

## MARINE BIODIVERSITY & ENVIRONMENTAL ASSESSMENT SERVICES

### WHY?

Understanding and protecting marine life is crucial for maintaining healthy ecosystems, supporting fisheries, and ensuring sustainable coastal development

#### Plankton Survey

- Comprehensive assessment of plankton communities in marine and coastal waters.
- Identification and quantification of key species to evaluate ecosystem health.
- Monitoring of seasonal and spatial variations in plankton populations.
- Analysis of plankton diversity indices to assess biodiversity and ecological balance.
- Detection of harmful algal blooms (HABs) and other ecological threats.

#### Benthic Fauna

- Comprehensive survey of benthic organisms in marine and coastal sediments.
- Identification and quantification of key species and communities to assess ecosystem health.
- Analysis of species diversity and abundance to monitor environmental quality.
- Detection of sensitive and indicator species for ecological assessment.
- Monitoring of spatial and temporal changes in benthic communities.

#### Mangrove & Seagrass Studies

- Mapping and assessment of mangrove forests and seagrass beds to evaluate ecosystem health.
- Monitoring of species composition, density, and seasonal variations.
- Supporting conservation, restoration, and sustainable coastal management initiatives.

#### Fishery Survey

- Assessment of fish populations and species diversity in marine and coastal waters.
- Monitoring of stock abundance and distribution for sustainable management.
- Analysis of fisheries resources and habitat health.

#### Coral Reef Studies

- Assessment of coral cover, species diversity, and reef health.
- Analysis of associated fish and invertebrate communities.
- Support for reef conservation, restoration, and sustainable marine planning.

#### Survey & Mapping Services

- Meteorological Measurements – Monitoring weather parameters such as wind, temperature, humidity, and rainfall for accurate environmental assessments.
- GIS & Habitat Mapping – Using spatial tools and field surveys to map habitats, biodiversity, and sensitive ecosystems.
- Hydrographic Surveys – Measuring tides, waves, currents, and seabed features to support marine infrastructure planning.
- Topography & Bathymetry Surveys – Mapping land elevations and underwater depths to guide coastal development and dredging activities.

