

Allowing private companies to mine beach sands containing Monazite, the raw material for Thorium, the long-term fuel for India's nuclear development programme, will hurt the national interest

Appeal to the government to revoke that decision

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Former Secretary to the Government of India

To

Shri Narendra D Modi

Prime Minister of India

Dear Shri Modiji,

I invite your attention to my letter of 6th of May, 2023 addressed to the Cabinet Secretasry (<https://countercurrents.org/2023/05/allowing-fdi-in-nuclear-power-development-an-imprudent-step-it-will-adversely-impact-the-national-security/>) appealing to the government not to permit private players, especially foreign agencies, to mine beach sands, as such a step is likely to pose a serious threat to national security.

Monazite is the raw material for Thorium, the long-term fuel for India's nuclear development programme. The beach sands along the coasts of Odisha, AP, T.Nadu and Kerala are rich in Monazite. The Monazite deposits in India constitute a significant portion of the deposits available globally (<https://world-nuclear.org/information-library/current-and-future-generation/thorium>) Considering their strategic importance, there is need to conserve Monazite-rich beach sands by restricting their mining for exclusively meeting the requirements of the Atomic Energy Commission in their effort to usher in nuclear power development based on Thorium.

It was in that context that Prime Minister Nehru, on the advice of Dr Homi J Bhabha, the architect of India's nuclear development programme, imposed a ban on export of Monazite and restricted its mining to the public sector.

Unfortunately, during UPA's rule, the government, under external pressure, imprudently relaxed the

ban on private mining of beach sands, leading to clandestine export of Monazite, which hurt India's national interest. But for intervention by public spirited citizens and timely intervention by the judiciary, such illegal extraction and export of Monazite would have continued unhindered, causing irreparable damage to Dr Bhabha's vision of long-term nuclear development strategy based on self-reliance.

In the light of court directions, in March, 2019, during NDA rule, the Union Ministry of Mines, on the advice of the Department of Atomic Energy (DAE), rightly re-imposed the ban on private mining of beach sands.

Evidently under continuing pressure from private miners, the NDA government once again imprudently permitted private mining of beach sand mining in August, 2023 through an amendment to the Mines and Minerals (Development & Regulation) Act (MMDRA). That decision is bound to have a long-term adverse impact on India's nuclear development programme.

Meanwhile, the UPA in the first instance and, later, the NDA government, decided to open the floodgates to India importing nuclear power reactors and Uranium fuel from outside, constituting a serious setback to Dr Bhabha's vision of making India self-reliant in the field of atomic energy. The decision that India should depend on imported nuclear reactors and imported fuel, apart from its adverse impact on the safety of nuclear power and its cost, constitutes yet another setback to indigenous efforts to conserve domestic Thorium resources as the future fuel for our nuclear development programme.

It is in this context that India should keep in view the developments taking place elsewhere in the use of Thorium as a fuel for nuclear development. Several countries including Germany, Canada, Japan, China, Netherlands, Belgium, Norway, Russia, Brazil, the UK & the USA have made significant advances in developing technology for using Thorium as a fuel (<https://world-nuclear.org/information-library/current-and-future-generation/thorium>).

According to a recent report (<https://futurism.com/china-thorium-nuclear-power>), researchers at the Chinese Academy of Sciences have been successful in the operation of a thorium-powered nuclear reactor located in the Gobi Desert. ***"The team had achieved "full-power operation" last June, according to [South China Morning Post](#), and recently succeeded in reloading the reactor while it was powered up — a world first"***

The DAE has played a leading role in undertaking R&D and indigenous technology development

for processing Thorium as a fuel for generating nuclear power. It is important that India sustains that effort and, for that purpose, every effort is made to conserve the domestically available Thorium resources, in line with Dr Bhabha's vision.

Private miners of beach sands operate to maximise their profits and their past track record shows how, in their effort to earn profits at any cost, did not hesitate to extract Monazite-rich components of beach sands and export the same, in violation of the threshold limits prescribed by the Atomic Energy Regulatory Board (AERB). It is therefore imprudent for India to re-introduce private mining of Monazite-rich beach sands. Thus, the 2023 amendment to MMDRA, to the extent it is related to mining of beach sands, is detrimental to the public interest.

Against this background, keeping in view the strategic importance of Monazite-rich beach sands as a raw material for Thorium and the necessity to restrict its mining to the public sector as the means to ensure that indigenously available Thorium resources are conserved for exclusive use for domestic nuclear power generation, I appeal to the government to revoke the relevant 2023 amendment to MMRDA so as to continue the ban on private mining of beach sands. India can ill-afford to fritter away its precious Thorium resources for other uses.

Regards,

Yours sincerely,

E A S Sarma

Visakhapatnam

22nd April 2025