15 -ാം കേരള നിയമസഭ

13 -ാം സമ്മേളനം

നക്ഷത്ര ചിഹ്നം ഇല്ലാത്ത ചോദ്യം നം. 3009 **10-03-2025 - ൽ മറുപടിയ്ക്ക്**

സമുദ്രാതിർത്തിക്കുള്ളിലെ മണൽ ഖനനം

ചോദ്യം		ഉത്തരം	
ശ്രീ. കെ. ബാബു (തൃപ്പൂണിത്തുറ)		**ശ്രീ സജി ചെറിയാൻ (മത്സ്യബന്ധനം, സാംസ്കാരികം, യുവജനകാര്യ വകുപ്പ് മന്ത്രി)**	
(എ)	സമുദ്രാതിർത്തിക്കുള്ളിലെ മണൽ ഖനനം ചെയ്യുന്ന പദ്ധതി ഉപേക്ഷിക്കണമെന്ന് ആവശ്യപ്പെട്ട് ഫിഷറീസ് പ്രിൻസിപ്പൽ സെക്രട്ടറി നിലവിലുള്ള സർക്കാരിന്റെ കാലയളവിൽ കേന്ദ്ര ഖനിമന്ത്രാലയത്തിന് കത്തയച്ചിട്ടുണ്ടോ; ഉണ്ടെങ്കിൽ പ്രസ്തുത കത്തിന്റെ പകർപ്പ് ലഭ്യമാകുമോ;	(എ)	ഉണ്ട്. സമുദ്രാതിർത്തിക്കുള്ളിലെ മണൽ ഖനനം ചെയ്യുന്ന പദ്ധതി ഉപേക്ഷിക്കണം എന്ന് ആവശ്യപ്പെട്ട് ഫിഷറീസ് പ്രിൻസിപ്പൽ സെക്രട്ടറി നിലവിലുള്ള സർക്കാരിന്റെ കാലയളവിൽ കേന്ദ്ര ഖനിമന്ത്രാലയത്തിന് 11-03-2023 തീയതിയിലെ B3/71/2023-FandPD നമ്പർ പ്രകാരം കത്ത് അയച്ചിട്ടുണ്ട്. കത്തിന്റെ പകർപ്പ് അനുബന്ധമായി ചേർക്കുന്നു.
(ബി)	മേൽപ്പറഞ്ഞ കത്തിൽ സ്വീകരിച്ച നിലപാടിന് വിരുദ്ധമായി ഖനനത്തിനുള്ള ടെൻഡർ നടപടിക്കായി 2025 ജനുവരിയിൽ കേന്ദ്രമന്ത്രാലയം കൊച്ചിയിൽ സംഘടിപ്പിച്ച ശില്പശാലയിൽ സർക്കാർ പ്രതിനിധിയെ അയച്ചിട്ടുണ്ടോ; ഉണ്ടെങ്കിൽ ആരാണ് സർക്കാരിനെ പ്രതിനിധീകരിച്ച് പങ്കെടുത്തത്; വ്യക്തമാക്കാമോ ;	(ബി)	11-01-2025-ന് കേന്ദ്രമന്ത്രാലയം കൊച്ചിയിൽ സംഘടിപ്പിച്ച റോഡ് ഷോയിൽ പങ്കെടുക്കുന്നതിന് ഫിഷറീസ് വകുപ്പിൽ നിന്നും പ്രതിനിധിയെ അയച്ചിട്ടില്ല. സംസ്ഥാന വ്യവസായ വകുപ്പ് പ്രിൻസിപ്പൽ സെക്രട്ടറി സംസ്ഥാനത്തിന്റെ നയപരമായ നിലപാടും നിലവിലെ ആശങ്കയും പ്രസ്തുത പരിപാടിയിൽ അറിയിച്ചിട്ടുണ്ട്. ഓഫ് ഷോർ മിനറൽ ഡ്രെഡ്ജിംഗ് ഉയർത്താവുന്ന വിവിധ പാരിസ്ഥിതികവും സാമൂഹികവുമായ വിഷയങ്ങളെ സംബന്ധിച്ച് സംസ്ഥാന വ്യവസായ വകുപ്പ് പ്രിൻസിപ്പൽ സെക്രട്ടറി ഒബ്സർവേഷൻ നോട്ട് അവതരിപ്പിക്കുകയും ചെയ്തിട്ടുണ്ട്. കൂടാതെ 13-02-2025 ൽ സംസ്ഥാനത്തിന്റെ ആശങ്കകൾക്ക് അടിസ്ഥാനമാകുന്ന വിവിധ ഘടകങ്ങളെ ബന്ധപ്പെടുത്തി പ്രസ്തുത ആഴക്കടൽ മണൽ ഖനനമെന്ന പ്രോജക്ട് ഉപേക്ഷിക്കണമെന്ന് ആവശ്യപ്പെട്ടുകൊണ്ട് വിശദമായ കത്ത് സംസ്ഥാന ഇൻഡസ്ട്രീസ് സെക്രട്ടറി കേന്ദ്ര ഖനി സെക്രട്ടറിയ്ക്ക് അയച്ചിട്ടുണ്ട്. ആഴക്കടൽ ധാതുഖനനവുമായി ബന്ധപ്പെട്ട വിഷയത്തിൽ സംസ്ഥാനത്തിന്റെ എതിർപ്പ് കേന്ദ്ര ഫിഷറീസ് വകുപ്പ് മന്ത്രിയെയും കേന്ദ്ര ഖനി വകുപ്പ് മന്ത്രിയെയും 27.02.2025 തീയതിയിലെ കത്ത് പ്രകാരം സംസ്ഥാന ഫിഷറീസ് വകുപ്പ് മന്ത്രി അറിയിച്ചിട്ടുണ്ട്.

			കൂടാതെ കേരളത്തിന്റെ സമ്പദ്ഘടനയെയും പാരിസ്ഥിതിക സന്തുലനത്തെയും പ്രതികൂലമായി ബാധിക്കുന്ന ആഴക്കടൽ ധാതുഖനനം ഉടൻ ഉപേക്ഷിക്കണമെന്ന് കേന്ദ്ര സർക്കാരിനോട് ആവശ്യപ്പെട്ടുകൊണ്ട് ബഹു. കേരള മുഖ്യമന്ത്രി 04-03-2025ന് കേരള നിയമസഭയിൽ അവതരിപ്പിച്ച പ്രമേയം ഏകകണ്ഠമായി പാസ്സാക്കിയിട്ടുള്ളതാണ്.
(സി)	സമുദ്രാതിർത്തിക്കുള്ളിലെ മണൽ ഖനന വിഷയത്തിൽ ഇപ്രകാരമുള്ള നിലപാട് വ്യത്യാസം ഉണ്ടായതെന്ന് ഏതു സാഹചര്യത്തിൽ ആണെന്ന് വ്യക്തമാക്കുമോ?	(സി)	കടൽ മണൽ ഖനന വിഷയത്തിൽ സർക്കാരിന്റെ നിലപാടിന് യാതൊരു മാറ്റവും വന്നിട്ടില്ല.

സെക്ഷൻ ഓഫീസർ

I/5645536/2023

GOVERNMENT OF KERALA

Fisheries and Ports (B) Department

No. B3/71/2023-FandPD 11-03-2023,Thiruvananthapuram

From

The Principal Secretary to Government

To

Sri. Mustaq Ahmad,
Director, Ministry of Mines,
Room No.313,
D-Wing, Shastri Bhavan,
Dr Rajendra Prasad Road,
New Delhi -- 110001

Sir,

Sub: Fisheries - Amendment of the Offshore Areas Mineral (Development and Regulation) Act, 2022 - submitting comments/suggestions - reg.

Ref: Your Notice No. M.VI-1/1/2022-Mines VI-Part (1) dated 09/02/2023

Kind attention is invited to the reference cited. The suggestions/ comments of the State Government with respect to Amendment of the Offshore Areas Mineral (Development and Regulation) Act, 2022 - are as follows;

We express our deep concern and anguish and request you impose a moratorium on mineral mining in the ocean because of the catastrophe it would cause to marine and estuarine fisheries and to thwart an impending environmental crisis. We also request you to thoughtfully assess the full impact before such a decision is taken. We are of the firm opinion that mineral mining in the marine environment if allowed would lead to a total collapse of the marine fisheries in the Country.

The fisheries sector has demonstrated an outstanding double-digit average annual growth of 10.87%since 2014-15. The sector has reached a record fish production of 142 lakh tons in the financial year 2019-20 and has immense potential for further growth. India is the second largest fish-producing country in the world accounting for 7.56% of global production and contributing about 1.24% to the country's Gross Value Added (GVA) and over 7.28% to the agricultural GVA. Export earnings from the fisheries sector have been Rs.46,662.85 crores during 2019-20. However, of late, the fisheries sector of the country is in the throes of a severe crisis principally on account of resource depletion, spiralling fuel costs, and climate change.

It is in this context that one should examine the decision to allow mineral mining in t h e ocean as an opportunity to extract rare earth metals to support renewable energy infrastructure, such as wind turbines and solar panels. Ocean mining or seabed mining operations target metals like nickel, cobalt, and copper, which have previously not been exploited because of their isolated locations in the deep sea, as well as technological and financial restraints. Proponents of ocean mining say it is necessary to produce the minerals needed for renewable energy in a way that is less destructive than land mining. Opponents counter that these minerals can indeed be generated with minimal environmental impact, such as through recycling electronics. One must also pay a closer look at the adverse impact it may bring to the socio- economic condition of the fisher folk community.

The Act of 2002 envisages providing an exploration license, composite license, or production lease for undertaking reconnaissance operation, exploration operation, or production operation in the "offshore areas". According to Section 4 (n) of the Act, "offshore" area means the territorial waters, continental shelf, exclusive economic zone, and other maritime zones of India. It means that mineral mining will also take place in the territorial sea and adjacent areas in the exclusive economic zone.

Further, the Act envisages every lessee to pay to the Central Government in advance, in addition to other payments required under this Act, the amount to be paid to the International Seabed Authority in respect of the offshore area granted under his production lease falling in such part of the continental shelf extending beyond 200 nautical miles from the baseline from which the breadth of the territorial sea is measured, towards the fulfilment of the obligation of the Central Government under Article 82 of the United Nations Convention on the

Law of the Sea, 1982. To avoid payment of this huge amount to the International Seabed Authority and also to reduce the transportation cost mining companies will generally prefer to locate their mines within the EEZ areas including the territorial waters which will lead to a collapse of the marine fisheries of this area.

Notably, the areas being explored for ocean mining are also fishing grounds for some of the world's most economically important pelagic and demersal fisheries, including sardines, mackerel, anchovies, shrimps, cuttlefishes, and squids. etc., Thus ocean mining has the potential for far-ranging and severe impacts on coastal fisheries, which would result in a decline in marine catches. Additionally, studies on benthic organisms like corals, sea urchins, bivalves, and crabs, have shown irrecoverable decreases in biomass and species diversity as a result of seabed mining.

Mineral mining in the ocean leads to a reduction in the biomass of the free-floating and benthic organisms which impacts the rate at which they trap carbon in our ocean.

Further at the bottom of the sea, sucking up nodules would involve the destruction of the bottom habitat leading to the potential extinction of many benthic species. The nodules themselves support complex ecosystems, which would be lost.

Stripping seamounts of the outer layer of 'crusts' containing cobalt and other metals would destroy deep-sea sponge and coral ecosystems that are likely to have taken thousands of years to grow. Mining hydrothermal vents also would destroy vent habitats and kill the associated organisms before the biodiversity of these unique and fragile ecosystems is well understood.

Sea bottom mining will lead to the cloudiness of water which will prevent light penetration reducing the euphotic zone of the sea. Any reduction in the euphotic zone will reduce the primary productivity which is the source of energy for all forms of life in the sea including fishes and shellfishes. A reduction in primary productivity will directly reduce fish abundance in the sea.

Plumes of sediment will be created as mining stirs up the seafloor, possibly spreading tens of thousands of square kilometres beyond the mining sites. This will have a direct effect on filter-feeding fishes like sardines, mackerel, etc., and other organisms such as corals and sponges, etc.Wastewater containing sediment and mine tailings (or mining 'fines') pumped back into the ocean would also form plumes that may travel hundreds of kilometres or further which may be toxic and cause water cloudiness, impacting species that use bioluminescence to hunt or find

mates.

Noise, light pollution, and sediment plumes could seriously impact species, such as fishes, whales, etc. that use noise, echolocation, or bioluminescence to communicate, find prey and escape predators. Constant loud noise and intense light will also make many fishes leave the fishing area to safer places thereby affecting fish catch.

The practice of ocean mining involves excavating the ocean floor and collecting metals, like manganese nodules, from the seabed. These metals are pumped from the seabed to the surface through a pipe, while wastewater and debris are dumped into the ocean, forming large sediment clouds underwater. As a result of these practices, there is potential for ocean mining to release sediment and toxins into the water which could cause contamination of the seawater and loss of productivity of the ocean.

Large seabed mining machinery would remove or destroy sponges, corals, and other marine life. Sediment clouds, some capable of traveling long distances, could smother or negatively impact the feeding of other marine life, including plankton, deep-diving marine mammals, and both benthic and pelagic fish. Seabed mineral extraction, which ranges from dredging to far more destructive techniques such as removing the top 12 inches of the seafloor off seamounts, could additionally affect seaweed forests and other marine habitats that nurture commercially and recreationally important fish. Also at risk are the breathtaking beaches, tide pools, and rocky reaches that help support a multi million-dollar tourism industry.

Since estuaries and backwaters are directly connected with the sea any decrease in the productivity of the ocean will directly affect the fish abundance in the estuaries and backwaters as well.

Decline in fish catch in the marine and inland areas will undoubtedly affect the socio-economic condition of the fishers and deteriorate their quality of life.

Apart from mining in the nearshore waters (territorial and exclusive economic zone), mining in the deep sea is also a risky proposition. It will interrupt the fishing of deep-sea fishes like tuna and billfish. Studies have indicated three main impacts of ocean mining on deep-water fisheries: (1) species like tuna may face food shortages if midwater ecosystems, which tuna rely on for forage, are impacted by sediment plumes; (2) water discharged from ocean mining operations may have higher concentrations of metals, including toxic elements like mercury, which can contaminate seafood resources; and (3) the noise and sediment

plumes created by ocean mining might result in avoidance by commercial species like tuna, altering migration patterns.A blue paper commissioned by the High-Level Panel for a Sustainable Ocean Economy found that ocean mining is a potentially risky proposition to deep sea fish diversity.

These impacts could cause seafood contamination or a reduction in the biomass of tuna and billfish. Another concern is the spatial scale of mining impacts, which is currently unknown. As water naturally moves and flows, it is impossible that the impacts of mining operations will remain isolated to only the area where mining is taking place. However, the impacts, including the discharge of unwanted sediments, could enter the marine ecosystem, stretching for hundreds of kilometres and remaining in the water for weeks or months.

In short, deep sea mining would lead to a wide range of environmental impacts would have to be expected from seabed mining. Next to direct physical ecosystem destruction through mineral collection vehicles, major damage, and disturbance would likely arise from light, noise, and sediment pollution. It is particularly important to consider these risks not only at a project level but at a cumulative scale since deep seabed mining would impact areas of continental scale. The most imminent impacts are:

1. Loss of habitat and life-supporting substrates, killing fauna and flora
2. Sediment plumes swirled up from mining, impacting species and habitats
3. Exposure of seabed life to toxic metals released during mining operations
4. Harm to genetic links between different populations of deep-sea animals
5. Habitat alteration and fragmentation through sediment, light, and noise
6. Impacts on primary production in the water column and food webs
7. Impacts on ecosystem functions through disruption of key processes
8. Alteration of large-scale ocean cycles including carbon, nutrients, and trace metals.

According to the Seventh Schedule of the Indian Constitution (Article 246) “fisheries” is a state subject (List II, entry 21), and “fishing and fisheries beyond the territorial waters” alone is placed in the Union list

(List II, entry 57). It means that the development of fishing and fisheries in the inland waters (freshwater, brackish water including estuaries and backwaters) and the sea upto 12 nautical miles from the baseline is a state subject. Mineral mining in the territorial waters will negatively affect fishing in the territorial waters and the inland waters as well leading to its extermination. It means the present attempt by the Ministry of Mines to allow mining in the territorial waters is a direct intrusion into the jurisdiction of the States.

Fishing at sea is probably the most dangerous occupation in the world. India has 252658 crafts fishing in her maritime waters. This includes 142206 motorised crafts, 63481 mechanised boats, 46873 non-mechanised boats, and 98 deep-sea fishing vessels. Incidents of ships colliding with fishing boats are on the increase in recent times which causes great concern and there is a need to ensure the safety of fishermen at sea. With large-scale mineral mining in the sea near the coast, the number of ships/ boats that ply in the area will increase tremendously leading to an increase in collision with the fishing vessels and the loss of lives of fishermen in large numbers.

Subsection 9 of Section 12 and Subsection 3 of Section 13 of the Act envisage issuing the license for fifty years to the Companies. Providing sea areas on lease for such a long period amounts to a “permanent” transfer of ocean resources to big companies.

According to Section 16A of the Act, the Central Government shall, by notification, establish a Trust, as a non-profit autonomous body, to be called the Offshore Areas Mineral Trust. The composition and functions of the Trust shall be such as may be prescribed by the Central Government. There is no representation of the State Governments and the fisher community in the Trust.

The development of the blue economy, which refers to the sustainable use of ocean resources for economic growth, improved livelihoods, and marine ecosystem health, has become a bit of a buzzword in recent years. In the effort to grow the “blue economy,” more mineral mining contracts would be granted in the coming days and the threat of ocean mining to fisheries will become more significant.

We are surprised that fisheries stakeholders were not consulted about the impact of ocean mining on fishing,seriously.Serious deliberations are required at the national level on what kind of overlap there might be with fishing industries and what new industries might be dangerous to other industries in our blue economic portfolio. However, the development of ocean space and resources is something that the fisheries industry should

be getting more involved in. There is an imperative need for fisheries industry stakeholders to get involved in conversations about ocean mining to ensure their interests are protected and fisheries remain productive through this stage of blue growth.We need to make some hard decisions that some industries are not compatible with our blue economy. Ocean mining might be one of those hard-to-fit new industries.

Given the present effects of rising ocean temperatures and acidification, nearshore marine waters and coastal communities cannot absorb another threat. India should close its waters to seabed mining. Such a careful conservation approach is feasible, far-sighted, and reasonable and is the need of the hour. And for the coastal towns, cities, and fishing and tourism industries that depend on these valuable but vulnerable waters for their livelihoods, it is a necessary precaution.

Deep-sea mining is not a distant threat—it's a clear and present danger. Urgent action by the Government of India is critical to stop ocean floor mining.

In this context, there is an urgent need to drop the idea of seabed mining in the country, calling for a deep-sea mining moratorium, saying there isn't enough understanding about the potential impacts.

Yours faithfully,

K S SRINIVAS
PRINCIPAL SECRETARY