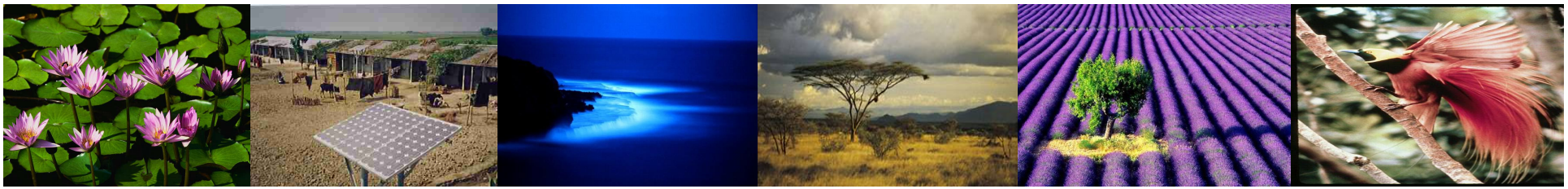
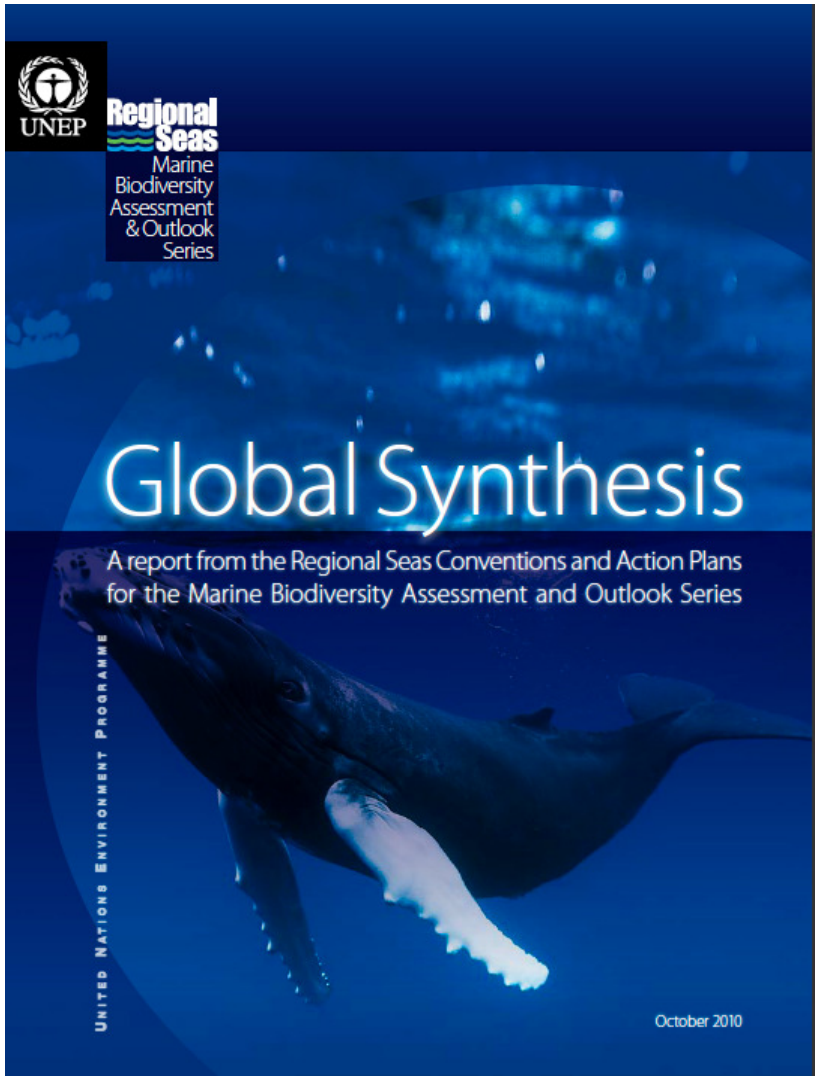
CCLME Project Inception Workshop

Dakar, Sénégal, 2-4 November 2010

Marine Biodiversity Assessment and Outlook
West and Central Africa Region

Abou Bamba,
Coordinateur Regional,
Secretariat de la Convention d'Abidjan

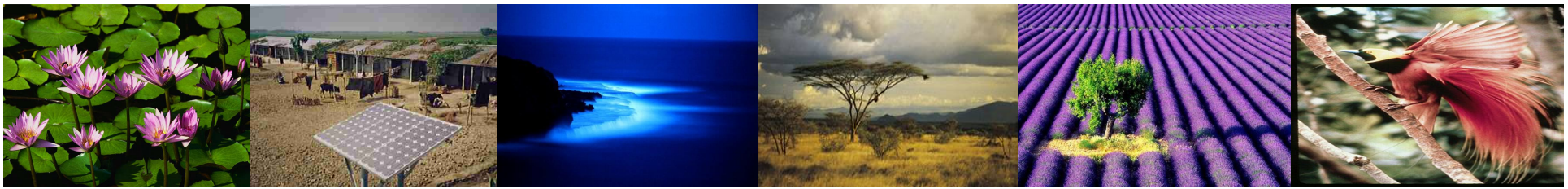



UNEP
Regional Seas
Marine Biodiversity Assessment & Outlook Series
Global Synthesis
A report from the Regional Seas Conventions and Action Plans for the Marine Biodiversity Assessment and Outlook Series
United Nations Environment Programme
October 2010

Outline

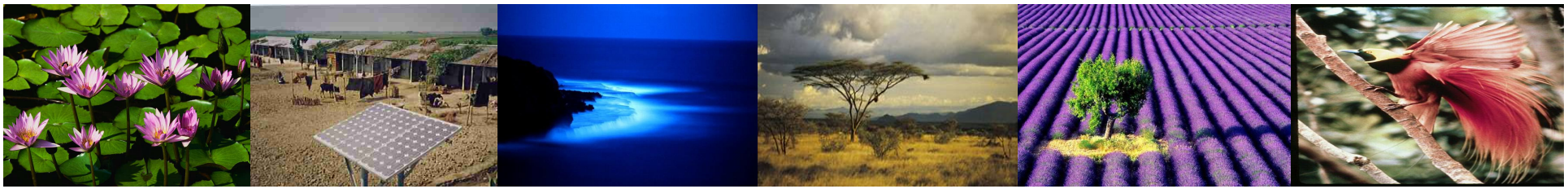
State of Marine Biodiversity in West and Central Africa

1. Drivers of change
   a. Land and Sea-based source of pollution
   b. Overfishing
   c. Physical alteration and destruction of habitat
   d. Climate change
   e. Marine invasive species
   2.



INTRODUCTION

- The coastal waters within the CCLME and Abidjan Convention region contain highly productive ecosystems that support rich fisheries.
- This provides important livelihoods for coastal communities. (e.g: Marine GDP)
- The region also supports an increasing amount of tourism and heavy industry.
- CCLME is the base for the region marine production and productivity.
- Growing environmental threats from climate change and pollution that could jeopardize the ecosystem services provided by the CCLME.

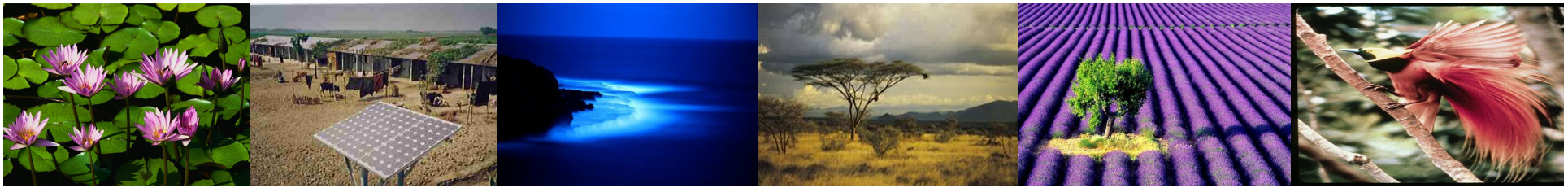


State of Marine Biodiversity in West and Central Africa

State of the Marine Biodiversity in the Western Africa Region

- Serious
- Moderate
- Low

	Pressure	State	Response	Outlook
Water quality				
Nutrients		-		
Temperature		-		
Acidification		N/A		
Marine Fauna: Fish and fisheries				
Others	-			-
Shipping/Ballast water		-		-



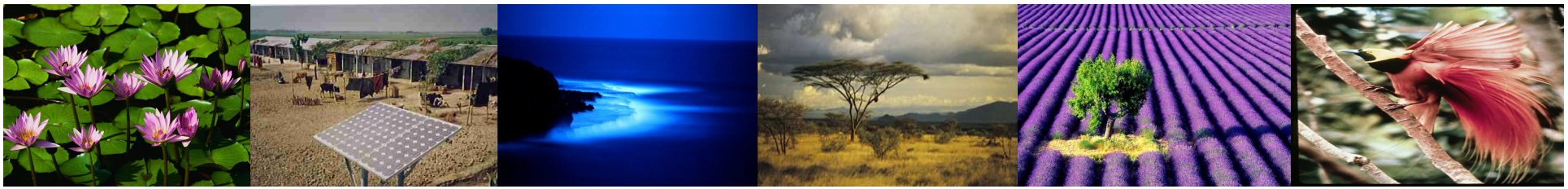
Drivers of change

- 1. Land and Sea-based source of pollution

A- Domestic discharges and run-offs well as industrial facilities. Oil, gas and related products in the Gulf of Guinea, and partly along the Nigerian, Gabonese, Congolese and Angolan coasts, where beach pollution by oil in the form of tar balls and oil spills, is frequently observed.

B- The other main concern of the region, as a major source of pollution from land-based activities is constituted by litter, solid wastes, plastics and other marine debris which threaten marine life, degrades the visual amenities of marine and coastal areas, with negative effects on tourism and general aesthetics.

This is particularly frequent along the beaches of the main large cities.



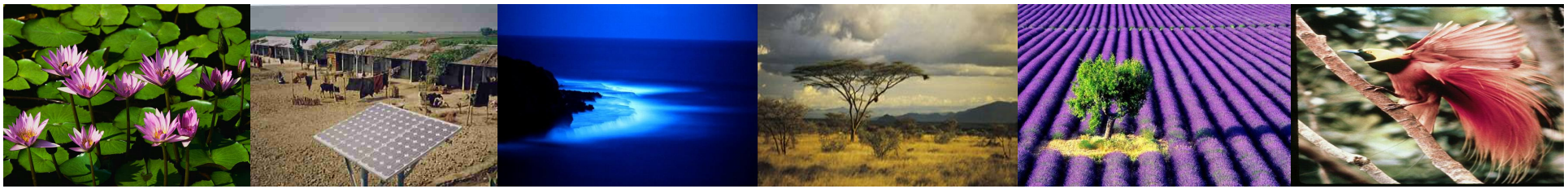
Drivers of change (c'd)

2. Overfishing

Fish catches in the Abidjan region peaked in the late 1970s and have been declining since then despite a few good years.

From 2000-2008, total fish catch by countries in the Abidjan Convention area has been stable, however, the general trend suggests that the fish catches have been decreasing since the 1980s.

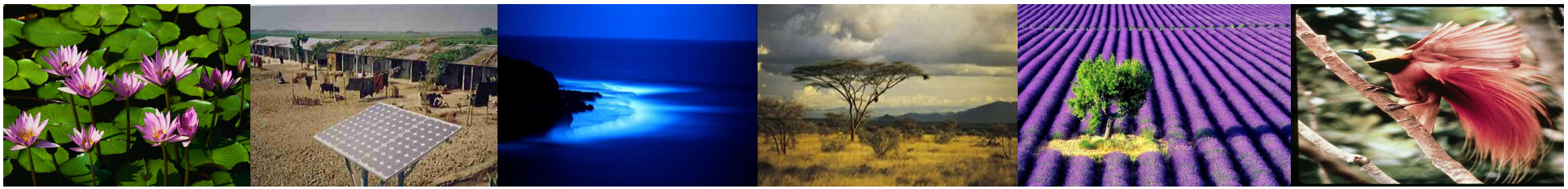
The observed increase in 2008 is due to a slight increase in fishing effort and the number of vessels.



Drivers of change (c'd)

3. **Physical alteration and destruction of habitats**

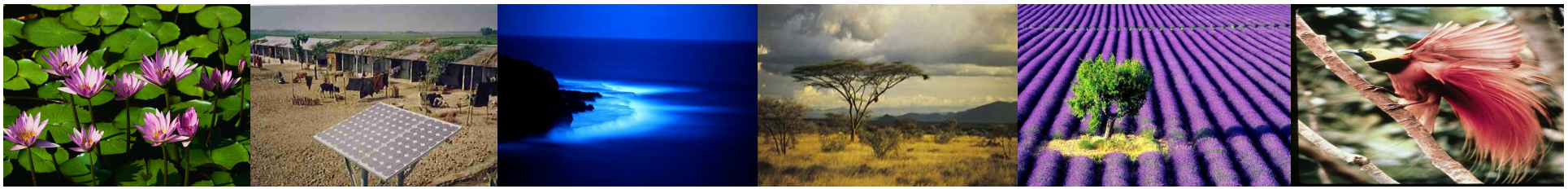
- Socio-economic development in the Abidjan region has drastically altered the coastal environment leading to coastal erosion, sedimentation, and siltation and soil acidification.



Drivers of change (c'd)

4. Climate change

Sea surface temperature in the Abidjan region has been increasing steadily since the pre-industrial times. While current temperature levels have not been increasing drastically, the region of warmer ocean temperatures has been expanding.

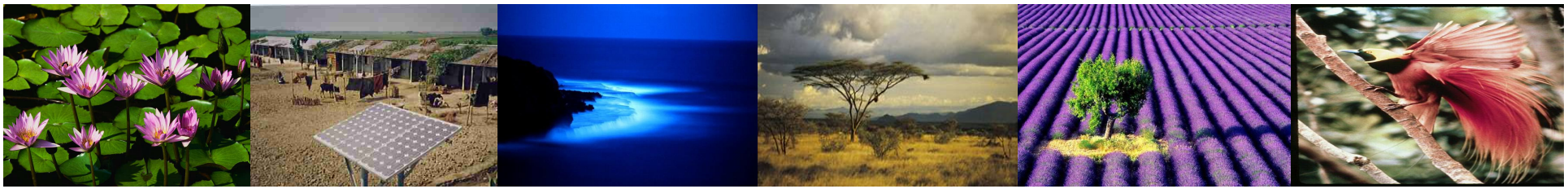


Drivers of change (c'd)

- **5. Marine Invasive Species**

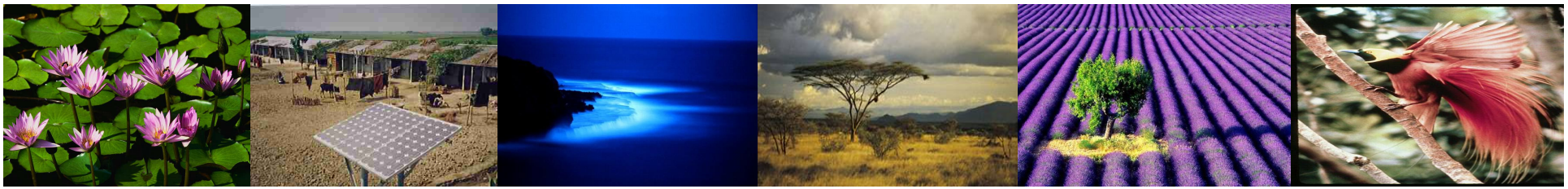
  Increasing global shipping and volumes of ballast water transfers increases the risk of moving alien species to new waters where they will thrive. *marine invasive species into the region.*

  Nitrogen can trigger algal blooms which in turn can poison fish and other marine creatures as well as contribute to the development of so called 'dead zones'—areas of sea with low oxygen concentrations.



CONCLUSIONS

- Sea Surface Temperatures will see a steady rise over future decades. Average temperatures – currently at around 25.5 degrees Celsius – could rise to over 27 degrees by the end of the century.
- A combination of increased shipping activity, temperature rises and new invasive species could result in 'widespread species extinction for the area'.
- Need to create MPAs (with proper management plans) along the coast as only a few exist
- The future outlook for the region's sea temperatures and nutrients is classed as 'serious'
- The state of fish and fisheries, by contrast, is given a 'low risk' outlook.



THANK YOU!