

# NATIONAL AGROMETEOROLOGICAL ADVISORY BULLETIN



08<sup>th</sup> April 2022 to 08<sup>th</sup> May 2022

Issued on 08<sup>th</sup> April 2022



Department of Meteorology  
Department of Agriculture  
2022.04.08



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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.

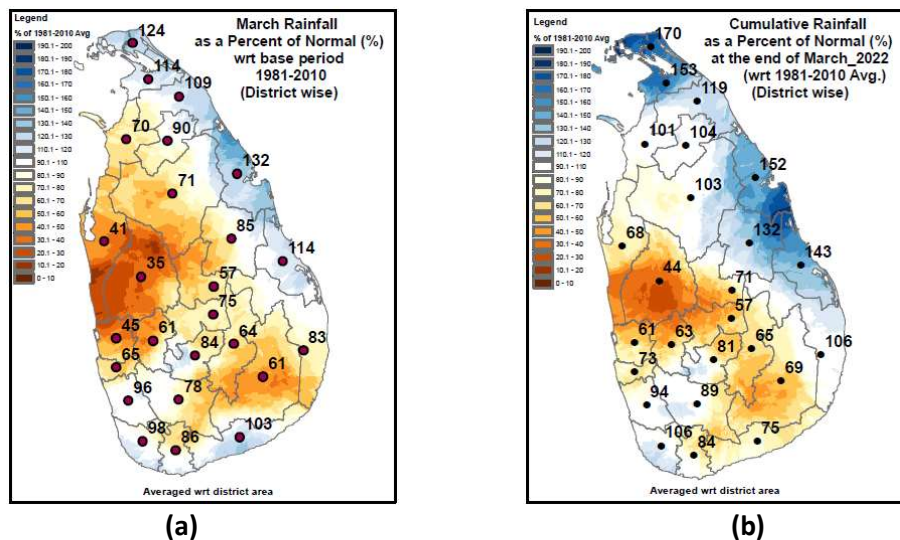
## Weather and Climate update

Department of Meteorology

### Rainfall Analysis-March 2022

According to the available rainfall data in the Department of Meteorology, above normal rainfalls were reported over Jaffna, Killinochchi, Trincomalee, and Batticaloa districts and near normal rainfalls in Mullative, Vavuniya, Hambantota, Kalutara, and Galle districts. Below normal rainfalls were reported over elsewhere of the country during the month of March 2022.

Observed rainfall as a percentage of normal during the month of March 2022 is shown in the figure 1(a) and observed cumulative rainfall as a percentage of normal from 1<sup>st</sup> January 2021 to 31<sup>st</sup> March 2022 is shown in the figure 1 (b).



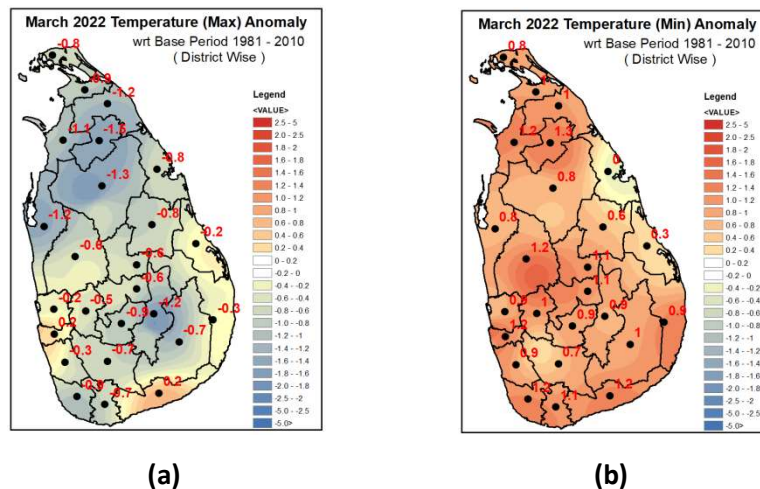
**Figure 01** : Observed Monthly rainfall as percentage of long-term average (1981-2010) during March 2022 (a) and cumulative rainfall from 01<sup>st</sup> January 2022 to 31<sup>st</sup> March 2022 as percentage of long term average (1981- 2010) (b)



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## Temperature analysis (March)

Average maximum temperatures were a little below normal over Mulativu, Mannar, Vavuniya, Anuradhapura, Puttalam and Badulla districts and near normal over other parts of the country during the month of March 2022. Average minimum temperatures during the month of March 2022 were little above normal over Killinochchi, Mullativu, Mannar, Vavuniya, Mathale, Kandy, Kegalle, Colombo, Galle, Matara, Hambantota and Monaragala districts and near normal over other areas of the country during the period.



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

## Weather Forecast: Forecast for the month of April 2022(Weekly)

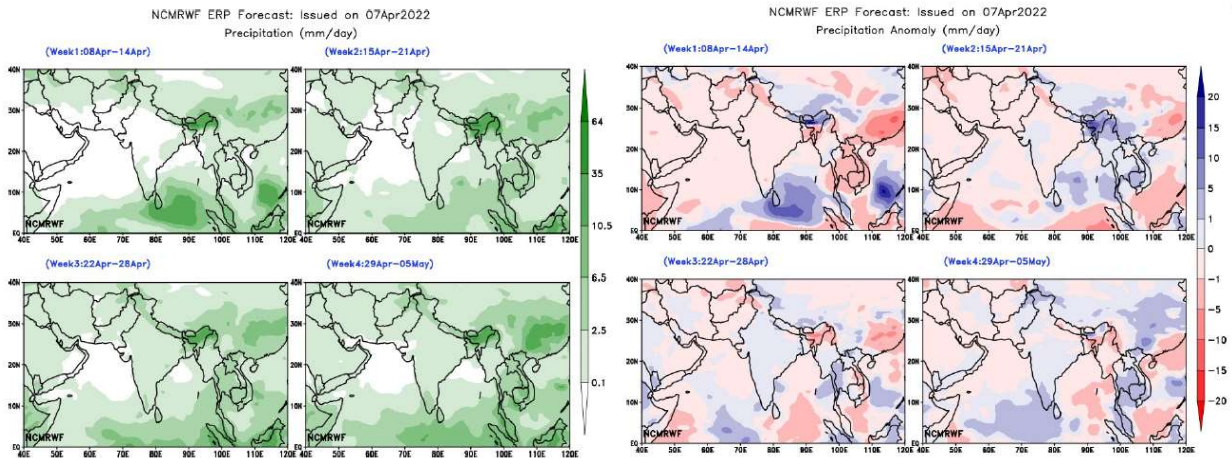
(Updatd on 7<sup>th</sup> April 2022)

Slightly above normal rainfalls are likely over most parts of the country during the week of 08-14 April 2022. During the weeks 15-21 April, 22-28 April and 29 April- 5 May near normal rainfalls are likely over the country (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](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 April-May-June (AMJ) 2022






**Figure 04 :** Seasonal Rainfall Forecast for April-June 2022 (AMJ 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 season of AMJ 2022 (Fig. 4).



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## Monthly Rainfall Forecasts for April-May-June 2022

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



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**Agro-met Advisory: April 2022**

**(For the months of April, May and June)**

Department of Meteorology (DoM) forecasts a **near or slightly above normal rainfalls** over most parts of the country for **April**. **Near normal rainfall** was predicted for Northern Province during **May and June**. No weather prediction has been issued for the other areas during these two months. DoM further forecasts that, **near or slightly above normal rainfalls** over most parts of the country for the **April, May and June** (AMJ) 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. DoM further stated that, farmers should have to take adequate precautionary measures, while doing their farming activities to avoid damages that may arise with temporary localized strong winds and **lightning**, especially during the month of April.

According to the Irrigation Department (ID), the average effective storage of major reservoirs is about 65%. Recently updated summary of daily water levels & storage of major reservoirs are attached in Table 4. ID further stated that, water issuing for the 2022 *Yala* season has been started during the first week of April and it will continue up to the end of April for the command areas of major reservoirs, including *Mahaweli* areas. ID emphasizes that, it is very important to use the water in the major reservoirs especially in Polonnaruwa, Anuradhapura, Trincomalee and Batticaloa for agricultural purposes as soon as possible. Because, with the prevailing dry period, considerable amount of water in the reservoirs will lose due to evapotranspiration. Furthermore, with onset of rains, water will be used for the hydropower generation.

Considering the weather forecast of DoM and irrigation water availability information of ID, the following agronomic interventions are recommended for the 2022 *Yala* season.



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## Paddy cultivation:

- Both rainfed and irrigated paddy farmers including *Mahaweli* system B and system C, are advised to plan their land preparation activities for the coming *Yala* season, immediately after completion of the harvesting practices.
- This will help to get the maximum benefits of rain-water and to use available water in the reservoirs for the land preparation activities.
- Since paddy farmers are at the stage of crop establishment, following agronomic practices are recommended to pay special concern for weed control.
  - Use the Disc plough (4-wheel tractor) or Mould-board plough (2-wheel tractor) for deep ploughing (6" – 9") during the first land preparation.
  - After the primary tillage, the bunds should be cleaned and organic matter can be added.
  - Maintain the standing water level covering ½ of the each ploughed soil clods, (*Hee-kata*) and allow 10 days, to germinate weed seeds.
  - The 2nd ploughing need to be done perpendicular direction to the primary tillage by using a tine tiller or a rotovator and standing water can be maintained at the level of 1"- 2" for 7 days.
  - Then, repairing and replastering of bunds should be done.
  - Compost and decomposed organic manure can be added to the field after second land preparation.
  - Tertiary tillage involves puddling and levelling. Puddling followed by a proper levelling is important for efficient and uniform water management, weed control, proper crop establishment.
  - It is recommended to have three weeks for land preparation including primary, secondary and tertiary tillage and then to crop establishment.
- 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 or row seeding, wherever possible.
- Farmers are advised to concern on Thrips attack, during the nursery stage of the plant and early stages of the seedlings.
- Paddy farmers are **highly advisable** to establish the crop, **before the 2<sup>nd</sup> week of May**.





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## Other Field Crops (OFCs)

- Farmers who have completed their harvesting for the previous season on time, and plan to cultivate other field crops due to the limited water storage of medium and minor tanks, can start the land preparation activities with the onset of First Inter-monsoonal rains during April to save the available water in the reservoirs.
  - They can complete the cultivation season at June or July thereby minimize the damages due to pest and diseases.
  - Farmers who are planning to start the cultivation activities after the first week of May, should have to give a special attention to choose lands with well drained soils and try to improve drainage systems to avoid the water logging situations due to unexpected intense rains. This is especially for paddy tracts which are going to be used for OFCs.
  - Others can start their cultivation activities for OFC's such as Black gram, Soy bean and Cowpea, after mid-May to prevent the damages caused by short intense rains that can be received during the first two weeks of May. However, these farmers should have to give a special attention on possible crop damages caused due to pest and diseases.
  - Nurseries for the Big onion cultivations can be started during the last week of April and field establishment can be done during the 3<sup>rd</sup> week of May to prevent the damages that can be caused by heavy rains due to pre-monsoonal disturbances in the mid-May.
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- If the drainage conditions are conducive, vegetables can be grown under excessive care, as intense rains always lead to infectious disease such as bacterial and fungal diseases and also leads to post-harvest losses.
  - Please consider that this advisory was prepared based on the national level 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 May for the rest of 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 **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 2: 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 3: Agro-ecological region wise expected rainfall values for **June**

Dry Zone (mm)		Intermediate Zone (mm)			Wet Zone (mm)	
AER	Jun	AER	Jun	AER	Jun	
DL1a	4.9	IL1a	65.8	WL1a	280.5	
DL1b	3.1	IL1b	52.4	WL1b	227.2	
DL1c	1.1	IL1c	12.9	WL2a	181.7	
DL1d	0.1	IL2	5.7	WL2b	164.3	
DL1e	0.0	IL3	18.5	WL3	121.2	
DL1f	0.4	IM1a	19.4	WM1a	312.5	
DL2a	3.5	IM1b	27.7	WM1b	227.4	
DL2b	30.2	IM1c	5.6	WM2a	226.4	
DL3	0.7	IM2a	77.8	WM 2b	160.0	
DL4	0.0	IM2b	16.2	WM3a	121.3	
DL5	28.6	IM3a	92.9	WM3b	79.4	
		IM3b	39.0	WU1	344.8	
		IM3c	50.1	WU2a	274.3	
		IU1	83.1	WU2b	217.6	
		IU2	51.1	WU3	137.9	
		IU3a	16.5			
		IU3b	22.8			
		IU3c	11.7			
		IU3d	12.6			
		IU3e	17.3			

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





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Table 4: Summary of daily water levels & storage of major reservoirs (07.04.2022)

NO	RANGE	NO OF TANKS	STORAGE (Acft)				
			GROSS	DEAD	PRESENT	EFFECTIVE	
						Acft.	%
1	Ampara	9	1,052,277	16,259	518,392	502,133	48
2	Anuradapura	10	555,567	27,583	486,133	458,550	87
3	Badulla	7	78,368	4,138	55,518	51,380	69
4	Batticaloa	4	140,120	1,085	131,714	130,629	94
5	Hambantota	10	378,065	34,172	176,007	141,835	41
6	Galle	2	3,160	-	2,683	2,683	85
7	Kandy	3	28,450	386	21,773	21,387	76
8	Kurunegala	10	142,381	5,670	81,451	75,781	55
9	Monaragala	3	44,900	2,640	27,141	24,501	58
10	Polonnaruwa	4	351,802	24,300	321,285	296,985	91
11	Puttalam	2	74,233	8,400	45,495	37,095	56
12	Trincomalee	5	191,221	2,555	167,191	164,636	87
13	Mannar	4	67,924	675	41,379	40,704	61
	TOTAL	73	3,108,468	127,863	2,076,162	1,948,299	65%

(Source: Water Management Division, Department of Irrigation)

**Department of Meteorology  
Department of Agriculture**

