

VanKIRAP Audience Survey Results

30 November 2023

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Executive Summary

This report presents the results of a VanKIRAP Audience Survey conducted in November 2023 to understand how people in Vanuatu get information about weather and climate, and how they use this information in their lives.

The survey was implemented using the commercial web survey application [Qualtrics XM](#) and comprised 45 questions addressing both demographic and user profiles of the audience, plus one screening question to ensure all respondents were over 15 years of age. It was distributed electronically via social media and email channels and collected data from respondents such as:

- Demographic information;
- Level of involvement in priority sectors (agriculture, fisheries, infrastructure, tourism and water resources);
- Knowledge about weather and climate phenomena;
- Experience of severe weather/climate phenomena;
- Information-seeking practices/behaviours in relation to climate and weather;
- Preferences for sources/channels used to locate weather and climate information;
- Needs and priorities in relation to weather and climate information;
- Potential gaps relating to climate and weather information.

Key Findings

Key findings from the Audience Survey:

- Corruption, global warming / climate change and the cost of food, transport and housing, together with lack of job opportunities are perceived as the most important issues facing Vanuatu today.

Knowledge of weather and climate terminology and concepts

- Knowledge of weather and climate terminology is relatively high, with three-thirds of the 68 participants reporting complete to almost complete knowledge. However, there remains a significant appetite (87%) to learn more about what causes different kinds of weather.
- 70% of respondents attributed climate change to the burning of fossil fuels, with varying other ideas about the cause of climate change. This highlights a knowledge gap that climate information services can assist with, such as providing more basic information about climate change causation and impacts.

- The three most commonly observed climate change phenomena are stronger storms/cyclones, hotter temperatures, and plants/crops fruiting out of season.
- A majority of respondents reported being personally affected by stronger storms/cyclones.
- 85% reported experiencing an extreme weather event or a natural disaster in the last 12 months.
- The top three impacts of climate change-related events are cyclones, damage to food crops, and damage to road infrastructure.

Information-seeking behaviour

- All respondents reported at least one type of communication device in their household.
- Respondents' information-seeking behavior highlighted they are:
 - Using weather or climate forecasts 'usually or always' for most options.
 - 'Planning social activities' attracted the highest number of 'usually or always' responses.
 - Severe weather forecasts are ranked as significantly more important, followed by 'rain forecasts for the next day', and 'weather outlook for next 3 days'.
 - In terms of wind forecasts, respondents are most interested in forecasts of wind speed on the following day, followed by wind direction for the next day, and wind speed over the next 3 days. This is likely a reflection of the key livelihood areas for respondents.
- Respondents reported that the top three sources where they received advance notification of an impending extreme weather event or natural disaster were SMS, Facebook, and the VMGD website (vmgd.gov.vu).
- Over two-thirds (68%) of respondents reported high or medium levels of trust in climate and weather information found on Facebook and social media platforms. Three main Facebook pages are reported as providing key and emergency weather information to the public: two are official government Facebook pages (VMGD, NDMO), and one is operated by a private meteorologist (Vanuatu Rainfall and Agrometeorology Outlook).
- Respondents reported diverse sites for hearing about climate change, with the most popular source of information being Facebook (74%), followed by the VMGD website (67%). The local radio station, newspaper and television were the next top ranked sources of climate change information (58%).
- Word-of-mouth remains a significant avenue for information sharing, whether at school (50%), work (48%) or talking to friends and family (50%).
- Traditional knowledge was considered a very useful source of information about weather and climate for more than half of respondents (52%). Despite the urban-centric profile of respondents, the survey results indicate this is still an important channel for accessing climate information in Vanuatu.

Specific weather and climate information interests

- There was a diverse range of opinions offered in response to the final question about climate information preferences, and notably, a number of these identified communications channels that they believe should be invested in by VMGD: SMS, and a VMGD mobile app were the two most mentioned.
- Several respondents highlighted the particular requirements of rural communities, and the need for more agromet information.
- In terms of wind forecasts, respondents are most interested in forecasts of wind speed on the following day, followed by wind direction for the next day, and wind speed over the next 3 days.
- In terms of rain forecasts, respondents are most interested in forecasts of when it will rain, likelihood of rain, and likelihood of heavy rain.
- In terms of temperature and humidity forecasts, respondents are most interested in forecasts of daytime temperature (*tmax*), daytime humidity, and nighttime temperature (*tmin*).
- In terms of marine weather, respondents are most interested in the likelihood of severe marine weather developing, what time high tide will be, what time low tide will be, and swell height.

- For extreme weather, respondents are most interested in the probability that a cyclone will form, the likelihood that a storm will develop, and the probability of heavy rainfall.

Participant demographics

- Respondents were primarily from Shefa province (79%) and reflected a reasonably highly educated, professional audience with good internet connectivity. Future research should ensure that remote provinces are also reached to better reflect the climate information needs of the broader population.
- Women represented 46% of survey respondents, within which three-quarters were aged 44 years and under, and had received tertiary level education.
- There is a bias in the data due to the high representation of educated, Shefa-based respondents.

In addition to the survey, a 24-month period of monitoring official VanKIRAP and VMGD communication platforms provides additional insights into the audience engagement and areas of interest in relation to weather and climate. The lengthier monitoring period allows insights into the patterns of audience engagement on these official platforms, with peak engagement periods aligning to the annual cyclone season (November to April). While not a feature of this report summary of the Audience Survey, it is worth capturing a few key themes here for completeness, to guide future planning for climate information products at VMGD:

- Peak audience engagement periods on the VMGD Facebook page and website occur during Vanuatu’s annual cyclone season (November to April), especially when extreme events have been forecast to occur. This is a period when audience attentiveness to weather and climate information is particularly attuned to seeking out new information, which presents an opportunity for VMGD to engage with audiences by positioning accurate, timely and useful content on high traffic channels.
- Audience engagement spikes especially around posts relating to new technologies and innovations for climate information.
- Traditional climate knowledge content has rarely been a feature on official platforms (excluding key workshops and VanKIRAP’s booklet launch) and presents an opportunity to be further promoted via online platforms to deepen audience understanding and engagement.

INTRODUCTION

Vanuatu is among the most vulnerable countries on earth to the increasing impacts of climate change, including climate-related natural disasters (e.g. cyclones, flooding, drought) and the effects of slow-onset events such as sea-level rise and ocean acidification. Vanuatu’s rapidly changing climate has implications for the Vanuatu Government’s service delivery and infrastructure projects, domestic connectivity, as well as on people’s livelihoods and food security. A changing climate outlook can disrupt residents’ access to essential services, their wellbeing, and potentially exacerbates existing vulnerabilities. Access to timely, relevant weather and climate information can and does assist with planning for work, school and other activities, to mitigate the negative implications of extreme weather events.

As the effects of global warming manifest and the hazards of climate change arise at accelerating rates, there is a need to shift the paradigm towards the standardised and mainstreamed use of science-based climate information, at multiple timescales, to support resilient development pathways.

The VanKIRAP project (2016-2023) is a Green Climate Fund-funded initiative delivered through a partnership between the Vanuatu Government and the Secretariat of the Pacific Regional Environment Program (SPREP). It supports the strengthening and application of Climate Information Services (CIS) in five targeted development sectors: tourism; agriculture; infrastructure; water and fisheries. The project has a

focus on addressing information gaps and priority needs of target beneficiaries at national, provincial, and local community levels across the five priority sectors.

Objective(s) of the survey

Recognising the significant role that good access to information can play in mitigating the negative impacts of extreme weather and climate scenarios on Vanuatu people’s lives, the VanKIRAP project conducted this survey to understand how people in Vanuatu get information about weather and climate and how they use this information in their lives. The results of the survey will assist future information, awareness and education efforts by Vanuatu Meteorology and Geohazards Department and related climate information projects, by providing an evidence base for communications strategies, tactics and products that is based on the actual knowledge, attitudes and practices of the Vanuatu public and stakeholders from priority sectors. Ultimately, this should better assist people in Vanuatu to locate accurate, timely and relevant information that they can use to become more climate resilient.

An ancillary objective of the Survey was to compare the results of a time bound survey period (November 2023), against a 24-month period of monitoring audience engagement on official project/government online platforms, to allow for additional insights into demonstrated patterns of audience engagement.

Why an audience survey?

This Audience Survey is a component of the VanKIRAP Communications Strategy and Action Plan and was designed to better understand the knowledge, attitudes and practices that people in Vanuatu have around climate and weather, and accessing information about these topics. The value of the survey results are that they provide insights into audience interests that can inform the production of more targeted, engaging content by VMGD and related climate information, as well as climate adaptation projects of all kinds.

Methodology

The baseline survey was originally intended to be conducted in 2017, however project financing and recruitment delays shifted this to 2022. The adjusted timeframe was for survey delivery during 2022 at the household level across VanKIRAP project sites, using experienced Vanuatu National Statistics Office (VNSO) enumerators, with the Qualtrics XM survey platform for data collection. Pandemic-related disruptions and a series of lockdowns from March to July, followed by an extended State of Emergency period with interdictions on inter-island travel, postponed planning for survey implementation to 2023. Twin tropical cyclones Judy and Kevin in March 2023, which devastated Shefa and Tafea Provinces and was followed by another period of State of Emergency, further disrupted various project activities and inter-island travel, against which the Audience Survey was planned. Target data collection events planned for mid-2023 at VanKIRAP climate centres were cancelled by the project. During this period, VNSO enumerators became engaged on three national censuses and surveys (the 2022 Business Establishment Census, Agricultural Census, MICS Health Multiple-Indicator Cluster Survey, an in-depth health survey). The audience survey methodology was then adapted to be delivered on-line through voluntary participation, using a convenience sample.

The audience survey was conducted across from 29 to 30 November 2023 and was implemented using Qualtrics XM. Timing of the survey early on in Vanuatu’s annual cyclone season provides insights into information seeking practices that can be cross-referenced against longer-term monitoring of audience engagement with official project and VMGD channels. Similarly, a focused 2-day period for data collection provides a snapshot in time; the survey was released during a national public holiday to optimize potential engagement from respondents.

Table 1 – Van-KIRAP sources of audience analytics (over life of project)

	2023			
	Q1	Q2	Q3	Q4

Online Monitoring	Monthly analytics of audience engagement across [list project/VMGD platforms]			
Audience Survey				Targeted audience survey

**Note: Monthly online analytics are addressed in separate reporting.*

The audience survey comprised 45 questions addressing both demographic and user profiles of the audience, plus a screening question. It was distributed electronically via social media and VankIRAP email newsletter, and responses were stored on Qualtrics XM. The Survey collected data on:

- Demographic information;
- Level of involvement in priority sectors (agriculture, fisheries, infrastructure, tourism and water resources);
- Knowledge about weather and climate phenomena;
- Experience of severe weather/climate phenomena;
- Information-seeking practices/behaviours in relation to climate and weather;
- Preferences for sources/channels used to locate weather and climate information;
- Needs and priorities in relation to weather and climate information;
- Potential gaps relating to climate and weather information.

A total of 68 Vanuatu residents responded to the survey, from 5 out of 6 of Vanuatu’s provinces. No residents of Torba responded to the survey, likely due to telecommunications connectivity challenges. In general, we can assume that there were a number of factors affecting participation rates: access to internet connectivity; access to a device; awareness of the survey; time availability; and English comprehension.

SURVEY RESULTS

Respondent demographics

A total of 68 respondents participated in the Survey. The profile of participants by gender, age, and education across Vanuatu’s six provinces is provided graphically below, against the corresponding survey question. It is also summarized as follows:

- The majority of respondents were from Shefa Province (79%), followed by Sanma (10%), Tafea (6%), Malampa (3%) and Penama (1%).
- 46% of respondents were female and 54% were male. 4% of participants reported a disability.
- Respondents ranged in age from 15 to over 65 years. The highest responding age group was ages 25–34 (37%), closely followed by ages 35-44 (18%) and 45-54 (18%), suggesting that respondents were mostly of working age. 54% of all respondents were aged 34 and under.
- The respondent group also records a higher than average level of educational attainment: 84% have had some form of tertiary education (college certificate or diploma and above). This is likely a reflection of the majority of participants reporting Shefa Province (79%), as their province of residence and are likely to have a professional profile for life in an urban setting. This concurs with the findings of the 2020 National Census, which observed that urban dwellers tend to be more highly educated due to access to institutions, and earning power, and also that Port Vila has the highest concentration of tertiary educated people in the country.
- 59% of the respondents live within 1km of the coast, and 72% live in an urban setting or in a big village close to an urban setting. 28% of respondents participated from rural settings. This is the opposite of the rural/urban population split reported by the 202 National Census, which was 74% rural/ 26% urban.
- Based on the respondent demographics, data analysis and trends identified reflect the sample bias inherent in the survey’s unique cohort of respondents.
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Figure 1: Profile of survey participants by province of residence

Q8 - Which province do you live in?

68 Responses

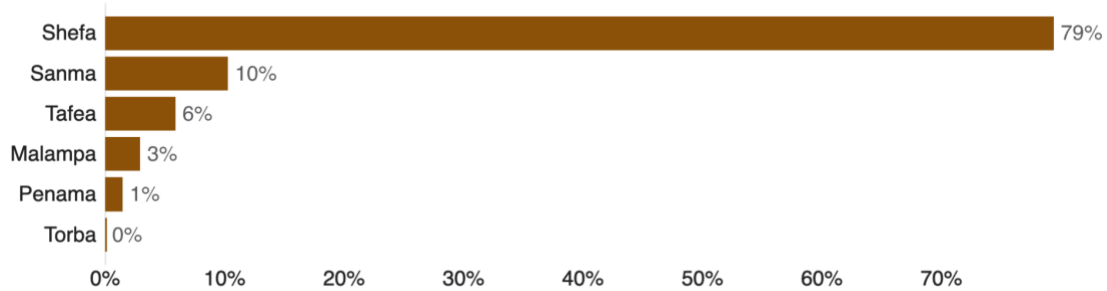


Figure 2 – Gender of respondents

Q2 - What is your gender?

68 Responses



Figure 3 – Age of respondents

Q3 - What is your age?

67 Responses

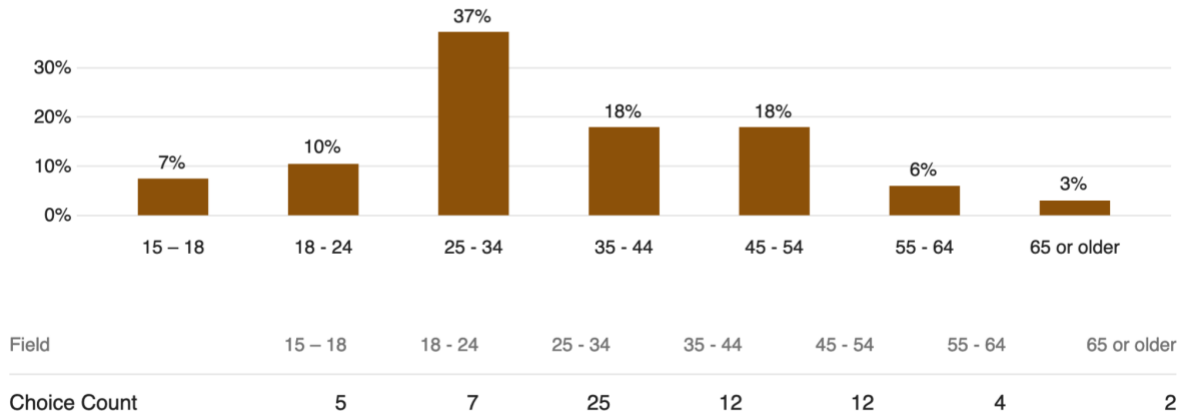


Figure 4 – Educational attainment of respondents

Q4 - What is the highest level of education that you have completed?

67 Responses

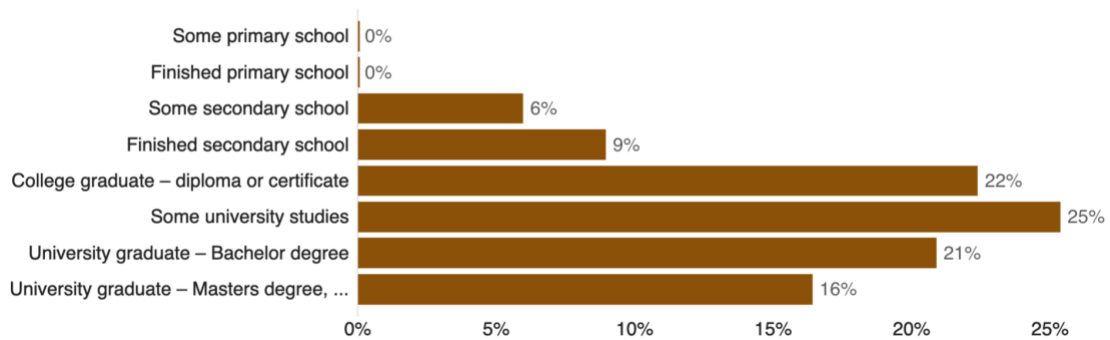


Figure 5 – Disability status of respondents

Q5 - Do you have a disability?

68 Responses



Figure 6 – Proximity to coastline

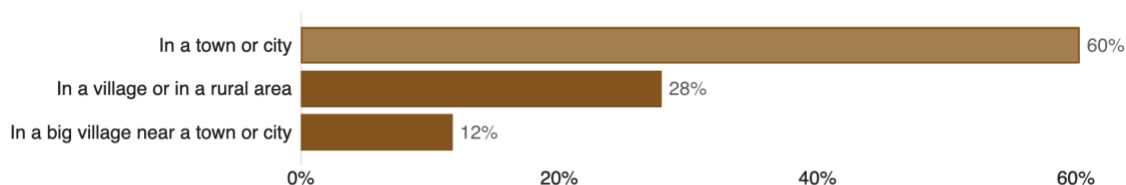
Q9 - Do you live within 1km of the coast?



Figure 7 – Rural/urban/peri-urban residence

Q7 - Where do you normally live?

68 Responses



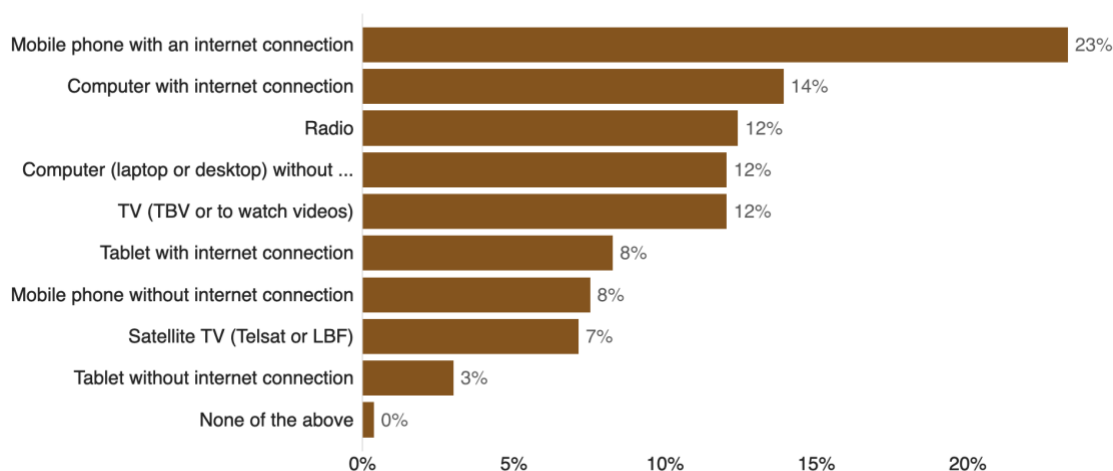
Communications device ownership

- All respondents reported at least one type of communication device in their household.
- Reflective perhaps of the residential geography of respondents, where internet connectivity is best in urban centres of Sanma and Shefa provinces, 45% of respondent households possess a device (mobile phone, computer or tablet) with internet connection. The mobile phone with internet connection is the most popular device for use (23%).
- 12% of respondents use radios to access information, again a likely reflection of the residential geography of respondents (likely to be primarily rurally-based respondents).
- Television (TBV) is available to 12% of respondents, reflective also of the current reach of this communications channel in Vanuatu. Satellite TV records lower access (7%) likely due to the financial cost of the monthly fees required to access this service. Satellite TV does not typically include local, Vanuatu programming.

Figure 8 – Household ownership of communications devices

Q6 - Do you or anyone in your household have any of the following? Select all that apply.

68 Responses



Livelihood/sectoral involvement

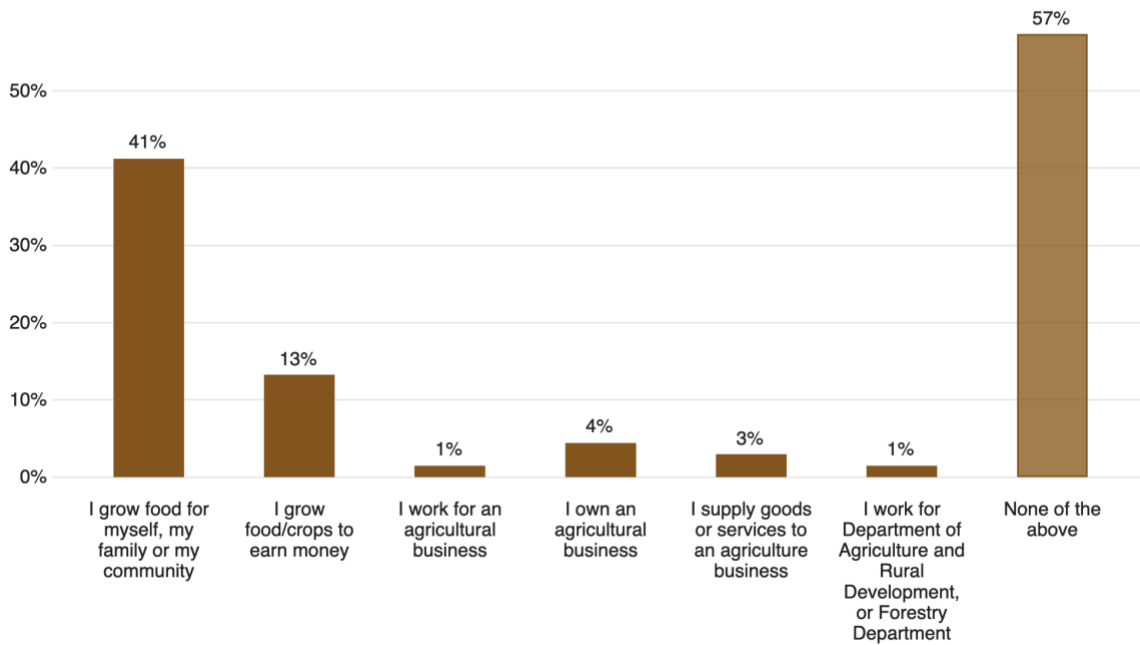
Agriculture

- 53% of respondents reported no formal engagement with the agriculture sector.
- 40% of respondents participate in food production, with 32% producing food for their household or community consumption, and 8% also growing cash crops.
- Only 2% of respondents reported involvement in an established agri-business, whether as a worker, owner or supplier.
- As the majority of respondents were based in Shefa Province, home to the capital of Port Vila, it is likely that many respondents are in the urban and peri-urban areas, and responses reflect this (access to land for agriculture being a key factor).

Figure 9 – Involvement in the Agriculture sector

Q10 - How are you involved in Vanuatu's agriculture sector? Select all answers that apply.

68 Responses



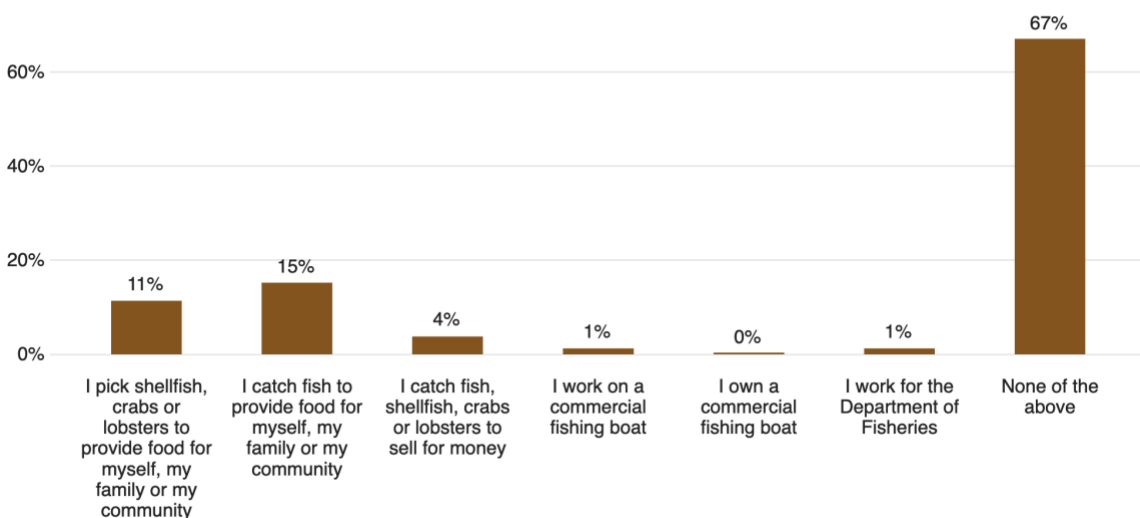
Fisheries

- 73% of respondents reported no formal engagement with the fisheries sector.
- 37% of respondents reported varying degrees of involvement with the fisheries sector for personal consumption, and for markets.
- None of the respondents reported any commercial fishing interests or vessel ownership, nor were any of the respondents involved in government fisheries.

Figure 10 – Involvement in the Fisheries sector

Q11 - How are you involved in Vanuatu's fisheries sector? Select all answers that apply.

68 Responses



Infrastructure

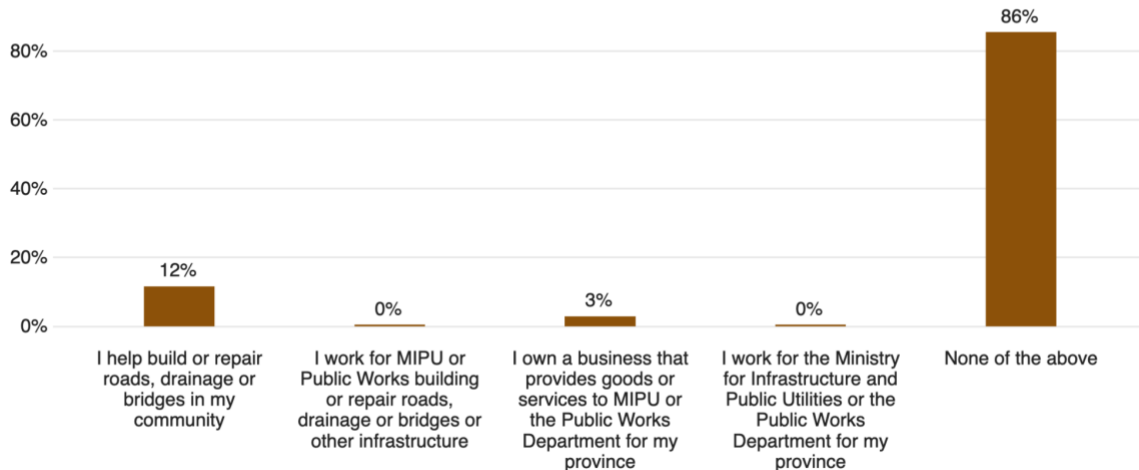
- The majority of respondents (92%) did not have any formal infrastructure sector involvement.
- 8% of respondents reported some community-based infrastructure sector involvement to build or repair roads, drainage and bridges.

- None of the respondents reported any engagement at the national government (MIPU, PWD) or provincial level.
- The infrastructure sector is highly specialized and an area where the Vanuatu government regularly reports a lack of capacity, therefore the participant profile for this survey is not unusual.

Figure 11 – Involvement in the Infrastructure sector

Q12 - How are you involved in Vanuatu’s infrastructure sector? Select all answers that apply.

68 Responses



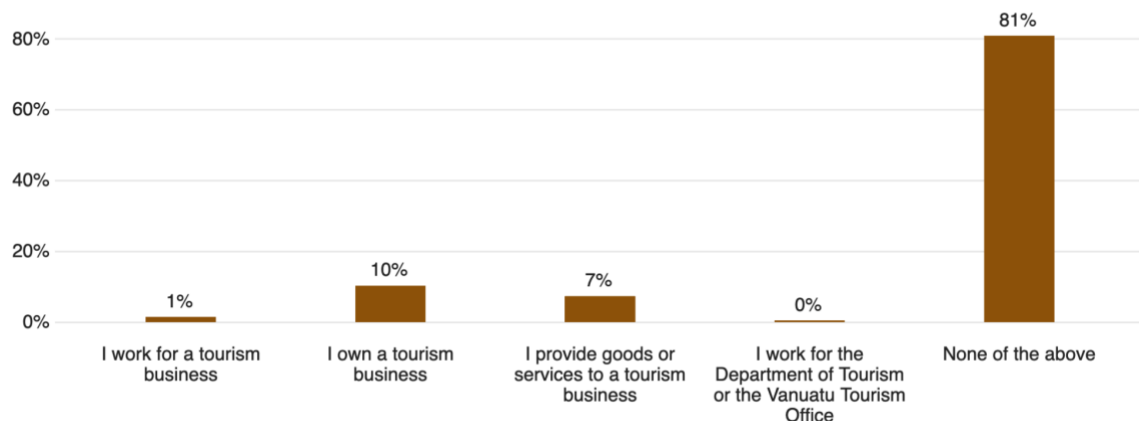
Tourism

- 28% of respondents are involved in the tourism sector, and 16% of all respondents reported ownership of a tourism business or employment in the industry.
- None of the respondents work for the Vanuatu Tourism Office or the Department of Tourism.
- Since reopening international borders on 1 July 2022, Vanuatu’s tourism sector has been slowly recovering from the pandemic-related restrictions. Prior to the pandemic of 2020, Vanuatu’s tourism sector was one of the largest employers in the country, reporting up to 5,000 workers and contributing over USD 170 million per year to the economy (see Naupa et al. 2021). It will be interesting to see how the respondent profile evolves in this sector for future surveys, noting that in 2023 it is still early days for this particular sector’s recovery.

Figure 12 – Involvement in the Tourism sector

Q13 - How are you involved in Vanuatu’s tourism sector? Select all answers that apply.

68 Responses



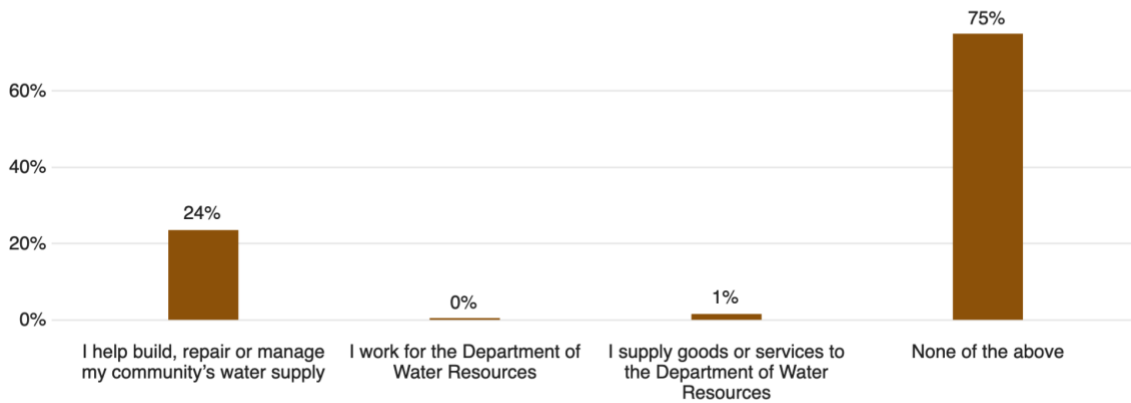
Water resources

- One-fifth (20%) of respondents engage in community-based activities in the water resources sector, helping to build, repair or manage their community’s water supply. This aligns with the overall geographic profile of survey respondents, with approximately 20% also participating from Vanuatu’s more rural provinces (i.e. not Shefa or Sanma where there are larger urban centres and water systems).

Figure 13 – Involvement in the Water Resources sector

Q14 - How are you involved in Vanuatu’s water resources sector? Select all answers that apply.

68 Responses



Priority issues for Vanuatu

- The majority of participants identified corruption (14%), global warming/climate change (12%), cost of food, transport and housing (7%) and lack of job opportunities (7%) as priority issues.
- Other respondents identified extreme weather events (4%), health and disease issues (4%) and youth delinquency (3%) as important issues.
- The emphasis on corruption and global warming and climate change likely reflects recent media attention on Vanuatu’s political dynamics, as well as the unseasonably early TC Lola in October 2023, and the twin severe tropical cyclones Judy and Kevin in February/March 2023.

Figure 14 – Priority issues word cloud



Knowledge of weather and climate terminology

- The majority of participants (76%) were familiar with all weather and climate terms mentioned in the survey.
- The least familiar terms to participants were climatology (24% did not know this term) and heat wave (12% were not familiar with this term).
- While the participants were quite familiar with most of the terms, this question is a useful reminder of the need to break down technical/scientific terminology to deepen understanding. The term ‘climatology’ is not common in English, nor in the local lingua franca Bislama, and therefore any future content development should factor this in.
- In terms of weather knowledge, 86% of respondents indicated they felt they had a good understanding of what causes weather and almost all respondents (96%) indicated they would like to have a better understanding of what causes different kinds of weather.
- Knowledge of the term ‘climate change’ was high (95%).
- Respondents reported diverse sites for hearing about climate change, with the most popular source of information being Facebook (74%), followed by the VMGD website (67%). The local radio station, newspaper and television were the next top ranked sources of climate change information (58%).
- Word-of-mouth remains a significant avenue for information sharing, whether at school (50%), work (48%) or talking to friends and family (50%).
- Churches are not a common source of climate change information (20%), nor is satellite TV (LBF/Telsat - 23%), the latter likely due to cost and reach of the service.
- Printed material, such as books, posters, and brochures, as well as movies, are other sites of hearing about climate change, for up to a third of respondents.

Table 2 – Familiarity with weather and climate terminology

Term	Yes	No
El Niño / La Niña	100.0%	
Storm surge)	85.3%	14.7%
Drought	98.5%	1.5%
Sea level rise	98.5%	1.5%
Meteorology	97.1%	2.9%
Climatology	77.9%	22.1%
Flash flood	97.1%	2.9%
Coral bleaching	91.2%	8.8%
Humidity	95.6%	4.4%

Forecast	98.5%	1.5%
Heatwave	85.3%	14.7%

Figure 15 – Understanding of weather causality

Q25 - Do you feel like you understand what causes different kinds of weather?

68 Responses

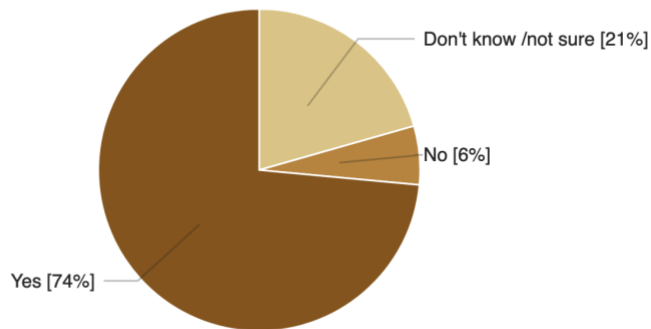


Figure 16 – Preference for better understanding of weather causality

Q26 - Would you like to have a better understanding of what causes different kinds of weather?

68 Responses

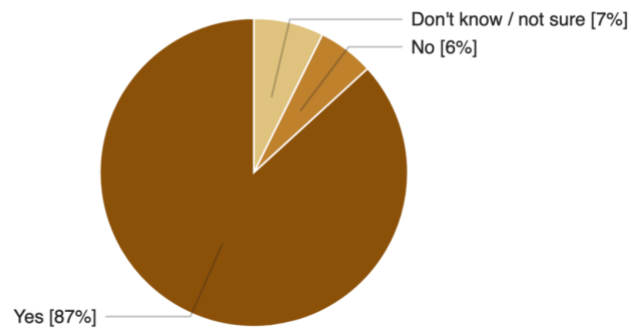
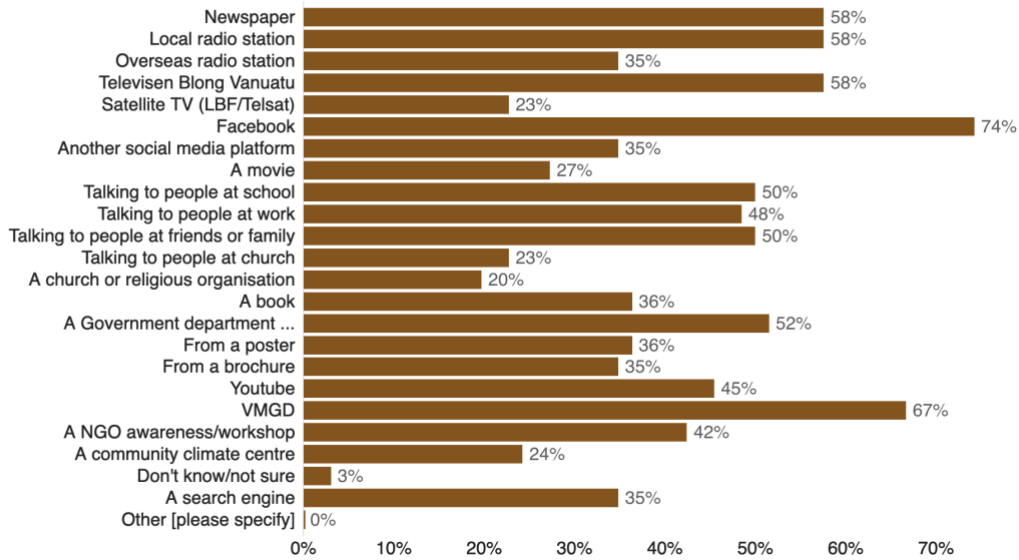


Figure 17 – Familiarity with 'climate change'

Q33 - Where have you heard the term 'climate change' being used before? Select all that apply.

66 Responses



Information-seeking behaviour

- Respondents reported using weather or climate forecasts ‘usually or always’ for most options.
- ‘Planning social activities’ attracted the highest number of ‘usually or always’ responses.
- Severe weather forecasts are ranked as significantly more important, followed by ‘rain forecasts for the next day’, and ‘weather outlook for next 3 days’.
- In terms of wind forecasts, respondents are most interested in forecasts of wind speed on the following day, followed by wind direction for the next day, and wind speed over the next 3 days.
- In terms of rain forecasts, respondents are most interested in forecasts of when it will rain, likelihood of rain, and likelihood of heavy rain.
- In terms of temperature and humidity forecasts, respondents are most interested in forecasts of daytime temperature (*tmax*), daytime humidity, and nighttime temperature (*tmin*).
- In terms of marine weather, respondents are most interested in the likelihood of severe marine weather developing, what time high tide will be, what time low tide will be, and swell height.
- For extreme weather, respondents are most interested in the probability that a cyclone will form, the likelihood that a storm will develop, and the probability of heavy rainfall.

Figure 18 – Frequency of use of climate/weather forecasts

Q17 - How often do you use weather or climate forecasts to...

68 Responses

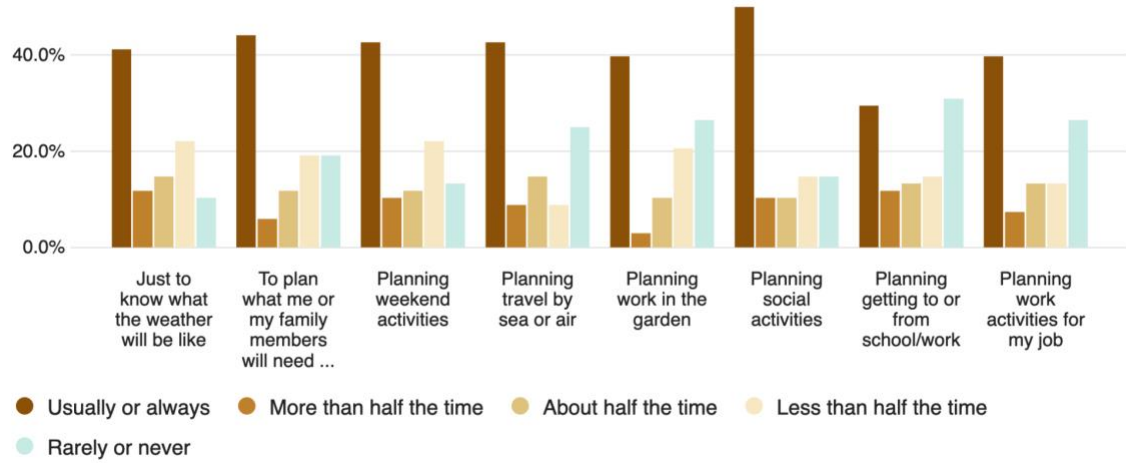


Figure 19 – Importance of different types of weather/climate information

Q18 - On a scale of 0-5, how important are the following kinds of weather and climate information to you?

68 Responses

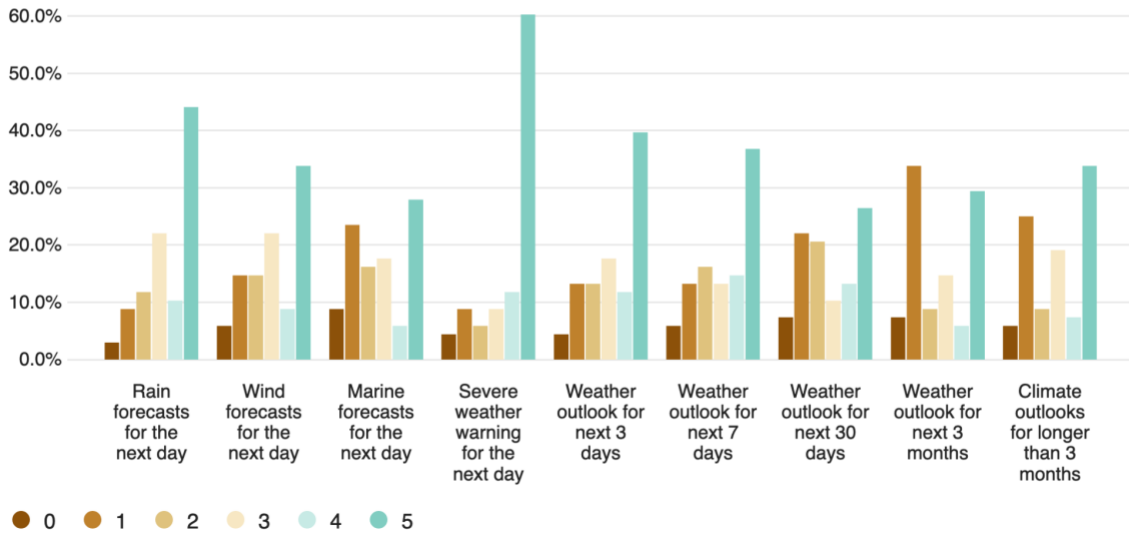


Figure 20 – Importance of wind forecast information

Q19 - Please look at the weather choices below relating to wind. Thinking about the weather forecast for the next day, how important is each one to you?

68 Responses

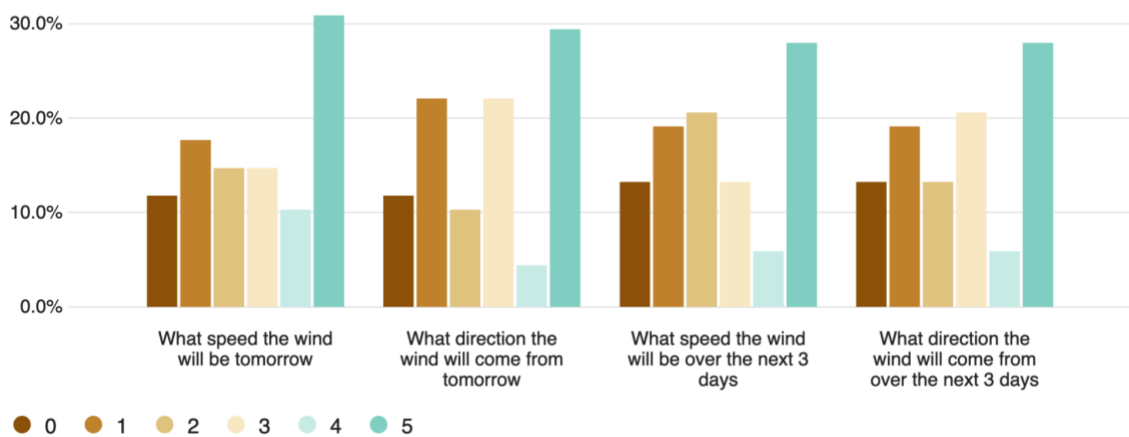


Figure 21 – Importance of rain forecast information

Q20 - Please look at the weather choices below relating to rain. Thinking about the weather forecast for the next day, how important is each one to you?

68 Responses

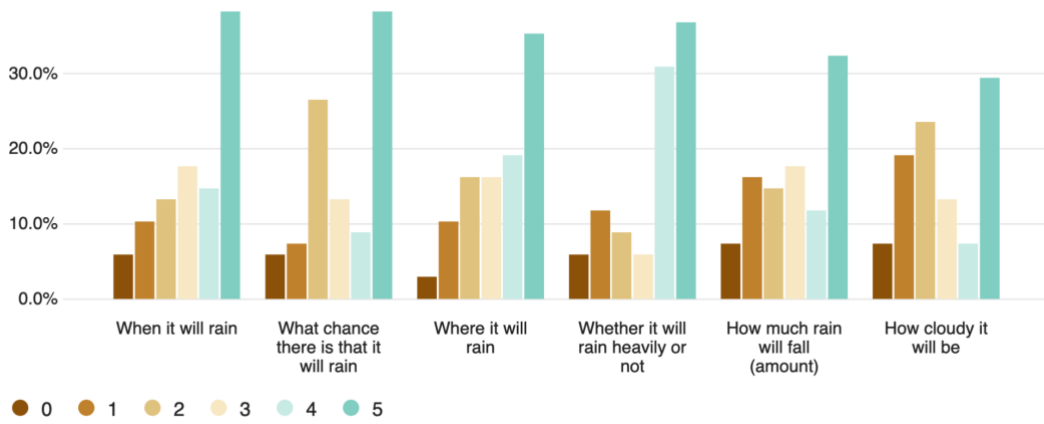


Figure 22 – Importance of temperature and humidity forecast information

Q21 - Please look at the weather choices below relating to temperature and humidity. Thinking about the weather forecast for the next day, how important is each one to you?

68 Responses

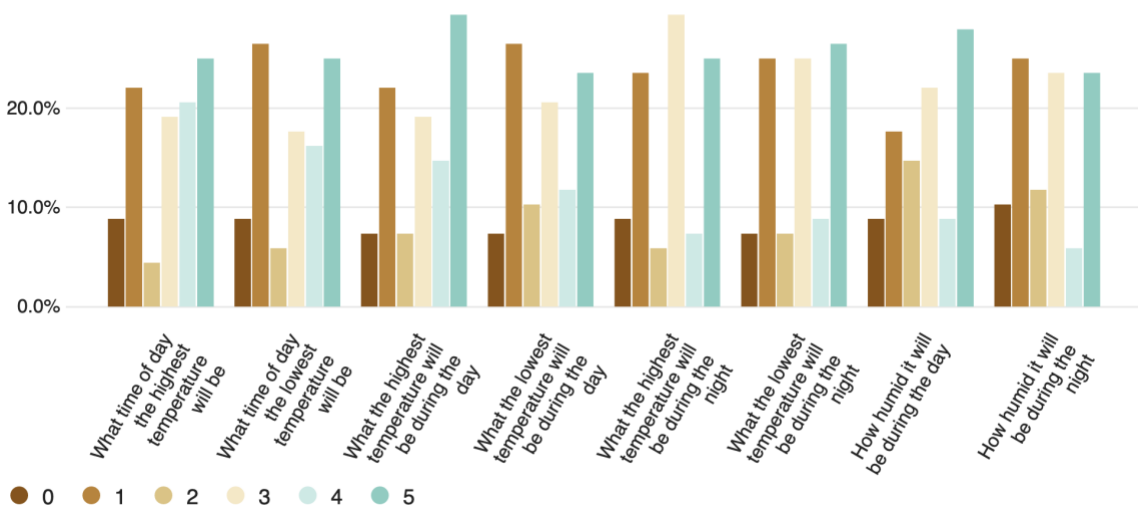


Figure 23 – Importance of marine weather forecast information

Q22 - Please look at the weather choices below relating to marine weather. Thinking about the weather forecast for the next day, how important is each one to you?

68 Responses

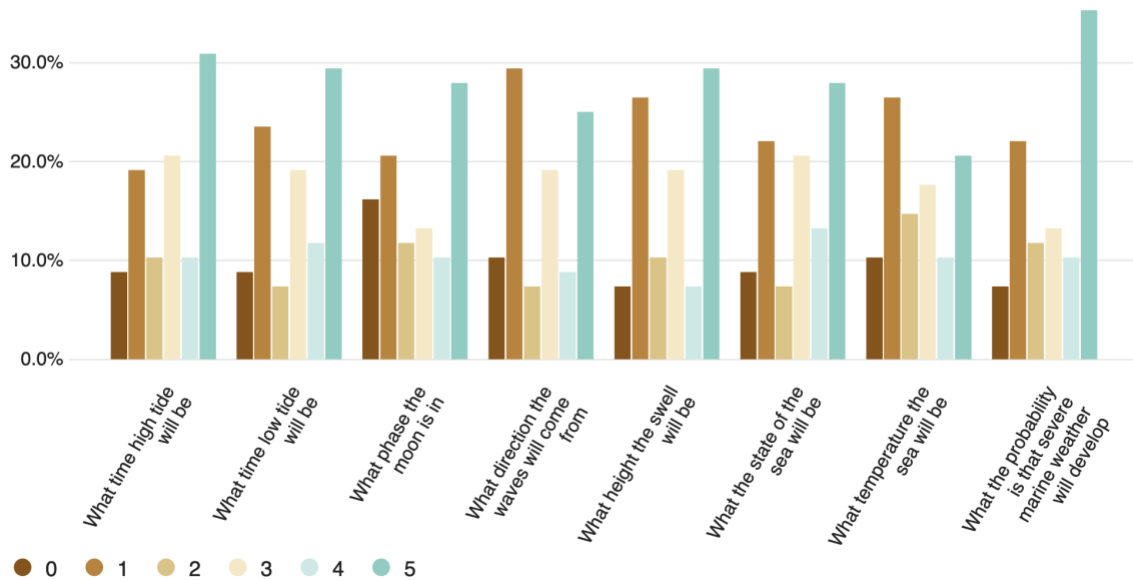


Figure 24 – Importance of severe/extreme weather forecast information

Q23 - Please look at the choices below about the likelihood of different kinds of severe/extreme weather. Thinking about the weather forecast for the next day, how important is each one to you?

68 Responses

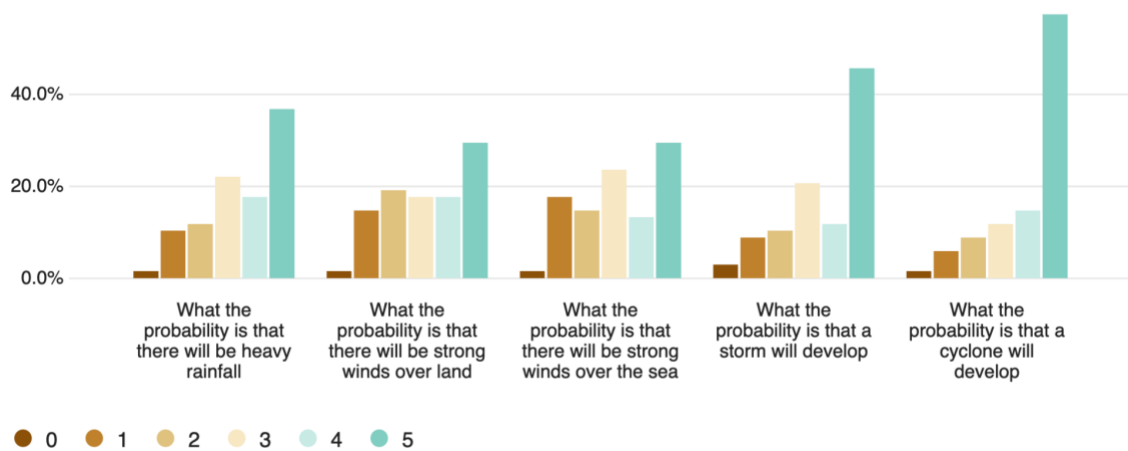
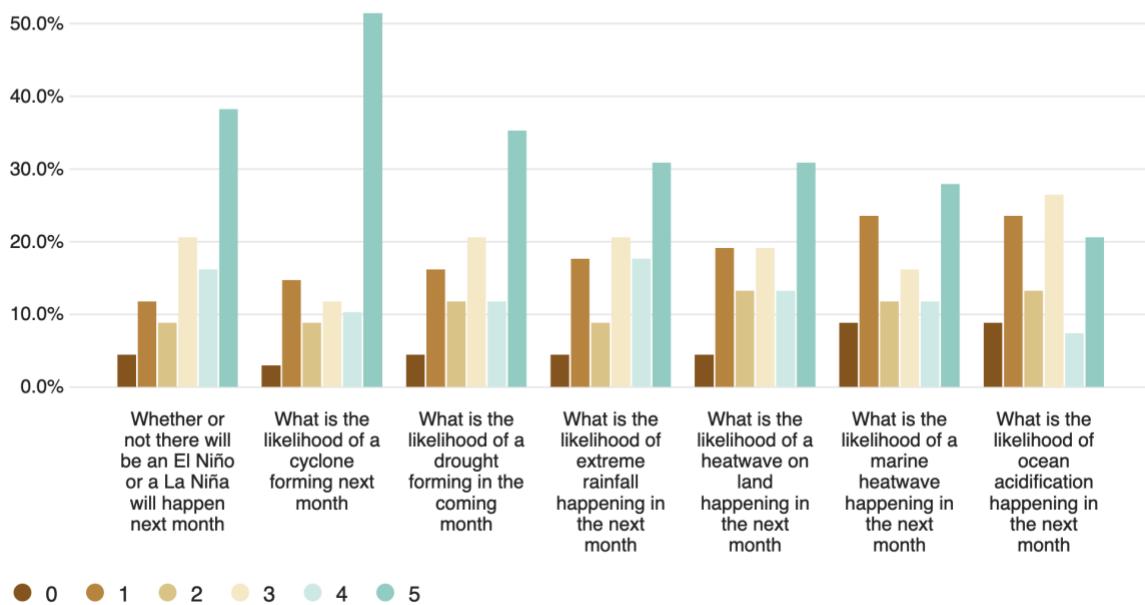


Figure 25 – Importance of probability in weather/climate information

Q24 - Thinking about the weather forecast for the next 30 days, how important is it for you to know about the the likelihood of the following kinds of weather/climate events?

68 Responses



Observed climate change phenomena

- The three most commonly observed climate change phenomena are stronger storms/cyclones, hotter temperatures, and plants/crops fruiting out of season.
- A majority of respondents reported being personally affected by stronger storms/cyclones.
- 85% reported experiencing an extreme weather event or a natural disaster in the last 12 months.
- The top three impacts of climate change-related events are cyclones, damage to food crops, and damage to road infrastructure.
- Respondents reported that the top three sources where they received advance notification of an impending extreme weather event or natural disaster were SMS, Facebook, and the VMGD website (vmgd.gov.vu).

Figure 26 – Observed changes in local weather patterns

Q27 - Have you observed any of the following changes in weather patterns in your community/area?
68 Responses

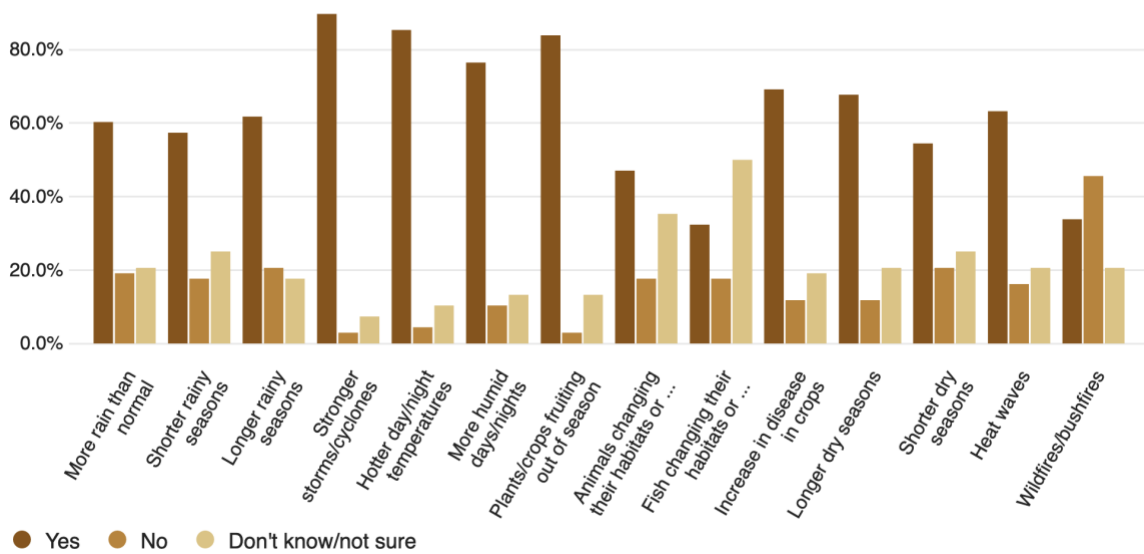


Figure 27 – Personal impact of observed changes in local weather patterns

Q28 - On a scale of 0 to 5, where 0 = not affected at all, and 5 = strongly affected, how has each of these weather patterns affected you?
66 Responses

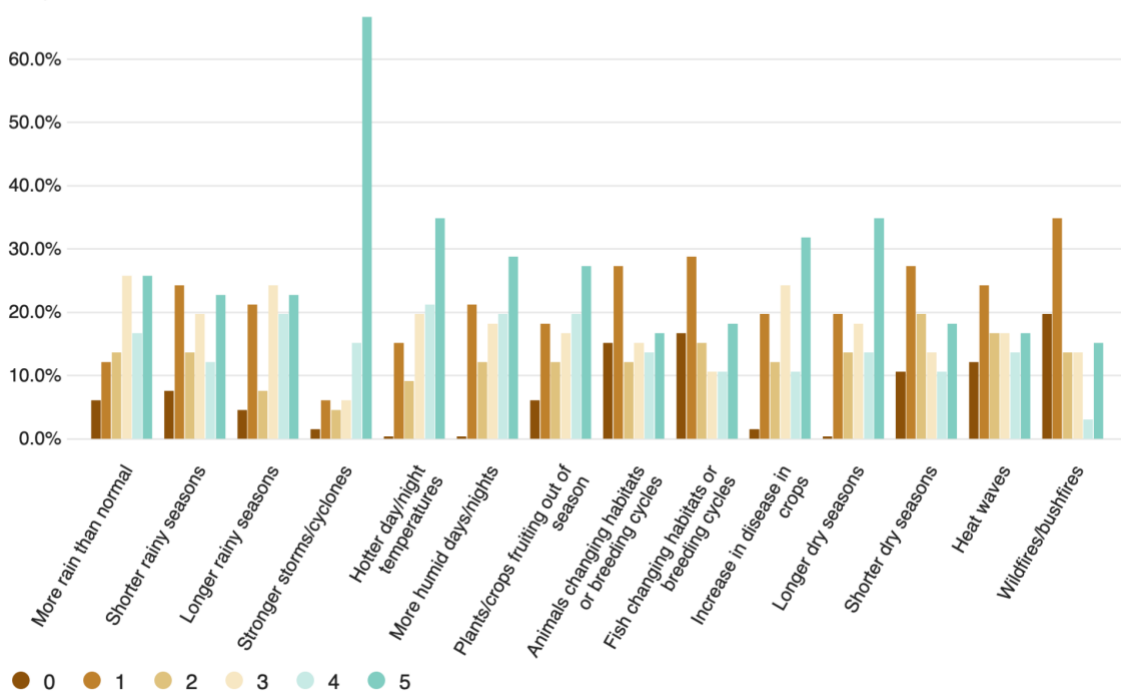


Figure 28 – Recent personal experience of extreme weather event/natural disaster

Q29 - Have you experienced an extreme weather event or a natural disaster in the last 12 months?

68 Responses

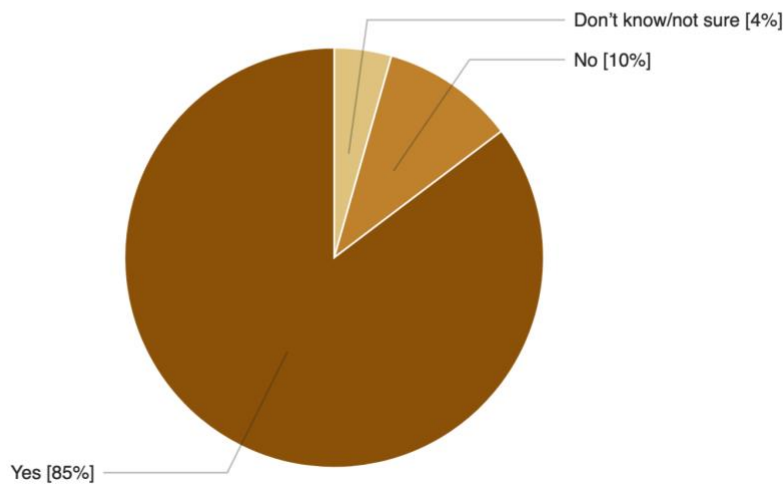


Figure 29 –Different kinds of impacts of extreme weather event/natural disaster experienced

Q30 - Which of the following impacts did you experience as a result of the extreme weather event or natural disaster? Select all that apply.

58 Responses

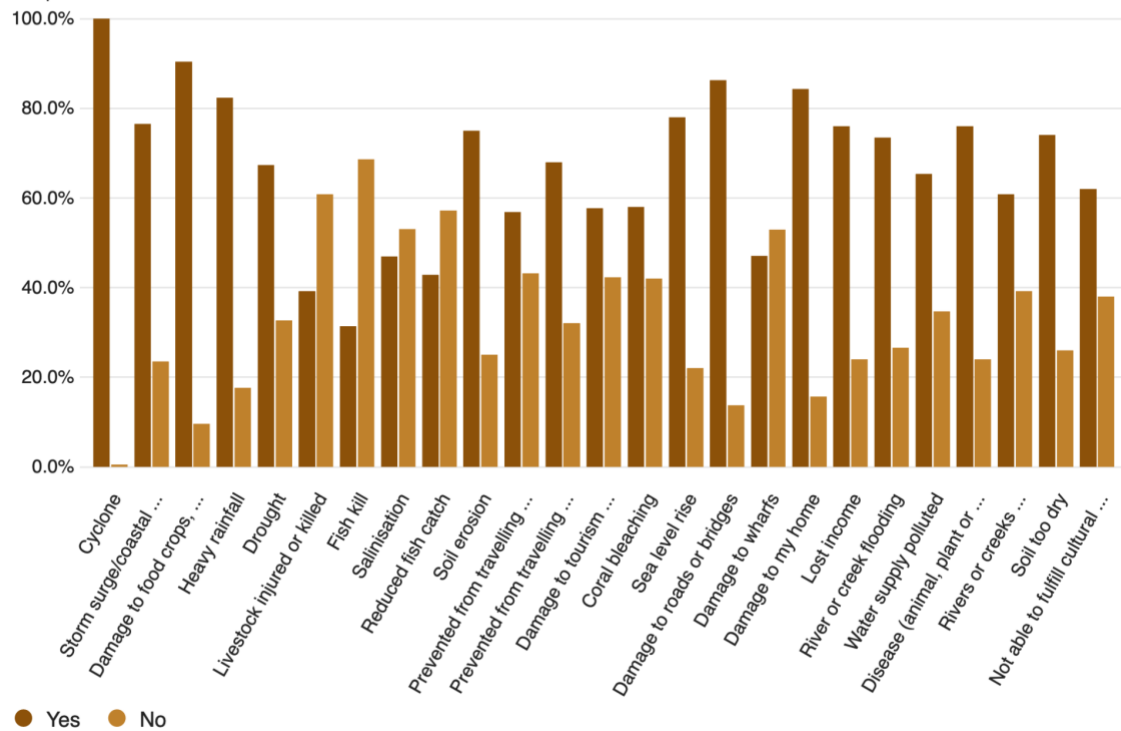
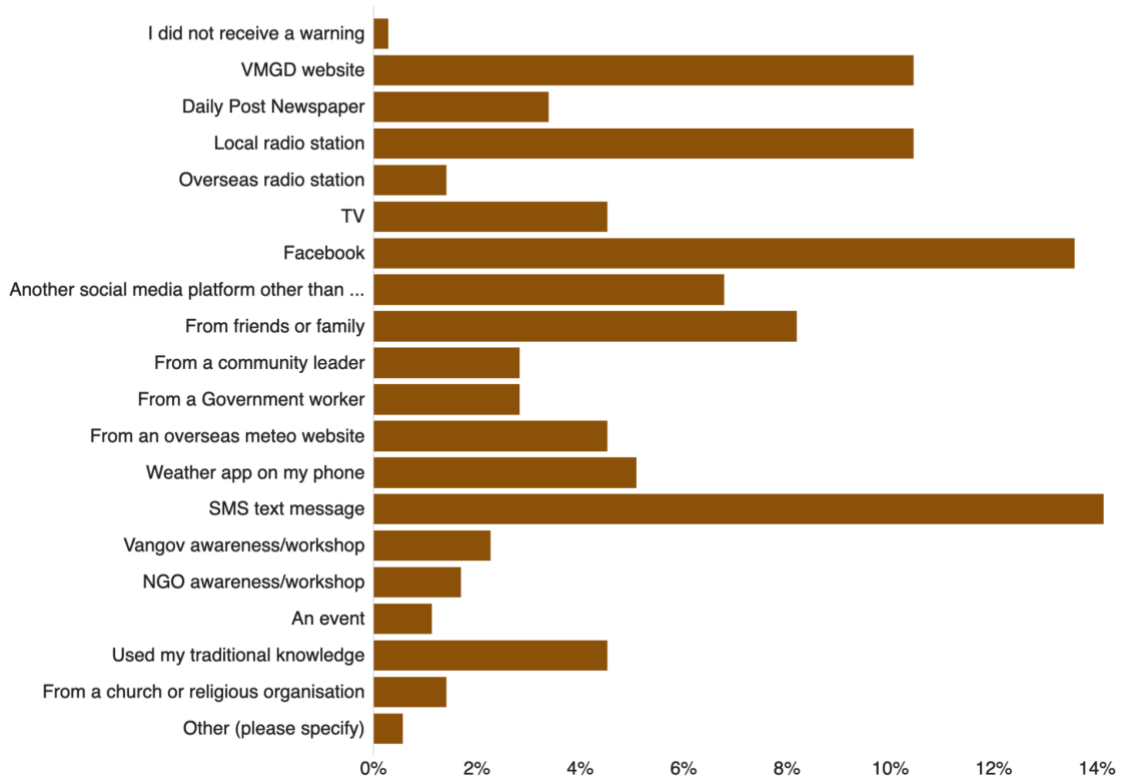


Figure 30 –Sources of prior notification of extreme weather event/natural disaster

Q31 - Where did you receive a warning about this extreme weather event or natural disaster before it happened? Select all that apply.

68 Responses



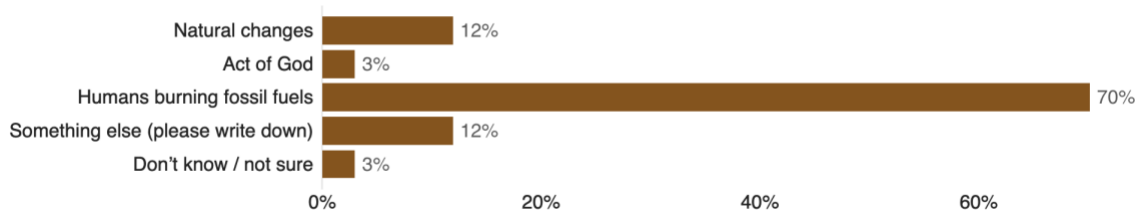
Understanding of climate change

- 70% of respondents attributed climate change to the burning of fossil fuels, with varying other ideas about the cause of climate change. This highlights a knowledge gap that climate information services can assist with, such as providing more basic information about climate change causation and impacts.

Figure 31 – Opinion on causes of climate change

Q36 - In your opinion, what is the main cause of climate change? - Selected Choice

67 Responses

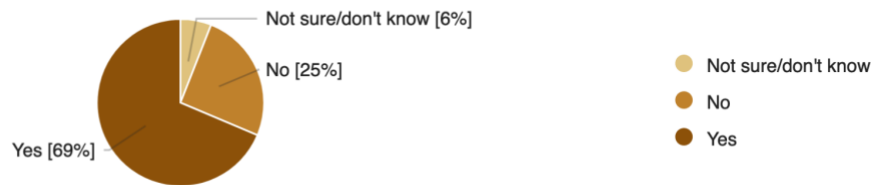


- Approximately the same number of participants (69%) indicated that they had independently tried to find out more information about climate and weather. This insight into information-seeking behaviour can be used to inform the types of content that need to be developed to meet this demand in climate information services.

Figure 32 – Personal initiative to seek out climate and weather information

Q37 - Have you ever tried to find out more information about climate or weather by yourself?

67 Responses



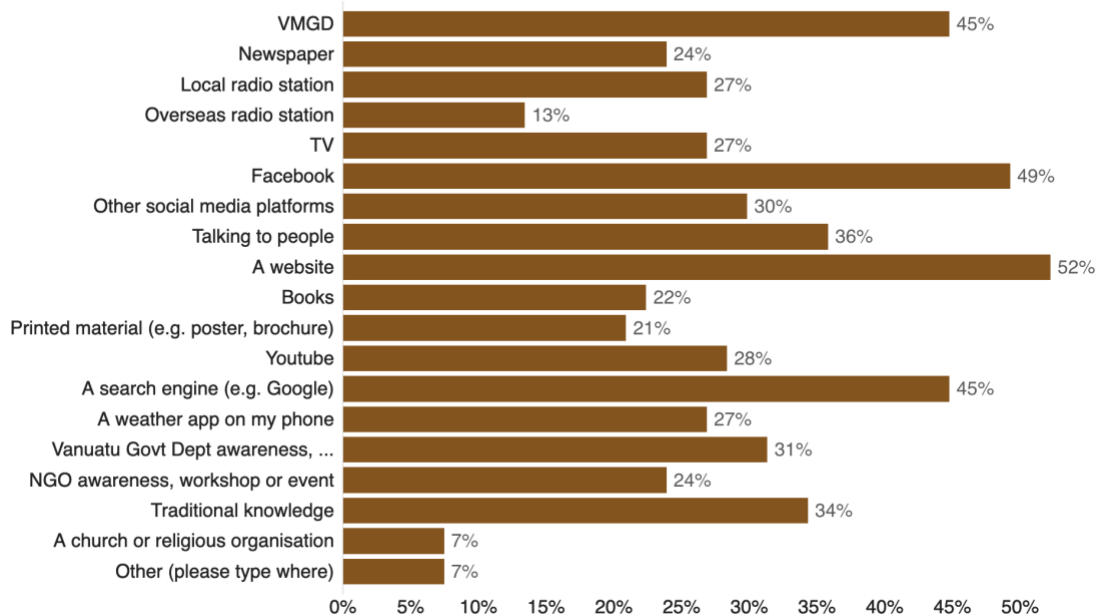
Sources of information

- Respondents reported that when they look for information on weather or climate, the top sources of information are websites (52%), Facebook (49%). VMGD (45%) and search engines (45%). Churches and overseas radio stations are low on the list for sources of information (13% and 7%), and getting information from printed material represents about one-fifth of respondents (21%).
- Talking to people (36%) and in-person interactions such as through government awareness workshops (31%) and NGO workshops (24%) remain important for almost a third of respondents.

Figure 33 – Sources of information about weather/climate

Q38 - Where did you look for information about weather or climate? Select all that apply.

67 Responses



- Over two-thirds (68%) of respondents reported high or medium levels of trust in climate and weather information found on Facebook and social media platforms. Three main Facebook pages are reported as providing key and emergency weather information to the public: two are official government Facebook pages (VMGD, NDMO), and one is operated by a private meteorologist (Vanuatu Rainfall and Agrometeorology Outlook).
- Trusted information is clearly important to respondents. Respondents shared a wide range of sources that they trust for reliable weather and climate information. The most common sources of trusted climate and weather information given were VMGD, Facebook pages, and Windy.com.

Figure 34 – Levels of trust in weather/climate information found on Facebook

Q39 - Do you feel like you can trust the climate and weather information you find on Facebook or other social media platforms?

67 Responses

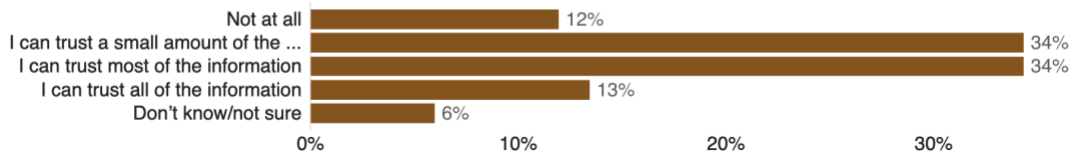


Table 3 –

Choice 1	Choice 2	Choice 3
TV news	friends and family	newspaper
VMGD	Windy	NOAA
Official meteorology website	Agriculture météo FB page	Sprep climate outlook
Trusted websites	Scientific reports and article	Activist social media groups who aim to spread awareness
Windy.com has four models	VMDG	US Navy
Facebook	Windy ty	Meteo
Local Radio Station	VBTC News	Local Official weather or news pages on Facebook
Social media	Meteorology Dept, Radio, TV	Traditional Knowledge
Windy.com	Government weather platform	Google
Radio Vanuatu	Face book	Message from phone
VRAO	VMGD	Mobile apps
Facebook	Elders	VMGD
Radio outlet	Facebook	Custom knowledge
VMGD website	Facebook	Traditional knowledge
New York times	Washington post	Conversation
A trusted scientific website	Scientific research and studies that have been peer-reviewed	Certain users on instagram
Climate information Outlooks monthly	Whether 7 day outlook	Agromet Bulletins
VMGD	Radio Vanuatu	Friends and family
Traditional knowledge	Vmgd page	Internet
Website	VMGD	Social Media Platforms (Facebook, Instagram etc.)
VGMD	Websites	
Messages from the government depart responsible	Facebook	Television
Kastom save / tradisonal kwnolej blong weta mo ol win	Radio Vanuatu	SMS text mesej (spos netwok hemi on, mi lo Is Erro samtaem i no wok mo FB i had)
VMGD	Radio Station	TV

VMGD	Climate Division	Radio/TV
radio	phone weather apps	social media
VMGD	Websites	Facebook
VmGD	Fb	Youtube
Vanuatu rainfall page on Facebook	BOM Australia	VMGD
Radio	Sms	FB
Through Facebook	Internet	Messages Mobile
Robson Tigonas Page via Facebook	VMGD page in facebook	Windy.com in google
Mr Robson Tigona's fb platform	VMGD	Local news paper.
VMGD	Trusted Websites	Forecasting App
VMGD	Facebook from Mr. Robson Tigona page	Television
VMGD	FACE BOOK	SMS
Published research	JTWC NOAA	BOM , etc
windy	vmgd	fiji met site
Weather app	Website (Google search engine)	Facebook (official page).
Vbtc	Tbv	News paper
VMGD	Google	Traditional knowledge
Windyty	Local radio station	Search engine
IPCC reports	well-known scientists	Trustworthy sources of information (WWF, National Geographic, Greenpeace, etc.)
Informations from VMGD	Workshops from NGOs	Brochures and Posters
Vanuatu Rainfall - Robson Tigona	Traditional Knowledge	VMGD
vanuatu meteo	vbtc	websites
Windyty	VMGD website	VMGD Facebook Page
VMGD	Radio	Weather app on my phone
Facebook	Radio	Internet engine- eg. Google
Radio station	SMS text	Windy for the cyclone
Search engine (Google)	VMGD	Social media
VMGD	Radio	Weather app by phone
VMGD	TRADITIONAL KNOWLEDGE	WMO
VMGD	Radio outlet	Daily post
Dr. Robson Tigona's	VMGD	Van Kirap
facebook	radio	sms

Familiarity with VMGD climate information products

- Familiarity with VMGD sites was relatively high for the majority of respondents— only 12% reported not having used a VMGD channel, and another 12% were not sure if they had used one. Familiarity with VMGD’s 116 toll-free recorded info line was reported to be the least familiar channel for VMGD information. This identifies an opportunity to consider what improvements can be made to awareness of the 116 service, and the level of accessibility to the service.
- 67% reported having used VMGD’s Facebook page, which points to a high level of demand that could be further expanded on to increase audience reach and engagement.
- Of those respondents who access VMGD platforms, cyclone warning information is a key topic (14%), followed by information about severe weather warnings (11%) and earthquake, volcano, tsunami (10%). This suggests a reasonable understanding of what kind of VMGD climate, weather and geohazard information services are available.

Figure 35 – Familiarity with VMGD climate information channels

Q43 - Have you ever used any official channel of the Vanuatu Meteorology and Geohazards Department

(VMGD)? Select all that apply.

67 Responses

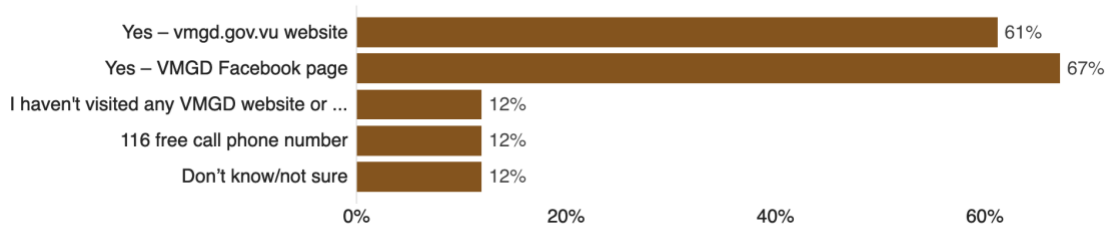
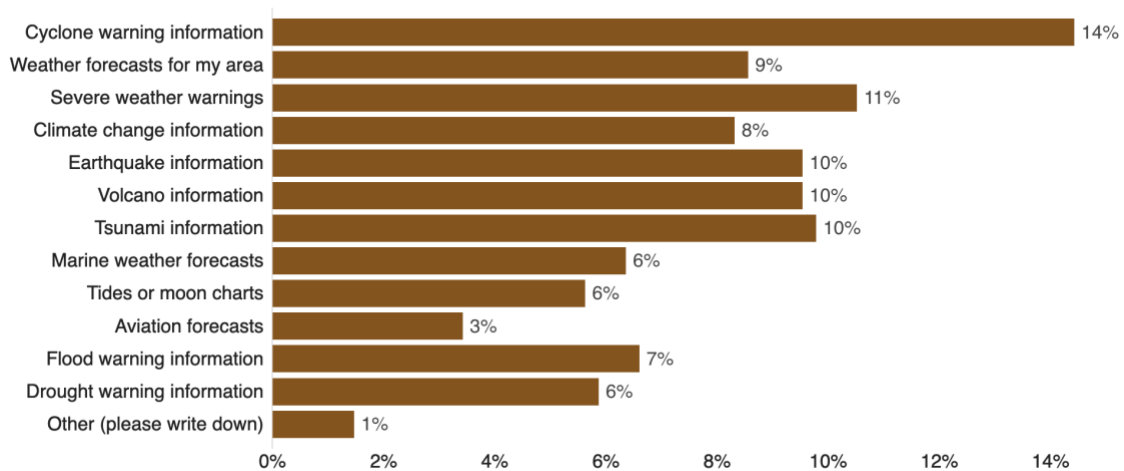


Figure 36 –Reason for seeking information from VMGD climate information channels

Q44 - What kind of information were you looking for when you used an official VMGD information

channel? Select all that apply.

67 Responses



Traditional climate and weather knowledge (TK)

- Traditional knowledge about weather and climate is considered very useful by 52% of respondents. 34% found TK slightly useful or not useful, with 12% unsure about traditional knowledge. This may be a reflection of the particular urban-centric group of respondents, as traditional knowledge

is typically transmitted in cultural, community settings. Interestingly, with the 52% who found traditional weather knowledge very useful, and the 57% who reported that traditional knowledge had changed in reliability, but was still useful, many were either rural-based or reported secondary education levels. Coupled with the person-to-person format for transmission of traditional knowledge information, and the trend for this to still be an important channel for accessing information, this suggests that traditional knowledge retains an important role as a readily accessible climate information service for Vanuatu.

- Only 13% reported that the reliability of traditional climate knowledge has reduced in utility, either somewhat or significantly. Almost a third of respondents (27%) expressed they did not know whether the usefulness of TK for predicting weather in their community or area has changed.

Figure 37 – Perceived usefulness of traditional climate knowledge

Q40 - How useful is traditional weather/climate knowledge (*kastom o lokol save blong weta o klaemet*) to you in your daily life?

67 Responses

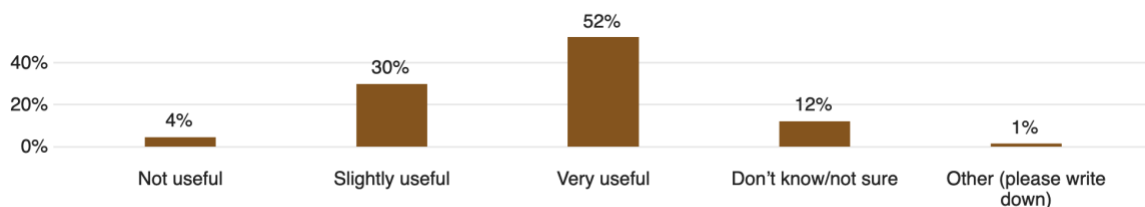
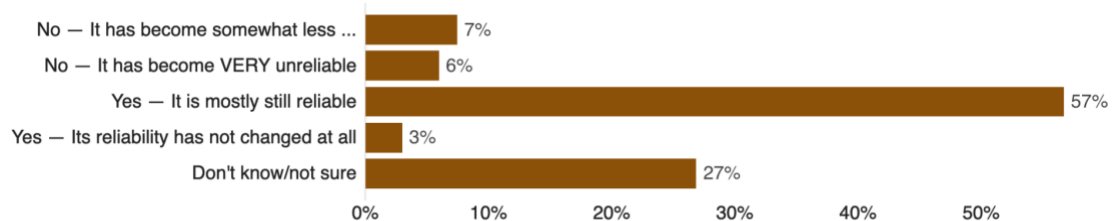


Figure 38 – Perceived changes in usefulness of traditional climate knowledge over time

Q41 - Thinking about traditional knowledge, has its usefulness for predicting weather in your community/area changed over time?

67 Responses



Open-ended suggestions

There was a diverse range of opinions offered in response to the final question about climate information preferences, and notably, a number of these identified communications channels that they believe should be invested in by VMGD: SMS, and a VMGD mobile app were the two most mentioned. Several respondents highlighted the particular requirements of rural communities, and the need for more agromet information.

Table 4 – Suggestions and comments

SMS based information needs to be provided in a timely manner. Unfortunately cyclone updates and tsunami warnings are often received quite late, too late to be useful. But thank you VMGD for your dedication and help to us all lo Vanuatu.
"List trusted sites
Earthquake history
El Nina history across last 40yrs
Cyclone history "

Being inclusive with the language of the weather information being distributed. We now live in a Diverse Nation with all kinds of people. Weather information should be shared in all 3 of Vanuatu's national Languages as we cannot be bias and expect everyone to understand all information shared in one language for everyone to understand which is why it would be great to do so.
If Radio (in emergencies when other channels are down). NOT in Bislama but English.
"In Vanuatu now a days climate change has become real in our country, so citizen of Vanuatu must be ready to face any disaster."
Weather is everyone business
e Information are very Useful ..
Find a way or Try to make it More inclusive so that our people living with Disability can understand Also..
I would like to know more about evey day weather information for me to plan my schedule of the week...and the weather information is very important to me.
Simple climate / weather messages that people with low understanding can understand.
I Prefer radio, and SMS. But i think its always best to have a climate TV where people can learn from about climate change and its impact in Vanuatu .
Since the weather is changing & time changes, people & world are moving into updated ICT for information during such disasters, here if the department can update the standard of delivering information when comes to disasters, use of weather apps, there's should be an option in phones for both digicel & Vodafone users to always check on weather when needed to get update as always. With that, a huge thanks to the department for a well great job done to always update Vanuatu for the future weather conditions affecting Vanuatu groups, salute & thank you!
Weather and climate information are very useful nowadays as we have a lot of issues concerning climate change impacting our pacific island countries as currently we are on our cyclone season period and experiencing an el nino period which may also lead to drought at some communities in the provinces of Vanuatu. we could continue receive information to radio outlets website Facebook and through channeled through church network including chiefs and the community. Through provincial technical advisory group community disaster climate change groups and VRN local network through the communities and to the last mile.
make sure people are well inform on the weather forecast. Information must accurate in order to help them in their planning.
There should be more awareness on different weathers in public and also present informations that people will want to know why we have this weather and also what do to during this weather also if informations is pass on throught government emails ,i'm sure most communities will understand what are you referring when talking abkut this terms.
Need awareness in communities in regular basis because not everyone has radio, phones, Internet....etc. Ni-Vans have quite a first hand type of behaviour that needs people to tell them in person so that the information will be passed.
a good phone app just for Vanuatu
Information should always be in bislama. Use simple words for everyone to read and understand.
To reduce climate change we must practicing the traditionals things. Not artificial things.
"1. Climate change is so frequent now so we need action in adaptation than any other activities like.
2. Thankyou for allowing me to stress my opinion.
3. How about we create multiple of free lines to call because 116 is too busy to reach especially during cyclone and after cyclone.."
Lately , VMGD has given out wrong information on cyclone location making me loosing my trust on them as a reliable source of information.
"Mobile app that can provide a range of resources to prepare for pre and post disaster and provide notification for key weather-related information. For immediate release of information, the use of SMS is too slow.
Notification might be quicker and easier to link up to other information. This requires Internet connection though."
Personally, I used Weather and Climate information for the deliverance of my courses to Students at our University.
And that I prefer updated and well-accurate information to give to the students."
"1. More awareness on when to plant crops/which crops survive better in wet/dry seasons
2. More awareness to the rural communities on the effects of climate change"
Student at primary schools should have more activities about climate change, its causes and its effects
Better if the timing is considered so information is passed on time. Most warnings received or posted are always late, or after something has happened.
Sms
My opinion is that, information is powerful weapons to safeguard the lives of people in remote rural communities around Vanuatu vu. The best way is availability to access internet services in rural areas must number priority which will help people there up to date to any information about climate change and its impacts. And also the accuracy of the the information is Paramount. I suggest you to help places in need for poor coverage of internet services and replace with them Solar Panel and internet disc. Thanks
We need to work together to reduce the impacts of climate change in Vanuatu and around the world. because actuality, the World is sick of our action.
"My suggestions are; - Create VMGD app - More awareness in the communities
- Climate program or weather information at VBTC or used as an ad on TV and frequently asking if it is possible to go out live on TV to broadcast weather forecasts. Or, add the Vanuatu Meteo channel on TBV."
"Climate change is everyone's business because it's affected our world."

CONCLUSION

Levels of awareness of the issues related to and knowledge about weather and climate change are reasonably high amongst the respondents of this Survey. However, respondents expressed particular interest in learning more about climate change impacts and responses, and there appear to be some areas where public education on climate change and information services would be beneficial, and future content production should specifically target current information gaps, such as:

- Public education and understanding of the causes of climate change needs to be deepened (this might also entail school education program partnerships with VMGD, particularly targeting provinces other than Shefa, leveraging the Community Climate Centres);
- Public awareness of the impacts of climate change on key sectors (tourism, water resources, infrastructure, fisheries and agriculture) needs to be broadened, and linked to information about climate adaptation and mitigation actions. This is a natural fit with climate resilience programs being undertaken by other government departments (for example, DARD), and will contribute to a more holistic understanding of both science-based evidence, and climate resilience action to be taken at the community and personal levels.

Survey responses indicate that there is a reasonable level of awareness and audience engagement with VMGD's climate information products (68%), however there is always room for improvement.

Future content development could consider:

- Enhancing awareness of the 116 toll-free line, and the range of climate information available via this channel (including in the 3 official languages of Vanuatu to broaden reach);
- Increasing the amount of information disseminated via the VMGD website and Facebook page. Based on anecdotal feedback, ensuring this is provided at regular, predictable intervals is key to maintaining an engaged audience and broadening audience understanding. Production of reliable, regular official information will also deepen levels of audience trust in VMGD's climate information products amongst the plethora of platforms and channels that the audience is currently using; the aim being to make VMGD the preferred source of climate information in Vanuatu, above non-official and overseas information sources.

Although beyond the scope of this survey's purview, it is worth reflecting on the Audience Survey's reflection of the attitudes towards traditional climate knowledge. Mindful that VanKIRAP has produced a Vanuatu Traditional Knowledge National Indicator Booklet (2023), survey respondents' engaged awareness with the issue of the reliability of traditional weather knowledge suggests that future content development could usefully build on and promote the Booklet's content through targeted content distribution.

Finally, the survey responses provide useful feedback on the preferred audience platforms for sourcing climate information. While VMGD's climate information products drew two-thirds of participants, efforts need to be taken to draw the remaining third of participants towards these products. The most popular channels of communication, based on audience survey responses, are Facebook (inclusive of VMGD's official page).

Recognising that survey participants were primarily from Shefa (79%) and were primarily urban and peri-urban (72% in total), with more reliable internet connectivity than in most other locations around Vanuatu, the need to continue in-person climate information flows remains highly relevant. The survey respondents identified that this remains important (50%). If this survey was replicated in more remote locations (e.g. Torba) it is likely that an additional range of audience engagement interventions would be identified that would further ensure that climate information products reach underserved rural audiences.