclear power by 1987 under the Department of Atomic Energy's programme, while Vikram Sarabhai envisaged a capacity of 43,500 MW by 2000. Yet, in 2005, when the Indo-US nuclear agreement was announced, production stood at just 3,300 MW.

Ajmal Khan and his co-writers analyse the performance of renewables against targets set for nuclear power after the India-US deal, the waiver given to India by the Nuclear Suppliers Group (NSG), and the agreements concluded with the US, France, Russia, Canada, Australia, and Japan. New renewable sources, excluding large hydropower plants, generated 147.3 terawatt hours (TWh) in 2020-21, up from 138.3 TWh the previous year. To put it in perspective, nuclear power's share in 2020–21 was 43.9 TWh.

The aspiration to produce 20 GW of nuclear power by 2020 and 470 GW by 2052 – backed by the Narendra Modi government's approval for 10 new nuclear reactors with a total capacity of 7 GW – appears hopelessly disconnected from reality. The 23 operational reactors in the country altogether produced just 6.8 GW during 2021, which was about 3% of the total electricity produced.

Nuclear plants are very expensive, take a long time to build, and are resisted by communities in their vicinity. It took 35 years to put up two 1,000 MW nuclear reactors at Kudankulam in Tamil Nadu, during which many protesters lost their lives and life was paralysed for long periods in several villages.

It is worth remembering that solar and wind power continue to grow at scale. Nuclear plants, on the other hand, are very expensive, take a long time to build, and are resisted by communities in their vicinity. It took 35 years to put up two 1,000 MW nuclear reactors at Kudankulam in Tamil Nadu, during which some protesters lost their lives and life was paralysed for long periods in several villages.

In Peringome in north Kerala, a nuclear power plant project was abandoned in the face of solid resistance from the people. In her essay, Caitlin Stronell attributes the uniqueness and impact of the Peringome protest to the legacy of environmental movements in Kerala, notably the Save Silent Valley campaign. Communities had also successfully pushed back against an earlier project for a nuclear power plant in Bhoothathankettu near the Periyar river. The bedrock of environmentalism in the state helped form a strong coalition at Peringome, including respected writers, artists, and intellectuals.

Peringome drew upon the world's horror at the nuclear accident at the Chernobyl Nuclear Power Plant in 1986, which raised public consciousness about nuclear hazards worldwide. The Fukushima nuclear disaster in 2011 added to this. Kerala has the highest literacy rate in India, and a ready, receptive audience for anti-nuclear campaigns. At a mass event led by the poet Sugathakumari, the participants took an oath in the name of the victims of Hiroshima, Three Mile Island, Chernobyl and other accidents to maintain their vigil against nuclear power.

What made Peringome unique was not only the presence of “various shades of opinion on nuclear power”, but also overwhelming support for rejecting the project.

None of this could stop the power plant from going critical, and its two units joined the power system in 2014 and 2017, with a formal dedication in 2016 by Prime Minister Narendra Modi, then Chief Minister J. Jayalalithaa, and Russian President Vladimir Putin.

Things turned out differently in neighbouring Tamil Nadu, as Ajmal Khan narrates. A different fate awaited the campaign against the twin Russian-designed 1,000 MW reactors planned in the 1980s for Kudankulam, a coastal fishing area in Tirunelveli district. Some of the largest protests in the world against a nuclear power plant have been held here, including a jal-satyagraha by fisherfolk, demonstrators burying themselves up to the neck in sand, and black flags being flown on Independence Day. Several protesters died in the course of the agitation.

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Kudankulam was opposed by a disparate set of activists under the banner of the National Alliance of People's Movements (NAPM), the People's Movement against Nuclear Energy (PMANE), a local umbrella group led by academic S.P. Udayakumar, and groups of fisherfolk and environmentalists.

The Tamil Nadu government saw the protests as a challenge to its authority. Jayalalithaa, after an initial attempt to mollify the communities with a legislative resolution asking the Prime Minister's Office to halt the project work, did a volte face. Repression of the protesting villagers, including women and senior citizens, followed, with cases of sedition, waging war against the state, attempt to murder, and damaging public property being filed by the hundreds. It took a Supreme Court order in 2014 to get most of these cases withdrawn. In the meanwhile though, police firing killed some demonstrators and others had spent up to six months in prison.

Kudankulam reflects a pattern of illegality that marks the location of a nuclear power plant and its construction in India. The Nuclear Power Corporation of India Limited (NPCIL) did not conduct public hearings on the Environmental Impact Assessment (EIA) for the first two units because the law was different when they were taken up. For two later units, the EIA report was not shared with residents in the local language. As a commercial entity, the NPCIL reactor was bound by the Coastal Regulation Zone, but ignored it. Gram Sabha resolutions also had no impact.

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Several essays in the book show that the absence of a democratic consensus is a hallmark of nuclear power projects in India. Ajin K. Thomas’s account of Mithivirdi in Gujarat shows how things can be different. Unlike Kudankulam, the villagers of Mithivirdi could assert their democratic rights and ensure the withdrawal of the NPCIL’s proposal for a 6,000 MW plant based on technology from Westinghouse Electric, which was first approved in 2009.

Here, the government’s approach to the protests was milder. The agitation strongly emphasised environmental rights, a collective declaration by local governments to have a “nuclear free zone” was possible, and there was recognition of intergenerational equity as a guiding principle to keep the air, water, and fertile lands free from nuclear pollution.

Amla Pisharody’s account of the protest movement in Gorakhpur, Haryana, describes the shocking loss of fertile farm land, which was capable of producing three crops in a year, including basmati rice. A total of 608.5 hectares was acquired and then left to dry out. Those who refused to sell were pressured to do so by cutting off their electricity and water supply. Here too, the residents viewed the EIA process as a farce.

Politically, both the UPA and NDA supported the 2,800 MWe Gorakhpur project, although the BJP had strongly opposed the proposal before 2014. Political parties entered the fray much after farmers started their campaign. The NPCIL thought little of the harm being done to highly endangered wildlife and was accused of causing blackbuck deaths. Inevitably, the monetary compensation and land sale divided and weakened the protest movement after 2021.

In Maharashtra, farmers and fisherfolk were jolted by a major bilateral nuclear initiative that targeted Jaitapur. France relies heavily on domestic nuclear power and has a programme of nuclear exports. Its agreement with India to develop a 9,900 MWe plant at Jaitapur has been controversial, beginning with that the European Pressurised Reactor (EPR) technology, which is to be used in six units, is unproven. A new EPR reactor being built in Flamanville, France has overshot its deadline by a decade.

Like Kerala, Bengal has a history of militant activism on issues of land, human rights, and labour. In opposing the NPCIL’s Haripur project, several strands of opposition came together – cultivators, fishermen, urban ‘anti-nuclear elites’, and politicians.

In Jaitapur, as in Kudankulam, there is active public opposition, and here too, the police have been used to break resistance and acquire land, say Ajmal Khan, Nikas Kindo, and Madura Gurav. The violence in villages such as Madban and Sakhari Nate has claimed lives, and farmers and fishermen have actively courted arrest. Post-Fukushima, 15 gram panchayats passed resolutions against the project, but many landowners accepted the compensation after that and the protest weakened.

Monamie Bhadra Haines’s essay on the 10,000 MW Russia-aided Haripur nuclear power plant for West Bengal provides some insight into how opposition formations can vary.

Like Kerala, Bengal has a history of militant activism on issues of land, human rights, and labour. In opposing the NPCIL’s Haripur project, several strands of opinion came together – cultivators, fishermen, urban “anti-nuclear elites”, and politicians. The Communist Party of India (Marxist) was seen as being positive towards the project in 2006, literally weeks before violence broke out in Nandigram, which is not far from Haripur. Then the project went into cold storage amidst a welter of accusations, including the alleged infiltration of Maoists, though this charge was denied by the Trinamool Congress.

Other theatres of protest against nuclear power have been Kovvada in Srikakulam district (Andhra Pradesh), where a reactor was planned by the NPCIL, and the uranium mines in Tummalapalle (Andhra Pradesh), Lambapur-Peddagattu (Telangana), and Nallamala forest (straddling both states).

Jadugoda in Jharkhand has been synonymous with uranium mining operations since 1967, a dirty consequence of the quest for clean nuclear energy. As Maia Sikina explains, the adivasis who have lost their land to mining have been left with empty promises of jobs, shrunken sacred groves, and expanding dumping sites for tailings waste. People living in the vicinity of the mines suffer severe health impacts. A study by the Indian Doctors for Peace and Development (IDPD) in 2008 reported a doubling of the incidence of congenital birth defects among children there.

This is a valuable book that throws light on the struggles of remote communities forced to relocate, give up their land, or live in fear around nuclear power plants with little or no support from governments. It also explores why some societies are more receptive to environmental messages while others are more easily divided.

G. Ananthakrishnan is a Chennai-based journalist.