

NATIONAL AGROMETEOROLOGICAL ADVISORY BULLETIN



08th March 2022 to 08th April 2022

Issued on 08th March 2022



**Department of Meteorology
Department of Agriculture
World Food Programme
2022.02.08**



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Farmers and all other farm managements are advised to follow the guidelines of Government of Sri Lanka to avoid infection and social transmission of CORONA virus (COVID-19). Precautions and safety measures should be taken up to prevent the Corona virus spread. Simple measures include social distancing, maintaining personal hygiene by washing hands with soap, wearing of face mask, drink hot water, stay at home and cleaning of implements and machinery. Farmers should not work in a group; consult with a doctor in case of any symptom.

Weather and Climate update

Department of Meteorology

Rainfall Analysis-February 2022

According to the available rainfall data in the Department of Meteorology, below normal rainfalls were reported over Kurunegala, Kegalle, Mathale, Kandy and Hambantota and in some parts of Monaragala districts and near or above normal rainfalls were reported elsewhere of the country during the month of February 2022.

Observed rainfall as a percentage of normal during the month of February 2022 is shown in the figure 1(a) and observed cumulative rainfall as a percentage of normal from 1st January 2021 to 28th February 2022 is shown in the figure 1 (b).

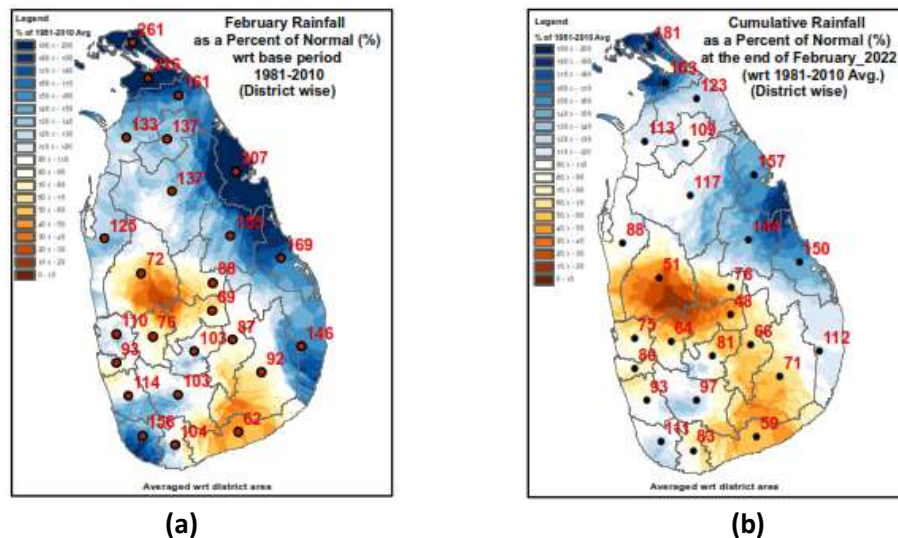


Figure 01 : Observed Monthly rainfall as percentage of long-term average (1981-2010) during February 2022 (a) and cumulative rainfall from 01st January 2022 to 28th February 2022 as percentage of long term average (1981- 2010) (b)



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Temperature analysis (February)

Average maximum temperatures were a little above normal over Hambantota district and little below normal over Anuradhapura and Vavuniya districts. Average maximum temperatures were near normal over remaining parts of the country during the month of February 2022. Average minimum temperatures during the month of February 2022 were mostly near normal over the country except Vavuniya, Kurunegala and Galle districts, where average minimum temperatures were little above normal during the period.

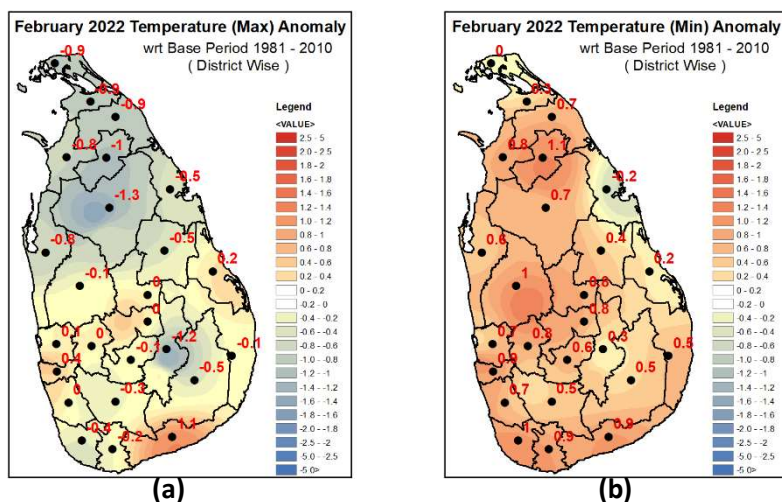


Figure 02 : Average Maximum (a) and Minimum (b) Temperature anomalies during the month of February 2022 compared with the long-term average (1981-2010)

Weather Forecast: Forecast for the month March 2022(Weekly)

(Updated on 3 March 2022)

Slightly above normal rainfalls are likely over most parts of the country except south-eastern part during the week of 04-10 March 2022 and there is a probability to experience above normal rainfall over the country, during the week starting from 11 to 17 March 2022. During the week of 18-24 March 2022, near or slightly above normal rainfalls are likely over the country and slightly below normal rainfalls are likely over the country from 25-31 March 2022 (figure 03).



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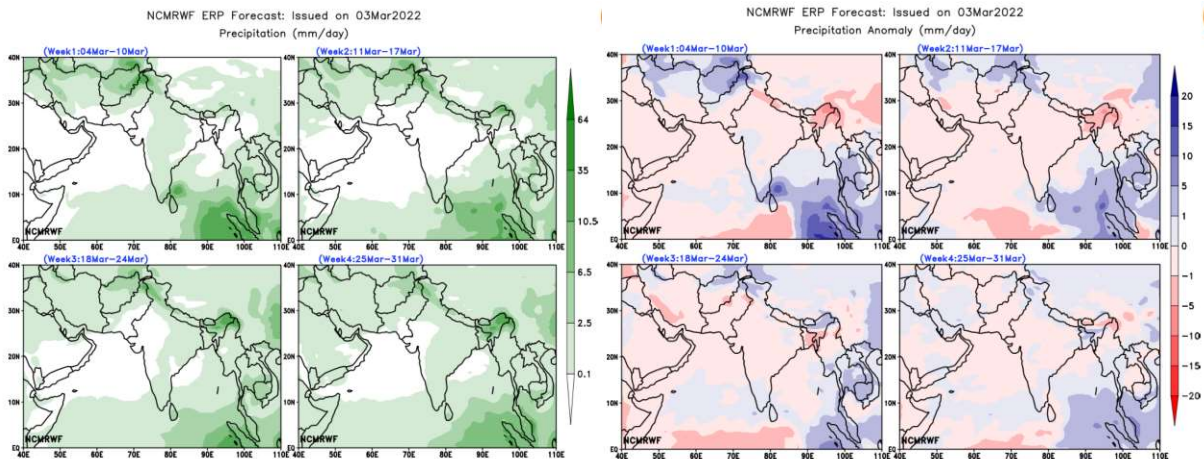


Figure 03 : Weekly rainfall Forecast and the Rainfall anomaly (mm/day)

Note: Department of Meteorology issues **Weekly Agromet Bulletin** to update climatological situation. It can be downloaded from the web page link- [Agromet Bulletin \(meteo.gov.lk\)](http://www.meteo.gov.lk)
http://www.meteo.gov.lk/index.php?option=com_content&view=article&id=28&Itemid=301&lang=en#weekly-updates-2022

Weather forecast for the season of March-April-May (MAM) 2022




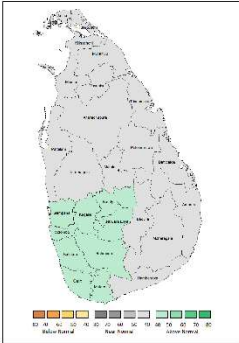

Figure 04 : Seasonal Rainfall Forecast for March-May 2022 (MAM 2022)

According to the Department of Meteorology, there is a probability for near or slightly above normal rainfall over most parts of the country for the MAM season 2022 (Fig. 4).



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Monthly Rainfall Forecasts for March-April-May 2022

Month	Rainfall forecast
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">March 2022</div>	<p>Near normal rainfalls are likely over most parts of the country during the month of March 2022.</p>
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">April 2022</div>	<p>There is a possibility for slightly above normal over southwestern part and near normal rainfall over other areas during the month of April 2022.</p>
 <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;">May 2022</div>	<p>There is no clear signal to issue a forecast for the month of May 2022. As such there are equal probabilities of having above, near or below normal rainfalls, during May 2022.</p>



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Agro-met Advisory: March 2022

(For the months of March April and May)

Consensus Seasonal outlook of Department of Meteorology (DoM) stated a **near normal rainfall** for **March**. For **April**, **slightly above normal** rainfall forecast has been issued over **south-western** part and **near normal rainfall** over **other areas** of the country. No weather prediction has been issued for May. DoM further forecasts that, **near or slightly above normal rainfalls** over most parts of the country for the **March April and May** (MAM) season. With the available weather information, it is advisable to consider general climatological rainfall values of each month for agriculture planning. Agro-ecological region-wise expected average rainfall values are attached in Table 1 - 3.

According to the Irrigation Department (ID), the average effective storage of major reservoirs is about 67%. Recently updated summary of daily water levels & storage of major reservoirs are attached in Table 4. ID further stated that, with the available water in major and medium reservoirs, a successful *Yala* season can be started and the season can be continued with the normal or slightly above normal rainfall predicted by DoM. Department of Agrarian Development (DAD) agree with ID and informed that minor irrigation tanks in major paddy growing areas such as Anuradhapura, Polonnaruwa, Kurunegala, Trincomalee and Batticaloa have satisfactory water levels. However, water levels in some minor irrigation tanks such as Moneragala do not possess satisfactory level of water.

Considering the weather forecast of DoM and irrigation water availability information of ID and DAD, the following agronomic interventions are recommended to plan the coming *Yala* season (2022 *Yala* season).

Paddy cultivation:

- Paddy farmer who are still at their harvesting stage for *Maha* season, should have to plan their harvesting practices under prevailing dry period, considering short-term weather forecasts issued by DoM to avoid sudden short-interval rains.



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- Both rainfed and irrigated paddy farmers are advised plan their land preparation activities for the coming *Yala* season immediately after completion of the harvesting practices. Try to start land preparation activities before mid-April. Maintain proper interval between each land preparation activity to decrease weed population in the field.
- Irrigated paddy systems should have to plan to get the maximum benefits of rain water to minimize the water use from the reservoirs.
- Three and half (3½) months paddy varieties are recommended for coming *Yala* season to the farming systems under major and medium tanks.
- If the water storage of minor tanks is not highly satisfactory, choose 3 month aged paddy varieties, in consultation with the officials of the Department of Agrarian Development.
- Avoid staggered cultivation to minimize the irrigation water losses and to minimize the pest and disease impacts.
- Encourage seedling broadcasting if parachute trays are available and transplanting wherever possible.
- Use 3-month aged paddy varieties for rainfed rice systems
- Maximum possible extent of paddy lands should have to cultivate to achieve the national targets, getting the maximum benefits of predicted rainfall and satisfactory level of water storage of the reservoirs.

Other Field Crops (OFCs)

- Farmers who are planning to cultivate other field crops (OFCs) with the available irrigation water, should have to start the cultivation activates during the first week of April. This will be beneficial to maximize the usage of the available water in the reservoirs under prevailing evapotranspiration conditions and minimize the damages due to pest and diseases.
- If paddy tracts are going to be used for OFCs, choose lands with well drained soils and try to improve drainage systems to avoid the water logging situations due to predicted rainfall.
- Seed and Plant Material Development Center (SPMDC) assured the availability of **basic** seeds to fulfill the farmer requirements. SPMDC further recommended OFCs such as



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Mung beans, Cowpea, Soy bean, Chili, Black gram, Finger millet and Gingelly considering the available stocks in the department.

- Since heavy rains due to pre-monsoon disturbances in the mid-May, highly impact on the Big onion cultivations during last consecutive years, adequate drainage provisions should have to provide considering the sudden, unexpected rains that can be received in the mid-May.
- Please consider that this advisory was prepared based the on national level forecasted information and therefore, it is advisable to strictly follow irrigation schedules and decisions taken at the Kanna meetings.

An updated Agro-met Advisory will be issued in early April for the 2022 *Yala* season in consultation with the Department of Meteorology and other relevant resource persons and stakeholders.



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Table 1: Agro-ecological region wise expected rainfall values for **March**

Dry Zone (mm)		Intermediate Zone (mm)		Wet Zone (mm)	
AER	Mar	AER	Mar	AER	Mar
DL1a	77.7	IL1a	29.4	WL1a	110.8
DL1b	26.0	IL1b	34.2	WL1b	65.6
DL1c	21.3	IL1c	77.0	WL2a	86.2
DL1d	3.4	IL2	47.9	WL2b	58.0
DL1e	4.6	IL3	19.3	WL3	47.3
DL1f	12.3	IM1a	58.9	WM1a	119.2
DL2a	26.6	IM1b	55.4	WM1b	141.9
DL2b	30.2	IM1c	46.6	WM2a	46.3
DL3	10.3	IM2a	95.0	WM 2b	57.2
DL4	8.5	IM2b	83.0	WM3a	53.4
DL5	28.6	IM3a	36.9	WM3b	33.3
		IM3b	30.0	WU1	88.7
		IM3c	43.8	WU2a	54.6
		IU1	64.9	WU2b	76.2
		IU2	56.6	WU3	54.5
		IU3a	123.0		
		IU3b	100.3		
		IU3c	66.1		
		IU3d	44.6		
		IU3e	55.0		

(Source: Punyawardena *et al.* 2003, Agro-ecological Region Map)



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Table 2: Agro-ecological region wise expected rainfall values for **April**

Dry Zone (mm)		Intermediate Zone (mm)		Wet Zone (mm)	
AER	Apr	AER	Apr	AER	Apr
DL1a	150.9	IL1a	123.4	WL1a	250.2
DL1b	87.7	IL1b	98.1	WL1b	184.5
DL1c	57.0	IL1c	113.2	WL2a	161.3
DL1d	15.6	IL2	84.0	WL2b	195.4
DL1e	38.0	IL3	113.5	WL3	146.9
DL1f	72.3	IM1a	119.8	WM1a	236.4
DL2a	45.6	IM1b	108.1	WM1b	229.7
DL2b	26.1	IM1c	91.1	WM2a	179.7
DL3	43.3	IM2a	175.4	WM 2b	167.3
DL4	41.8	IM2b	158.7	WM3a	162.6
DL5	51.7	IM3a	98.4	WM3b	118.8
		IM3b	106.5	WU1	189.8
		IM3c	92.9	WU2a	161.3
		IU1	125.6	WU2b	184.5
		IU2	123.4	WU3	123.0
		IU3a	250.4		
		IU3b	197.5		
		IU3c	144.4		
		IU3d	100.3		
		IU3e	99.9		

(Source: Punyawardena *et al.* 2003, Agro-ecological Region Map)



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Table 3: Agro-ecological region wise expected rainfall values for **May**

Dry Zone (mm)			Intermediate Zone (mm)			Wet Zone (mm)	
AER	May		AER	May		AER	May
DL1a	44.5		IL1a	104.0		WL1a	358.3
DL1b	31.8		IL1b	88.5		WL1b	345.7
DL1c	27.1		IL1c	62.9		WL2a	205.3
DL1d	17.5		IL2	40.0		WL2b	142.4
DL1e	24.3		IL3	60.7		WL3	198.8
DL1f	27.5		IM1a	67.3		WM1a	293.3
DL2a	29.5		IM1b	42.0		WM1b	252.8
DL2b	14.5		IM1c	34.5		WM2a	158.7
DL3	18.5		IM2a	121.4		WM 2b	143.4
DL4	13.7		IM2b	78.4		WM3a	107.3
DL5	21.0		IM3a	82.9		WM3b	85.6
			IM3b	46.7		WU1	244.5
			IM3c	55.0		WU2a	170.5
			IU1	81.4		WU2b	156.4
			IU2	84.1		WU3	123.0
			IU3a	94.2			
			IU3b	84.6			
			IU3c	78.0			
			IU3d	95.8			
			IU3e	70.6			

(Source: Punyawardena *et al.* 2003, Agro-ecological Region Map)



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Table 4: Summary of daily water levels & storage of major reservoirs (07.03.2022)

NO	RANGE	NO OF TANKS	STORAGE (Acft)				
			GROSS	DEAD	PRESENT	EFFECTIVE	
						Acft.	%
1	Ampara	9	1,052,277	16,259	539,783	523,524	51%
2	Anuradapura	10	555,567	27,583	497,934	470,351	89%
3	Badulla	7	78,368	4,138	60,929	56,791	77%
4	Batticaloa	4	140,120	1,085	139,686	138,601	100%
5	Hambantota	10	378,065	34,172	192,735	158,563	46%
6	Galle	2	3,160	-	2,775	2,775	88%
7	Kandy	3	28,450	386	22,253	21,867	78%
8	Kurunegala	10	142,381	5,670	82,443	76,773	56%
9	Monaragala	3	44,900	2,640	30,443	27,803	66%
10	Polonnaruwa	4	351,802	24,300	305,632	281,332	86%
11	Puttalam	2	74,233	8,400	49,230	40,830	62%
12	Trincomalee	5	191,221	2,555	170,542	167,987	89%
13	Mannar	4	67,924	675	43,357	42,682	63%
	TOTAL	73	3,108,468	127,863	2,137,742	2,009,879	67%

