



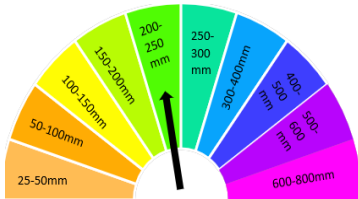
# Fiji Sugarcane Rainfall Outlook For December 2024, January 2025 & February 2025 and January to March 2025 **Experimental**

Volume 2

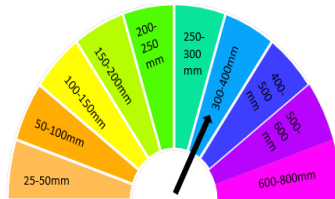
Issue: 11

Issued: December 13, 2024  
Next issue: December 31, 2024

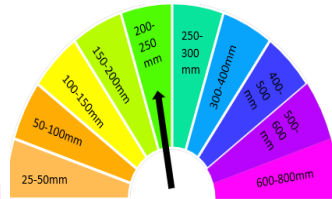
## Key Messages



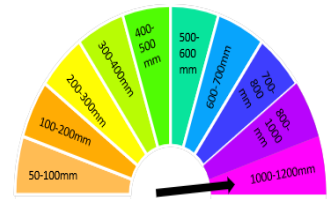
December 2024



January 2025



February 2025



January to March 2025

## English

### 1. Drainage Management

**Clean and fix drains:** Before the rainy season, ensure all farm drains are clear of debris. Check for any blockages that could cause flooding or waterlogging.

**Regular maintenance:** During rainy periods, continue to inspect the drains regularly to ensure water flows freely and that they are not blocked by leaves or mud.

### 2. Weed Control

**Pre-rain herbicide application:** Apply herbicides before rain to stop weeds from growing. This ensures that weeds are controlled before heavy rainfall makes it harder to manage.

**Cover crops or trash blanketing:** Use mulch or cover crops to smother weeds and reduce their growth. This helps protect the soil and reduces the need for chemical herbicides.

**Post-rain weed removal:** After heavy rain, manually remove weeds that grow quickly, as they might be harder to control if left unchecked.

### 3. Pest and Disease Control

**Monitor pests and diseases:** Keep an eye on pests like borers and common diseases such as Fiji Leaf Gall, which can worsen during wet conditions.

**Pre-rain treatments:** If pests or diseases are detected, treat them with appropriate chemicals or natural remedies before the rains arrive to prevent further spread.

**Post-rain checks:** After heavy rain, inspect crops for damage or disease. If necessary, remove or destroy any affected plants to stop the spread of pests and disease.

### 4. Soil and Fertilizer Use

**Careful fertilizer application:** Use split applications of fertilizer to avoid runoff during heavy rains. This ensures that nutrients are absorbed effectively by plants without being washed away.

**Reapply after floods:** After floods, nutrients may be leached from the soil. Reapply fertilizers as necessary to replace the lost nutrients and maintain healthy plant growth.

### 5. Waterlogging and Cyclone Readiness

**Avoid planting in flood-prone areas:** Try not to plant crops in areas prone to waterlogging or flooding. These areas are less likely to produce healthy crops during the rainy season.

**Maintain in-field drainage systems:** Ensure that any internal drainage systems, such as ditches or furrows, are clean and functioning to prevent waterlogging.

## 6. Protect Farm Tools and Crops

**Secure storage for tools and chemicals:** Ensure that farm tools, fertilizers, and chemicals are stored in a dry, secure location to prevent rusting, contamination, or damage from the rain.

**Trim overhanging branches:** Trim any trees or branches that could fall during heavy storms or cyclones, causing damage to crops or equipment.

**Proper storage of leftover fertilizer:** After applying fertilizers, ensure that any leftover product is stored in a safe, dry place to maintain its effectiveness and prevent leaching.

7. SRIF technology transfer officers and FSC farm advisors can be contacted for more information on 8921839.

## *Hindi Version*

### 1. Jal Nikaasee Prabandh

**Naaliyon ko saaf aur theek karen:** Barasaat ke mausam se pahale, sunishchit karen ki sabhee khet kee naaliyaan saaf hon. Kisee bhee rukaavat kee jaanch karen jo baadh ya jalabharaav ka kaaran ban sakatee hai.

**Niyamit sanrakshan:** Barasaat ke dauraan, niyमित roop se naaliyon ka nireekshan karate rahen taaki yah sunishchit ho sake ki paanee sahi roop se bahata rahe aur ve pattiyon ya keechad se avaruddh na hon.

### 2. Ghaas Nivantran

**Baarish se pahale ganne ke dawai ka prayog:** Ghaas ko badhane se rokane ke liye baarish se pahale ganne ke dawai ka prayog karen. Isase yah sunishchit hota hai ki bhaaree varsha se pahale ghaas ko niyantrit kar liya jaata hai, jisase prabandhan karana kathin ho jaata hai.

**Phasalon ko dhaken ya koodedaan bichhaen:** Ghaas ko dabaane aur unkee vrddhi ko kam karane ke liye geelee ghaas ka upayog karen ya phasalon ko dhaken. Isase mittee kee raksha karane mein madad milatee hai aur raasaayanik jadee-bootiyon kee aavashyakata kam ho jaatee hai.

**Baarish ke baad ghaas hataana:** Bhaaree baarish ke baad, tejee se badhane vaale ghaas ko mainyual roop se hata den, kyonki agar aniyantrit chhod diya gaya to unhen niyantrit karana kathin ho sakata hai.

### 3. Keet evan Rog Nivantran

**Keeton aur beemaariyon par nazar rakhen:** Borer jaise keeton aur Fiji Leaf Gall jaisee saamaany beemaariyon par nazar rakhen, jo geelee sthitiyon ke dauraan kharaab ho sakatee hain.

**Baarish poorv upachaar:** Yadi keet ya rog pae jaate hain, to aage phailane se rokane ke liye baarish aane se pahale uchit rasaayanon ya praakrtik upachaaron se unaka ilaaj karen.

**Baarish ke baad kee jaanch:** Bhaaree baarish ke baad, kshati ya beemaaree ke liye phasalon ka nireekshan karen. Yadi aavashyak ho, to keeton aur beemaariyon ke prasaar ko rokane ke liye kisee bhee prabhaavit paudhe ko hata den ya nasht kar den.

### 4. Mittee evan Urvarak ka Upayog

**Urvarakon ka saavadhaanee poorvak prayog:** Bhaaree baarish ke dauraan paanee ke bahaav se bachane ke liye urvarakon ka vibhaajit prayog karen. Yah sunishchit karata hai ki poshak tatv bina dhule paudhon dvaara prabhaavee dhang se avashoshit ho jaate hain.

**Baadh ke baad punah aavedan karen:** Baadh ke baad, mittee se poshak tatv nikal sakate hain. Khoe hue poshak tatvon kee bharapae karane aur svasth paudhon ke vikaas ko banae rakhane ke liye aavashyakata anusaar urvarakon ko dobara daalen.

### 5. Jalajamaav aur toophaan ki taiyaaree

**Baadh sambhaavit kshetron mein ropan se bachan:** Koshish karen ki jalabharaav ya baadh vaale kshetron mein phasalen na lagaen. In kshetron mein barasaat ke mausam mein svasth phasal paida hone kee sambhaavana kam hotee hai.

**In-field jal nikaasee pranaaliyon ko banae rakhen:** Sunishchit karen ki koee bhee aantarik jal nikaasee pranaaliyaan, jaise ki khaee ya naalee, saaph hain aur jalabharaav ko rokane ke liye kaam kar rahee hain.

## 6. Khet Aujaaron aur Phasalon kee Raksha Karen

**Aujaaron aur rasaayanon ke liye surakshit bhandaar:** Sunishchit karen ki khet ke aujaar, urvarakon aur rasaayanon ko jang lagane, sandooshan ya baarish se hone vaale nukasaan se bachaane ke liye sookhe, surakshit sthaan par sangrahit kiya jae.

**Latakatee shaakhaon ko chhaanten:** Kisee bhee ped ya shaakhaon ko chhaanten jo bhaaree toophaan ke dauraan gir sakate hain, jisase phasalon ya upakaranon ko nukasaan ho sakata hai.

**Bache hue urvarak ka uchit bhandaar:** Urvarak lagaane ke baad, sunishchit karen ki kisee bhee bache hue utpaad ko usakee prabhaavasheelata banae rakhane aur leeching ko rokane ke liye ek surakshit, sookhee jagah par sangrahit kiya jae.

7. Adhik jaanakaaree ke liye SRIF yah FSC pharm salaahakaaron se 8921839 par sampark kiya ja sakata hai.

## *I Taukei Version*

### 1. Laurai ni Vakata

**Samaki ni I vakata:** Namaki me na laurai me samaki vinaka na veivakata ni bera ni tekivu na gauna ni draki suasua. Qarauni me na kua ni dua na ka me vakataotaka na drodro ni wai, ka na rawa ni vakavuna na luvu ni teitei.

**Samaki wasoma na I vakata:** Qarauni me na dau talevi wasoma na veivakata lalai, e na gauna ni draki suasua, me qarauni me na drodro vinaka tiko na wai e na gauna ni tau ni uca.

### 2. Qarauni na Tubu ni Co

**Vakayagataki ni vakabulabula ni qele:** Ni sa vakasalataki me na tekivu vakayagataki na I vakabulabula ni qele, ni bera ni tekivu tau na uca, me na rawa ni tarova na tubu ni coca. Oqo e na veivuke e na kena vakaberaberataki na tubu ni co ca, ni sa tekivu me vakilai na veitaravi ni tau bi ni uca.

**Samaki/ Ubiraki ni teitei:** Ni sa vakasalataki e na kena dau samaki ka biu tu na benu e na I teitei me na rawa ni ubia na I tei, me na rawa ni vakaberaberataki na tubu ni co ca. Na I walewale ni samaki ni teitei oqo, e na rawa ni vakalailaitaka tale ga na kena vakayagataki ni wainimate e na I teitei.

**Samaki ni teitei ni tau oti na uca:** Ni sa vakasalataki mo ni takevu samaka tiko yani na nomuni teitei ni tau oti na uca, me vaka ni na rawa ni tekivu me dredre na kena samaki ni sa tekivu veitaravi na tau ni uca, ka na totolo na tubu ni co.

### 3. Qarauni na Basika ni Manumanu kei na Veimataqali mate e so

**Yadravi na veimataqali mate:** E na gauna ni draki suasua, ni sa vakasalatki me yadravi vakavinaka na I teitei me vaka ni na rawa ni basika na veimanumanu, ka na rawa ni kauta mai na veimataqali mate e na I tei.

**Veigaravi ni bera na tau ni uca:** Ni bera na gauna ni tau ni uca, kevaka e sa tekivu laurai e so na veimataqali mate eso, ni sa vakasalataki mo ni vakayagataka na kena wainimate se I walewale tale e so ni kena wali, me rawa ni tarova na kena dewa ki na vo ni tei tale e so, ni bera na gauna ni tau ni uca.

**Sikovi ni teitei ni sa tau oti na uca:** Ni sa dau oti na uca, gadrevi me na dau laurai na I teitei, ka kau laivi tale ga na I tei ka sa tekivu laurai kina na tauvimate se veimataqali mate e so, me na rawa ni tarova tale ga na kena teteva na vo ni teitei.

### 4. Vakayagataki ni Qele kei na Vakabulabula ni Qele

**Vakayagataki ni vakabulabula ni qele:** Ni sa vakasalataki mo ni vida rua na vakayagataki ni vakabulabula ni qele, me na rawa ni tarova na kena sisi e na gauna ni tau bi ni uca. Na I walewale oqo e na rawa ni vukea na kena vakayagataka na I tei, na I vakabulabula ni qele, ka tarova tale ga na kena savata laivi na uca e na gauna ni tau ni uca.

**Vakayagataki ni vakabulabula ni qele, ni tau oti na uca:** E na gauna ni tau ni uca, e na rawa ni savati laivi na I vakabulabula ni qele e na gauna ni tau ni uca.

### **5. Vakavakarau ki na Waluvu kei na Cagilaba**

**Teitei e na vanua lolovira:** Ni sa vakasalataki me vakalailaitaki na teitei e na vanua dau luvuluvu rawarawa, me vaka ni na rawa ni vakavuna na bula gogo ni I tei e na gauna ni vula I suasua.

**Drodro ni wai:** Sa kerei me na dau samaki vinaka na vei keli se vakata lalai, me na rawa ni tarova na kena luvu na I teitei e na gauna ni tau ni uca.

### **6. Maroroi ni Teitei kei na I Yaya ni Teitei**

**Maroroi vinaka na I ayaya ni cakacaka kei na wai ni mate:** Qarauni me maroroi vinaka na I yaya.

**Musu na Tabu ni Kau:** Ni sa vakasalataki me tekivu musu na veitaba ni kau, ka ra rawa ni kamusu e na gauna ni cagilaba, ka na rawa ni vakacacana na I teitei se I yaya ni loma ni bai.

**Maroroi ni vakabulabula ni qele:** Sa kerei me dau maroroi vinaka na I vakabulabula ni qele ni sa vakayagataki oti, e na dua na vanua matau, me na rawa ni vakayagataki tale.

7. Ke tu tale e so nomuni vakatataro, e ratou tu vakarau na Tabana ni Technology Transfer e na SRIF, kei iratou na daunivakasala vei kemuni na dauteitei e na FSC, me ratou sauma na nomuni taro, e na naba ni talevoni 8921839.

## **Climate Outlook**

- El Niño Southern Oscillation (ENSO) is currently on neutral, with indicators continuing to favor development of La Niña from December 2024 to February 2025 period.
- For December 2024, there is a high (75%) chance of receiving at least **200-250mm** of rainfall in Sigatoka area, **250-300mm** of rainfall from Malolo to Rakiraki, Seaqaqa, Labasa, Batinikama and Vunivutu, while there is high chance of receiving at least **300-400mm** of rainfall in Dobuilevu and the rest of the sugarcane belt areas in Vanua Levu.
- During January 2025, there is a high (75%) chance of receiving at least **200-250mm** of rainfall in Sigatoka area, **250-300mm** of rainfall from Malolo to Tagitagi, and Penang., while there is high chance of receiving at least **300-400mm** of rainfall in Mota, Koronubu, Rarawai, Navatu, Vatukoula, Tavua and across sugarcane belt areas in Vanua Levu.
- For February 2025, there is a high (75%) chance of receiving at least **200-250mm** of rainfall in sigatoka area, **250-300mm** of rainfall from Malolo to Penang, Labasa, Batinikama, Wainikoro and Vunivutu, while there is high chance of receiving at least **300-400mm** of rainfall in Dobuilevu and the rest of the sugarcane belt areas in Vanua Levu.
- During January to March 2025 period, there is a high (75%) chance of receiving at least **800-1000mm** of rainfall from Olosara to Tagitagi, while there is high chance of receiving at least **1000-1200mm** of rainfall across remaining sugarcane belt areas in Viti Levu and Vanua Levu.
- Fiji is now in its tropical cyclone season, which began on 1st November and continues until 30th April.
- Fiji is likely to be affected by one to two (1-2) tropical cyclones during the coming cyclone season, with one cyclone likely to reach severe category (Category 3-5).
- There is equal risk of tropical cyclones to affect any part of the Fiji Group.
- All communities should remain alert and prepared throughout the tropical cyclone season and take heed of all advisories and warning issued.

## Rainfall Outlook: December 2024

75% chance of rainfall exceeding X mm:  
December 2024

Data source: ACCESS-S2  
Observations: MSWEP

Base period: 1981-2018

Model Run: 09/11/2024  
Issued: 11/11/2024

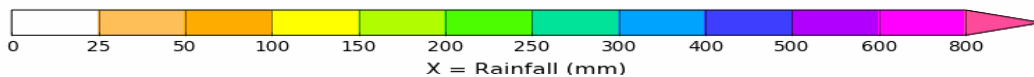
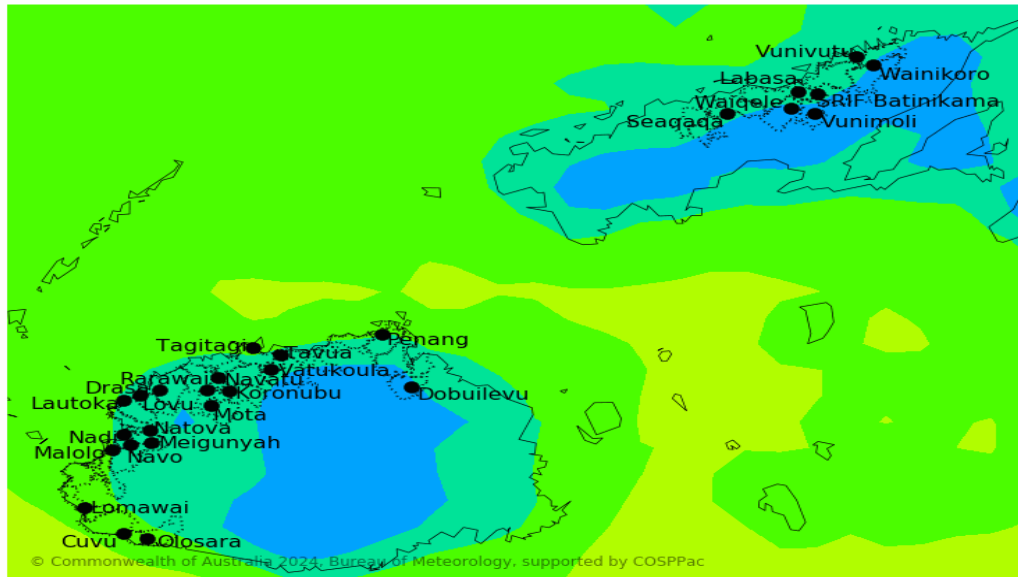


Figure 1: High (75%) chance of receiving at least 200-250mm of rainfall in sigatoka area, 250-300mm of rainfall from Malolo to Penang, Seaqqa, Labasa, Batinikama and Vunivutu, while there is high chance of receiving at least 300-400mm of rainfall in Dobuilevu and the rest of the sugarcane belt areas in Vanua Levu. The confidence in the outlook is moderate.

## Rainfall Outlook: January 2025

75% chance of rainfall exceeding X mm:  
January 2025

Data source: ACCESS-S2  
Observations: MSWEP

Base period: 1981-2018

Model Run: 09/11/2024  
Issued: 11/11/2024

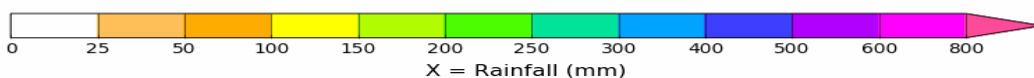
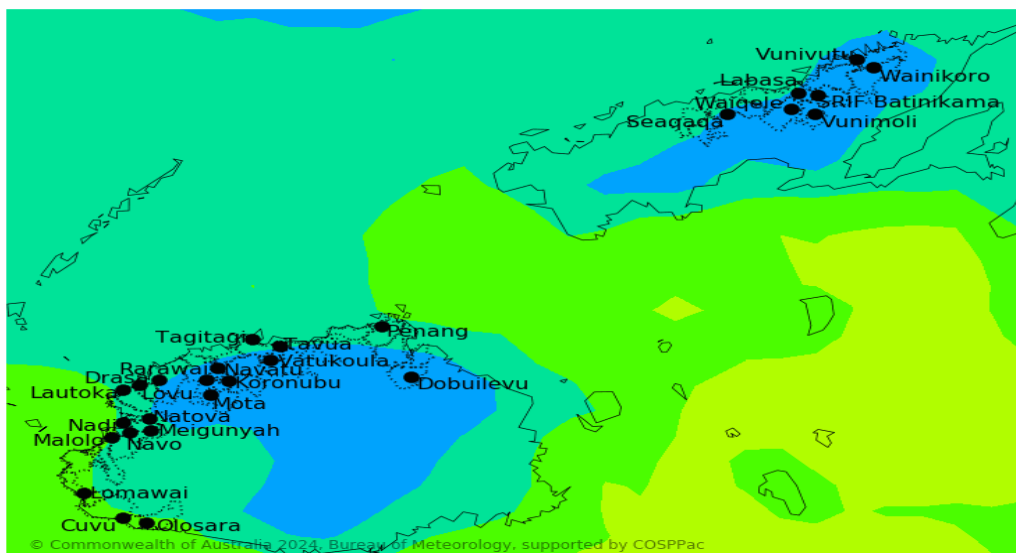


Figure 2: High (75%) chance of receiving at least 200-250mm of rainfall in Sigatoka area, 250-300mm of rainfall from Malolo to Tagitagi, and Penang,, while there is high chance of receiving at least 300-400mm of rainfall in Mota, Koronubu, Rarawai, Navatu, Vatukoula, Tavua and across sugarcane belt areas in Vanua Levu. The confidence in the outlook is low to good.

## Rainfall Outlook: February 2025

75% chance of rainfall exceeding X mm:  
February 2025

Data source: ACCESS-S2  
Observations: MSWEP

Base period: 1981-2018

Model Run: 09/11/2024  
Issued: 11/11/2024

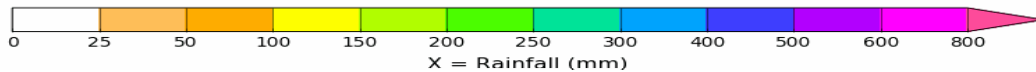
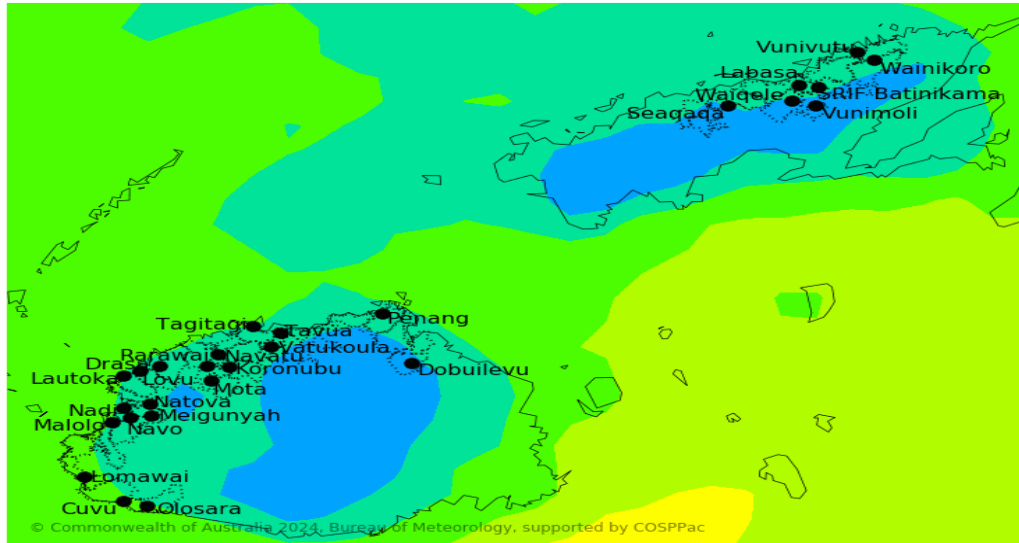


Figure 3: There is a high (75%) chance of receiving at least 200-250mm of rainfall in sigatoka area, 250-300mm of rainfall from Malolo to Penang, Labasa, Batinikama, Wainikoro and Vunivutu, while there is high chance of receiving at least 300-400mm of rainfall in Dobuilevu and the rest of the sugarcane belt areas in Vanua Levu. The confidence in the outlook is low to good.

## Rainfall Outlook: January 2024 to March 2025

75% chance of rainfall exceeding X mm:  
January to March 2025

Data source: ACCESS-S2  
Observations: MSWEP

Base period: 1981-2018

Model Run: 09/11/2024  
Issued: 11/11/2024

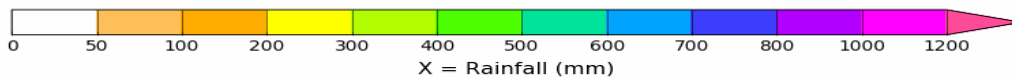
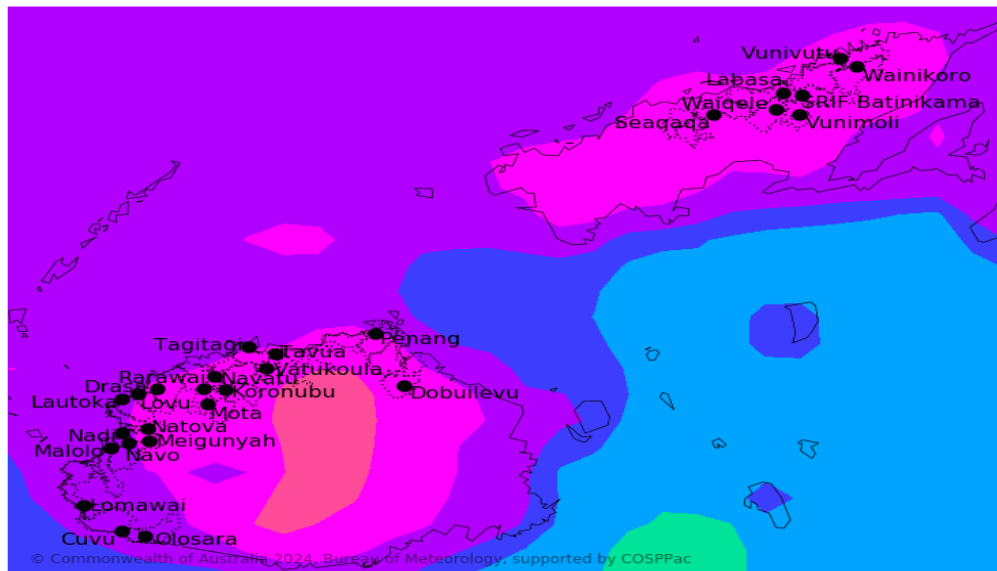


Figure 4: High (75%) chance of receiving at least 800-1000mm of rainfall from Olosara to Tagitagi, while there is high chance of receiving at least 1000-1200mm of rainfall across remaining sugarcane belt areas in Viti Levu and Vanua Levu. The confidence in the outlook is high to very high.

## Explanatory Notes

### Fiji Sugarcane Rainfall Outlook

The Fiji Sugarcane Climate Outlook is a collaborative product of the Fiji Meteorological Service (FMS) and the Sugar Research Institute of Fiji (SRIF). It is produced to provide advisories to the farmers and other key sugar industry stakeholders. It aims to provide advanced warning on climate abnormalities for informed decision making. The product is issued on a monthly basis.

### El Niño Southern Oscillation (ENSO)

ENSO is the principal driver of the year-to-year variability of Fiji's climate. There are two extreme phases of this phenomena, *El Niño* and *La Niña*.

El Niño or La Niña events usually recur after every 2 to 7 years. It normally develops during the period April to June, attains peak intensity between December to February and decays between the period April to June the following year. While most events last for a year, some have persisted for up to 2 years. It should be also noted that no two El Niño or La Niña events are exactly the same. Different events have different impacts, but most exhibit some common climate characteristics.

Usually there is a lag effect on Fiji's climate with ENSO events, that is, once an El Niño or La Niña event is established in the tropical Pacific, it may take 2-6 months before its impact is seen on Fiji. Similarly, once an event finish, it can take 2-6 months for climate to normalise.

**El Niño** events are associated with warming of the central and eastern tropical Pacific. El Niño events usually result in reduction of Fiji's rainfall. Often the whole of Fiji is affected in varying degrees and it is quite unusual for one part of the country to experience a prolonged dry spell, while the other is in a wet spell. The relationship and level of rainfall suppression is greater in the Dry Zone (sugarcane growing areas) than in the Wet Zone. It is the suppression of rainfall during the Cool/Dry Season (May to October) that is normally of most concern. Dry Season mean monthly rainfall in the Dry Zone ranges between 40mm and 90mm. A reduction in Cool/Dry Season rainfall in the Dry Zone results in little or no rainfall until the next Wet Season. While usually the strength of an ENSO event is proportional to its impact on Fiji, at times weak event can also have a significant impact.

**La Niña** events are associated with cooling of the central and eastern tropical Pacific. Usually La Niña results in wetter than normal conditions for Fiji, occasionally leading to flooding during the Warm/Wet Season (November to April).

When ENSO is neutral, that is, neither El Niño nor La Niña, it has little effect on global climate, meaning other climate influences are more likely to dominate.

**Lag effects** – means that there is a delay in the impacts of some aspect of climate due to influence of other factors that is acting slowly.

**Disclaimer:** The seasonal climate outlook provided in this document is presented for the sugar sector and should be used as a guide only. While FMS and SRIF takes all measures to provide accurate information and data, it does not guarantee 100% accuracy of the forecast presented in this outlook. Please enquire with FMS and SRIF for expert advice, clarifications and additional information as and when necessary. The user assumes all risk resulting directly or indirectly from the use of the climate prediction information.