Climate and Oceans Monitoring and Prediction (COMP)

Pacific Islands - Online Climate Outlook Forum No. 147 Summary Report

Date: Thursday 12 December 2019

Time: Australian Eastern Daylight Time at 11:00AM (01:00 UTC)

Host: SPREP

Chair: Papua New Guinea

Apologies: Cook Islands, Tuvalu, Tonga, Kiribati

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 January 2020 and is to be chaired by **Samoa**.

Participants:

The Forum was attended by 19 climate officers (10 female) from 8 partner PIC NMSs.

Cook Islands:

Fiji: Terry Atalifo, Jasneel Chandra, Shweta Shiwagni and Arieta Daphne

Kiribati:

Niue: Hingano Laufoli-Hipa and Raquel Tanaki

Papua New Guinea: Kisolel Posanau, Nanao Bouauka and Kila Kila

Palau: Kikuko Mochimaru and Rick Bizon Republic of Marshall Islands: Nover Juria

Samoa: Kotoni Faasau

Solomon Islands: Max Sitai and Lloyd Tahani

Tonga:

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^{*} Seasonal Climate Outlooks in the Pacific Island Countries: climate prediction software developed under the PI-CPP.

Tuvalu:

Vanuatu: Glenda Pakoa, Niel Malosu, Albert Willy, Daphne Nalawas and Limona Nalpini

Australia: Grant Beard

SPREP: Philip Malsale and Tile Tofaeono

OCOF tables were received from 10 participating countries before the meeting.

Observations and Verification of September to November 2019 outlooks:

Observed rainfall for the one and three-month periods ending November 2019 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 |
|-------------------------|----------|-------------------------|---------------|-----------------|
| Labasa Airport, Fiji | November | 40.0 | 6 | 61 |
| Savusavu airfield, Fiji | November | 89.9 | 6 | 63 |
| Rotuma, Fiji | November | 723.3 | 103 | 106 |
| Udu Point, Fiji | Sep-Nov | 781.5 | 62 | 69 |
| Rotuma, Fiji | Sep-Nov | 1349.4 | 99 | 102 |
| Hanan Airport, Niue | November | 340.9 | 105 | 114 |
| Hanan Airport, Niue | Sep-Nov | 681.8 | 103 | 111 |
| Kavieng, PNG | November | 557.4 | 92 | 92 |
| Port Moresby, PNG | Sep-Nov | 254.8 | 102 | 111 |
| Taro, Solomon Islands | November | 1099.2 | 38 | 40 |
| Whitegrass, Vanuatu | November | 0.5 | 1 | 49 |
| Aneityum, Vanuatu | November | 20.8 | 2 | 68 |
| Aneityum, Vanuatu | Sep-Nov | 1026.5 | 68 | 68 |

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

Validation of forecasts with observed rainfall for the months of September to November 2019 period showed 17 consistent, 23 near-consistent and 9 inconsistent outlooks (49 stations across 10 countries).

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

Cook Islands (N/A); Fiji (5C, 5NC, 3In); Kiribati (3NC, 1In); RMI (2NC); Niue (1C); Palau (1NC); PNG (4C, 2NC, 1In); Samoa (3C, 1NC); Solomon Islands (4NC, 3In); Tonga (N/A); Tuvalu (1C, 3NC) and Vanuatu (3C, 2NC, 1In).

Overall: 17C, 23NC, 9In.

January to March 2020 Outlooks:

SCOPIC outlooks: 56% of the 52 stations have their highest probability in tercile 1, 2% in tercile 2, 17% in tercile 3, 8% have near-equal probabilities in two terciles and 17% have near-equal probabilities in three terciles.

POAMA outlooks: 29% of the 42 stations have their highest probability in tercile 1, 10% in tercile 2, 33% in tercile 3, 14% in near-equal probabilities in two terciles and 14% with near-equal probabilities in three terciles.

Other matters Discussed:

- Password to download SCOPIC provided to Solomon Islands to download new SCOPIC version
- OCOF 148 will be hosted by SPREP with Samoa as the chair

Observed Rainfall and Validation

| Country | November 2019 | September to November 2019 | Verification [†] for September to November 2019 outlooks |
|---------------------|--------------------------------|-------------------------------|---|
| Cook Islands | | | |
| Fiji | Mostly below normal and normal | Below normal to above normal | Consistent to Inconsistent |
| Kiribati | Mostly normal | Mostly normal | Near-Consistent and Inconsistent |
| RMI | Normal | Normal | Near-Consistent |
| Niue | Above normal | Above Normal | Inconsistent |
| Palau | Normal | Normal | Near-consistent |
| Papua New Guinea | Mostly normal to above normal | Below normal to above normal | Consistent to Inconsistent |
| Samoa | Below normal and normal | Most below normal | Mostly Consistent |
| Solomon Islands | Mostly normal | Normal and above normal | Near-consistent and Inconsistent |
| Tonga | | | |
| Tuvalu | Below normal to above normal | Below normal to above normal | Consistent and Near-Consistent |
| Vanuatu | Below normal and normal | Below normal to above normal | Consistent to inconsistent |

[†] 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).

Country Stakeholder Engagement- Evaluations of how effective country engage with their stakeholders

| Country | Date November | Stakeholder | Total Number of Participants | Number of male | Number of female |
|--|-------------------------|--|------------------------------------|-------------------|------------------------|
| Cook Islands | | | | | |
| Fiji Climate Summary | 12/11/2019 | General public | 140 | 106 | 34 |
| Fiji Climate Outlook | 15/11/2019 | General public | 124 | 93 | 31 |
| Fiji -Climate Outlook for Monasavu | 12/11/2019 | EFL | 13 | 13 | - |
| Fiji- EAR Watch | 07/11/2019 | Humanitarian partners | 122 | 96 | 26 |
| Fiji - ENSO Outlook | 25/11/2019 | General public | 142 | 116 | 26 |
| Fiji-Ocean Outlook | 15/11/2019 | Reef Explorer Fiji limited, Maritime Safety Authority, World wildlife fun, wildlife conservation society and Tourism sector. | 36 | 29 | 7 |
| Fiji-Meteorological Data Requests | 01/11/19 to 31/11/19 | A range of stakeholders | 57 | 49 | 8 |
| Kiribati Climate bulletin | 15th November | Government Sectors, Non-Government Organisations, Fisheries (coastal and offshore) Sector, General Public and internal staffs. | +105 | +41 | +60 |
| Kiribati -EAR Watch | 15th November | OB, KMS, Disaster, Climate Change, WSEU, PUB, EHU, ECD, KRC, TTM, Lands, Aviation, Marine Guard, BPA, Mineral, Commerce, COSPAC, IFRC | 33 | 11 | 22 |
| Kiribati Ocean Outlook | 15th November | Government Sectors, Non-Government Organisations, Fisheries (coastal and offshore) Sector, General Public and internal staffs. | +105 | +41 | +60 |
| Kiribati –Media Release | 15th November | Media Collègues- Government and Non-Government entities. And Internal staffs. | 43 | 28 | 15 |
| Marshall Island - Climate Bulletin | 22/11/19 | Office of the Chief Secretary Office(CSO) and National Disaster Management Office(NDMO) | 4 | 2 | 2 |
| Niue - Climate Bulletin | 07/11/19 | General public | 70 | 30 | 40 |
| | 14/11/19 | Government officials | 17 | 7 | 10 |
| | | Village council and Private sector | 19 | 8 | 11 |

| Niue – Monthly Climate Briefing | 25/11/2019 | Private Sector, Government Officials, Government staff, | 75 | 45 | 30 |
|--|---------------|--|-----|----|-----------------|
| | | Village Council | | | |
| Palau | 0.5/4.4/0.040 | No Engagement | | | |
| PNG-EAR Watch | 25/11/2019 | Govt, UN Agencies, NGOs, Private sector, Media and Universities | 115 | 76 | 39 |
| PNG- EAR Watch (circulated by DMT secretariat) | 26/11/2019 | Humanitarian partners of DMT | 28 | 16 | 12 |
| PNG- Agricultural Meteorology & Climate Change Impact Survey (FAO) | 12/11/2019 | NDAL, NARI, NWS, other agriculture related sector | N/A | | (2 from NWS) |
| Samoa – Climate Summary | 8/11/19 | 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 | 11/11/19 | Samoa Met Office | 9 | 7 | 2 |
| Samoa- Ocean bulletin | 27/11/19 | 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-Seasonal Rainfall Outlook | 27/11/19 | 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 briefing | 26th | Farmer Association, Samoa MET officers | 4 | 3 | 1 |
| Solomon Islands- Climate Bulletin | November | Red Cross, NDMO, Ministry of Agriculture, SIBC, Hydrology, Solomon star, Paoa FM, World Vision, Glodridge Mining, Ministry of Mines and Energy, MEHRD | 13 | 12 | 1 |
| Solomon Islands – EAR Watch | November | 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 - MalClim | November | MEHRD Prime Minister's Office, SIBC, Solomon star Newspaper | 7 | 7 | 0 |
|--|----------|---|-----------------------------------|-----|-----|
| Solomon Islands – Ocean Bulletin | November | Climate Change, NDMO, Environment, Tourism, Trade Co., Fisheries, Nature Conservancy, South Pacific Community | 14 | 9 | 5 |
| Tonga | November | | | | |
| Tuvalu - Climate Bulletin | November | Governments civil servants, including departments, Tuvalu Red Cross and Media | All civil servants and NGOs | | |
| Tuvalu-Monthly climate briefing | November | Governments civil servants, including departments, Tuvalu Red Cross and Media | All civil servants and NGOs | | |
| Tuvalu-Ocean bulletin | November | Governments civil servants, including departments, Tuvalu Red Cross and Media | All civil servants and NGOs | | |
| Vanuatu- Early Action Rainfall Watch | 28/11/19 | VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua 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- Climate Update | 28/11/19 | VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red Cross Society, Matevulu College, Onesua 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 | 28/11/19 | VMGD-Van-KIRAP Staffs, Oxfam Vanuatu, Action Aid Vanuatu, University of the South Pacific (USP), Vanuatu Statistics Office, SPREP, Vanuatu National Disaster Management Office (NDMO), Media-Vanuatu, Vanuatu Red | 206 | 104 | 102 |

| | Cross Society, Matevulu College, Onesua 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. | | | |
|-------|---|------|------|-----|
| Total | | 1644 | 1064 | 578 |

[Note: The above stakeholder data may not total up due to lack of data from NMS or community and noticeboards are counted only in total]