



Indian Deep-sea Environment Experiment (INDEX) is a multi-disciplinary study to establish baseline conditions and evaluate the possible impact of deep-seabed mining in Central Indian Basin. A disturbance was simulated to study the effects of sediment re-suspension and re-settlement in the benthic areas. Monitoring the process of restoration and recolonisation of benthic environment and development of predictive models for environmental impact of deep seabed mining are underway.

Significant information on physical, chemical, biological and geological characteristics of water column and benthic baseline conditions has been generated in the programme. Evaluation of impact of simulated disturbance on the seafloor shows vertical mixing of sediment on the seafloor, lateral migration of sediment plume, changes in geochemical and biochemical conditions as well as reduction in biomass in the benthic environment. The results obtained are useful in determining the indicator parameters and standardising the methods for assessment of effects of large-scale mining.

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