

Development of information infrastructure on global warming and ocean acidification

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The oceans, which cover 70 per cent of the earth's surface, have in recent years been experiencing various changes. The small island countries dotting the oceans are of course significantly affected by such changes and are now struggling to deal with them.

We, OPRI-SPF, held international seminars with relevant organizations and discussed our new international joint policy proposal, 'For the Better Conservation and Management of Islands and their Surrounding Ocean Areas' to further materialize policy for the sustainable development of islands and their surrounding ocean areas. We participated in the International Conference on Small Island Developing States (SIDS 2014), at which we presented the above policy proposal as a contributing document, and organized a side event to launch the international collaboration network, "Islands and Oceans Net (IO Net)".

The 2nd General Meeting of IO Net was held in December 2016 with great success and significance, with 120 participants coming from 11 countries and 12 international/intergovernmental organizations. At this meeting, the Partners not only discussed the development strategy for 8 projects, based on the results of the 1st General Meeting held in May 2015 and the interactions thereafter, but also reinforced cooperation and information sharing for the implementation phases.

We proposed a project titled "Start-up of Regional Monitoring Network Platform on Ocean Acidification" as one of the 8 projects. Although it is certain that an increase in CO₂ concentration causes ocean acidification, there is still much to learn about the actual processes. Furthermore, because acidification occurs over multiple spatiotemporal scales, it is vital that both onsite and satellite observations of the oceans are used to elucidate the overall picture and establish an information infrastructure for integrating data from models of marine physics, chemistry, and biology and generating projections. In order to address the issues of ocean warming and acidification, we are developing the "Marine Crisis Watch & Action" platform based on the west Pacific region and planning to provide it to neighboring countries.

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