

**Joint JCOMM / CAgM Task Team on Weather, Climate and Fisheries  
San Sebastian, Spain  
September 19, 2015**

**Opening of Meeting and Organization of the Session**

1. Dr James Salinger, Leader of the Commission for Agricultural Meteorology (CAgM) and Joint Commission for Oceanography and Marine Meteorology (JCOMM) Task Team on Weather, climate and Fisheries opened the Task Team meeting on 19 September 2015 at 9:00 am. Dr Salinger welcomed all of the participants and their involvement in the meeting. Mr Stefanski, Chief of the Agricultural Meteorology Division, presented the agenda (Annex 1) and it was adopted by the group.

2. This meeting of the Joint Task Team was held in conjunction with the [Third Climate Impacts on Oceanic Top Predators \(CLIOTOP\) Symposium](#) which took place from 14 to 18 September 2015.

**Review of the Progress of Task Team**

3. Dr Salinger and Mr Stefanski presented the progress of the Task Team since the first meeting that was held in New Caledonia. The 16<sup>th</sup> Session of the CAgM was held in April 2014 and approved the Terms of Reference of the Task Team (see Annex 2). There was some discussion on the TORs. Also, the membership of the Task Team was reviewed and there were no major comments. The final list of participants of the Task Team Meeting is provided in Annex 3.

4. Dr Salinger congratulated the group on the publication of the special journal issue based on the October 2011 workshop held in the Cook Islands.. The special issue was entitled *Climate and Oceanic Fisheries: Selected Papers from International Workshop on Climate and Oceanic Fisheries* and was published in Climatic Change, Volume 119, Issue 1, July 2013.

**Review of Current Activities and Possible Synthesis Report**

5. Each member provided a brief update of their activities and how these can be used by the Task Team. There were presentations on the WMO Coastal Inundation Demonstration Project (CIFDP); the use of online services and user feedback; International Comprehensive Ocean-Atmosphere Data Set (ICOADS); NOAA Sea Ice products: possible sub seasonal to seasonal (S2S) forecasting and application products for coastal fisheries; seasonal climate products from GFDL; the IMBER Newsletter; the Integrated Observation System; links to the Strategic Committee of International Council for the Exploration of the Sea (ICES) and North Pacific Marine Science Organization (PICES).

6. From the previous Team meeting, there was a proposal to develop a synthesis report based on the IPCC AR 5 reports on the comparative impact and relevant importance of climate information on the status of the fisheries stock with focus on climate variability. There was a good discussion on how to proceed which is reflected in the following action items.

**Action Items**

7. Based on the discussion during the meeting, the Task Team members agreed to work on the following action items which are based on the first four TORs of the Task Team. The actions on the coastal management (TOR E) will have to be done later.

### **TOR A & F**

- Write letter to JCOMM Management Group from TTWCF on issue of non-physical variables
- Interact with GOOS Technical Panel Marine life and biology (Sam Simmers)
- Interact with CAgM Management Group Meeting in Nov 2015
- Identify and liaise with Marine Climatology Centers
- Interact with Euro GOOS and IMOSS
- Investigate participating in any Global Fisheries / Ocean meetings (July 2016 – Southampton UK)
- Widen the interaction with other groups (i.e. EJMC)

### **TOR B**

- Keith Brander to send fisheries information
- Review 60 day Global Ocean Data Assessment Experiment
- Review Ocean Forecasting Systems (Molly McCann)
- Examine 6-9 month forecast – management strategic evaluation
- Explore inputs from Global Ocean Data Assimilation Experiment (GODAE)
- Review journal article from Oceanography Vol 23 Nov 2009
- Need ability to analyse where and when to get indices

### **TOR C – in relation with synthesis report (para 5)**

- Miguel Niquen to provide updated information on anchovy impacts
- Ed Harrison to summarize fisheries issues from AR5, seasonal and 10 year time scale
- Team members to review climate variability impacts – tropical pacific, Spain – anchovies
- Examine issue in Indian Ocean – Lee Climate change, Anne Hollowod's PPT
  - Cannot be done without social science.
  - If you have a weak/moderate environmental relationship, do not use it
  - Fish management under climate and environmental uncertainty
- Bob Stefanski (WMO) will assist
- Interact with European Marine organizations
- Review IPCC Summary for policymakers

### **Other Items**

- Develop of a Flagship publication on impacts on ENSO sardine California – Anchovy
- Examine to publish in Oceanography – magazine or Nature / Climate Change
- Timelines
  - Sep 2016 – First Draft
  - Mar/ Apr 2017 – 2<sup>nd</sup> draft
  - Sept 2017 – final draft
- Create website for TTWCF by end of October 2015

### **Closing remarks**

8. Dr Salinger closed the meeting at 5.54 pm and wished all of the participants a safe return home.

## **Annex 1 - Draft Agenda**

**Venue: Olarain Hotel, San Sebastian, Spain**

1. Approval of the agenda and any modifications
2. Progress since first Task Team meeting, Noumea, New Caledonia 16 February 2013.
  - 2.1 Publication of Special Issue of Climatic Change.
  - 2.2 Terms of Reference approved by the last sessions of CAgM (XV) and JCOMM 2014 and re-establishment of Task Team.
  - 2.3 Membership of Task Team
- 3 Review of the current data collection by JCOMM and others, to assess how these data meet the current needs of the ecosystem-approach to management in fisheries; as appropriate, work with other JCOMM expert teams to develop climate services for fisheries based on the available marine climate data.
- 4 Preparation of a synthesis report (building on AR5), with emphasis on comparative impact / relevant importance of climate information on the status of the stock (with focus on climate variability's side) – tools, management responses
  - 4.1 Background on impacts of climate change on fisheries;
  - 4.2 Climate variability impacts and relevant importance in contributing to estimation of the status of selected fisheries stocks;
  - 4.3 Risk assessment and management evaluation tools incorporating climate information for the ecosystem-approach to management of fisheries;
  - 4.4 Weather and climate tools for integrated coastal zone management of coastal fisheries and marine aquaculture;
  - 4.5 Meteorological and ocean climate observations indices that support the information requirements to manage ocean ecosystems;
  - 4.6 Policy brief – climate, oceanic and fisheries information requirements and services for management of fisheries: The Global Framework for Climate Services.
- 5 Develop a “flagship story” on impact on climate information (e.g. Peruvian anchovy and El Nino impact), by supporting a case study need for ‘re-packaging’ available information for users.
- 6 Agreement on end products and tasks ahead;
- 7 Reporting to JCOMM and CAgM;
- 8 General
- 9 Other matters.

## **ANNEX 2**

### **Joint CAgM-JCOMM Task Team on Weather, Climate and Fisheries**

#### **Terms of Reference**

(Approved by CAgM-16 in April)

- (a) To review the current data collection by JCOMM and others, to assess how these data meet the current needs of the ecosystem-approach to management in fisheries; as appropriate, work with other JCOMM expert teams to develop climate services for fisheries based on the available marine climate data;
- (b) To encourage oceanic and coastal fisheries management organizations to inform their members about the advantages of making and reporting relevant marine meteorological and ocean observations to the various WMO/IOC observation and information systems;
- (c) To contribute to the understanding of the impacts of climate change on fisheries and marine aquaculture;
- (d) To identify risk assessment or management evaluation tools that incorporate climate variability in order to improve the ecosystem-approach to management of fisheries;
- (e) To identify how weather and climate tools can inform integrated coastal zone management relevant to coastal fisheries and marine aquaculture;
- (f) To submit reports, including recommendations on follow-up actions, in accordance with timetables agreed by Management Committees of CAgM and JCOMM.

## ANNEX 3 – List of Participants

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in order to reduce email spam.