



VAN-KIRAP NEWSLETTER

Vanuatu Klaemet Infomesen, blong Redy, Adapt mo Protekt project

June 2019

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Editorial:

Johanna Johnson, SPREP Manager

Welcome to the second edition of the Van-KIRAP project newsletter. There was an extremely positive response to the first edition, and we are pleased to share more stories about project activities with our stakeholders and partners in Vanuatu and the region.

This edition focuses on some of the important engagement that the Van-KIRAP team is conducting with farmers and fishers at the mini-festival, tourism stakeholders and engineers in the Public Works Department. There has also been progress on the expansion of the Traditional Knowledge network and the commencement of data rescue in preparation for the data digitization of climate and hydrology records.

Van-KIRAP has had a busy month with the first Technical Working Group meeting on 23 May and the 3rd Steering Committee meeting on 28 May 2019, both hosted in Port Vila. The members of both committees commended the project team on working to secure the second disbursement while still progressing some key activities. They also endorsed the project Environmental & Social Safeguards Management Plan (ESMP) that provides guidance on implementing responsible practices for all project activities and operations. Some new initiatives that will come into effect under the ESMP include: a move to e-documents and less printing, offsetting project travel and a *lokal kaikai* policy that promotes local foods and catering businesses.

Another important achievement this last month has been the development of the five sector case studies. The sector coordinators have been working hard to design pilot studies that demonstrate how access to tailored climate information can support decision-making in their sectors, and promote resilience to future climate impacts. We look forward to sharing more about these case studies with you in future editions

Happy reading and tankgiu tumas!

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Department of Tourism & Vanuatu Skills Partnership supports Van-KIRAP project



Moses Bani, Van-KIRAP Tourism Coordinator and Warren Gama, Vanuatu Skills Partnership discuss cooperation.

Photo: Sunny Seuseu/SPREP



Van-KIRAP Tourism Sector Coordinator, Moses Bani

Photo: Sunny Seuseu/SPREP

The Department of Tourism and the Vanuatu Skills Partnership have given their support to partner with the Vanuatu Klaemaet Infomesen Blong Redy, Adapt mo Protekt (Van-KIRAP) project. The two organizations committed to become partners in this project following separate consultations carried out this month.

The new partnership will support the use of climate information to build resilience and manage climate risks impacting the tourism sector in a negative way. Additionally, the partnership will ensure that activities and programs are carried out collaboratively to promote sustainable development for the Tourism Industry.

Some of the planned activities for implementation under the Van-KIRAP Project is undertaking awareness sessions and face to face discussions with the tourism sector and stakeholders sharing with them relevant information about the project, and understanding and using climate information for the sector.

On Monday, 10th June 2019, the Project Management Unit (PMU) of Van-KIRAP represented by the Technical Advisor, Mr Sunny Seuseu and Tourism Sector Coordinator, Mr. Moses Bani conducted an awareness session with the Department of Tourism (DoT) team at the Ministry of Tourism, Trade, Industry, Cooperative and Ni Vanuatu Business conference room. It was the first brief with the new Director, Mr. Jerry Spooner and the DoT team. Another session was conducted with the Productive Sector Manager, Mr. Warren Gama of the Vanuatu Skills Partnership (VSP) on Thursday, 13th June 2019. The Vanuatu Skills Partnership, previously known as TVET Program is an Australian funded program working closely with the Ministry of Education & Training and Provincial Government to support and strengthen the skills system in Vanuatu through coordinated delivery of training services to members of the community.

"I can see the objectives of the Van-KIRAP Project align well with what Vanuatu Skills Partnership and Department of Tourism are doing. I am sure we can share our resources and work together to implement our work for the betterment of tourism operators especially in responding to the early warning signs of climate change" said Mr Gama, Productive Sector Manager, Vanuatu Skills Partnership.

An MOU has been signed between DoT and VSP to work in partnership to facilitate training for tourism operators in the provinces and Van-KIRAP sees this as an opportunity to expand this partnership to the project so tourism reliant communities receive tangible benefits.

"I see a lot of work that Van-KIRAP will undertake resonates with the new Vanuatu Tourism Sustainable Policy 2030. Vanuatu Skills Partnership will be happy to work in partnership with Van-KIRAP and DoT to implement the project" Mr Gama added.

Both the Director and Productive Sector Manager have assured the Van-KIRAP project team of their support towards the successful implementation of joint project activities.

Water - WOTA HEM I LAEF



Technical staff of the Department of Water Resources sorting out the paper records of the hydrological data.

Photo: Department of Water Resources

The Water Resources department is a target sector for the Van-KIRAP project and features in this June edition with a start to the hydrological data rescue of observations dating back to the 1930's.

Digitization of hydrological data will commence soon as part of the Van-KIRAP Project, and will support the Vanuatu Meteorology and Geohazards Department (VMGD) in informing government, policy makers and communities on water resource management and climate-related slow onset events such as drought and flood.

The hydrological data rescue began with the cleaning and dusting of old paper records, and reorganizing flow charts and records, which needs to be complete before the data can be digitized.

In the field, the team is also assessing operations, security and maintenance for all hydrological stations in Efate. This work will continue throughout 2019.

Van-KIRAP lends its support to the Shepherd Mini Agriculture Show



Fisherman in Sangava village, Emae island with Peter Tiamua promoting climate information to assist fishing activities.

Photo: Peter Tiamua/Vanuatu FisheriesDepartment

More than 1000 fishermen and communities representatives who participated in the Shepherd Mini Agriculture Show learned how climate information can support fishing decisions on when to fish and best times to go out.

Peter Tiamua, Van-KIRAP Fisheries Sector Coordinator spoke to a number of fishermen and SMAS participants on the Vanuatu Climate Update bulletin and the climate and ocean information therein. This was one way in which the project can contribute to the overall objective of the SMAS.

"Overall, the feedback from those recipients were positive and would love to receive the bulletin on a regular basis". said Peter Tiamua

"The people also requested that the information be simplified to layman's language and translated into bislama to allow local people better understand the outlook information" Tiamua added.

The Shepherd Mini Agriculture Show was held on Emae island from 18 - 21st June 2019. The SMAS was a joint initiative between the Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity (MALFFB) as well as the Ministry of Trade, tourism, Cooperatives and ni-Vanuatu business.

The aim of the SMAS was to prepare farmers and fishers to achieve the category of marketing under the banner of "From farm gate to table". It was also an opportunity to serve visitors to the country with fresh organic food, meat and drink while they enjoy themselves on our unpolluted beaches. Once confirmed successful in all restaurants and hotels, it is going to become a global marketing strategy to attract health food lovers from across the world.



From 'Rescuing' to 'Cleaning' historical climate data

There is widespread appreciation for the fact that the value of weather and climate data, information and forecasts are growing in importance to Vanuatu.

As society becomes more sensitive to climate, the importance of quality data and climate prediction for the protection of lives and property is paramount.

Work is underway at the Vanuatu Meteorology and Geohazards Department (VMGD) to quality control (QC) all available climate observations that are in electronic format, taken from sites across Vanuatu. This is an initiative that is supported by the Vanuatu Klaemet Infomesen blong Redy, mo Protekt project (Van-KIRAP).

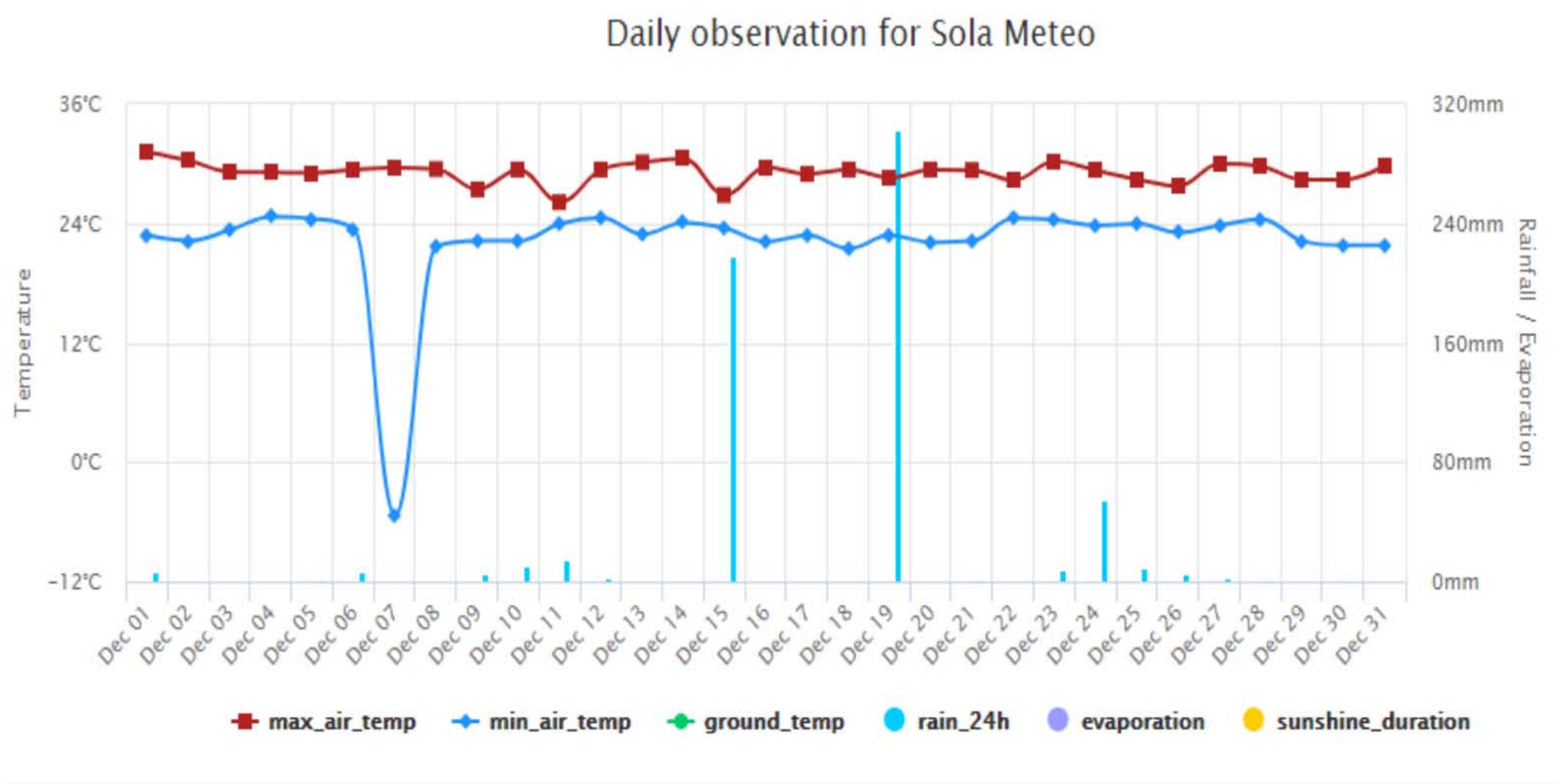
“The aim of doing this is to identify outliers that could cause biases in the analysis of climate trends over time. It is also the opportunity to adjust climate records, if necessary, to remove non-climatic factors so that the temporal variation in the adjusted data reflects only the variations due to climate processes” said Daphne Nalawas, Van-KIRAP Data Homogenization Officer.

The benefits of the QC process include capturing errors in datasets that can present tremendous deviations on trends in performing research and climate analysis for Vanuatu.

“On reflection, an increase in confidence has been the big winner for me working alongside Neil Malosu (Climate Data Archives), Kalsuak Gorden (Vanuatu Rainfall Network Coordinator) and Abel Kalo (Data Manager) as well as other Climate Services division officers to quality control the climate data” added Nalawas.

From January to June 2019, a total of 103,562 records have been quality controlled for 2 Stations namely Sola and Pekoa. The plan is by end of the year about 40% of the data will be QC which will then be fed into the Data Homogenization Process that will be jointly delivered by the Australian Bureau of Meteorology and SPREP later on in the year.

Improvements in the quality of the data will lead into increase in the value of climate data for users for example in the agriculture, fisheries, tourism, water, infrastructure and various economic sectors. Through this, they are also leading to significant savings in life and property.

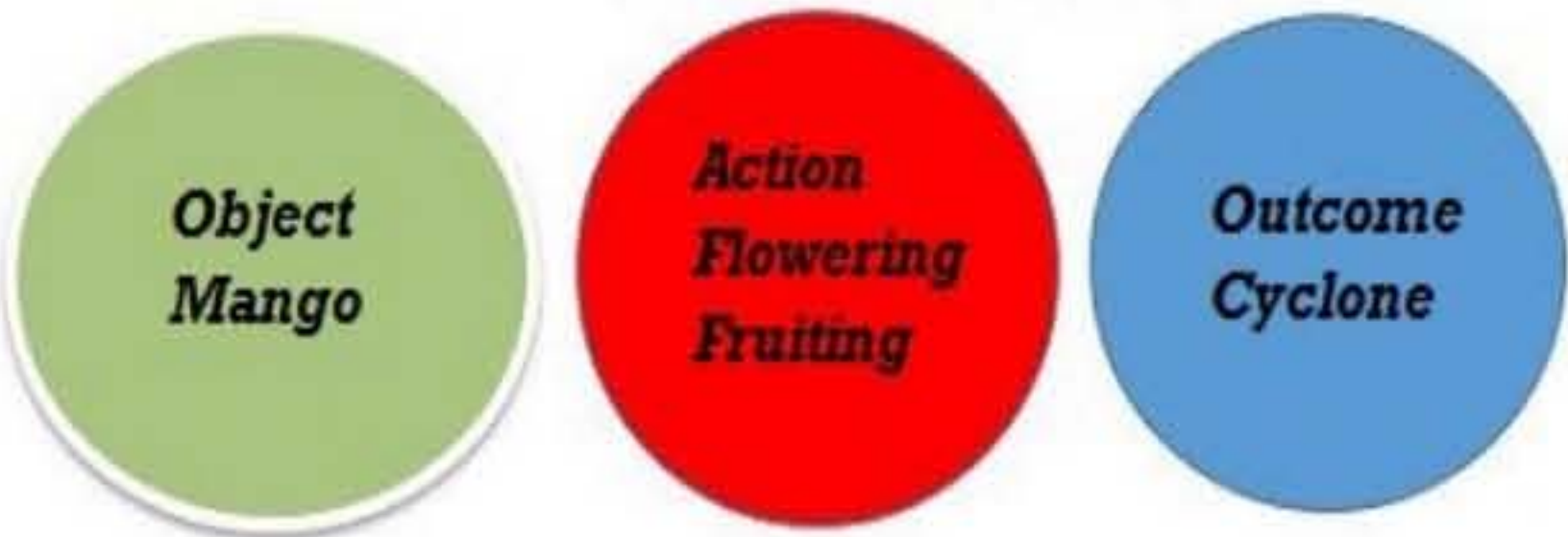


Example of an erroneous data collected from Sola station that requires corrections and updated.

Photo: Daphne Nalawas/VMGD

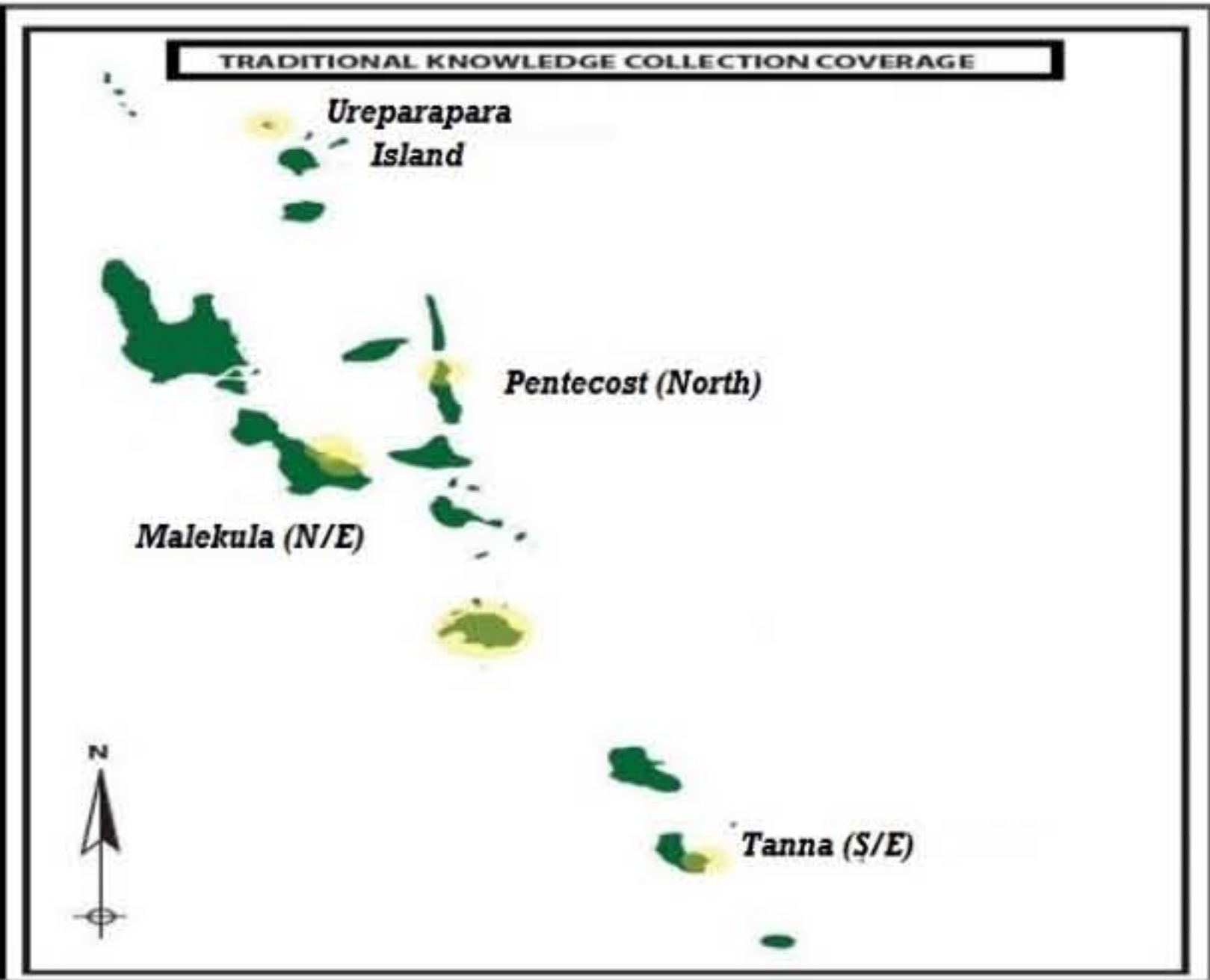
Special focus on 'Traditional Knowledge' under the Van-KIRAP project.

TK Indicator = Object + Action=Outcome



Vanuatu Traditional Knowledge data collection process.

Photo: Albert Willy/VMGD



Vanuatu Traditional Knowledge data collection coverage (sites).

Photo: TK team/VMGD



TK team talking to community elders.

Photo: TK team/VMGD

The Vanuatu Meteorology and Geo-Hazards Department (VMGD) has been working on a Traditional Knowledge program in the past years, but only covering four provinces in Vanuatu. New resources and a full-time traditional knowledge officer supported by the Vanuatu Klaemet Infomesen blong Redy, Adapt mo Projek (Van-KIRAP) project, will expand the Traditional Knowledge network to all six provinces in Vanuatu.

“The traditional knowledge project at VMGD was developed in response to concerns that traditional knowledge of weather and climate in Vanuatu was eroding with the potential to reduce community resilience to extreme climate events” said Albert Willy, Van-KIRAP Traditional Knowledge Officer.

In response, the Traditional Knowledge (TK) project focuses on 3 areas:

1. To preserve Vanuatu’s traditional knowledge of weather and climate. Weather and climate knowledge is in danger of becoming lost due to growing western influences (cultural homogenisation), land-use changes and the impact of climate change – a concern shared by community elders and the Meteorological community.
2. To encourage Ni-Vanuatu communities to use VMGD forecasts as well as traditional knowledge forecasts to increase their own resilience to extreme events. Some remote, rural areas may not routinely use “official” warnings from the national meteorological services (NMSs) because they are either difficult to obtain, are not understood and/or are not fully accepted by the community. In these communities there is a strong reliance on traditional methods of weather and climate forecasting, and the NMS forecasts may not be utilised fully, if at all, potentially leaving the communities vulnerable to extreme events, particularly as land-use and climate change have the potential to impact on the reliability of TK forecasts.
3. To increase the level of trust between VMGD and the community. VMGD is concerned that there may be a lack of trust or understanding of the seasonal climate forecasts (or Vanuatu Climate Update). The TK project is a way for the VMGD to acknowledge traditional ways of forecasting and demonstrate their interest in preserving this knowledge for future generations. In addition, it was anticipated that communication between the VMGD and the community could be enhanced by incorporating local (traditional) knowledge into climate discussions and forecasts.

“Our meteorological and geohazards information given to the people must always meets their level of understanding in order for them to easily utilise and take action and prepare themselves to be resilient in times of a natural disasters.” said Mr Albert Willy Van-KIRAP Traditional Knowledge Officer.

The traditional knowledge data collection process involves the documenting of stories about plant and animal behaviours as well as atmospheric and astronomical phenomena that indicate what climatic and weather conditions will happen. For example, the diagram below shows a TK story collection board about the mango tree, with flowering and fruiting indicator of a tropical cyclone.

“We are still relying on our Traditional Knowledge, because we live in a remote area, and also we understand our Traditional Knowledge and use them in our daily activities, on top of that the TVL and Digicel networks are not accessible to us”. Elderly in Ureparapara Island, Torba Province.

The staged process in which the Traditional Knowledge project follows has four main components, **COLLECTION** of Information, **STORAGE** of information, **MONITORING** and **VERIFICATION** of the indicators and lastly **FORECASTING** and **DISSEMINATION** of the information back to the communities. The Van-KIRAP project will expand the network to all Vanuatu provinces, including two Provinces not previously documented, Sanma and Shefa. The four main pilot sites are Ureparapara (Torba Province), Malekula (Malampa Province), Pentecost (Penama Province), and Tanna (Tafea Province), which are shows in the map below.

Special focus on 'Traditional Knowledge' under the Van-KIRAP project (cont).



Albert Willy with TK officers from Samoa, Tonga and Australia at the AMOS Conference, Darwin, Australia.

Photo: VMGD

The TK programs is now working on component two (2), Monitoring and Verification of the indicators and as part of this component, the TK team has completed verification sites visits to the Central East of Malekula Island, visiting the villages of Tautu, LitzLitz, Uri and Uripiv Island.

To enhance the capacity of VMGD in this important area and share Vanuatu’s experience , Albert Willy presented a paper on; **“Visualizing and understanding seasonality and climate variability using seasonal calendars,”** at the Australian Meteorology and Oceanography Society (AMOS) Conference took place in Darwin, Australia from 11th-14th June 2019.



Van-KIRAP Electronics Engineer joins the maintenance of key met instruments



VMGD technicians in the field providing calibration and upkeep of the key met instruments.

Photo: VMGD

Three Automatic Weather Stations (AWS) in Efate being calibrated by the ICT & Engineering section of the Vanuatu Meteorology and Geo-Hazard Department (VMGD) with assistance from the Vanuatu Klaemet Infomesen blog Redy, Adapt mo Protekt (VAN-KIRAP) team member.

It is an annual task for preserving the meteorological equipment. Calibrating and maintaining these weather sensors are a key role of ensuring that these weather sensors gives accurate information.

Currently about 11 AWS are installed throughout the six provinces of Vanuatu, targeting the Aviation industry, and two AWS supports the climate early warning centers installed in Efate Island.

VMGD Met technician Jeremy Bani with VAN-KIRAP electronic technician Jino Moli trouble shooting a soil temperature sensor on Epao village East Efate AWS site. But yet, due to rise in extreme weather events such as drought, heat waves, cyclones and flooding, and slow onset changes, such as rising temperatures, sea-level rise and ocean acidification in Vanuatu, there is a growing recognition that in order to meet the societal needs for decision makers, development partners, communities and individuals across five target sectors (agriculture, fisheries, infrastructure, tourism and water) to plan for and respond to the long- and short-term impacts of climate variability and change.

The Green Climate Fund (GCF) is supporting the delivery of climate information service by the VMGD including procurement of new meteorological equipment under the VAN-KIRAP project, by adding another eight Automatic weather stations, eight Automatic rain gauges, two ocean buoys, one Hydrological river gauge and one weather radar.

This new meteorological equipment will expand the current VMGD observational network throughout Vanuatu.

Staff Profile - Moirah Matou, Project Manager, Van-KIRAP



Moirah Matou, Project Manager, Van-KIRAP

I come from a small Village of Renou, south east Ambrym, now married to Tanna.

My interest has always been in science from junior high school. My field of study in undergraduate was Bachelor of Science.

After graduating I became a teacher at Malapoa College for 6 years as a Maths and Physics teacher.

The opportunity came in 2006 for new positions opening up at VMGD for Weather Forecasting so I went for that; forecasting floods, high seas, and tropical cyclones.

In 2009, I had the opportunity to undertake a World Meteorological Organization (WMO) Meteorology Graduate Diploma in Meteorology course in Australia.

In 2016, I returned to Australia under DFAT scholarships to do Masters of Science Research on Synoptic weather influences on rainfall in Vanuatu. An area that I wish to continue to pursue in the future to understand more of local orographic influence on weather and climate in the main islands of Vanuatu.

After graduating I joined the Climate division in VMGD for a couple of years before joining Van KIRAP Project as VMGD project Manager.

Thank you tumas

Moirah

About Van-KIRAP

The project will increase the ability of decision makers; development partners; communities and individuals across five target development sectors (agriculture, fisheries, infrastructure, tourism and water) to plan for and respond to the long and short term impact of climate change.

The project will build capacity to harness and manage climate data; develop and deliver practical CIS tools; support enhanced coordination and dissemination of tailored information; enhance CIS related information and technology infrastructure and support the application of relevant CIS through real-time development process.

Tokabout Van-KIRAP

Projek blong provaedem ol man ples mo ol ofis wetem infomesen abaot klaemet we i stret mo i tru long taem, mo provaedem ol tool blong ridiusum impak blong klaemet jenj long ol laef blong yumi, ol karen blong yumi mo ol samting blong yumi.

Taem yumi nogat infomesen we i stret mo i tru long taem blong hem abaot impak blong klaemet jenj, ol divelopmen sekta, gavman mo ol komuniti i save lusum fulap samting mo divelopmen i save slo daon long taem we i kat drae sisen, hot weta, saeklon, flad mo ol narafala disasta we klaemet jenj i stap kosem.

Van-KIRAP Upcoming outreach activities.

JULY						
S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

24. Childrens Day
30. Independence Day
21-24. Turi Food Festival (Climate Division(TK))
Planned to carry out Awareness and Trainings, Week 1,2 & 4 no confirm dates yet (Fisheries Dpt)

AUGUST						
S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

15. Assumption Day
18-23. 4th Art Festival Vanuatu (Climate Division(TK))
Planned to carry out Awareness and Trainings, Week 1,3 & 4 no confirm dates yet (Fisheries Dpt)

Climate Information Services for Resilient Development in Vanuatu



Climate Information and Services (CIS) provides people and organisations with timely, tailored climate-related information and tools that they can use to reduce the impacts of climate change including on lives; livelihoods and property. CIS supports better policy, planning, and decision making across sectors, at national and community scales for both long and short-term timeframes.

The **Climate Information Services for Resilient Development in Vanuatu (CISRDP) Project** responds to priorities identified in the Vanuatu Framework for Climate Services and the Vanuatu Meteorology and GEO-Hazards Department (VMGD) Strategic Development Plan, developed through a national consultation and design process.

Without timely and tailored information about the impacts of climate change development sectors, governments and communities alike risk massive losses and development due to drought; heat waves; cyclones flooding; ocean acidification and other short and long term climate change pressures.



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