Verification of Subsequent Week Forecast for the Subdivision: xxxxxx

Month, 20xx

Forecast Category: Normal/Above Normal/Below Normal (N/AN/BN) – Rainfall/Tmax/Tmin

	Week 1		Week 2		Week 3		Week 4		Week 5	
	Tue	Fri	Tue	Fri	Tue	Fri	Tue	Fri	Tue	Fri
Forecast										
Actual										

Monthly Forecast Verification:

1. The mean weekly/monthly/seasonal deterministic forecast verification is carried out for 3×3 contingency table for rainfall and 2×2 contingency table for temperature (Minimum and Maximum).

Skill score for mean weekly rainfall

		Observed			
		Above Normal	Normal	Below Normal	Total
Forecast	Above Normal	a	b	c	A
	Normal	d	e	f	B
	Below Normal	g	h	i	C
	Total	D	E	F	G
	Hits=a+e, Misses= b+d+h, False=c+f+g, Correct Negative=i				

Sr.No.	Skill	Formula
1	Accuracy (ACC)	$\dfrac{\text{Hits} + \text{Corret Negatives}}{\text{Total}}$
2	Bias score (BIAS)	$\dfrac{\text{Hits} + \text{False Alarms}}{\text{Hits} + \text{Misses}}$
3	Probability of detection (POD)	$\dfrac{\text{Hits}}{\text{Hits} + \text{Misses}}$
4	False alarm ratio (FAR)	$\dfrac{\text{False Alarms}}{\text{Hits} + \text{False Alarms}}$

5	Critical success index (CSI)	$\dfrac{\text{Hits}}{\text{Hits + Misses + False Alarms}}$
6	Success ratio (SR)	$\dfrac{\text{Hits}}{\text{Hits + False Alarms}}$
7	Miss ratio (SR)	$\dfrac{\text{Misses}}{\text{Hits + Misses}}$

Criteria for calculation the deviation from normal for RF:

Above Normal (20% or more)
Normal (-19% to 19%)
Below Normal (-20% or less)

2. Skill score for mean weekly for temperature (Minimum and Maximum)

		Observed	
		Below Normal	Above Normal
Forecast	Below Normal	a	b
	Above Normal	c	d
	Forecast accuracy =(a+d)/(a+b+c+d) Bias score (BIAS) =(b-c)/(b+c) ; BIAS< Underforecast; BIAS> Overforecast		

Criteria for calculation the deviation from normal for Temp:

Above Normal (+1.6 or more)
Normal (-1.5 to +1.5)
Below Normal (-1.6 or less)

Similar table for seasonal may also be prepared by combining various months in the seasons.

Verification of the Agromet Advisory issued by units:

		Rainfall (mm)	Tmax (°C)	Tmin (°C)	Warning (If any)
First 5 days forecast (cumulative)					
Subsequent week forecast					
1a.	Advisory (crop, horticulture, livestock and block specific)				
1b.	Importance of subsequent week forecast in agromet advisory generation				
2a					
2b					
3a					
3b					
…					

This needs to be done for other dates of advisory issued.