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விவசாயத் திணைக்களம்
Department of Agriculture

මගේ අංකය / எனது எண் / My No.: NRMC/04/Agro-met/Advisory/2024/11

ඔබේ අංකය / உமது எண் / Your No.:

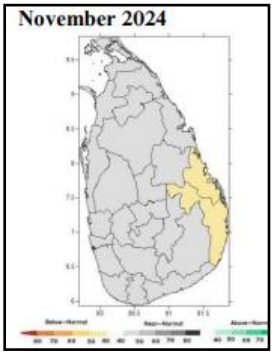
දිනය / திகதி / Date: 12.11.2024

Agro-met Advisory: November 2024
(For the months of November, December and January)

The Natural Resources Management Centre, Department of Agriculture (NRMC, DOA) has released the Agro-met advisory for November 2024, which incorporates weather forecasts provided by the Department of Meteorology (DOM) and the irrigation water availability information from the Irrigation Department (ID), Mahaweli Water Management Secretariat (MASL-WMS) and the Department of Agrarian Development (DAD). Field-level data and information for this document were collected from the Department of Agriculture, Mahaweli Authority of Sri Lanka (MASL), ID, DAD and plantation research institutes.

The **Department of Meteorology (DoM)** has issued the seasonal weather forecast for the upcoming three-month period, outlining the anticipated weather conditions;

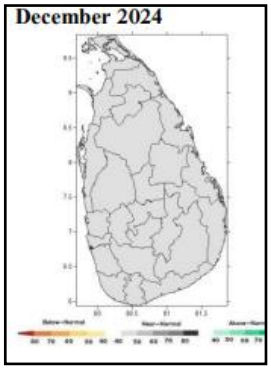
Rainfall forecast for **November**



There is a higher chance of having near normal rainfalls over most parts of the country except Ampara and Batticaloa districts where below normal rainfalls are likely during the month of November 2024.

There is a possibility of atmospheric disturbances, such as low-pressure areas and depressions, developing during the month, particularly in the latter part, which could lead to an increase in rainfall.

Rainfall forecast for **December**



There is a possibility for near normal rainfall over most parts of the country during the month of December 2024.

Development of the synoptic scale systems such as lows, depressions and cyclones are also possible during the month. These climatic conditions may alter the forecast.

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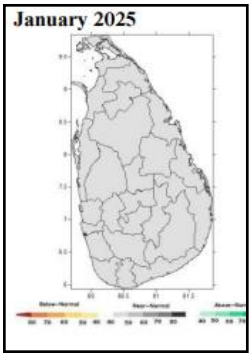
Rainfall forecast for **January**



According to the available global model forecasts, there is a possibility for near normal rainfall over most parts during the month of January 2025.
In addition, the development of cyclones and wave-type disturbances is also possible during the month; thus, the forecast may change.

With the available weather predictions, it is advisable to consider general climatological rainfall values as **near-normal** rainfall values for each month when undertaking agricultural planning. Agro-ecological region-wise expected average rainfall values are attached in Table 1 - 3.

The **Irrigation Department (ID)** reported that most irrigation ranges started water issuance for the current *Maha* season last month (October). Most of the cultivation area under ID, are on track to continue through the season with the available water storage and ranges without the sufficient water storage are also likely to reach sufficient levels with the anticipated rainfall, according to the DOM forecast. The ID further stated that, of the total land area under its management, 95% (756,897 acres) is planned for cultivation this *Maha* season. The average effective storage in major reservoirs stands at approximately 54.3%. (Tables 4).

The **Mahaweli Authority of Sri Lanka (MASL)** stated that, out of the planned 94,318 hectares of paddy for the upcoming 2024/25 Maha season, 32,199 hectares have started land preparation activities, and 11,643 hectares are in the stage of second ploughing.

The **Water Management Secretariat (WMS)** of the Mahaweli Authority of Sri Lanka (MASL) reports that the current reservoir storage in Mahaweli areas is about 70% (2,748 MCM). The seasonal water requirement for the area which the WMS is providing water is 2,351 MCM and the present effective storage is 1,690.8 MCM. The remaining water requirement is expected to be met by anticipated rainfall. Therefore, proper water management practices and water conservation are essential for a successful season.

According to the **Department of Agrarian Development (DAD),** approximately 70% of minor irrigation tanks still have not reached 50% of their capacity. However, anticipated rainfall is expected to raise water levels to a satisfactory level for the continuation of the season. Currently, land preparation activities have commenced in approximately 70% of Agrarian Services areas, and crop establishment under minor tanks has begun in 50% of these Agrarian Services areas for the 2024/25 Maha season.

Based on available weather information, the Agro-Met Advisory Committee recommends the following agronomic interventions to ensure optimum production during the 2024/25 Maha season.

Paddy cultivation

- According to the weekly forecast from the DOM, above-normal rainfall is expected across most areas of the country during the two mid-weeks of November. Therefore, both rainfed and irrigated paddy farmers who have not yet begun cultivation activities are advised to start immediately.

- Delayed cultivation can lead to several issues, such as problems with water availability, unfavorable weather conditions during the harvesting stage and limitations on planting 3 or 3½ month rice varieties, which are mostly available to farmers. (However, long aged varieties are not promoted to drought prone areas)

- It is important to pay attention to short-term weather forecasts and carefully select dates for crop establishment in the field, to avoid seed losses or the need for re-sowing.

- Although the country is currently receiving higher rainfall, it is essential to maximize the benefits of this rainwater and follow proper water management practices. Despite the current heavy rains, there may still be water shortages later in the season or during the upcoming *Yala* season.

- While the recommended duration for land preparation is three weeks, farmers are advised that if adjustments are necessary, this period should not be reduced to less than two weeks. Reducing it to less than two weeks would not adequately fulfill the requirements for proper land preparation.

- However, for paddy lands with high weed density, when the allocated time for land preparation is reduced to less than three weeks, weedicides such as glyphosate can be used to ensure effective weed management.

- Attention should be given to thrips damage at the early stage of the crop, as field observations have noted a considerable threat from this pest. For paddy lands where cultivation activities have not yet started, seed treatment is recommended to prevent or control thrips damage.

Other Field Crops (OFCs)

- Farmers who have not yet started cultivating long-duration upland OFCs, such as maize, are advised to begin cultivation activities given the current rainy conditions.

- It is important to monitor short and medium-range weather forecasts when planning key agronomic practices, such as crop establishment and fertilizer application.

- For other crops, such as short-duration legumes like black gram, mung bean, and cowpea, planting can begin in mid-November.

- Additionally, selecting appropriate soil conservation methods is important, particularly with regard to the slope of land.

- Since unexpected, short-duration intense rains are common during the November-December period, well-drained soils and cultivation under proper drainage conditions are essential.

Plantation Crops

Tea

- Tea growing regions will receive average rainfall of above 300mm for November. However, maximum temperature would be higher for Ratnapura, Kandy and Nuwara Eliya tea growing districts.

- Hence, remaining agronomic practices of planting and pruning can be continued in Low, Mid and Up elevations.

- Main planting and pruning operations can be performed in Uva region.

- Precautions, such as mulching and irrigation (if possible) should be taken to minimize high temperature effects, if drought days persists for new clearings and pruned fields.

- Attention should be given to areas subjected Blister blight incidents, in vulnerable pockets, due to high average rainfalls.

- For weed control, post-emergent herbicide application/cultural and mechanical methods can be practiced for Low, Mid and Up elevations, while post-emergent herbicide application should be practiced for Uva region.

Rubber

- Although planting season in the Intermediate zone can proceed until the end of November, it is better to avoid planting in December due to upcoming dry conditions.

- The farmers in the intermediate zone, especially in Monaragala and Ampara would be better to finish moisture conservation practices and fertilizer application by the end of November.

Coconut

Coconut growers are advised to;

- Continue field planting of coconut seedlings during November

- Establish/renovate contour drains and drainage drains

- Mulching around the manure circle using coconut fronds, husks, weed thrash, straw or any plant materials.

- Adopt moisture conservation practices as husk pits

- Addition of organic matter

- Rain water harvesting

- Start harrowing

Note: Please consider that this advisory was prepared based on national-level information. If available, it is advisable to consider localized detailed information as a supplementary to this advisory.

An updated Agro-met Advisory will be issued in early December 2024 in consultation with members of the technical advisory committee, other relevant resource persons and stakeholders.

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- Mr. A.M.R.W.S. Dilhan Ratnayake (Research Officer) Rubber Research Institute of Sri Lanka

Special Thanks:

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All Directors of the DOA (f. y. i. pls.)

All District Secretaries (f. y. i. pls.)

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Director General - Mahaweli Authority of Sri Lanka (f. y. i. pls.)

Chairman – Paddy Marketing Board (f. y. i. pls.)

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

Dry Zone (mm)			Intermediate Zone (mm)			Wet Zone (mm)	
AER	**Nov**		**AER**	**Nov**		**AER**	**Nov**
DL1a	217.9		IL1a	189.4		WL1a	305.1
DL1b	168.3		IL1b	174.9		WL1b	273.7
DL1c	202.0		IL1c	226.6		WL2a	242.7
DL1d	166.4		IL2	224.3		WL2b	233.0
DL1e	187.5		IL3	163.9		WL3	222.3
DL1f	157.2		IM1a	242.3		WM1a	289.5
DL2a	196.2		IM1b	252.3		WM1b	285.7
DL2b	191.3		IM1c	156.0		WM2a	232.8
DL3	191.4		IM2a	248.5		WM 2b	248.0
DL4	185.8		IM2b	264.8		WM3a	226.4
DL5	137.4		IM3a	208.4		WM3b	220.6
			IM3b	218.8		WU1	258.0
			IM3c	195.3		WU2a	209.2
			IU1	272.8		WU2b	229.8
			IU2	251.4		WU3	189.6
			IU3a	290.6			
			IU3b	272.5			
			IU3c	227.2			
			IU3d	140.1			
			IU3e	167.0			

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

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

Dry Zone (mm)			Intermediate Zone (mm)			Wet Zone (mm)	
AER	**Dec**		**AER**	**Dec**		**AER**	**Dec**
DL1a	89.0		IL1a	50.9		WL1a	130.6
DL1b	105.7		IL1b	69.5		WL1b	111.2
DL1c	191.9		IL1c	148.5		WL2a	117.5
DL1d	178.1		IL2	246.1		WL2b	63.5
DL1e	167.2		IL3	69.6		WL3	53.0
DL1f	99.7		IM1a	281.0		WM1a	124.2
DL2a	236.0		IM1b	259.5		WM1b	145.2
DL2b	240.1		IM1c	260.9		WM2a	82.7
DL3	99.9		IM2a	132.6		WM 2b	61.2
DL4	96.3		IM2b	156.7		WM3a	70.0
DL5	87.2		IM3a	131.9		WM3b	151.9
			IM3b	172.1		WU1	102.8
			IM3c	167.5		WU2a	95.8
			IU1	276.5		WU2b	118.9
			IU2	267.8		WU3	132.9
			IU3a	159.9			
			IU3b	152.9			
			IU3c	174.3			
			IU3d	84.7			
			IU3e	130.5			

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

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

Dry Zone (mm)			Intermediate Zone (mm)			Wet Zone (mm)	
AER	**Jan**		**AER**	**Jan**		**AER**	**Jan**
DL1a	36.5		IL1a	10.7		WL1a	64.5
DL1b	30.3		IL1b	21.8		WL1b	44.0
DL1c	114.2		IL1c	85.0		WL2a	54.6
DL1d	44.2		IL2	183.1		WL2b	12.0
DL1e	33.7		IL3	12.9		WL3	12.3
DL1f	9.4		IM1a	186.0		WM1a	56.8
DL2a	138.4		IM1b	208.8		WM1b	73.6
DL2b	127.5		IM1c	115.8		WM2a	30.1
DL3	11.9		IM2a	53.8		WM 2b	15.8
DL4	9.8		IM2b	78.6		WM3a	21.2
DL5	35.1		IM3a	58.1		WM3b	73.6
			IM3b	79.2		WU1	43.4
			IM3c	112.6		WU2a	52.6
			IU1	213.8		WU2b	60.3
			IU2	182.2		WU3	74.9
			IU3a	52.0			
			IU3b	83.3			
			IU3c	80.8			
			IU3d	55.2			
			IU3e	62.5			

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

Table 4: Summary of daily water levels and storage of major reservoirs (11.11.2024)

NO	RANGE	NO OF TANKS	STORAGE (Acft)				
			GROSS	DEAD	PRESENT	EFFECTIVE	
						Acft.	%
1	AMPARA	9	1,052,221	14,909	488,617	473,708	**45.7%**
2	ANURADAPURA	10	558,572	42,735	284,635	241,900	**46.9%**
3	BADULLA	7	78,492	6,149	42,212	36,063	**49.8%**
4	BATTICALOA	4	140,133	1,085	50,679	49,594	**35.7%**
5	HAMBANTOTA	10	377,738	33,172	310,497	277,325	**80.5%**
6	GALLE	2	3,081	-	3,139	3,139	**100.0%**
7	KANDY	3	28,450	386	21,718	21,332	**76.0%**
8	KURUNEGALA	10	140,920	5,561	113,316	107,755	**79.6%**
9	MONARAGALA	3	44,872	2,815	31,456	28,641	**68.1%**
10	POLONNARUWA	4	352,010	24,300	254,553	230,253	**70.3%**
11	PUTTALAM	2	74,261	8,400	54,312	45,912	**69.7%**
12	TRINCOMALEE	5	191,288	2,555	78,630	76,075	**40.3%**
13	MANNAR	4	67,383	551	21,020	20,469	**30.6%**
	TOTAL	**73**	**3,109,420**	**142,618**	**1,754,784**	**1,612,166**	**54.3%**

(Source: Water Management Division, Department of Irrigation