### Climate and Oceans Monitoring and Prediction (COMP)

### Pacific Islands - Online Climate Outlook Forum No. 150 Summary Report

Date: Wednesday 18 March 2020

Time: Australian Eastern Daylight Time at 12:00PM (01:00 UTC)

Host: SPREP Chair: Tonga

Apologies: Tuvalu and Cook Islands

#### Main purpose for the OCOF:

 To provide a regular forum for the 12 participating PIC NMSs to discuss the current ENSO status, recent one and three-month rainfall, drought (if present), their seasonal climate outlooks and stakeholders engagement with other countries and the COMP (Bureau of Meteorology and SPREP) project team.

In addition, it serves as an online training forum for recent SCOPIC development and gives the project team and the NMSs an opportunity to discuss other project related matters.

#### Agenda:

- 1. Brief introduction of PIC participants, SPREP and Bureau of Meteorology teams.
- 2. Report on current ENSO status.
- 3. Each NMS report on their past one and three months' rainfall in relation to the current ENSO situation (include ranking and verification), their three-month outlooks and their stakeholders engagement. Wherever appropriate NMS to report on their drought status.
- 4. Round-table discussion: addressing general concerns/queries on outlooks and SCOPIC
- 5. Feedback on COSPPac products and services.
- 6. Country statements with regards to drought or drought-like conditions, drought module issues/concerns.
- 7. The next OCOF will be held on 15 April 2020 and is to be chaired by **Tuvalu**.

#### Participants:

The Forum was attended by 17 climate officers (9 female) from 10 partner PIC NMSs.

#### Cook Islands:

Fiji: Arieta Daphne

Kiribati: Miriam Kataunati

Niue: Hingano Laufoli-Hipa and Lenita Togiamana

Papua New Guinea: Kisolel Posanau

Palau: Kikuko Mochimaru

Republic of Marshall Islands: Nover Juria, Samson Kanenko and Dindin Jitkelong

Samoa: Faapisa Aiono, Kotoni Faasau, Junior Lepale, Mattaniah Salesa

Solomon Islands: Noel Sanau
Tonga: Seluvaia Finaulahi

Tuvalu:

Vanuatu: Glenda Pakoa, Kalsuak Godden

Australia: Grant Beard

SPREP: Philip Malsale, Tile Tofaeono, Azarel Marine, Kwon Heekyoung and Kim Doyi

OCOF tables were received from 12 participating countries before the meeting.

#### Observations and Verification of December 2019 to February 2020 outlooks:

Observed rainfall for the one and three-month periods ending February 2020 were discussed for each PIC. This month, several countries experienced extreme rainfall as shown in the following table:

Station	Period	Rainfall Amount (mm)	Rainfall Rank	Years of record
Laucala Bay, Fiji	February	86.4	2	79
Nausori Airport, Fiji	February	119.1	2	64
Tokotoko, Fiji	February	94.0	2	75
Oni-i-Lau, Fiji	February	35.1	5	74
Labasa Airport, Fiji	February	163.6	8	64
Penang Mill, Fiji	Dec 19- Feb 20	468.9	9	107
Laucala Bay, Fiji	Dec 19- Feb 20	537.9	3	78
Nausori Airport, Fiji	Dec 19- Feb 20	535.6	3	64
Tokotoko, Fiji	Dec 19- Feb 20	661.0	6	73
Rotuma, Fiji	Dec 19- Feb 20	660.9	9	104
Beru, Kiribati	February	442.1	62	65
Butaritari, Kiribati	February	544.0	76	82
Beru, Kiribati	Dec 19- Feb 20	1085.7	56	62
Port Moresby, PNG	February	79	12	132
Port Moresby, PNG	Dec 19- Feb 20	279.2	8	128
Apia, Samoa	February	922.7	128	131
Afiamalu, Samoa	February	1516.9	64	67
Nafanua, Samoa	February	1263.0	46	48
Faleolo, Samoa	February	648.8	58	59
Apia, Samoa	Dec 19- Feb 20	1965.5	125	129
Afiamalu, Samoa	Dec 19- Feb 20	3295.3	63	65
Nafanua, Samoa	Dec 19- Feb 20	2496.3	41	43
Faleolo, Samoa	Dec 19- Feb 20	1390.8	54	57
Auki, Solomon Islands	February	638.0	57	59

Lata, Solomon Islands	February	660.8	45	46
Nuku'alofa, Tonga	February	62.5	5	76
Nanumea, Tuvalu	February	788.	80	80
Nui, Tuvalu	February	565.0	68	74
Funafuti, Tuvalu	February	644.5	81	87
Niulakita, Tuvalu	February	662.7	62	65
Nanumea, Tuvalu	Dec 19- Feb 20	652.0	76	78
Nui, Tuvalu	Dec 19- Feb 20	1482.4	68	74
Funafuti, Tuvalu	Dec 19- Feb 20	1623.9	81	87
Niulakita, Tuvalu	Dec 19- Feb 20	1637.3	62	65
Port Vila, Vanuatu	Dec 19- Feb 20	404.5	6	67

[Note: The above data may not have undergone quality control]

Validation of forecasts with observed rainfall for the months of December 2019 to February 2020 period showed 23 consistent, 27 near-consistent and 9 inconsistent outlooks (59 stations across 12 countries).

A summary of results (C-Consistent, NC-Near Consistent, In-Inconsistent, N/A-not available) for each country is as follows:

 Cook Islands (1NC, 1In);
 Fiji (7C, 6NC);
 Kiribati (2C, 2NC);
 RMI (1NC, 1In);

 Niue (1C);
 Palau (1C);
 PNG (2C, 6NC, 1In);
 Samoa (4In);

 Solomon Islands (4C 3NC);
 Tonga (2C, 4NC);
 Tuvalu (1C, 2NC, 1In) and Vanuatu (3C, 2NC, 1In)

Overall: 23C, 27NC, 9ln.

#### April to June 2020 Outlooks:

SCOPIC outlooks: 36% of the 61 stations have their highest probability in tercile 1, no station in tercile 2, 15% in tercile 3, 10% have near-equal probabilities in two terciles and 39% have near-equal probabilities in three terciles.

POAMA outlooks: 80% of the 49 stations have their highest probability in tercile 1, 4% in tercile 2, 14% in tercile 3, 2% have near-equal probabilities in two terciles and there are no station with near-equal probabilities in three terciles.

#### Other matters Discussed:

- New SCOPIC version 4.4.17 release and available on the website
- Discuss about ACCESS-S
- OCOF 150 will be hosted by SPREP with Tuvalu as the chair

#### **Observed Rainfall and Validation**

Country	February 2020	December 2019 to February 2020	Verification* for December 2019 to February 2020 outlooks	
Cook Islands	Above normal	Below normal and normal	Near-Consistent and Inconsistent	
Fiji	Mostly below normal	Mostly below normal	Consistent and Near-Consistent	
Kiribati	Above normal	Mostly above normal	Consistent and Near-Consistent	
RMI	Above normal	Normal to above normal	Near-Consistent and Inconsistent	
Niue	Normal	Below normal	Consistent	
Palau	Normal	Below normal	Consistent	
Papua New Guinea	Below normal and normal	Below normal to above normal	Consistent to Inconsistent	
Samoa	Above normal	Above normal	Inconsistent	
Solomon Islands	Normal and above normal	Below normal and Normal	Consistent to Near-Consistent	
Tonga	Below normal to above normal	Mostly normal	Consistent and Near-Consistent	
Tuvalu	Above normal	Above normal	Consistent to Inconsistent	
Vanuatu	Below normal and above normal	Below normal to above normal	Consistent to Inconsistent	

<sup>\*</sup> Forecast is <u>consistent</u> when observed and predicted (tercile with the highest probability) categories coincide (are in the same tercile).

Forecast is <u>near-consistent</u> when observed and predicted (tercile with the highest probability) differ by only one category (i.e. terciles 1 and 2 or terciles 2 and 3).

Forecast is <u>inconsistent</u> when observed and predicted (tercile with the highest probability) differ by two categories (i.e. terciles 1 and 3).

# <u>Country Stakeholder Engagement- Evaluations of how effective country engage with their stakeholders</u>

[Note: The stakeholder data below may not total up due to lack of data from NMS or no participation

Country	Date	Stakeholder	Total	Number	Number
	February 2020		Number of Participants	of male	of female
Cook Islands – Climate bulletin	February	Ministry of Transport	22	16	6
Cook Islands – EAR Watch	February	Ministry of Transport Cook Island Red Cross	22	16	6
Fiji Climate Summary	07 February	General public	140	106	34
Fiji Climate Outlook	13 February	General public	124	93	31
Fiji -Climate Outlook for Monasavu	13 February	Energy Fiji Limited	13	13	-
Fiji- EAR Watch	07 February	Humanitarian partners	122	96	26
Fiji-Ocean Outlook	19 February	Reef Explorer Fiji Limited, Maritime Safety Authority of Fiji, World Wildlife Fund, Wildlife Conservation Society, Ministry of Fisheries and Tourism Sector	36	29	7
Fiji-Meteorological Data Requests	01/02/20 to 29/02/20	A range of stakeholders	35	30	5
Kiribati Climate bulletin	11 February	Government Sectors, Non-Government Organisations, Fisheries (coastal and offshore) Sector, SPREP, General Public and internal staffs.	111	41	70
Kiribati -EAR Watch	11 February	Government Sectors, Non-Government Organisations, Fisheries (coastal and offshore) Sector, SPREP, General Public and internal staffs.	111	41	70
Kiribati Ocean Outlook	11 February	Government Sectors, Non-Government Organisations, Fisheries (coastal and offshore) Sector, SPREP, General Public and internal staffs.	111	41	70
Kiribati –Media Release	11February	Media Collègues- Government and Non-Government entities. And Internal staffs.	43	28	15
Marshall Island – Monthly Climate Briefing	21 February	Office of the Chief Secretary Office(CSO) and National Disaster Management Office(NDMO)	5	2	3
Niue - Climate Bulletin	06 February	General public	40	20	40
	20 February	Stakeholders	20	15	5
	25 February	Government officials, Village council and Education Department	58	27	31

Niue – Monthly Climate Briefing	26 February	Stakeholder, Government Officials, Government staff	90	45	45
Palau – Climate briefing	February	Office of the Vice President (Vice President/Chair), A Minister, Alternate Chair, Office of the President (Public Information Officer), National Emergency Management Office (Coordinator), Attorney General's Office (Attorney General/Designee), Bureau of Youth & Parks & Recreation (Director/Designee), Bureau of Public Health (Director/Designee), Bureau of Public Works (Director/Designee), Bureau of Public Safety (Director/Designee), Palau Community College (President/Designee), Bureau of Education Administration (Director/Designee), Palau Public Utility Corporation (General Manager/Designee), Palau National Communications Corporation (General Manager/Designee), Foreign Affairs (Directors or Designee), Bureau of Domestic Affairs (Director/Designee), Bureau of Agriculture (Director/Designee), Governors' Association (Designee), Palau Red Cross Society (Executive Director/Designee), National Weather Service (Meteorologist-in-Charge/Designee), Division of Property & Supply (Chief/Designee), Environmental Planner/Designee), Environmental Planner/Designee), Division of Property & Supply (Chief/Designee), Bureau of Customs & Border Protection (Director/Designee), Bureau of Budget and Planning, Bureau of Tourism	28	18	10
Papua New Guinea – Climate Bulletin	13 February	Govt: National Disaster Centre, Dept. of Agriculture and Livestock, Climate Change Development Authority, National Agriculture Research Institute, Dept. of Transport, Dept. of Mineral Policy and Geohazard Management, Dept. of Works, PNG Fire, National Maritime Safety Authority, Civil Aviation Safety Authority, PNG Forest Authority, National Capital District Commission, PNG Customs Authority, National Dept. of Health, Dept. of Education, Centre for Environmental Protection Authority. UN agencies: UNDP, IOM, UNOCH. Private: PNG Air Services Limited, ExxonMobil, Ok Tedi Mining Ltd, PNG Power Ltd, Global Construction Ltd, Datec, Interoil,	196	146	50

		Air Niugini, Bank South Pacific, PNG Ports, Media and Universities.			
Papua New Guinea – EAR Watch	20 February	Govt: National Disaster Centre, Dept. of Transport, National Agriculture Research Institute, Dept. of Agriculture and Livestock, Provincial Disaster Coordinators, Civil Aviation Safety Authority, Climate Change Development Authority, Dept. of Mineral Policy and Geohazard Managment, PNG DFAT, Centre of Environmental Protection Authority, National Capital District Commision, Dept. of Education. UN Agencies: UNDP, FAO, IOM, Oxfam. NGOs: Childfund, WVI, PNGRC. Private: Pacific Hydo Services, PNG Power, Ok Tedi Mining Ltd, Media. Aus DFAT and Universities	252	154	98
Papua New Guinea - Monthly Disaster Management Team	28 February	Govt : National Disaster Centre, National Weather Service  UN : Resident Coordinator's Office, IOM, UNDP, UNICEF, FAO, WHO, UNWomen, UNFPA, OHCHR, UNDSS	29	20	9
		NGO : WVI, MSF, ICRC, IFRC			
		Donor : Aust DFAT, EU, JICA, NZHC (MFAT), USAID			
Samoa – Climate bulletin	28 February	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa –Monthly Climate briefing	28 February	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa- Ocean bulletin	28 February	RED Cross, Water Authority (SWA), Media, Health, Works & Infrastructure, Land & Transport Authority, Agriculture & Fisheries, Fire Services, Ministry of Women, National University of Samoa, Tourism, Foreign Affairs, Communication and Information Technology, Disaster Managers, Marines	65	27	38
Samoa- Agro-Met Working group Meeting	17 February	Food and Agriculture Organization (FAO), Ministry of Agriculture and Fisheries (MAF)-Crop Divisions, Ministry	18	4	14

		Total	2910	1674	1256
Vanuatu – Climate Summary	17 February	Presbyterian College, Aore Adventist College, Tafea College, CSU, Vanuatu Care International, Save the Children Vanuatu, UNDP, Shefa Education, Live & Learn, UN-Women, Vanuatu Christian Council (VCC), GCF Private Consultants, Vanuatu Society of People Living with Disability, Unelco Vanuatu, World Health Organization, Vanuatu Meteorology & Geo-Hazards Department (Staffs), Others.	206	104	102
Vanuatu Ocean Outlook	17 February	(NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua	206	104	102
Vanuatu- Early Action Rainfall Watch	17 February	of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office	206	104	102
Vanuatu- Climate Update	25 February	VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University	206	104	102
Tuvalu		No Engagement			
Tonga –Ocean bulletin	12 February	General public	100	66	34
Tonga –Climate bulletin	12 February	General public	100	66	34
Solomon Islands – MalClim	February	MEHRD, Prime Minister's Office, SIBC, Solomon star Newspaper	7	7	0
Solomon Islands - Ocean Bulletin	February	Climate Change, NDMO, Environment, Tourism, Trade Co., Fisheries, Nature Conservancy, South Pacific Community	14	9	5
Solomon Islands – EAR Watch	February	Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Goldridge Mining, Ministry of Mines and Energy, MEHRD	13	12	1
Solomon Islands – Climate bulletin	February	Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Goldridge Mining, Ministry of Mines and Energy, MEHRD	13	12	1
Samoa - Agro-Met Workshop	18-21 February	Food and Agriculture Organization (FAO), Ministry of Agriculture and Fisheries (MAF)-Crop Divisions, Ministry of Natural Resource and Environment (MNRE)-Met Division, University of the South Pacific (USP)	18	4	14
		of Natural Resource and Environment (MNRE)-Met Division, University of the South Pacific (USP)			