

## The Ecosystem Approach to West African Fisheries : influence of low trophic levels



P. Licandro<sup>1</sup>, M. Camara<sup>2</sup>, I. Diallo<sup>3</sup>, J. El Abed<sup>4</sup>, L. Magnone<sup>1</sup>, M.G. Mazzocchi<sup>1</sup>, B. Mbengue <sup>1,4</sup>, I. Percopo<sup>1</sup>, R. Piscopo<sup>1</sup>, A. Samba<sup>4</sup>, D. Sarno<sup>1</sup>, E. Scalco<sup>1</sup>

<sup>1</sup> Stazione Zoologica A. Dohrn, Italy; <sup>2</sup> Centre de Recherche Scientifique de Conakry-Rogbane & <sup>3</sup> Centre National des Sciences Halieutiques de Boussoura, Guinea; <sup>4</sup> Institut Mauritanien de Recherches Océanographiques et des Pêches, Mauritanie

**ISSUE:** Lack of information/scientific assessment on low trophic levels is a major issue to the implementation of the Ecosystem Approach to Fishery Management in NW Africa

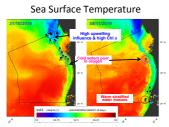
STUDY AIM: Contribute to fill the knowledge gap on plankton diversity/distribution in the region

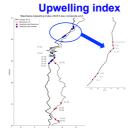
**ACTIONS:** Case studies in Mauritania and Guinea

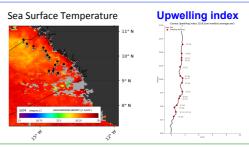
## Mauritania (Cruise in Oct-Nov 2019)

## **Guinea (Cruise in June 2019)**

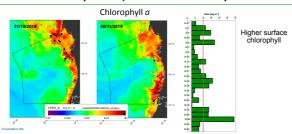
Hydrographic features are driven by the influence of the upwelling, which has a stronger influence in the Northern Mauritanian region

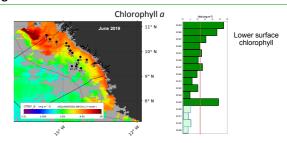






Surface chlorophyll peaks in zones influenced by the upwelling (North Mauritania and Guinea) and on the shelf (Centre/South Mauritania). Chl a is overall higher in Mauritania than in Guinea.





Phytoplankton standing stock is generally dominated by diatoms of different type, depending from the latitude. In Guinea also other phyto-types groups (dinoflagellates, cyanobacteria, coccolithophores) might locally dominate



Zooplankton standing stock is dominated by copepods, but gelatinous filter feeders tend to increase in highly productive areas. The size of the zooplankton stock is similar in the two regions but differences in species composition can be associated with different seasonal periods

