KIRIBATI METEOROLOGICAL SERVICE COUNTRY REPORT

Reporting on National Priority Actions of the Pacific Islands Meteorological Strategy (PIMS) 2017-2026

This Report is presented to the Fifth Pacific Meteorological Council (PMC-5) Meeting held in Apia, Samoa from 7-9 August 2019

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1.0 Summary

This report will provides an insight of the Kiribati Meteorological Service (KMS) in terms of institutional arrangement, governance as well as achievements and operational structure and budget over the period of 2017 - 2019. It also provides a brief overview of the workplan over the next two years (2019-2021) and

KMS is currently a division under the Office of the President (Office of Te Beretitenti) comprises of 32 staff including support staff working toward a vision "A proactive and efficient informant on weather, climate and ocean conditions" and a mission "To observer and deliver information on weather, climate and ocean patterns to strengthen public preparedness for disasters"

For many years, the Meteorological services in Kiribati is not very popular and visible with the Government structure and this might related to its nature of work since New Zealand Meteorological Service devolved the service to the Government of Kiribati in 1989, where the stations are designated only for weather and climate observation. In addition to that, low frequency of occurrence in damaging storms or extreme weather events in the Kiribati region due to its geographical location which outside the cyclonic belt, its make it more complex to justify the need to upgrade the Meteorological services.

However, when Kiribati became a member of the World Meteorological Organization (WMO) and started to partner in a number of long term Australian program such as Sea level, Climate Services and Climate Change programs that are all under the COSPPac this time, the scope of work and services provided by KMS started to expand and moving from data collection to data analysis and developing and disseminating information such as seasonal climate outlook, tide prediction, climate projections, drought monitoring and so forth.

That significant increase in number of KMS products, services and participation and advise in national committees enable the Government to acknowledge the role and services of KMS in terms of Disaster risk reduction and Climate change adaptation but not to the extend like other Meteorological Service in countries that are prone to Cyclones, Tsunami and other destructive hazards.

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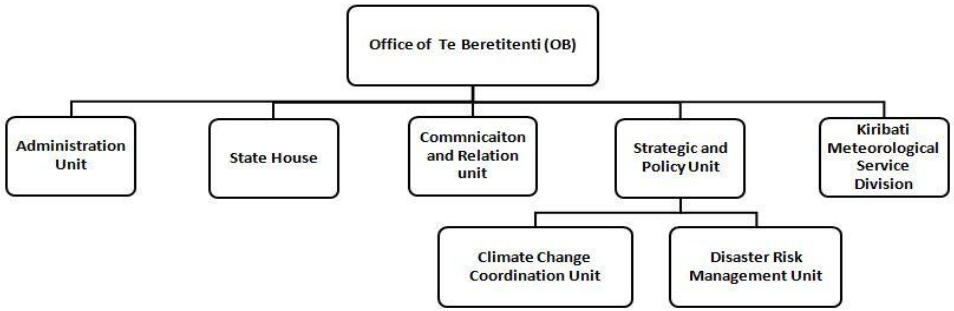
2.0 Background Information

2.1 Institutional Setup

The Kiribati Meteorological Service (KMS) is one of the Kiribati Government divisions that has been administrated under different Government ministries since it localized to Government of Kiribati in 1989 from the New Zealand Meteorological Service. It has been under the Ministry of Environment, Ministry of Communication and Transport and recently moved to the Office of the President (Office of Te Beretitenti) where Climate Change Coordination and Disaster Risk Management also housed.



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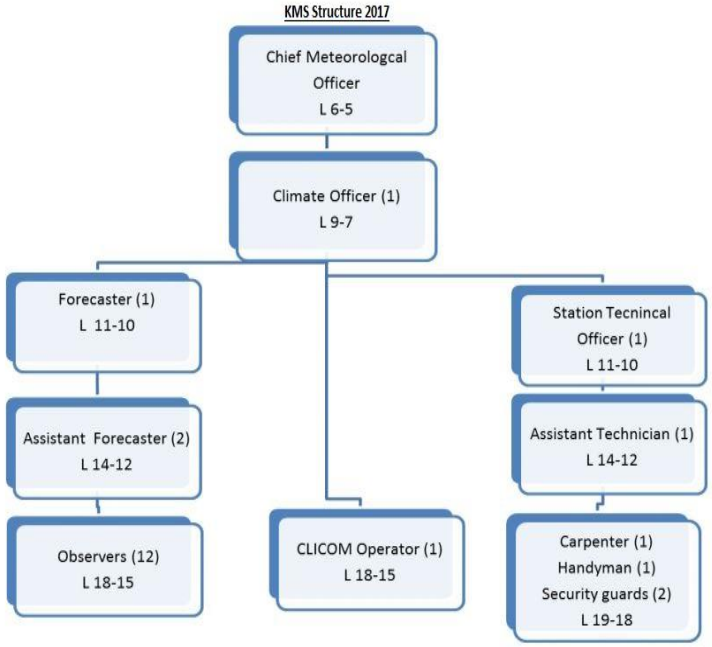
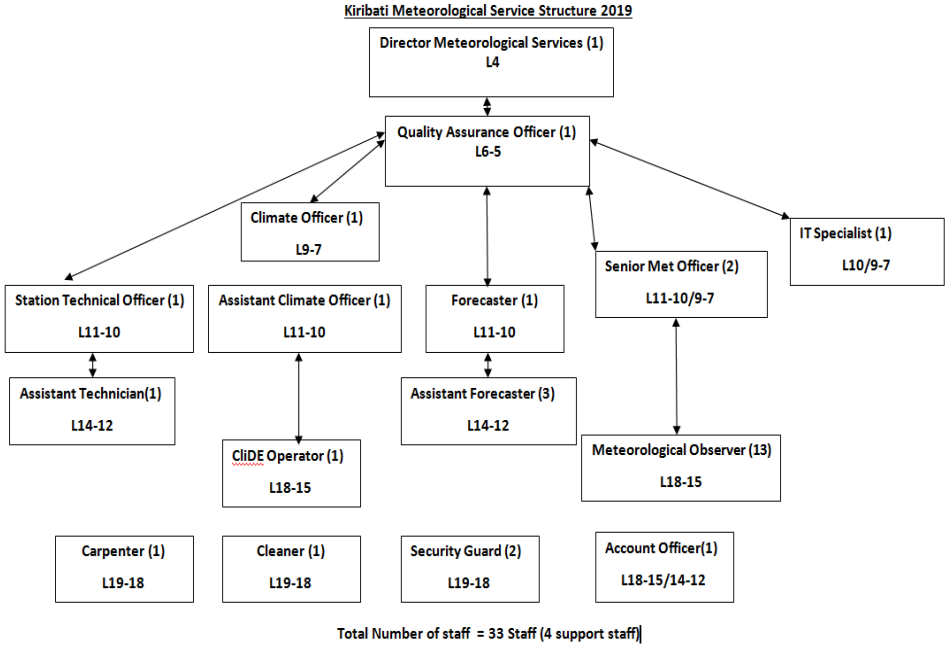
Governance	Description
MET LEGISLATION: Update on whether or not your country have a stand-alone Meteorology Act or equivalent in place.	There is no stand-alone Meteorology Act for Meteorological Services in Kiribati .
Do you require for your Act to be reviewed? What support would you require to complete this activity.	KMS have a plan to develop Meteorology Act for Kiribati and this is one of the activity to undertake under the CREWS project.
Strategic Planning	
Does your NMHS have a strategic plan, implementation/operational plan or equivalent(s)?	KMS do have a Strategic and Implementation plan 2014-2019 and to be revised and updated under the CREWS project this year.
Describe how meteorology (weather) and climatology (climate variability and climate change) are featured in the current national development plan, government ministries corporate and implementation/operational plans.	The Kiribati Development Plan 2016-2019, Priority Area No 4 is on Environment and includes Climate Change and Disaster risk Reduction. However, the Kiribati long term plan known as the Kiribati Vision in the next 20 years (KV 20) , under Pillar 2 "Peace and Security" Weather and Climate monitoring system has to be 100% by 2036 contribute to improve Peace and Security and that should be more on Early Warning system.
Describe the process if your NMHSs is reporting against the SDG or its national equivalent	The reporting on SDG was collectively done at the national level by the Ministry of Finance and Economic Development using information and scope on budget activities, program/projects undertaken in the country.

2.2 Staffing

In 2017, the Kiribati Meteorological Service made a submission for the need to create more positions, out of the many proposal, we quite fortunate to get support for the creation of 2 Senior Meteorological Observers, 1 Quality Assurance Officer and 1 IT Specialist and at the same time upgrade Chief Meteorological Officer into the Director post. Below is the 2 structures. Since 2018 the total number of staff within KMS is 33 including support staff.





Total number of staff = 24 staff (including support staff)

2.3 Finance

There has been a slight increase in the annual budget allocation to KMS over the last 3 years (2017-2019) and a significant increase in the 2018 budget is due to the establishment 4 new senior positions and upgrading 2 existing positions.

Description	2017	2018	2019 Funds		Total
	Total Budget (AUD)	Total Budget (AUD)	Administration (AUD) salary	Operation (AUD)	AUD
Government of Kiribati	437,370.00	615,00.00	441,182.00	177,276.00	618,458.00

2.3.1 Projects supporting the NMHSs

Name of Project	Total Project Budget	Percentage of how much is provided to the NMHSs	Summary of NMHSs activities covered by the project
Upper Air GUAN project			Upper air launching
Seismic Support fund			Maintenance to Seismic stations in Kiribati
UNDP-LDCF Food Security Project			Established 3 Automatic weather stations on Maiana Island, Abemama Island and Nonouti Island.
UNDP-RESPAC Project			• Meteorologist training (completed) • Establishing Met Training at Main office. • Installation of 5 Meteorological stations on the outer islands (Butaritari, Tab North, Nikunau, Arorae and Kanton) that will support Aviation services to outer islands. • Provision of KM office furniture to support climate
COSPPac			Support Climate Services, sea level monitoring and provision of Tide calendars.

3.0 Progress of the NMHS

3.1. UPDATE on Achievements of the NMHS from 2017-2019

[This can reflect new activities, programs, services implemented by the NMHSs. Under each of the activities, indicate which PKO(s) this activity has achieved. One Activity can contribute to more than 1 PKO]

No.	Achievements (Activities) of the NMHS (2017-2019)	1	2	3	4	5	6	7	8	9	10	11
1	Completion of the New Meteorological Station at Cassidy International Airport on Kiritimati Island that will become the Meteorological station to service Kiribati Islands in the far Eastern region who 2 hours ahead of main island group. (BSRP -EU)	X		X	X							
2	Upgrading of Meteorological Equipments at the two International Airports (Tarawa and Kiritimati Island) and the two stations are now operate 24/7 (FINPAC - Finland)	X										
3	Installation of the first ever 3 Automatic Weather stations on 3 outer islands (Maiana, Abemama, Nonouti) adding on to the 5 existing manual stations. (UNDP-LDCF Food Security project- GEF)	X				X	X	X				
	Installation of CliDEsc for data analysis from the 3 AWS as well as other data that already in the CliDE database.			X		X	X					
4	Upgrade the Chief Meteorological Officer position to the Directors level and create new position such as Quality Assurance Officer who become the Deputy Director and two Senior Meteorological Officer positions to look after Weather observation at the two International Airport stations together with IT Specialist position (GoK-Recurrent budget).									X	X	
5	Allocating 10K into annual budget to support KMS to support meteorological equipments in terms of their spare-parts and upgrading. (GoK - Recurrent budget)									X	X	
6	Installation of 9 Automated rain gauges in 9 selected outer islands to improve rainfall monitoring in the region (Water Security Project - New Zealand Aid)			X		X		X				

7	Development of Kiritimati Island Drought Management Plan (KID-MP) (SPREP)							X				
8	1 staff completed Meteorologist Training in Australia which is the first ever attempt for Kiribati to participate in the Australian Meteorologist training. (UNDP-RESPAC - Russian/India).									X		
9	Completion of Short term (Refresher Training) to 3 Meteorological Observers in Fiji (JICA/ RESPAC)	X								X		
10	2 Staff attending Met Equipment maintenance and Calibration Training at Fiji Meteorological Service (JICA/ RESPAC)									X		
11	2 Staff attending Pacific Desk in Hawaii (USAID)			X								
12	In-country Training on Tsunami Detection, Warning and Response utilizing the PTWS Enhance Products (IOC)				X							
13	Development of Kiribati Costed TK workplan (COSPPac)									X		
14	Completing documentation for Part 174 and now await Audit from PASO	X										

3.2. Proposed Activities to be Carried out in the Future (2019-2020)

[Proposed Activities indicated in the Matrix will give an indication on the priorities

No	Proposed Activities to be carried out between 2019-2020	1	2	3	4	5	6	7	8	9	10	11
1	To establish more new station and rehabilitate the closed surface stations (UNDP- RESPAC)	X		X	X							
2	Revised our Strategic and Implementation Plan for 2019 - 2022 and working on Meteorological Act for Kiribati (CLEWS)										X	
3	Improving early warning on Costal Inundation from extreme tides, waves and storm surges (CLEWS)				X							
4	Arrange for Marine weather Observation from ships operating in the Kiribati waters in partnership with Marine Services (No funding)		X									
5	Organizing in-country and attachment training for Assistant Forecasters on means to improve public Weather and Marine			X								

	forecasting. (No funding)											
6	Start collecting, document, evaluate and use of Traditional Knowledge in Weather and Climate forecast (no funding)									X		
7	Secure funding support and resources to upgrade telecommunication, computing resources including hardware and software systems to access and use products that on currently available to improve Early warning system.				X							
8	Upgrade KMS website and strengthen collaboration with media outlets at the national level (CLEWS)								X			
9	To ensure that all Met Observers already undertake at least Basic Entry for Meteorological Observation as well as refresher trainings (no funding)	X										
10	To be Certified under Part 174 and seek funding and technical support to work toward ISO certification (no funding)	X										
11	Improve communication between Meteorological stations and to ensure that all chatty beetles were operational and ready as a backup communication system (no funding/USAID ??)				X				X			
12	To organize outreach to communities once all weather forecasting services and early warning are improved (GoK)			X								
13	Secure funding support for more staff to participate in Meteorologist and Meteorological Technician Training courses.									X		
14	Seeking Government support to improve infrastructure and equipments/ tools.								X			

4.0. Gaps and Future Needs that would Improve the National Meteorological and Hydrological Services

1. Over the last two years it been proved that early warning on severe weather events in Kiribati require more improvement especially on the level of threat expected from the event(s).

2. More training and capacity building in the weather observation and forecasting area is always a need for a small meteorological services like KMS who just started to localized those services with limited experiences.

3. However, once training and capacity building completed, it sometimes quite meaningless when there is no proper or limit infrastructure and equipments on the ground. In this regard, it should always go hand in hand, capacity building and improving and investing in the infrastructure/equipment and tools.

4. Over the last two years, there are also limited opportunities and support to enable NMHS within PMC region to help or assists each other which sometimes more effective rather than having an International or National consultant. The good example is on certification where Countries who are quite ahead in terms of their certification assists other national meteorological services to bring them to the level they in terms of provision of training, advice on how they go about it and sharing documentations.

5. Provision of more products and services means opening window for more operational cost and that quite difficult to justify especially when the information given have no dollar value added to it. In this regard, the move into having cost recovery for Meteorological services is a good approach to overcome the over spending and extra financial support that may required from time to time.

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