

Marine Physics & Ocean Climate

#### Pathways to Mainstreaming EO in support of sustainable Blue Economy Development - *learning and recommendations from the delivery of EO4SD Marine in West Africa*

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# Earth Observation 4 Sustainable Development - Marine Cluster

marine

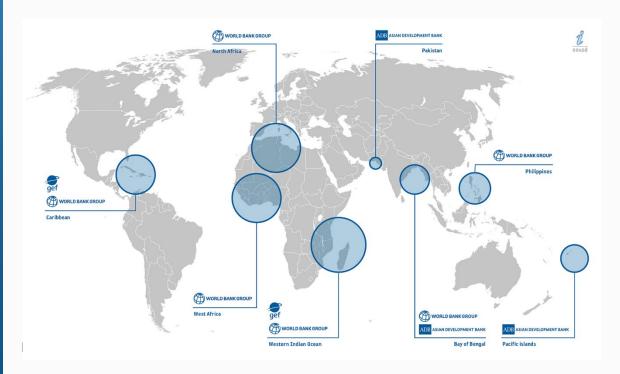
e0721



Interaction with ~ 175 stakeholders

35 countries

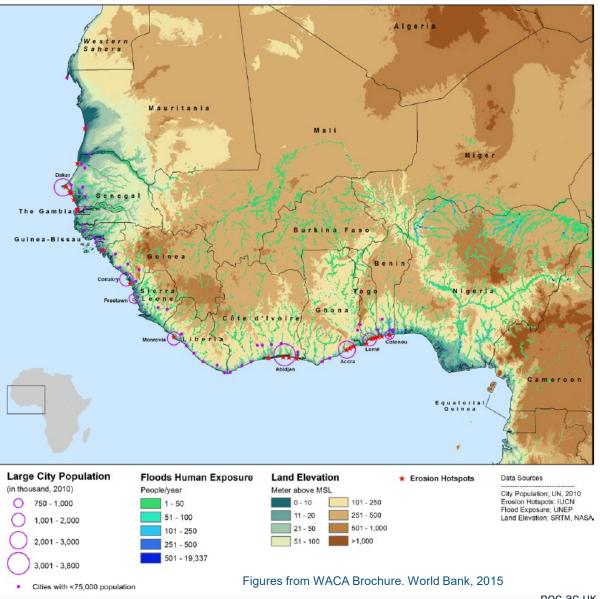
~ 22 EO specialists, 4 partners from research sector, 2 SME's





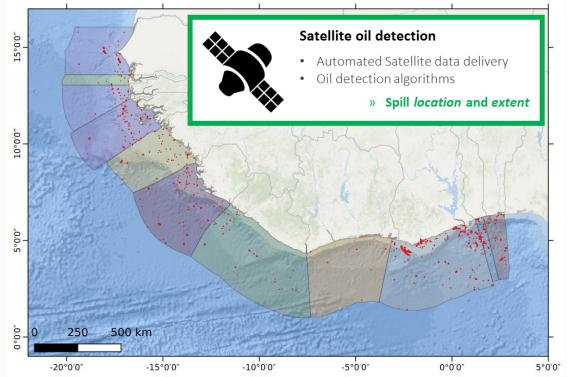
## West Africa Coastal Areas Management Program (WACA)

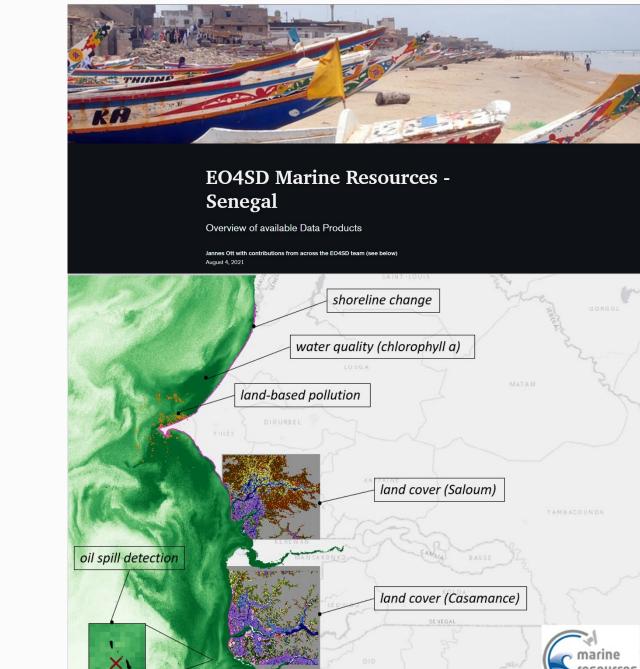
- Coastal zone provides estimated 56% of West Africa's GDP (2015)
- Unsustainable development and inadequate management of the coastal zone is threatening the productivity of coastal ecosystems and the lives and livelihoods of their inhabitants
- Solutions require regional approach to manage transboundary issues, and involve multisectoral investments / interventions



# **EO4SD** contribution

- Mapping and Monitoring services
- Capacity Development Activities



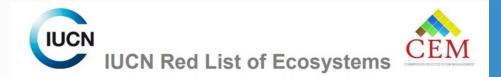


resources

# Pathways forward for EO services

- Integration of regionally harmonised EO services into Coastal Observatory (ORLOA)
- Marine Spatial Planning under Abidjan Convention through collaboration with IUCN - Integration of EO services into regional approach
- Develop EO 'thread' within WACA REsIP 2 Research Partnerships
- Broadening Engagement e.g. PRCM, RAMPAO have offices in Senegal deliver regional activities - all require / have needs for overlapping EO services





Ecosystem risk assessments for conservation actions



Coral reefs are in danger and rainforests are disappearing. How much remains of these ecosystems, how are their functions changing and how likely are they to disappear?





#### A MARINE SPATIAL PLANNING (MSP) FRAMEWORK FOR THE ABIDJAN CONVENTION COUNTRIES

http://mamiwataproject.org

**GUIDANCE AND EXAMPLES** 

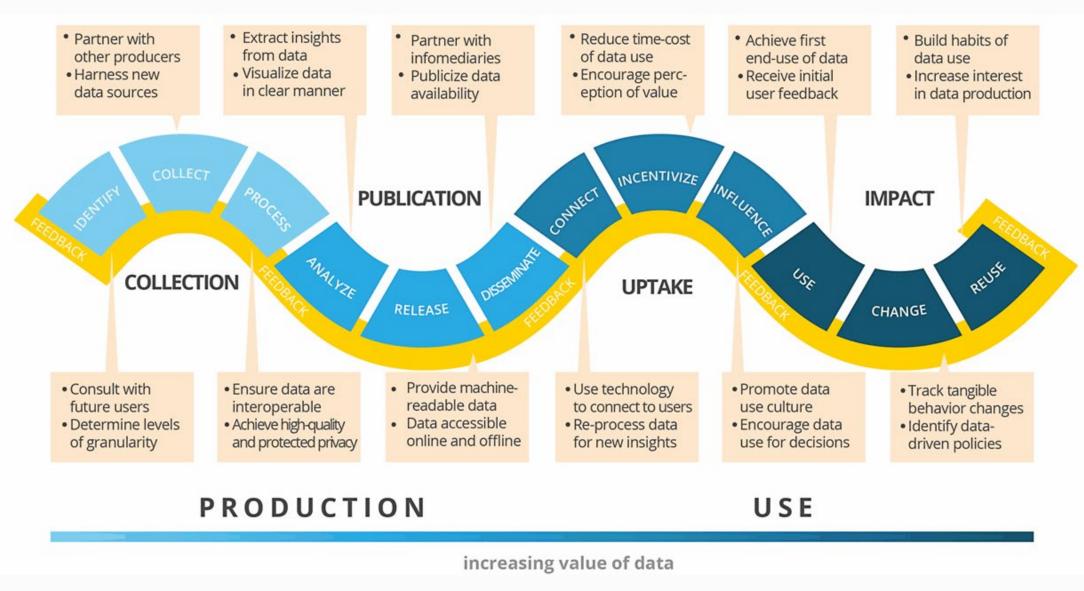
National Oceanography Centre

### **Discussion points**

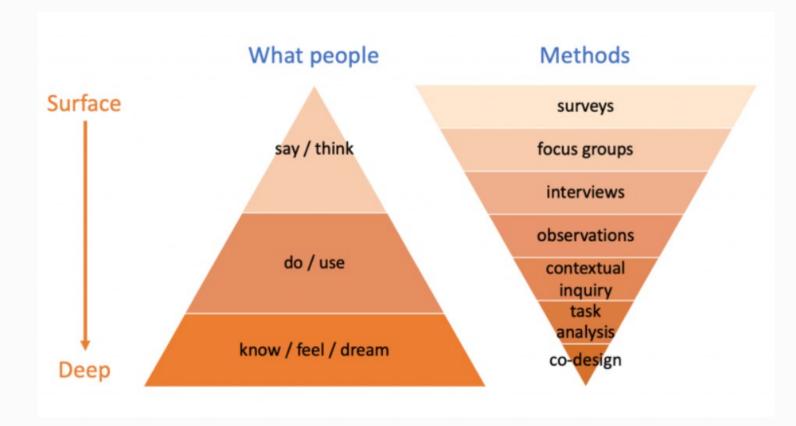
- Sharpen focus to maximise impact (depth not breadth?)
- Invest more time in understanding user
  needs, building relationships and trust to
  facilitate effective feedback and input
- Supporting development, growth & operation
  of knowledge networks
- Planning for calibration and validation
  activities (where needed) + Data culture and
  data management



# How far do we go along the value chain?



#### Understanding User Needs and getting input to development process



# Supporting development, growth, operation of knowledge networks

Relationship development & trust

Role of Universities and Research Institutes

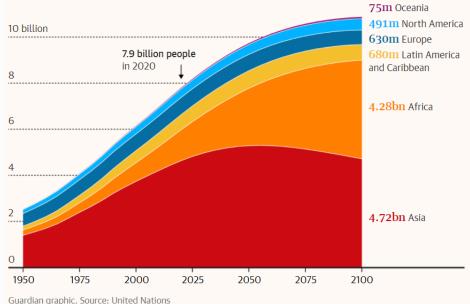
How do we:

- Enable participation in the service development and delivery processes?
- Enable better access / connection to International EO community
- Support (EO) innovation and entrepreneurship in client states?



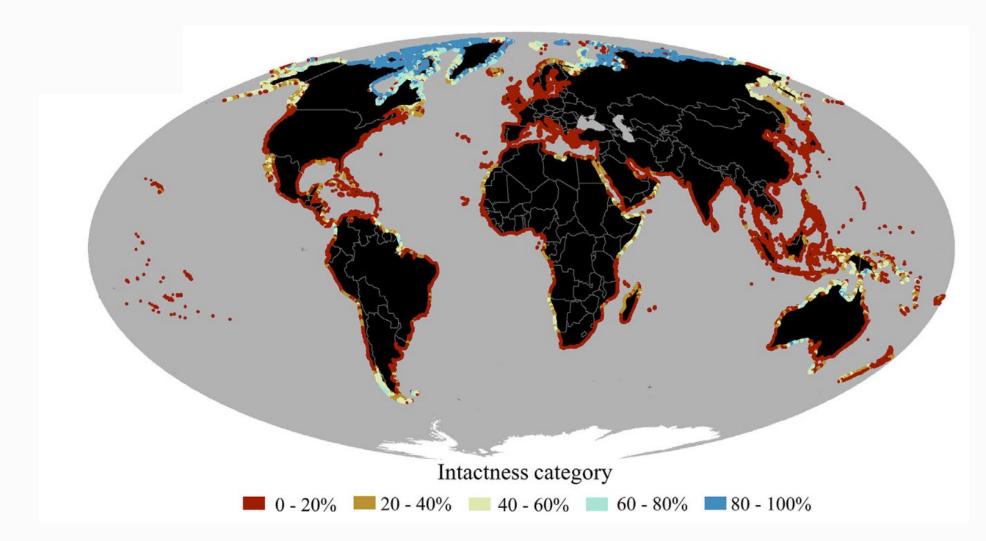


The world's population will rise to 10.9bn by 2100, with most of the growth driven by Africa



# Successfully address calibration/validation needs 000000 2017:10:15 10:25:23 Opportunity to integrate local capacity 27C Add value, make real Citizen science approaches -3 **ROV** Dives – 64 -11 57m Data 'hugging' - culture shift? 277 in total CoastSnap Get IT ON Google Play

**Global rarity of intact coastal regions -** 47.9% of coastal regions are heavily affected by humanity, and in most countries (84.1%) > 50% of their coastal regions are degraded.



Williams, B. A., et al. (2022). Global rarity of intact coastal regions. Conservation Biology, e138374.https://doi.org/10.1111/cobi.13874



### Thank you

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