

**WORLD METEOROLOGICAL ORGANIZATION**

**INTERGOVERNMENTAL OCEANOGRAPHIC  
COMMISSION (OF UNESCO)**

DATA BUOY COOPERATION PANEL

DBCP-XXVII/Doc. 6.4  
(29-Aug-11)

TWENTY-SEVENTH SESSION

ITEM: 6.4

GENEVA, SWITZERLAND  
26-30 SEPTEMBER 2011

ENGLISH ONLY

## **REPORT BY THE TASK TEAM ON CAPACITY BUILDING**

*(Submitted by Sid Thurston, Chair, TT-CB, USA)*

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### **Summary and purpose of the document**

This document contains the report by the chairperson of the DBCP Task Team on Capacity Building, and provides details on the outcome of the Second in-region Capacity Building workshop for countries of the Western Indian Ocean region, Balaclava, Mauritius, 2-6 May 2011 and preparations for the upcoming Third Workshop scheduled for Mombasa Kenya in May 2012.

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### **ACTION PROPOSED**

The Panel will review the information contained in this report and comment and make decisions or recommendations as appropriate. See part A for the details of recommended actions.

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- Appendices:**
- A. Report by the Task Team on Capacity Building
  - B. Terms of Reference of the DBCP Task Team on Capacity Building
  - C. Goals for the Third DBCP in Region Western Indian Ocean Capacity Building Workshop, Mombasa, Kenya, May 2012

**-A- DRAFT TEXT FOR INCLUSION IN THE FINAL REPORT**

6.4.1 Sid Thurston, Chairperson of the Task Team on Capacity Building reported on the progress during the intersessional period. In particular, he provided comprehensive information on the preparation and outcome of the Second in-region Capacity Building workshop for countries of the Western Indian Ocean region, Balaclava, Mauritius, 2-6 May 2011 (see Appendix A).

6.4.2 After discussion, the Panel agreed with the following action items:

- To convene the Third "DBCP In-Region Western Indian Ocean Capacity Building Workshop", May 2012, Mombasa, Kenya. The goals for the workshop are detailed in Appendix C (**action; TT-CB; Spring 2012**).
- To coordinate workshop preparations with the DBCP, Kenya Meteorological Agency, Kenya Marine & Fisheries Research Institute, the NOAA Office of Climate Observation (OCO), the African Monitoring of the Environment for Sustainable Development (AMESD), and the Agulhas-Somali Current Large Marine Ecosystem (ASCLME) (**action; S. Thurston & Secretariat; Autumn 2011**).
- To continue to build Observation Development Team (ODT) and Modelling Development Team (MDT) with Met/Ocean Institutes in the Western Indian Ocean Region (**action; TT-CB; DBCP-27**).
- To Assemble a Team to explore recent advances in Information and Communication Technology (ICT) to help facilitate more effective DBCP TT-CB Outreach and Capacity Building Activities on a larger scale (**action; TT-CB; DBCP-27**).
- To Enhance Coordination and Cooperation between TT-CB and WMO Regional Associations (**action; TT-CB; DBCP-27**).
- To Discuss Preparations and Funding Impact for an additional "Asia Capacity Building Workshop" in 2012 (**action; TT-CB; DBCP-27**).

6.4.3 The Panel thanked Dr Thurston and members of the Task Team for their efforts. The full report of the Task Team will be included in the CD-ROM that will be distributed with the Session final report.

## APPENDIX A

### REPORT BY THE DBCP TASK TEAM ON CAPACITY BUILDING

**Efforts for Capacity Development in Africa - Data Buoy Cooperation Panel (DBCP) With National Partners, Organized a Training Opportunity for Ocean in-situ Observations and Modelling in Africa.**

***Second In-Region Capacity Building Workshop of the Data Buoy Cooperation Panel for Countries of the Western Indian Ocean Balaclava, Mauritius, 2-6 May 2011***

***“Implementation and Operation of Western Indian Ocean and Greater Agulhas Current Observing System: Building Links and Predictive Capacity for East African Participation”***

1. In November 2009, at the Joint WMO/IOC Technical Commission for Oceanography and Marine Meteorology (JCOMM) Third Session held in Marrakesh Morocco 4-11 November, endorsed the Partnership for New GEOS Applications (PANGEA) concept. [www.jcomm.info/pangea-concept](http://www.jcomm.info/pangea-concept) PANGEA provides for in-country practical applications training of ocean data to large and diverse groups of regional participants and the Mauritius workshop therefore formed part of the DBCP's contribution to the PANGEA concept.

2. The First DBCP In-Region Western Indian Ocean Capacity Building Workshop (WIO-1) was kindly hosted by the South African Weather Service (SAWS) in Cape Town in April 2010. The theme: Implementation and Operations of Indian Ocean Data Buoy Networks and their Applications for Enhancing Regional Predictive Capability. The focus was on observations and data collection, as well as modelling products and validation by in-situ ocean observations, with an overall aim to link regional Meteorological/ Ocean/ Climate models and data collection networks to provide national products. Two capacity building teams were initiated – the observational development team (ODT) and the modelling development team (MDT). Presentations from the first workshop can be found on: <http://www.jcomm.info/wio-dbcpl>

3. This Second training Workshop, hosted by the Mauritius Oceanography Institute, titled *“Implementation and Operation of Western Indian Ocean and Greater Agulhas Current Observing System: Building Links and Predictive Capacity for East African Participation”* ([www.jcomm.info/wio-dbcpl2](http://www.jcomm.info/wio-dbcpl2) ). This provided another opportunity to implement the concept of PANGEA, by complementing other existing capacity building programs and promoting the use of ocean observations for regional socio-economic sustainability. The Goals of the Workshop were successfully achieved as follows: Build capacity within Regional Institutes to apply new Indian Ocean Observing System (IndOOS) Data, such as from The Research Moored Array for African–Asian–Australian Monsoon Analysis and Prediction (RAMA) and others, for enhanced predictive Capability for the Region; Demonstrate the crucial role of ocean observations for understanding and predicting Regional weather, ocean and climate; Build In-Region Modelling Development Teams (MDT) and Observation Development Teams (ODT), including for the implementation of buoy programmes; and to demonstrate the Societal and Economic benefits of delivering enhanced ocean observing system data for better informed decisions such as for Fisheries Management and Extreme Events to include for droughts, floods and cyclones.

4. As contributions to IndOOS and RAMA implementation with Japan, China and other Regional Partners, the United States National Oceanic and Atmospheric Administration (NOAA) has been working with India and Indonesia to implement the Central/Eastern Indian Ocean Observing System for the past six years. Now the agency is also working with the Agulhas-Somali Current Large Marine Ecosystem (ASCLME) Project to implement the Western Indian Ocean RAMA Array. NOAA's partners contribute ship time while NOAA provides instruments and moorings. NOAA also contributes other benefits to its partners under "resource sharing" PANGEA agreements which include capacity building workshops, and training and education opportunities.

During this Mauritius Workshop, NOAA signed such a Memorandum of Agreement with the United Nations Development Program (UNDP) ASCLME for cooperative scientific and technical collaboration between NOAA and nine African/Indian Ocean States of the ASCLME.

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## APPENDIX B

### TERMS OF REFERENCE FOR THE DBCP TASK TEAM ON CAPACITY-BUILDING

(as adopted at DBCP-XXIV)

#### ***The DBCP Task Team on Capacity-Building shall:***

1. Initiate, plan and coordinate the implementation of the Training and Capacity-Building work programme including, in particular, the regular Training Course on Buoy Programme Implementation and Data Management;
2. Keep under review existing training material (paper and electronic) and advise on updating as well as for the development of new material;
3. Review and assess national, regional, and global requirements for capacity-building and develop / improve programmes as appropriate;
4. Liaise with other capacity-building programmes in relevant areas to develop and implement integrated activities, to explore potential synergies and opportunities for efficiently using resources available; liaise in particular with the JCOMM cross-cutting Team on Capacity-Building;
5. Endeavour to mobilize the resources required for DBCP capacity-building, including those needed for the implementation of the Training Courses;
6. Make recommendations to the DBCP Executive Board and / or the DBCP for addressing the issues above; and
7. Report to the DBCP Executive Board and the DBCP at its biennial Sessions.

#### ***Membership:***

The membership is open to all Panel members. The Chairperson, appointed by the Panel, has selected the following team members:

- Sidney Thurston
  - NOAA / OCO (TT Chairperson)
  - DBCP Chairperson
  - DBCP Executive Board members
  - DBCP Vice-chairpersons (or their respective deputies)
  - DBCP Technical Coordinator
  - Ali Mafimbo (Kenya)
  - G. Latha (India)
  - Johan Stander (South Africa)
  - Lucy Scott (South Africa)
  - Hamad Mohammed Al Gheilani (Oman)
  - Mathieu Belbeoch (Argo Technical Coordinator)
  - Bill Burnett (USA)
  - Walter Flores Servat (Peru)
  - Djoko Hartoyo (Indonesia)
  - Byung-Gul Lee (Korea)
  - Kwan-Chang Lim (Korea)
  - Rick Lumpkin (USA)
  - David Meldrum (UK)
  - Jean Rolland (France)
  - R. Venkatesan (India)
  - Representative of the IOC & WMO Secretariats
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## APPENDIX C

### GOALS FOR THE THIRD DBCP IN-REGION WESTERN INDIAN OCEAN CAPACITY BUILDING WORKSHOP (Mombasa, Kenya May 2012)

- Continue to Build Capacity Within Regional Institutes to Apply New Indian Ocean Observing System (IndOOS) Data, such as from RAMA and others, for Enhanced Predictive Capability for the Region as for Fisheries Management and Extreme Events,
  - Continue to Find Synergy between DBCP in-situ ocean observations and Satellite Observations of the Regional Africa Monitoring of the Environment for Sustainable Development (AMESD),
  - Enhance Coordination and Cooperation between TT-CB and WMO Regional Association (RA-I),
  - Demonstrate the Crucial Role of Ocean Observations for Understanding and Predicting Regional Weather, Ocean and climate,
  - Discuss ways to mitigate implementation constraints by Regional Piracy,
  - Continue to Build In-Region Modelling Development Teams (MDT) and Observation Development Teams (ODT), including for the implementation of buoy programmes,
  - Learn practical implementation aspects for the deployment of operational data buoys at sea, the collection of buoy data, and related data management,
  - Learn Practical Application of Regional Models for Addressing Impacts from Climate Change in the Coastal and Marine Environment,
  - Become Familiar with Tools for Identifying and Accessing Operational Data Streams for ocean/weather/climate Model Assimilation,
  - Validate Model Products from Indian Ocean Observations,
  - Coordinate Regional Institutes for Increasing in-situ Western Indian Ocean Observations,
  - Utilize advances in Information and Communication Technology (ICT) to facilitate more effective Outreach and Capacity Building Activities on a larger scale.
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