

08th May 2024 to 08th June 2024 Issued on 08th May 2024







Department of Meteorology

Department of Agriculture

2024.05.08

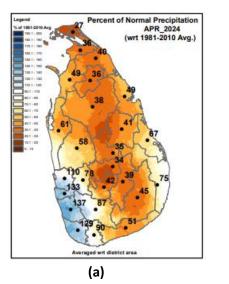
Weather and Climate update

Department of Meteorology

Rainfall Analysis-April 2024

According to the available rainfall data in the Department of Meteorology below normal rainfalls were reported over most parts of the country except Colombo, Gampaha, Kalutara, Galle and Mathara districts, where near or above normal rainfalls were reported during the month of April (Fig 1(a)).

Observed rainfall as a percentage of normal during the month of April 2024 is shown in the figure 1(a) and observed cumulative rainfall as a percentage of normal from 1st January 2024 to 30th April 2024 is shown in the figure 1 (b). Cumulative rainfall in the figure 1(b) shows above normal rainfall over Western and Southern provinces and Ampara and Batticaloa districts, near normal rainfalls over Badulla and Rathnapura districts and below normal rainfalls over remaining areas of the country.



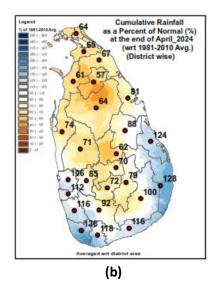


Figure 01 : Observed Monthly rainfall as percentage of long-term average (1981-2010) during April 2024 (a) and cumulative rainfall from 01st January 2024 to 30th April 2024 as percentage of long term average (1981-2010) (b)

Temperature analysis-April 2024

During the month of April average maximum temperatures (daytime) were above normal over most parts of the country except Badulla, Monaragala, Ampara and Batticaloa districts, where it is near normal maximum temperatures. Average minimum temperatures (night-time) were above normal over most parts of the country except Jaffna, Killinochchi, Trincomalee, Nuwara Eliya, Badulla and Monaragala districts, where it is near normal during the month of April 2024.

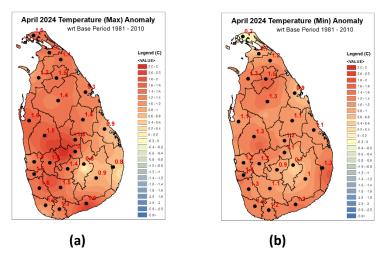


Figure 02: Average Maximum (a) and Minimum (b) Temperature anomalies during the month of April 2024 compared with the long-term average (1981-2010)

Weather Forecast: Forecast for the month of May 2024 (Weekly)

(Updated on 02nd May 2024)

A slightly below normal rainfalls are likely over western province and Galle and Matara districts during 03rd -09th May. Near normal rainfalls are likely over remaining area of the country during the week. During the weeks 10th -16th, 17th -23rd and 24th -30th of May slightly above normal rainfalls are possible over most parts of the country (Figure 03).

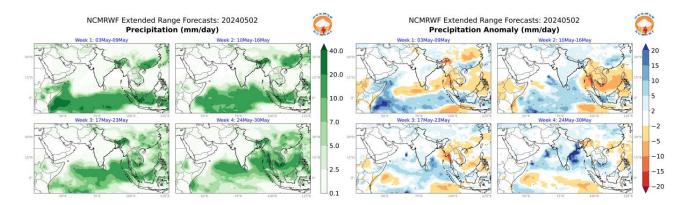


Figure 03: Weekly rainfall Forecast and the Rainfall anomaly (mm/day)

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://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 May-June-July (MJJ) 2024

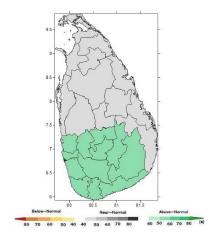
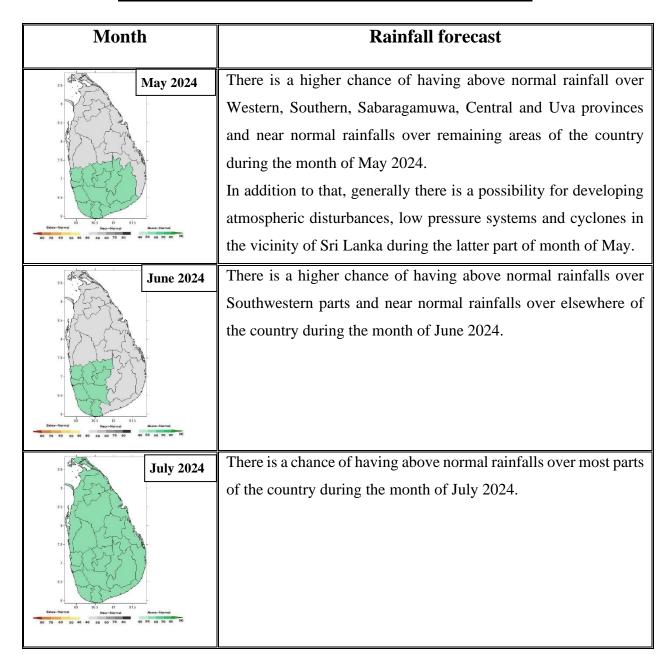


Figure 04: Seasonal Rainfall Forecast for May-July 2024 (MJJ 2024)

Above normal rainfalls are likely over Western, Southern Sabaragamuwa, Central and Uva provinces and near normal over remaining areas during May- July 2024 season (Fig. 04).

Monthly Rainfall Forecasts for May-June-July 2024



Agro-met Advisory: May 2024

Natural Resource Management Centre, Department of Agriculture

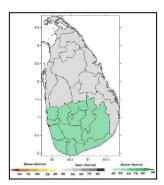
(For the months of May, June and July)

Department of Meteorology (DoM) has issued the seasonal weather forecast for the coming threemonths period, outlining the anticipated weather conditions;

• Rainfall forecast for May

There is a higher chance of having above normal rainfall over Western, Southern, Sabaragamuwa, Central and Uva provinces and near normal rainfalls over remaining areas of the country during the month of May 2024.

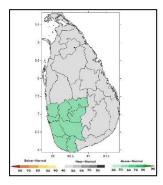
Showery condition is likely to enhance from 12th over most parts. In addition to that, generally there is a possibility for developing atmospheric disturbances, low pressure systems and cyclones in the vicinity of the island, during the latter part of month of May.



Rainfall forecast for June

There is a higher chance of having above normal rainfalls over Southwestern parts and near normal rainfalls over elsewhere of the country during the month of June 2024.

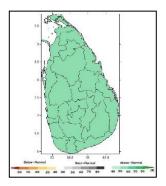
Ground frost are possible in Nuwara Eliya district during the month.



• Rainfall forecast for July

There is a chance of having above normal rainfalls over most parts of the country during the month of July 2024.

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.



Due to the prevailing extreme daytime temperatures, workers exposed to heat are susceptible to occupational illnesses and injuries, including heat stroke, heat exhaustion, heat cramps, or heat rashes. Considering these risks, the Department of Meteorology insists to draw the attention of the farming community and relevant field officers to practice the following activities during agricultural activities.

- Wear a brimmed hat
- Wear loose, lightweight, light-colored clothing
- Drink plenty of water and do not wait until you are thirsty to drink
- Avoid alcohol or liquids containing large amounts of sugar
- See the possibility of scheduling tasks earlier or later in the day to avoid mid-day heat
- Spend time under shade or inside the buildings during breaks

However, this extreme heat condition is likely to reduce gradually from mid of May 2024.

In addition, adequate precautions are necessary to minimize damages caused by lightning associated with thundershowers during the afternoon or evening.

- It is advised to stay away from open spaces such as paddy fields, parks, playgrounds, ponds, lakes and beaches.
- Seek shelter immediately as soon as you hear thunder and lightning very closely.
- Stay away from tall structures, such as telephone poles and trees; lightning tends to strike the tallest object around.

According to the **Irrigation Department** (ID), the cultivation progress of paddy under major and medium irrigation schemes collectively stands at approximately 90%. The range-wise summary of cultivation progress for major and medium irrigation schemes associated with the 2024 Yala season is provided in Table 4. The information in Table 5 and Table 6 provides updated details on water availability in major and medium irrigation reservoirs, respectively. A comparison with the long-term average reveals that, all major irrigation reservoirs except Kurunegala and Puttalam maintain higher effective storage. ID further ensures that the available water storage in the major and medium reservoirs will be sufficient to continue the season with proper water management practices.

According to the **Mahaweli Authority of Sri Lanka** (**MASL**), the cultivation progress of paddy in Mahaweli areas at approximately 73,319 hectares as of May 6, 2024. The Mahaweli Authority is further planning to reach targets for other field crops (OFCs) during May and June.

The Water Management Secretariat (WMS) has reported that water releases for the 2024 Yala season has commenced for all Mahaweli areas. As of April 30, 2024, the present available storage in reservoirs controlled by WMS is 79%. The WMS further stated that they would be able to manage all irrigation systems controlled by WMS successfully in this season, except Huruluwewa system and system H. Unless a considerable amount of rain is received to Kotmale, Polgolla, Bowatenna, Dambulu oya, Kandalama and Kalawewa catchments, there will be water shortages for crop cultivation in Huruluwewa system and system H areas.

The **Department of Agrarian Development (DAD)** has declared that water issuing for minor irrigation tanks has also commenced for the 2024 Yala season. In parallel to the water issuing and evaporation losses, the available water in the reservoirs appears to be decreasing rapidly. It is anticipated that approximately 70% of the expected cultivation area under minor irrigation schemes will be utilized for this Yala season. In addition to paddy, OFCs such as maize, green gram, and cowpea are also being cultivated under minor irrigation tanks.

Considering the available weather information, the agro-met advisory committee recommends the following agronomic interventions to ensure optimum production, during 2024 Yala season.

Paddy cultivation

➤ Considering the available forecast of higher rainy conditions in May and July, paddy farmers are advised to stay updated with the 10-day and weekly forecasts issued by the DoM. They can plan their agronomic activities, such as applying fertilizer and pesticides, especially during the planning and harvesting period from July onwards.

- ➤ Due to the prevailing hot weather conditions, there has been an increase in temperature in the soil and standing water in the paddy fields. This weather condition can impact seedling health, fertilizer, and weedicide reactivity, especially under saline soils. Therefore, paddy farmers should be aware of the following facts:
 - When applying agrochemicals, it is crucial to follow the recommendations of the Department of Agriculture (DoA).
 - o Levelling of lands is essential during land preparation activities.
 - In case of any uncertainties, farmers should contact Agriculture Instructors or the Rice Research and Development Institute (RRDI), Batalagoda.
- ➤ Those who have not yet started cultivation activities can discuss the possibility of selecting short-aged paddy varieties such as 2½ or shifting to Other Field Crops (OFCs), taking regional information into account and consulting with field officers.

Other Field Crops (OFCs)

- To maximize the national targets, it is important to utilize agricultural land that has not yet begun cultivation activities by planting OFCs.
- ➤ With the available weather predictions, it is important to commence the cultivation of Other Field Crops (OFCs) immediately.
- As above-normal rainfall is expected compared to a typical southwest monsoon season, it is necessary to pay extra attention to enhance drainage systems during this period
- ➤ With the predicted above-normal rains, field establishment of big onion cultivations should be undertaken with extra care, preparing raised beds and improving drainage systems.
- ➤ The harvesting period of green gram will be at the end of June or the beginning of July. If continuous rains persist during this period, it will impact harvesting activities. Therefore, staying updated with short and medium-term forecasts is important.

Vegetables

Considering the predicted rains in May and July, vegetables should be grown with proper drainage systems, utilizing raised beds, and providing proper rain shelters if possible.

Plantation Crops

Tea

Some tea growing districts received fair amount of rainfall in April 2024, though Mid & High elevation tea growing areas are yet to receive adequate rainfall. However, higher maximum temperature conditions prevailed in almost all tea growing areas. Hence, it is yet to alleviate the drought stress on tea plants completely. Above normal rainfall for May 2024 has been predicted with high maximum temperature as well. Rains are expected to receive from second week of May.

- With the onset of rains, agronomic operations, like pruning and planting can be commenced. However, necessary steps should be taken to prevent, high temperature stress for young plants and pruned fields.
- Attention should be given about high temperature when pollarding shade trees in pruned fields
- Planting should not be carried out in very heavy rainy days.
- Normal harvesting can be practices, with the onset of rains
- Once fields get adequate moisture from rains, fertilizer application can be practiced.
 However, heavy rainy days should be avoided.
- Slashing the weeds and thatching the lands would reduce weed growth, reduce heat stress on tea plants as well as prevent erosion due to rains.
- Land preparation can be continued.

Coconuts

Coconut growers are advised to;

- Start fertilizer application during May and June
- Start field planting of coconut seedlings during May and June
- Establish/renovate contour drains and drainage drains. Drainage drains are established to remove excess water and they should be cut with low slope and with barriers to reduce the runoff and facilitate infiltration.

- Mulching around the manure circle using coconut fronds, husks, weed thrash, straw or any plant materials.
- Adopt moisture conservation practices as husk pits, coir dust pith
- Addition of organic matter
- Rain water harvesting To collect rain water within the land using ponds (*Pathaha*) to store water and use during drought

Cinnamon

- With the expected rainfall in May, new planting can be started. It is necessary to repair the draining systems in the steep lands, to reduce soil erosion.
- Also, in May, June and July when the rains are expected, harvesting, pruning and training can be done.
- After harvesting, gap filling (planting new plants for the empty spaces) can be done.
- Apply fertilizer about one and half months after harvesting, when the red color of new shoots turn into green.
- Pay more attention to the cultivation as pest and diseases can be spread with the rain.

Minor Export Agricultural Crops (Pepper, Coffee, Nutmeg, Clove, etc.)

- Minor Export Agricultural Crops (Pepper, Coffee, Nutmeg, Clove, etc.)
- With the upcoming monsoon season, it is advised that planting should be initiated.
- When heavy rainfall is anticipated, protective measures for the saplings should be employed. These measures include mulching to prevent soil erosion, staking for support against strong winds, and using tree guards to protect from excess water and debris.
- Land preparation for cultivation should be undertaken in accordance with the monsoon conditions.
- Tasks such as plant selection and other management activities should be carried out in a manner that allows for distribution to farmers based on crop production.

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

Dry Zone (mm)		Intermedia	te 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)

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

Dry Zone (mm)		Intermediate	Intermediate 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: Punyawardena et al. 2003, Agro-ecological Region Map)

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

	Dry Zone (mm)		-	z Zone (mm)	Wet Zone (mm)		
AER	Jul		AER	Jul		AER	Jul
DL1a	6.4		IL1a	36.1		WL1a	187.7
DL1b	3.4		IL1b	32.3		WL1b	124.3
DL1c	5.8		IL1c	18.7		WL2a	120.3
DL1d	5.0		IL2	16.7		WL2b	121.9
DL1e	6.7		IL3	10.3		WL3	71.6
DL1f	0.3		IM1a	27.3		WM1a	233.3
DL2a	15.4]	IM1b	19.4		WM1b	160.5
DL2b	9.2]	IM1c	5.7		WM2a	201.0
DL3	1.9		IM2a	55.3		WM 2b	134.9
DL4	0.4]	IM2b	23.0		WM3a	84.8
DL5	3.5]	IM3a	87.8		WM3b	64.5
]	IM3b	27.1		WU1	287.1
]	IM3c	42.7		WU2a	247.6
			IU1	73.3		WU2b	178.8
			IU2	54.1		WU3	127.9
			IU3a	26.0			
			IU3b	20.0			
			IU3c	30.0			
			IU3d	31.6			
			IU3e	22.0			

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

Table 4: : Range-wise summary of cultivation progress for Major & Medium Irrigation Schemes Yala 2024

(06.05.2024)

		Percentage of			
No	Range	Ploughing done	Sown		
1	Ampara	99%	99%		
2	Anuradapura	70%	50%		
3	Badulla	60%	40%		
4	Batticaloa 100%		100%		
5	Colombo 85%		75%		
6	Galle	85%	40%		
7	Hambantota	90%	80%		
8	Kandy	90%	70%		
9	Kurunegala	60%	40%		
10	Monaragala	90%	80%		
11	Polonnaruwa	30%	5%		
12	Puttalam	40%	25%		
13	Trincomalee	80%	65%		
14	Mannar	70%	40%		
	Total	76.5%	62.5%		

(Source: Water Management Division, Department of Irrigation)

Table 5: Summary of daily water levels & storage of major reservoirs (10 .05.2024)

			STORAGE (Acft)					
NO	RANGE	NO OF TANKS	GROSS	DEAD	PRESENT	EFFE	CTIVE	
			GROSS	DEAD	PRESENT	Acft.	%	
1	AMPARA	9	1,052,221	14,909	783,762	768,853	74.1%	
2	ANURADAPURA	10	556,390	42,735	376,048	333,313	64.9%	
3	BADULLA	7	78,388	6,149	61,505	55,356	76.6%	
4	BATTICALOA	4	140,133	1,085	99,218	98,133	70.6%	
5	HAMBANTOTA	10	377,738	33,172	301,741	268,569	77.9%	
6	GALLE	2	3,081		2,499	2,499	81.1%	
7	KANDY	3	28,450	386	19,360	18,974	67.6%	
8	KURUNEGALA	10	140,920	5,561	76,559	70,999	52.5%	
9	MONARAGALA	3	46,684	2,690	40,937	38,247	86.9%	
10	POLONNARUWA	4	352,010	24,300	272,841	248,541	75.8%	
11	PUTTALAM	2	74,261	8,400	32,063	23,663	35.9%	
12	TRINCOMALEE	5	191,288	2,555	143,586	141,031	74.7%	
13	MANNAR	4	67,383	551	42,861	42,310	63.3%	
	TOTAL	73	3,108,947	142,493	2,252,979	2,110,487	71.1%	

(Source: Water Management Division, Department of Irrigation)

Table 6: Summary of effective storage of medium reservoirs (06.05.2024)

		Effective
		storage
NO	RANGE	(%)
1	AMPARA	82.1%
2	ANURADAPURA	71.0%
3	BADULLA	80.5%
4	BATTICALOA	70.2%
5	COLOMBO	50.0%
6	HAMBANTOTA	71.4%
7	GALLE	78.8%
8	KANDY	67.6%
9	KURUNEGALA	62.5%
10	MONARAGALA	73.6%
11	POLONNARUWA	86.9%
12	PUTTALAM	56.2%
13	TRINCOMALEE	82.0%
14	MANNAR	54.1%
	TOTAL	76.5%

(Source: Water Management Division, Department of Irrigation)

Table 7. Summary of Major Reservoir/Tank Storage - Mahaweli Authority of Sri Lanka (30.04.2024)

Major Reservoir/Tank Storage - Mahaweli Authority

		1	TIK Storage - Iviaria	Ten Autho	,
Sr. No.	River Basin	System	Tank Name	Full Capacity (MCM)	Storage at 30th April 2024
1	Maduru Oya	В	Pimburaththawa	49.34	43.42
2	Maduru Oya	В	Aralaganwila	14.96	14.96
3	Maduru Oya	В	Randiyawewa	6.37	5.41
4	Maduru Oya	В	Madurangala wewa	4.11	2.88
5	Maduru Oya	В	Sewanawewa	3.69	2.58
6	Maduru Oya	В	Muthugala wewa	3.64	3.46
7	Mahaweli	С	Henanigala	12.80	11.01
8	Kala Oya	Н	Konwewa	3.95	2.49
9	Kala Oya	Н	Paindikulama	3.85	3.85
10	Mahaweli	MD&RO	Randenigala	801.50	748.10
11	Mahaweli	MD&RO	Victoria	721.20	416.00
12	Maduru Oya	MD&RO	Maduruoya	596.60	494.60
13	Mahaweli	MD&RO	Moragahakanda	557.90	448.60
14	Walawa	MD&RO	Udawalawa	268.70	269.40
15	Mahaweli	MD&RO	Kaluganga	248.00	231.10
16	Mahaweli	MD&RO	Kothmale	170.90	48.30
17	Mahaweli	MD&RO	Ulhitiya	146.10	126.80
18	Kala Oya	MD&RO	Kalawewa	104.00	65.90
19	Mahaweli	MD&RO	Loggaloya	48.00	47.00
20	Kala Oya	MD&RO	Kandalama	33.80	20.20
21	Walawa	MD&RO	Chandrikawewa	27.70	22.09
22	Mahaweli	MD&RO	Bowathenna	23.50	14.30
23	Mahaweli	MD&RO	Hepolaoya	12.60	12.60
24	Kala Oya	MD&RO	Dambuloya	11.70	10.70
25	Mahaweli	MD&RO	Rantambe	7.00	5.10
26	Mahaweli	MD&RO	Polgolla	4.45	3.09
27	Walawa	Walawa	Kiriibbanwewa	16.53	14.05
28	Walawa	Walawa	Urusitawewa	4.73	4.73
29	Walawa	Walawa	Habaraluwewa	3.79	3.03
30	Walawa	Walawa	Galwewa	3.79	2.27
31	Walawa	Walawa	Andarawewa	3.21	1.86
	Total	•	mcm	3,918.41	3,099.89
	Total		Acft	3,173,913	2,510,908
		% Available			79%

(Source: Water Management Secretariat - Mahaweli Authority of Sri Lanka)

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 June 2024 in consultation with members of the technical advisory committee, other relevant resource persons and stakeholders.

Technical Advisory Team Members

- o Ms. Anusha Warnasooriya (Director Climate Change and Research) Department of Meteorology
- o Eng. (Mr.) L.M.W.Rathnasiri (Director of Irrigation (Water Management) Irrigation Department
- o Ms. D.K.W.R. Senevirathna (Director Agriculture) Mahaweli Authority of Sri Lanka
- o Mr. D.D. Perera (Technical Officer Water Management Division) Department of Agrarian Development
- Dr. W.M.U.K. Rathnayake (Director, Natural Resources Management Centre) (Principal Agriculture Scientist – Soil Science - Rice)
- o Dr. M.A.P.W.K. Malaviarachchi (Additional Director) Field Crops Research and Development Institute
- o Mr. K.M.D.W.P. Nishantha (Additional Director, Plant Protection Service) Horticultural Crops Research and Development Institute
- Mr. L.C. Silva (Assistant Director of Agriculture, Research Physiology) Rice Research and Development Institute (RRDI)
- o Ms. T.M.P.G.S.P. Thennakoon (Additional Director- IC) National Agriculture Information and Communication Centre
- Ms. Aruni B. Abeysekera (Assistant Director of Agriculture-Agro-climatology and Climate Change) -Natural Resources Management Centre

For Plantation Crops:

- Dr. Shayamantha Bandara (Principal Research Officer) Tea Research Institute of Sri Lanka
- Mr. A.M.R.W.S. Dilhan Ratnayake (Research Officer) Rubber Research Institute of Sri Lanka
- Ms. K.V.N.N. Jayalath (Senior Research Officer) Coconut Research Institute
- Ms. P.K.D. Pabasara (Assistant Director (Research) National Cinnamon Research and Training Center
- B. D. P. Rangoda (Deputy Director) Department of Export Agriculture, Sri Lanka
- A. J. Warusavitharana (Director Agriculture) Ministry of Agriculture and Plantation Industries

Special Thanks:

- o Eng. (Mr.) Nilantha Dhanapala (Deputy Director General MASL and Secretary, Water Management Secretariat) Mahaweli Authority of Sri Lanka
- o Ms. Preethika Jayakody (Deputy Director, Department of Meteorology)
- o Mr. M.S. Thilakasiri (District Director of Agriculture Kegalle)
- o Mr. D.M.P.T. Dissanayake (Deputy Director and Crop coordinator Mung Beans)
- o Mr. D. R. Kanchana (Assistant Director of Agriculture and Crop coordinator Big Onion)