THE OPPORTUNITY

PREFACE expects to:

Improve understanding of climate variability in the Tropical Atlantic, focusing on the eastern boundary upwelling regions and the Gulf of Guinea

Generally improve climate modelling and prediction capabilities

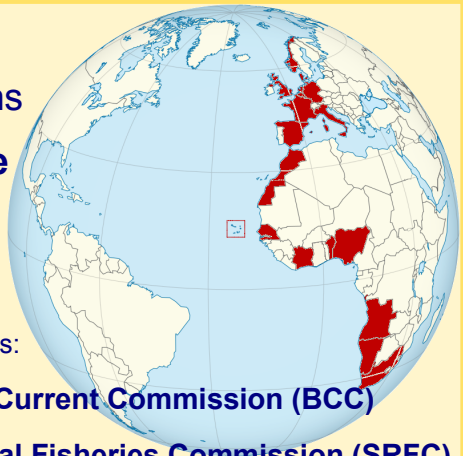
Advance understanding of marine ecosystems functioning, in particular with regard to variability and climate change, for better socio-economic adaptation

Foster work in synergy with other relevant projects and enhance cooperation between African and European research institutions

Guide policy makers and stakeholders for the sustainable management of marine ecosystems

THE PARTNERS

28 institutions from **Europe** and **Africa**



Supported by 2 associate partners:

The Benguela Current Commission (BCC)

The Subregional Fisheries Commission (SRFC)

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Enhancing PREdiction oF Tropical Atlantic ClimatE and its Impacts

SEVENTH FRAMEWORK PROGRAMME

Co-funded by the European Union under FP7-ENVIRONMENT
Project ID: 603521

November 2013 - October 2017

www.preface-project.eu

Image credits: Bernard Bourlès (IRD); Jörn Schmidt (CAU); Pericles Silva (INDP); Lea Svendsen (NERSC) and Mahaut de Vareilles (UiB)

THE CHALLENGE

Climate Change

The **tropical Atlantic** exerts a **strong influence** on climate of surrounding continents and also **on global climate**. The climate in this region recently experienced shifts of great socio-economic consequences. The **oceanic changes** were largest in the **eastern boundary upwelling systems** and the **Gulf of Guinea.**

Societal Implications

These three large marine ecosystems are not only of **great climatic importance** but are among the **most productive** in the world. **African countries** bordering these depend upon their ocean for fisheries, tourism and societal development. They were strongly affected by the recent changes and will **face important adaptation challenges** associated with global warming and population growth.

Predicting the Future

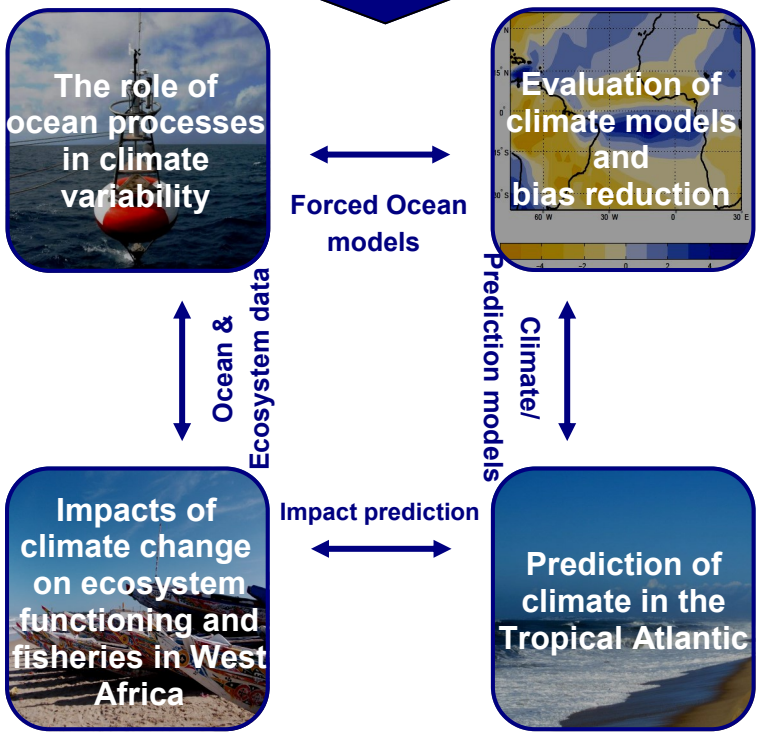
Compounding this, the tropical Atlantic is a **region of key uncertainty in the earth-climate system:** state-of-the-art climate models exhibit large systematic error, climate change projections are highly uncertain, and it is largely unknown **how climate change will impact marine ecosystems** and **what will be the consequent global socio-economic impacts**.

THE GOALS & STRATEGY

- Reduce uncertainties in our knowledge of the functioning of tropical Atlantic climate.
- Improve climate prediction and quantification of variability and climate change impacts in the region.
- Understand climate change effects on small scale fisheries and coastal communities of West Africa and derive an understanding in projections and possible implications for management.
- Assess socio-economic vulnerabilities and evaluate the resilience of Atlantic African fishing communities to climate -driven ecosystem shifts and global markets.

"To improve climate prediction in the Tropical Atlantic to a level where socio-economic benefit can be realised, with particular focus on sustainable management of marine ecosystems and fisheries."

PREFACE brings together African and European expertise in **oceanography, climate modelling and prediction,** and **fisheries science** to work on 4 inter-related themes:



PREFACE collaborates with the project AWA (awa-project.org) and numerous other projects, programmes, scientists and stakeholders. We are eager to increase our collaborations. Find out more at:

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