



Integrated environmental indices for ecosystem management in West Africa

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Reçu le 09/12/2014; publié le 15/05/2015

AWA © MS WP4_S4_5_93

Abstract

The definition of environmental indices and their regular availability in time is of key importance in the management of marine areas, specially for coastal systems, generally under high anthropic pressure. Such indices, from the physics to the biology, are presented for the West African Upwelling system, in order to monitor the state of the environment, as well as to define possible “reference points” for management purposes as well as for the estimation of political measures. For the Canary current upwelling system, we present several integrated indices that describe some physical and productivity aspects of the system, as well as their ability to be supplied on a regular basis. Such indices also need to be simple, reliable, reproducible and based on homogeneous data sets for the longest possible periods. Comparative ecosystem studies also needs by nature comparable indices, and a compromise has sometimes to be found between usability and ecological pertinence.



Commission Sous-Régionale des Pêches
Sub-Regional Fisheries Commission



Book of Abstract International Conference ICAWA 2014

THE AWA PROJECT
Ecosystem Approach
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Trilateral German-French-African research initiative

ISBN :978-2-9553602-0-1

Edited by:

Patrice Brehmer (IRD) & Hamady Diop (SRFC/CSRP)

With the collaboration of:

Marie Madeleine Gomez, Ndague Diogoul, Viviane Koutob, Peter Brandt, Bamol Ali Sow, Alban Lazar, Xavier Capet, Heino Fock, Carlos F. Santos, Eric Machu, Hamet Diadihou, Didier Jouffre, Ibrahima Diallo, Joern Schmidt, Amadou Gaye, Mahfoudhould Taleb Sidi, Yves Gouriou, Rafael Almar, Moussa Sall, Dominique Duval Diop, Modou Thiow, Ross Wanless, Jacob Gonzales-Solis Bou, Ibrahima Ly, Dienaba Beye Traoré, Marie Bonnin, Werner Ekau.

ISBN: 978-2-9553602-0-0

SRFC/CSRP – IRD ©2015

Cover design: AWA (BMBF – IRD) project

Logo and flyers: Laurent Corsini (IRD)

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