

Abstract

SPECIAL EVENTS:

Technical and Policy Workshop
on Sustainable Nutrient
Management in Support of the
Asian Platform of Global
Partnership on Nutrient
Management

Ecosystem “Health Report Card” a Tool for Monitoring Health of a Coastal Ecosystem

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Chilika Lake a coastal wetland along East Coast of India is subjected to constant pressures from both natural processes and human activities. The major threats to the lake's ecological integrity are pollution due to land based activities, unregulated tourism, and sedimentation. Ecosystem Health Report card (HRC) is developed as an effective monitoring tool for tracking and reporting the ecological health of a coastal ecosystem. It was initiated through a collaborative project on “Global foundations for reducing nutrient enrichment and oxygen depletion from land based pollution, in support of Global Nutrient Cycle” with funding support from United Nations Environment Programme (UNEP/GEF). We present the HRC of Chilika Lake which assess the ecosystem health of Chilika Lake, by taking into consideration 10 indicators organized into three broad indices: (i) Water quality (ii) Fisheries and (iii) Biodiversity.

The first in the series of Ecosystem Health Report Cards for Chilika Lake was developed in 2012. The current health report card (HRC 2014) is the second in series and is useful for comparing the changes in lake health over multiple years and progress towards Chilika Lake management goals. The 2014 Chilika Lake Report Card provided a different perspective of lake health compared to the 2012 report card, as this follows an extreme climatic event i.e. a severe tropical cyclonic storm, *Phailin*, on October 12, 2013 which had profound impact on the lake ecosystem. Sustained lake monitoring revealed that the lake is highly resilient to sudden changes.

The HRC not only provides information about the status of the health of the Lake, but also generates awareness about pressures, which are affecting the ecological values and services of the lake. HRC translates the complex volume of data and information gathered through the lake monitoring research into a simple communicable format, which is understandable and appreciated by a wide audience including local communities, policy makers, and the stakeholders.

HRC based assessment has proved an effective tool for sustainable management of Chilika Lake.



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Setting the Sustainable Development Agenda for
the Seas of East Asia beyond 2015