

Steering PH towards deep seabed mining

Mario A. Aurelio, Ph.D., OYS 2005

Professor and Director, National Institute of Geological Sciences, University of the Philippines Diliman
Member, Legal and Technical Commission, International Seabed Authority, Kingston, Jamaica

In these times of ever-growing environmental protectionism, land-based mining is increasingly facing difficult challenges mainly because of the inherent impacts of its extractive nature. In the Philippines, the effects of land-based mining are further amplified as population grows continually every year, posing big challenges in balancing between conserving biodiversity and providing the resources that the human race needs.

The “Area”: a new mining frontier

Without directly impacting the jurisdictional physical environment of a State, the deep seabed area beyond national jurisdiction offers an option to provide for mineral resources essential for both traditional industries (*e.g.* steel manufacture) and advanced technologies (*e.g.* space and medical sciences). This region, referred to as the “Area” by the United Nations Convention on the Law of the Sea (UNCLOS or the Convention), is currently being explored for its potential in 3 main metallic mineral groups, namely; (1) polymetallic manganese nodules; (2) polymetallic hydrothermal sulphides; and (3) cobalt-rich ferromanganese crusts. Polymetallic manganese nodules form as mineral concretions in abyssal plains bordered by fracture zones; polymetallic hydrothermal sulphides originate from hydrothermal vents along spreading centers; cobalt-rich ferromanganese crusts accumulate around submarine volcanic seamounts.

The International Seabed Authority

The International Seabed Authority (ISA), an autonomous organization established under UNCLOS, regulates the exploration and exploitation of these deep seabed mineral resources in the Area. The ISA is the organization through which States Parties to UNCLOS shall, in accordance with the regime for the seabed and ocean floor and subsoil thereof beyond the limits of national

jurisdiction as established in Part XI of the Convention, organize and control activities in the Area, by administering its resources under the principle that these are a **common heritage of mankind** (CHM). Areas where exploration activities are currently being undertaken include the Clarion-Clipperton Fracture Zone in the Pacific Ocean, the Mid and Southwest Indian Ridges in the Indian Ocean, the Fifteen-Twenty Fracture Zone in the Mid Atlantic Ocean and the Western Pacific seamount region.

Philippine engagement in the Area

Although dominated by big players like France, Germany, Russia, China, Japan, Korea among others, small island states like Tonga, Nauru, Kiribati and Cook Islands have also started engaging in seabed mining activities in the Area. This phenomenon simply proves that the deep seabed promises great benefits to member States regardless of their economic and technological capabilities. This should encourage and motivate the Filipino people to take their share of the seabed resources in the Area, bearing in mind that the nationality-independent CHM principle entitles them to this share. To secure this share, the Philippines should start engaging in seabed mining activities in the Area.

Urgent need for an UNCLOS-compliant PH seabed mining legislation

To engage in this endeavour however, demands serious commitments and stringent requirements. Foremost among these requirements is an UNCLOS-compliant seabed mining legislation. For a contractor to be allowed to engage in seabed mining activities in the Area, the sponsoring state should be entitled, by way of a legislation that is compliant with the provisions of UNCLOS, to conduct mineral exploration and exploitation in the deep seabed. While the present Philippine Mining Act of 1995 (R.A. 7942) is short of such UNCLOS-compliant provisions, a 2016 memorandum circular from the Mines and Geosciences Bureau on offshore mining may serve as a working document to build upon. Sample mining legislations of some countries that currently hold contracts with the Authority are available for consultation at the ISA website. It is strongly recommended that a PH legal and technical working group be formed immediately to attend to this and other urgent needs.