SUMMARY REPORT

NUTRITION MONTH 2023

Family Health Bureau
Ministry of Health
Sri Lanka
June 2023

Contents

1. Introduction

Malnutrition among children under 5 years of age is a public health concern in Sri Lanka.

During routine growth monitoring assessment conducted in child welfare clinics and field weighing posts, Public Health Midwives [PHM] measure weights and lengths/heights of children under 5 years of age and these data is collected for immediate action. However, the coverage of the assessment in some age groups, specially 2 - 5 years age group is not satisfactory, as the attention given to growth monitoring is insufficient amidst the heavy burden of routine workload. Therefore, this set of routine data may not depict the true child nutrition status of the country.

In 2006, the concept of ***Nutrition Month*** was introduced with the aim of carrying out nutrition assessment of children under 5 years to obtain comprehensive prevalence data on child nutrition and to assess the annual trends. During this month, the anthropometric measurements, namely the length/ height and weight of all the children under 5 years of age are measured as an island wide activity irrespective of the routine schedule recommended in the Growth Monitoring and Promotion Programme. In the subsequent years, the focus of *Nutrition Month* was expanded to include pregnant mothers, school going children and children not attending school as well as the general public.

COVID-19 pandemic in 2020 / 2021 and subsequent economic crisis in 2022 caused an increase in prices of most food items and as a result, many vulnerable families are affected with resultant nutrition issues. Many sectors were extending their support in intervening to improve food security among vulnerable families and provided various assistance to identified districts/ vulnerable groups in various forms.

With the objective of assessing the national nutrition status and disseminating the latest nutrition data among the health staff and also among other stakeholders to strengthen, stream line and target service provision, Nutrition Month activities were held island wide, in the month of June 2023.

2. Methods

Nutrition month 2023 was held in June while the initial preparations were initiated in May 2023. Discussions were held with the district and provincial level health managers to identify challenges they could face in achieving maximum coverage and reporting. Required assistance was provided and instructions were given to initiate anthropometric measurements of all children under 5 years of age from 1st of June 2023.

Technical update to all MOHs, other supervising staff categories and PHMs was held on 2nd of May with the participation of all relevant consultants and stakeholders. Several training sessions on Infant and Young Child Feeding [IYCF] guidelines, anthropometric measurements, recording and assuring quality of data for PHMs and supervising staff categories were done in both local languages making the staff refresh their knowledge and skills.

All Medical Officers of Health [MOH] were given instructions to achieve the maximum coverage of children under 5 years under care by promoting parents' participation and improving accessibility.

All MOHs were advised to measure nutrition status in their school children by PHI areas, making sure that at least one school with less than 200 children and one with more than 200 children in each PHI area are covered.

Continuous supervisions were encouraged and close monitoring of reporting was carried out.

3. Results

3.1 Nutritional status of children under 5 years:

3.1.1. Reporting rates

Data from all 356 MOHs covering 6915 PHM areas in the country provided data with a national reporting rate of 100% [Figure 1].

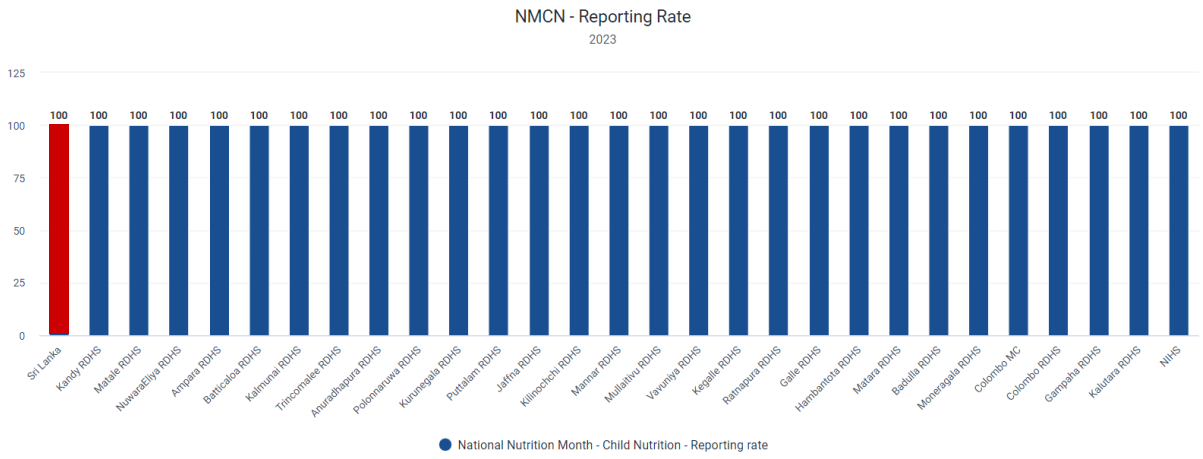

Figure 1: National Nutrition Month 2023 Reporting Rates of children under 5 years

3.1.2. Assessment coverage of children under 5 years

A total of 1,406,213 children under 5 years have been registered with Public Health Midwives in Sri Lanka of which **1,357,675** children were measured during the month of June with an assessment coverage of 96.5%. Highest coverages (100%) were achieved by districts of Ampara and Kilinochchi. Lowest assessment coverage was reported from Colombo Municipal Council area which was 71.8% [Figure 2].

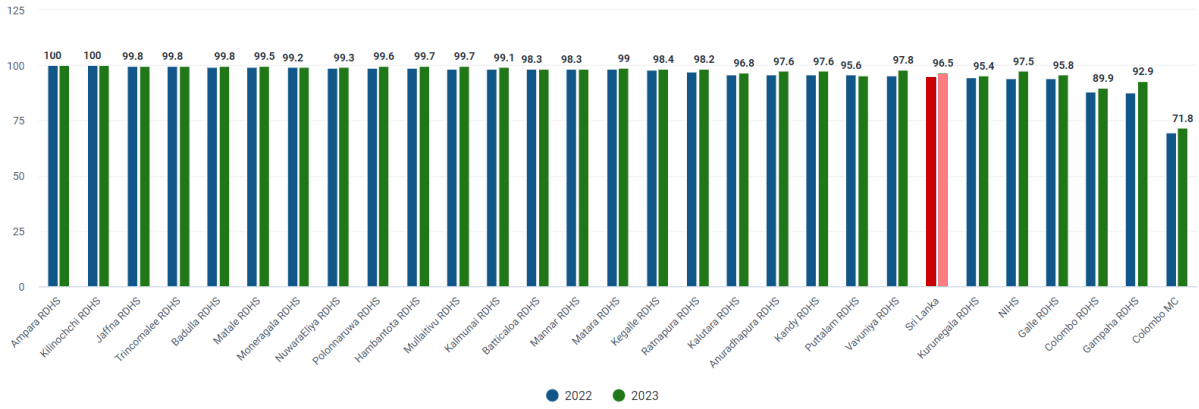

Figure 2 : Percentage of children under 5 years measured for growth of registered under care

3.1.3. Children under 5 years with underweight

A child whose weight is in the orange or red zones in the weight for age chart in the CHDR is considered as underweight. Underweight is defined as low weight-for-age (less than -2SD). A child who is underweight may be stunted, wasted or both.

Percentage of children under 5 years with underweight was reported to be 17.1 % in Sri Lanka according to the nutrition month data and highest underweight percentage was reported from Nuwaraeliya district which was 26.4%.

Compared to 2022 nutrition month data, all districts except Vavuniya have shown an increase in underweight percentages [Figure 3].

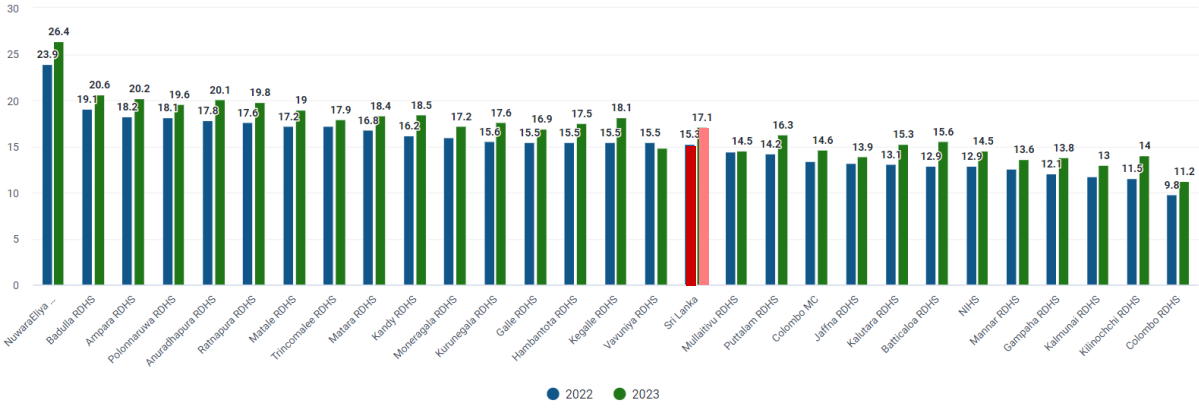

Figure 3: Percentage of under 5 years children with underweight (moderate + severe)

Compared to 2022, underweight in all sectors have increased [Figure 4].

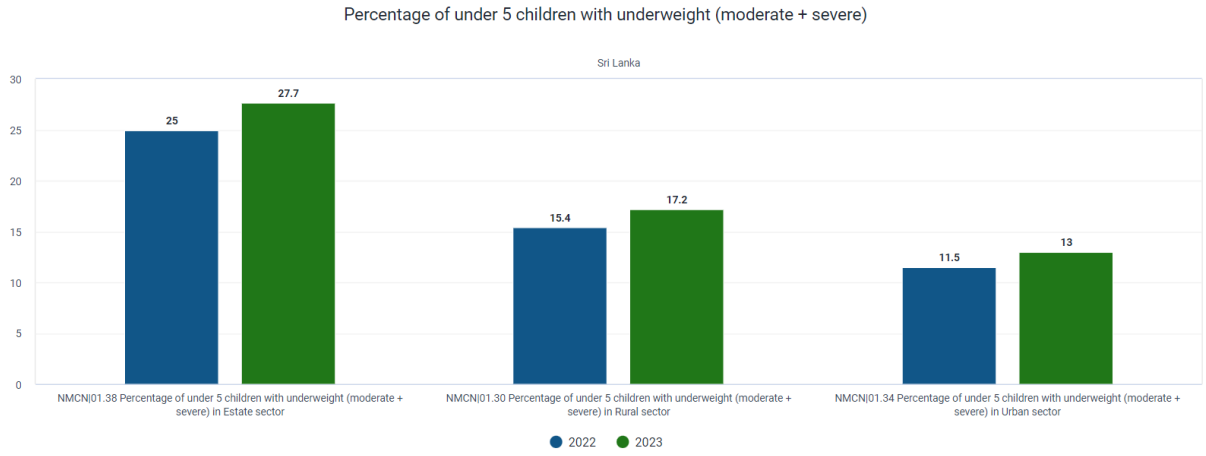

Figure 4: Percentage of children under 5 years with underweight (moderate + severe) by Sector

3.1.4. Children under 5 years with wasting

Wasting is defined as low weight-for-length/height (< -2SD). It often indicates recent and severe weight loss, although it can also persist for a long time. It usually occurs when a child has not had food of adequate quality and quantity and/or they have had frequent or prolonged or severe illnesses.

Percentage of wasting under 5 years was reported as 10%. No much change is observed in the overall wasting percentage under 5 years from the previous year's value of 10.1%. Highest wasting percentage was reported from Polonnaruwa district followed by Anuradhapura and Matale districts [Figure 8]. Except in Kilinochchi district, all districts show a slight reduction in wasting compared to last year.

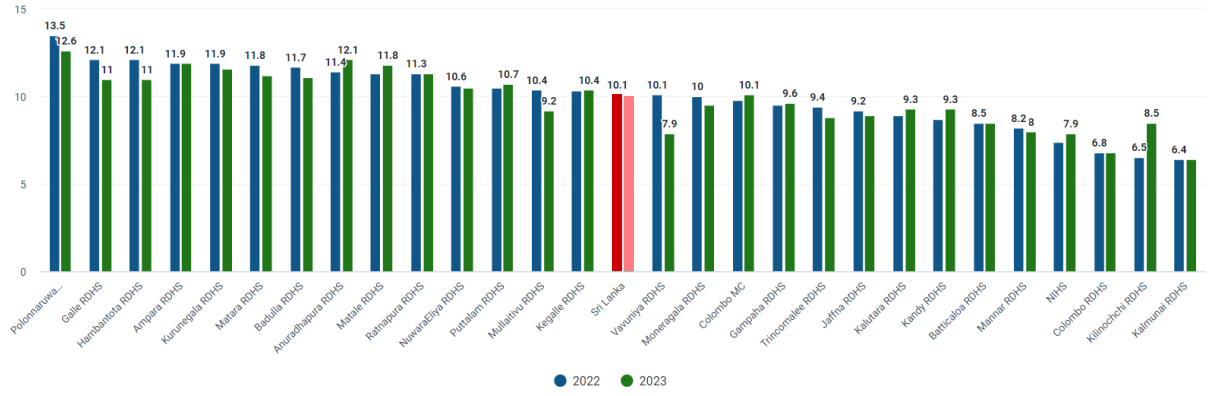

Figure 5 : Percentage of children under 5 years with wasting (SAM + MAM)

Compared to 2022, wasting in estate and rural sectors have reduced slightly [Figure 6] whereas, in urban sector it has remained at around 8% [8.1%].

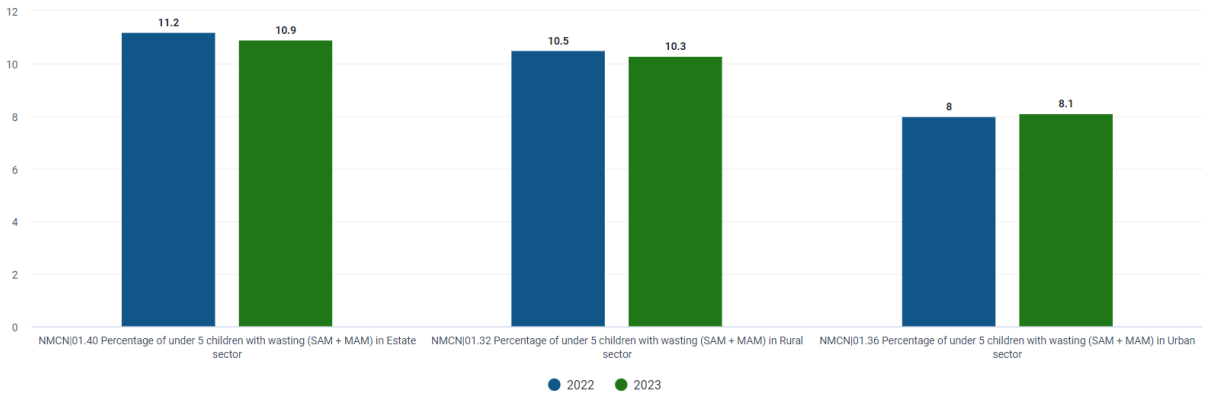

Figure 6 : Percentage of children under 5 years with wasting by sector

3.1.5. Children under 5 years with severe acute malnutrition [SAM]

Severe acute malnutrition is defined as **a very low weight for length/height (< -3SD).** A total of 15,763 SAM children [1.2%] were reported in 2023 compared to the 18,420 [1.4%] SAM children reported in 2022 [Annexure 1].

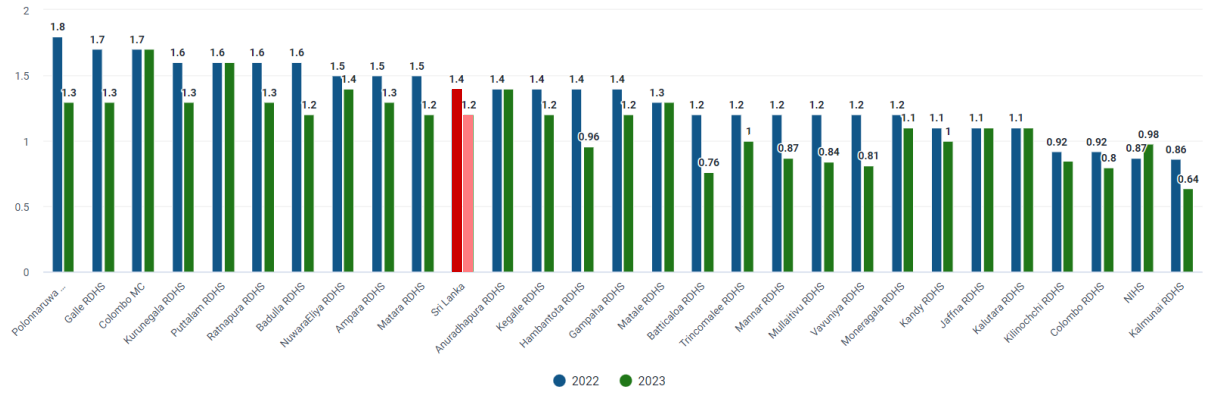

Figure 73 : Percentage of children under 5 years with severe wasting (SAM)

In all districts except NIHS Kalutara, percentage of SAM children has reduced compared to 2022 [Figure 7].

3.1.6. Children under 5 years with stunting

Stunting is defined as low length/height-for-age (<-2SD). It is the result of chronic or recurrent undernutrition, usually associated with poverty, poor maternal health and nutrition, frequent illness and/or inappropriate feeding and care in early life. Stunting prevents children from reaching their physical and cognitive potential.

It was noted that in all districts the stunting percentages have gone up. Highest percentage of stunting was reported from the district of Nuwaraeliya [Figure 8].

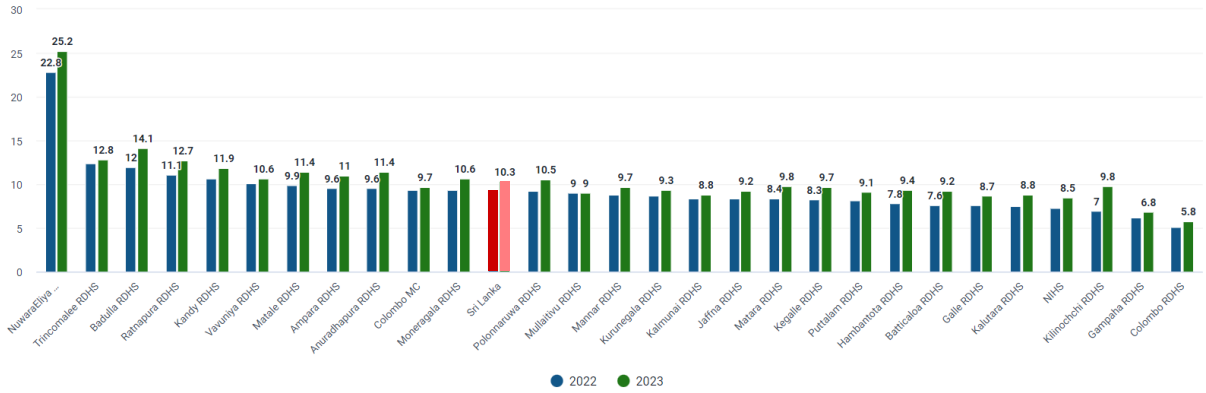

Figure 8: Percentage of under 5 children with stunting (moderate + severe)

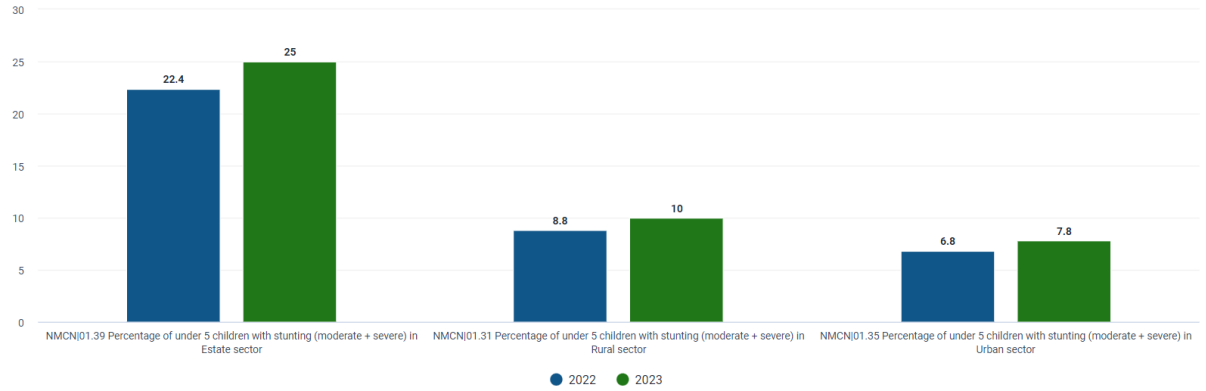

Figure 9: Percentage of children under 5 years with stunting (moderate + severe) by sector

In all sectors percentage of children with stunting has been increased in 2023 compared to the previous year. The highest rate is reported from the estate sector followed by the rural sector.

3.1.7. Children under 5 years with overweight and obesity

In all districts except Vavuniya, overweight and obesity has decreased compared to 2022 [Figure 10].

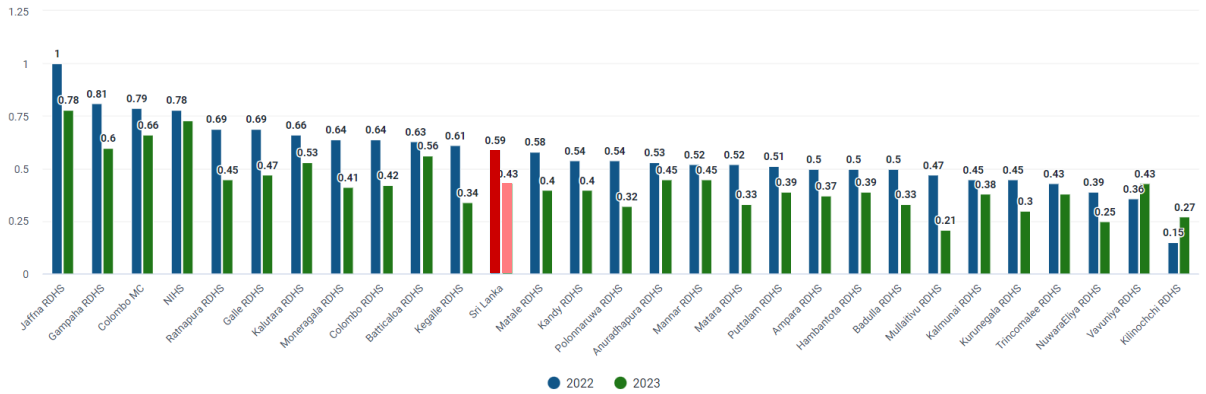

Figure 10: Percentage of children under 5 years with overweight and obesity

3.1.8. Nutrition status of children under 5 years by age categories

3.1.8.1. Infants under 1 year of age

Underweight and stunting have increased in infants compared to 2022 data whereas, wasting and overweight/obesity has decreased. [Figure 11].

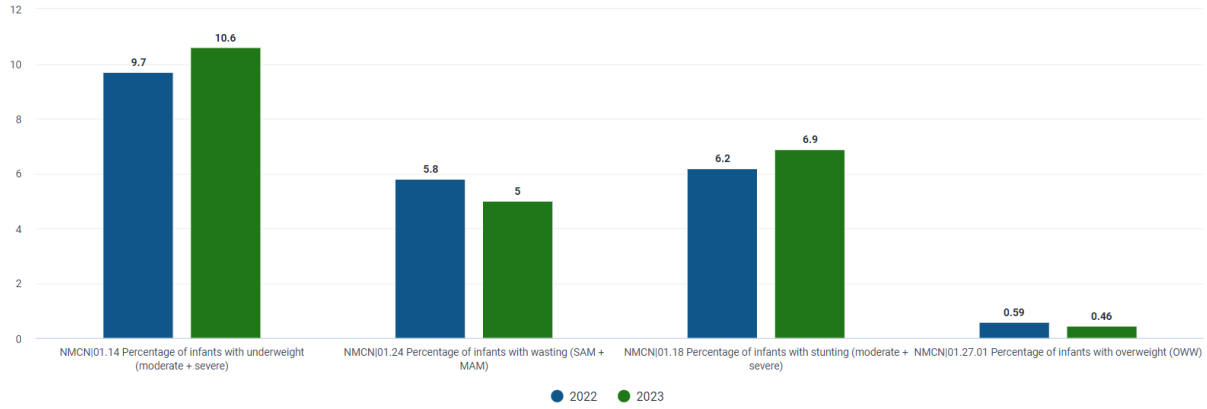

Figure 41 : Nutrition status of infants under 1 year

3.1.8.2 Children 1-2 years of age

Same is observed among 1-2 years age group, as underweight and stunting have increased and wasting, overweight/obesity showing a slight reduction in 2023 [Figure 12].

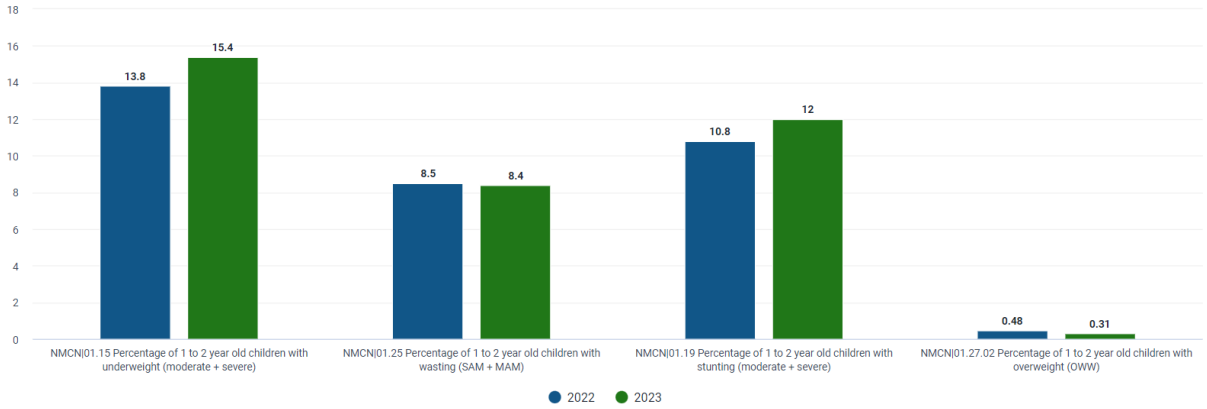

Figure 52 : Nutrition status of young children between 1 to 2 years

3.1.8.3 Children 2-5 years of age

Same trend continued among the preschoolers with increased underweight and stunting and wasting remaining the same compared to 2022 [Figure 13].

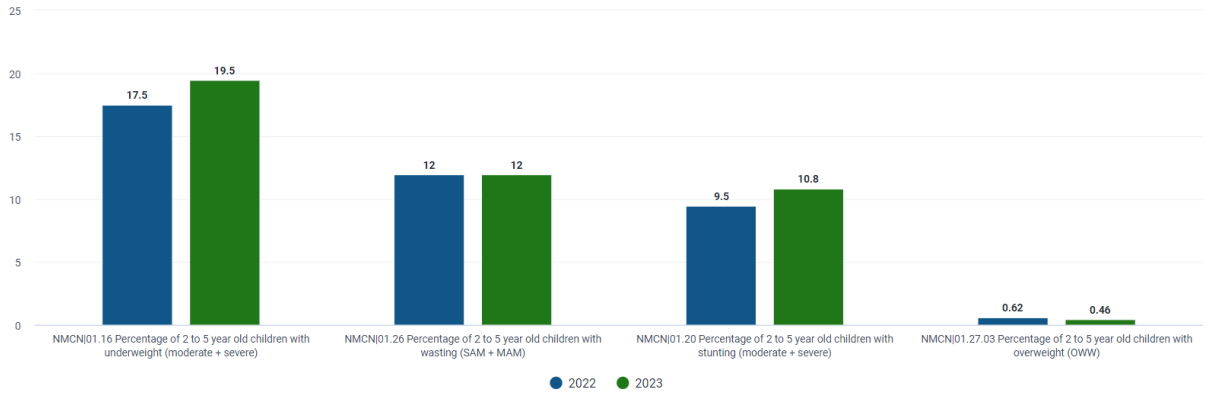

Figure 63 : Nutrition status of children between 2 to 5 years

3.1.9. Comparison of stunting and wasting 2022 and 2023 by MOH Areas

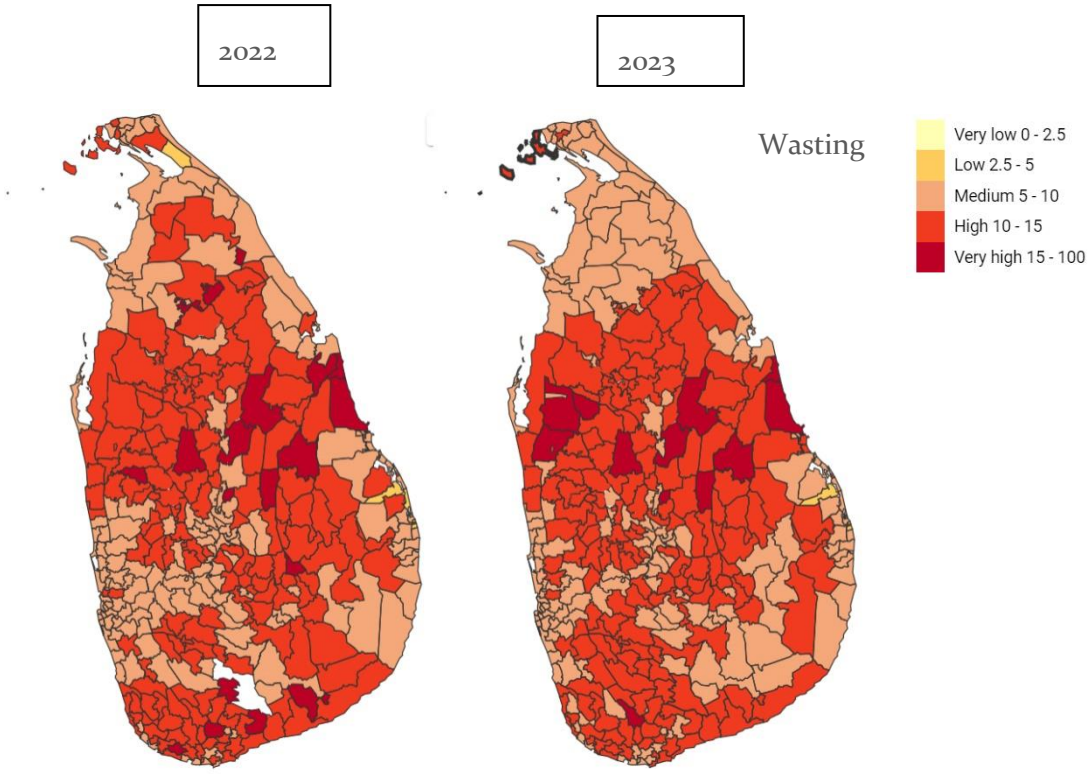

*Figure 14: Comparison of wasting among children under 5 years 2022 & 2023 by MOH areas

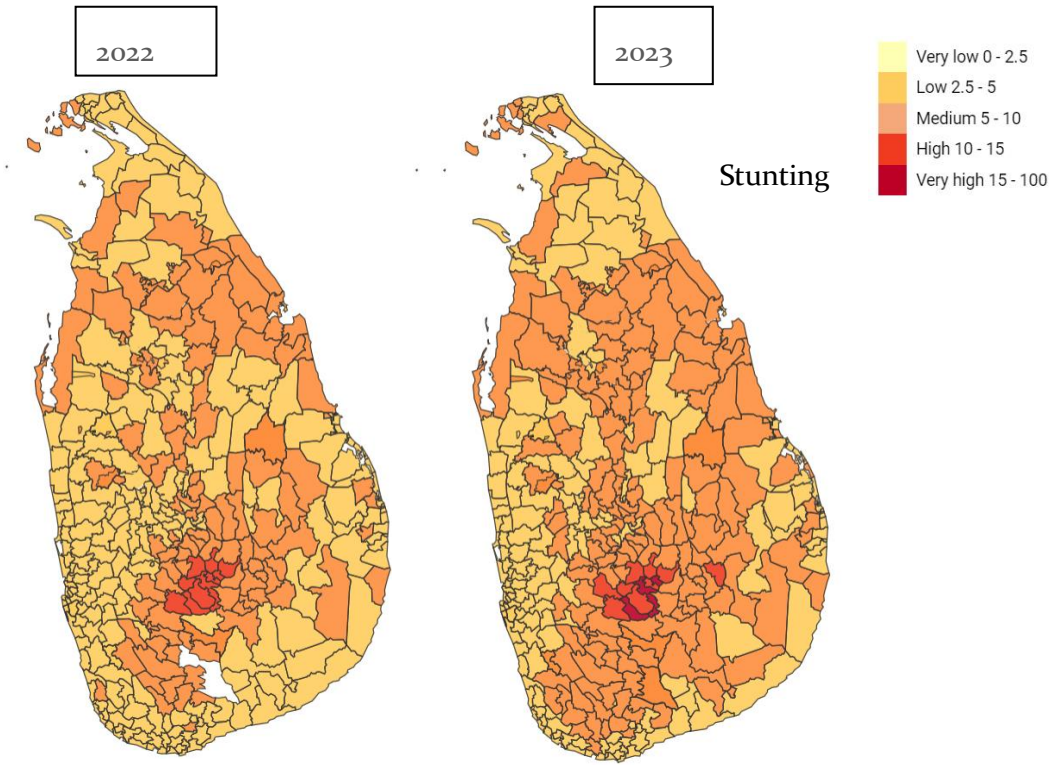

Figure 15: Comparison of stunting among children under 5 years 2022 & 2023 by MOH areas

**Maps were based on the WHO cut-off values for public health significance*

WHO. Global database on child growth and malnutrition (http://www.who.int/nutgrowthdb/en/)

LABELS	PREVALENCE THRESHOLDS (%)		
	WASTING	OVERWEIGHT	STUNTING
Very low	< 2.5	< 2.5	< 2.5
Low	2.5 - < 5	2.5 - < 5	2.5 - < 10
Medium	5 - < 10	5 - < 10	10 - < 20
High	10 - < 15	10 - < 15	20 - <30
Very high	≥ 15	≥ 15	≥ 30

3.2. Nutritional status of pregnant women:

A comparison of routinely collected data on maternal nutrition was done using the electronic Reproductive Management Information System of FHB

3.2.1. Pregnant women with low Body Mass Index

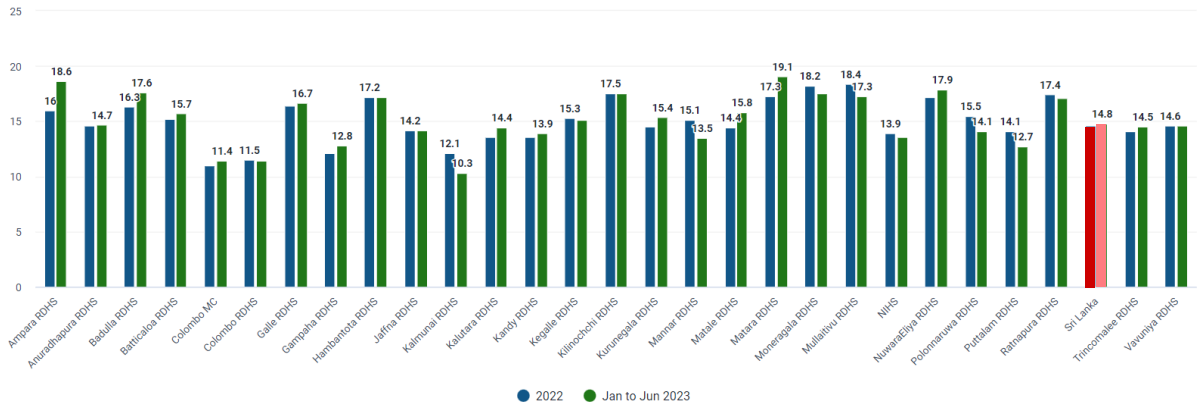

Figure 16: Percentage of pregnant mothers with BMI < 18.5%

According to routine data (eRHMIS), low body mass index [BMI] less than 18.5 kg/m² among pregnant women also have increased slightly in the country.

3.2.2. Pregnant women with Anaemia

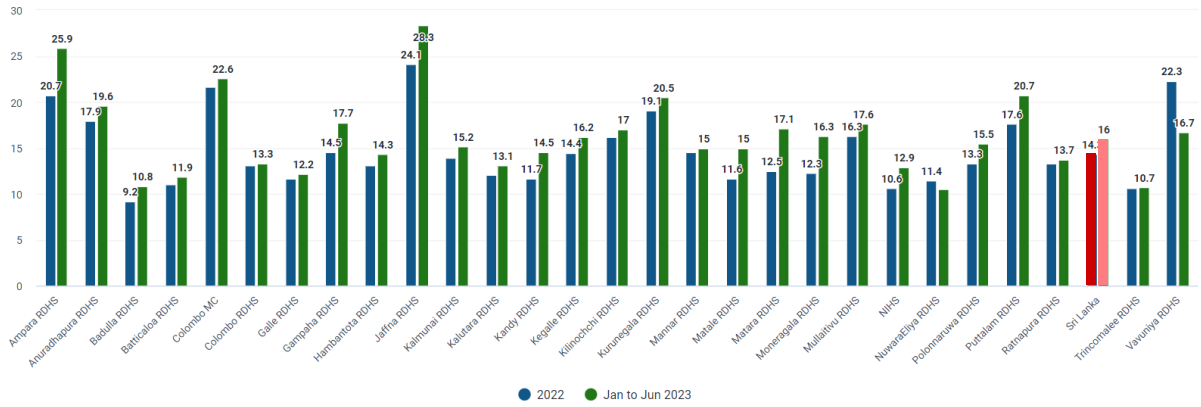

Figure 17: Percentage of pregnant mothers with Hb less than 11g/dl before 12 weeks of POA

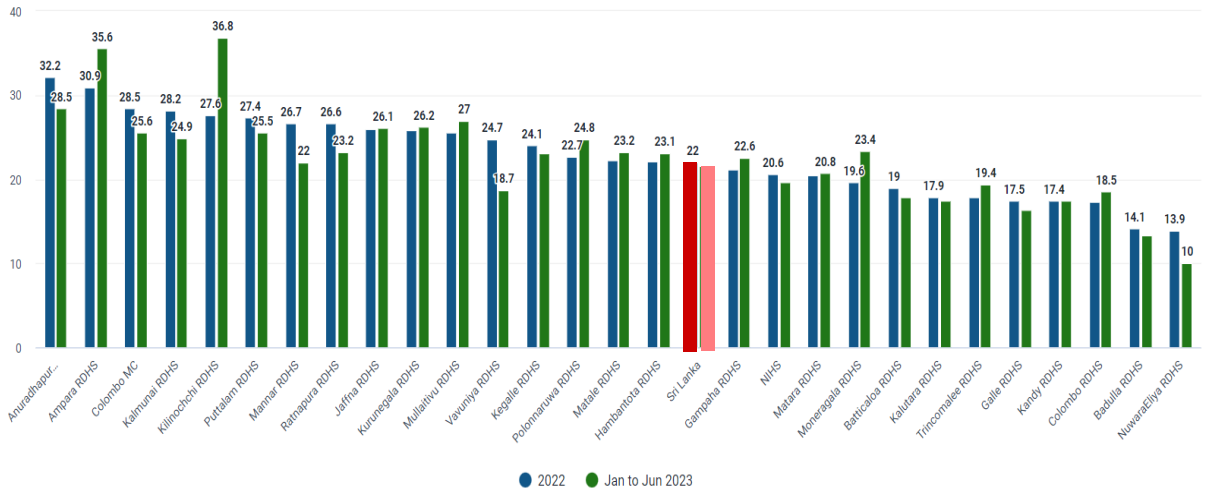

Figure 18: Percentage of pregnant mothers with Hb less than 10.5g/dl in 26-28 weeks of POA

Anaemia of pregnant women at the booking visit has increased from 14.3% to 16% in Sri Lanaka with the highest reporting rate [28.3%] from the district of Jaffna followed by Ampara district [25.6%]. At 26-28 weeks, anaemia rate of 22% was reported in both 2022 and 2023.

3.2.3. Low Birth Weight reporting

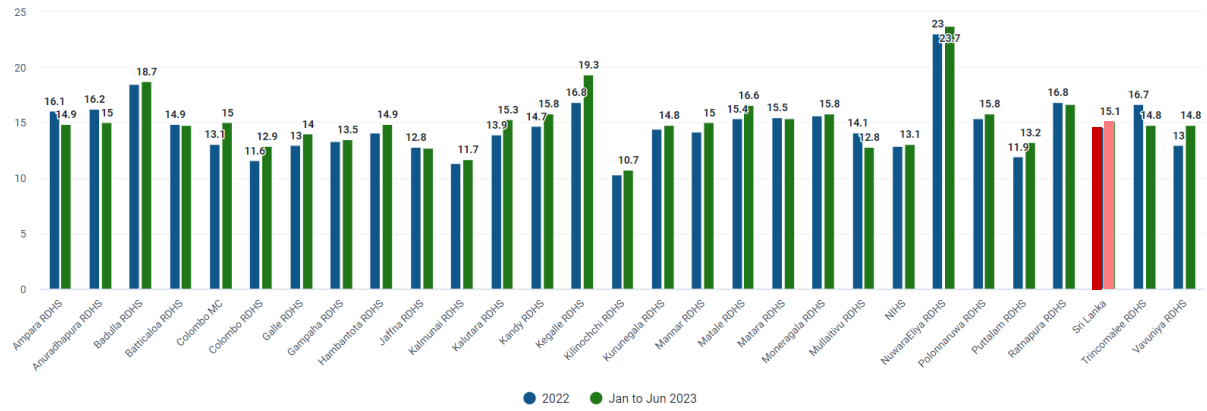

Figure 19: Percentage of babies with low birth weight

Low birth weight [LBW] reporting in most of the districts have increased with a national value of 15.1%. Highest LBW was reported from Nuwaraeliya which was 23.7%.

3.3. Nutritional status of school children

3.3.1. Comparison of wasting among students examined in 2022 and 2023 (nutrition moonth data)

Data reported in Nutrition Months in 2022 and 2023 showed an increase in wasting among all examined students [Grade 1,4,7 and 10] from 19.5% and 21.0% [Figure 20].

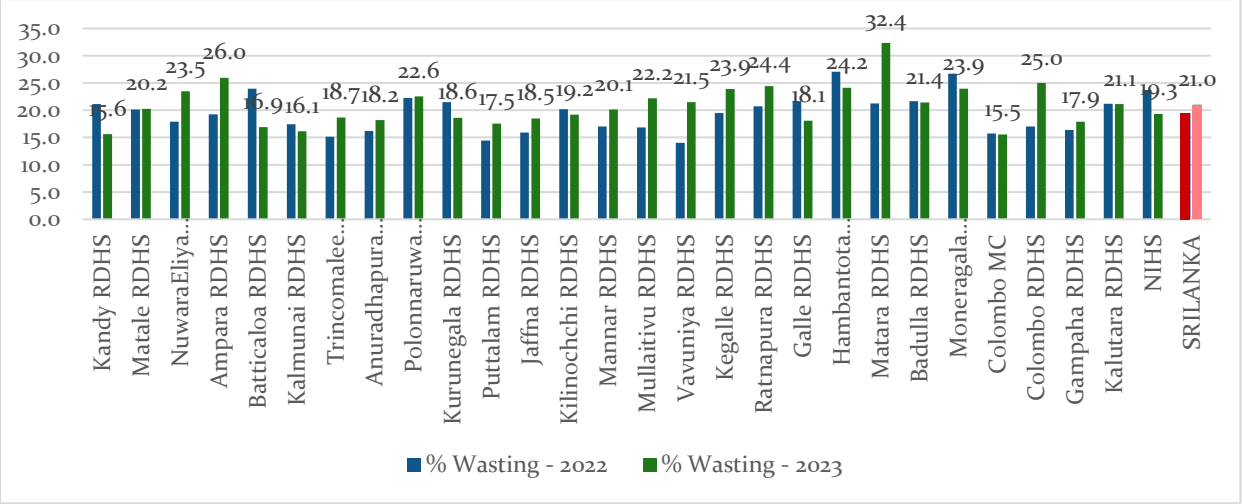

Figure 20: Percentage of wasting status among students examined 2022 and 2023

3.3.2. Obesity among school children

Obesity among school children examined during the Nutrition month [Grade 1,4,7 and 10] has increased from 1.4% to 2.7% [Figure 21] whereas overweight has remained the same at 6.1% [Figure 22]

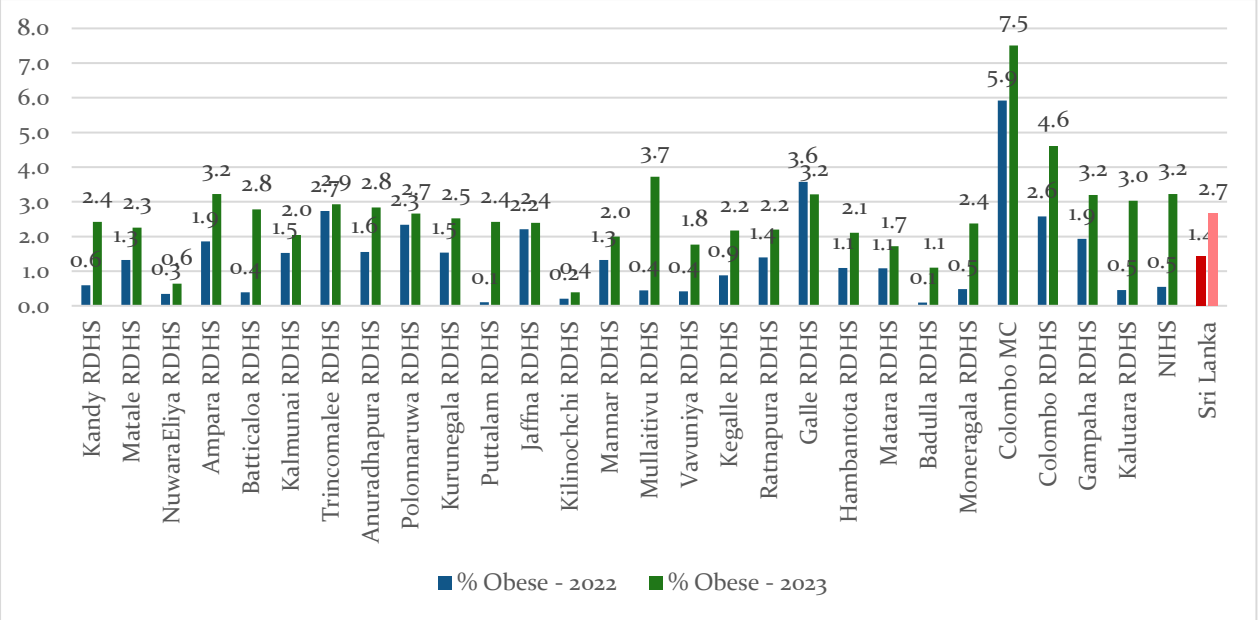

Figure 21: Percentage of obesity status among students examined 2022 and 2023

3.3.3. Overweight among school children

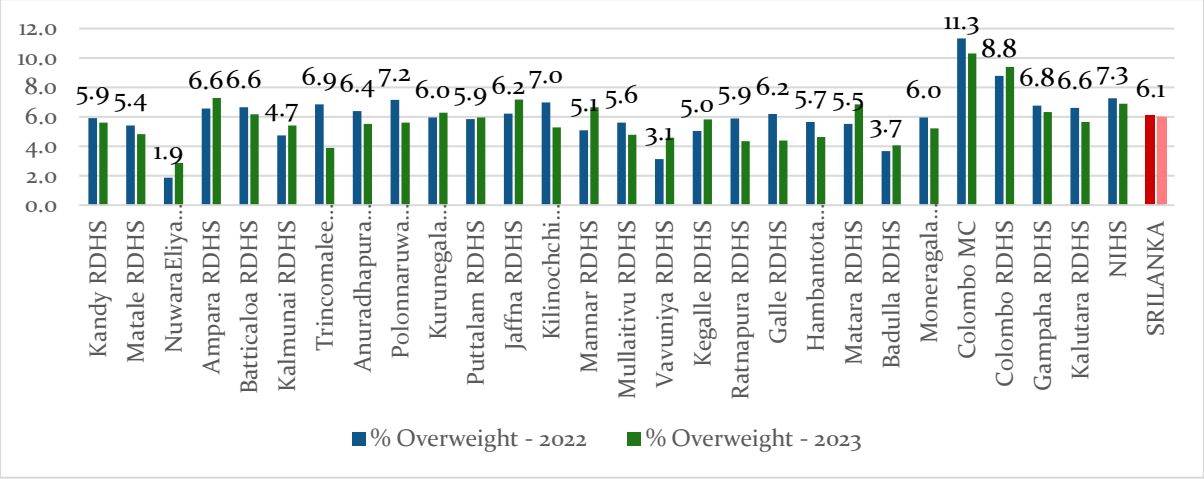

Figure 22: Percentage of overweight status among students examined 2022 and 2023

4. Summary

In 2023, percentages of children under 5 years with growth faltering, underweight and stunting has increased compared to 2022 where as a slight reduction is observed in wasting and overweight/ obesity [Figure 16].

This trend is seen in all age categories [infant, 1-2 years, 2-5 years] and in all three sectors [urban, rural & estate].

In areas where there is an increase in wasting and stunting, further detail analysis is needed by PHM area for identification of vulnerability in these areas.

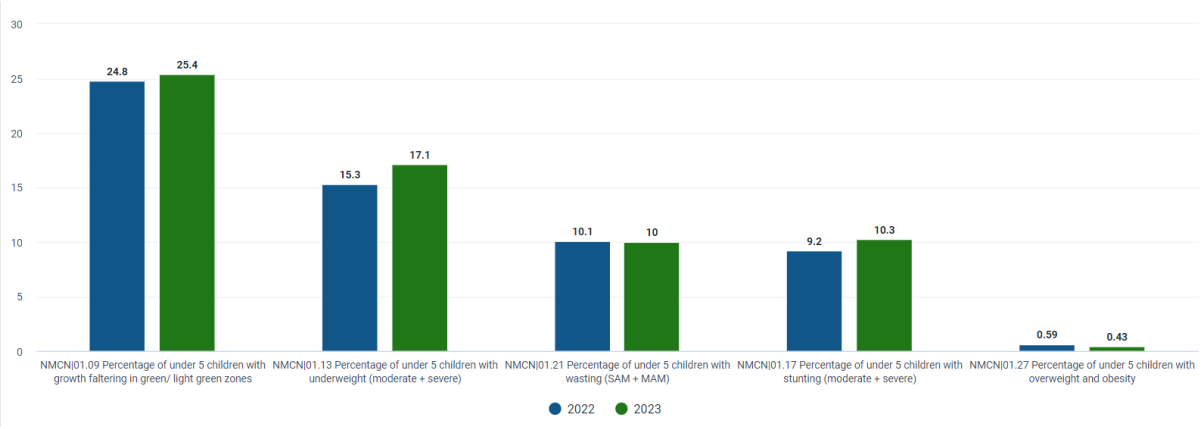

Figure 23: Nutrition status of Children under 5 years

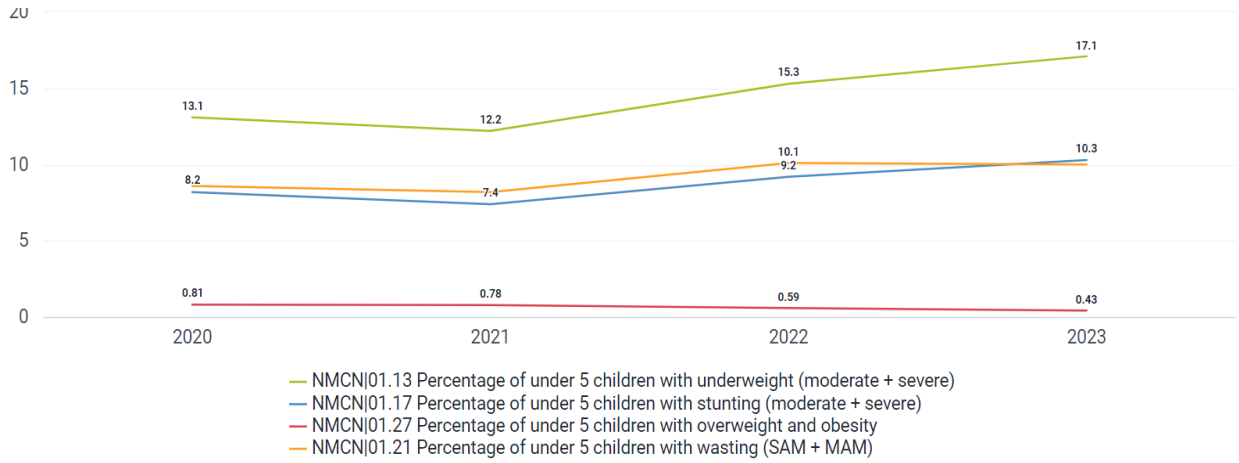

Figure 24: Underweight, wasting, stunting and overweight trends of children under 5 from 2020 to 2023

In children under 5 years, from 2020 to 2023, it was observed that underweight and stunting have increased whereas, wasting and overweight have reduced from 2022 to 2023.

Compared to 2022, indicators on maternal nutrition [low BMI, anaemia and LBW] have increased slightly over the year.

5. Conclusions and recommendations

- Underweight and stunting have increased. The increase in stunting appears to be the key contributor to increased underweight status. As stunting is more likely due to longstanding deprivation of a balanced diet, with the period of high food inflation, measures to increase the variety of food in the daily diet of children is recommended. Actions to popularize locally available low-cost nutritious food items, including such items in the food aid packages and targeting the nutritionally vulnerable families for the food aid are recommended. As a medium-term measure to improve home gardening etc.
- Wasting has neither improved nor deteriorated. Increase of stunting may have contributed to this. On the other hand, the intensified activities to detect and treat SAM and MAM by the health sector can be cited as a reason for this. Health sector measures to prevent growth faltering which is the key intervention to prevent children from falling into MAM and SAM should be further strengthened; identification of growth faltering early and providing individual counselling to address issues in dietary practices including use of low-cost nutritious alternatives. Nutrition clinics at MOH level should be strengthened. Therapeutic feeding at hospital setting for SAM treatment (paediatric and clinical nutrition facilities and outreach clinics) should be strengthened. Reaching the nutritionally vulnerable families with children with food aid may also have contributed to the maintaining of the same wasting rates without further deterioration. These measures should be continued giving special emphasis to including food to ensure energy density also into the food baskets.
- Health staff should be equipped with necessary facilities to follow up these nutritionally vulnerable children more frequently according to the guidelines provided by the Ministry of Health.
- More attention to be drawn on strengthening early childhood care and development with good parenting and responsive feeding.
- Extreme caution should be exercised to refrain from including inappropriate food items such as commercial milk preparations and ultra processed food items in these food aid which can cause long-term irreversible damage both to health and the economy.
- Overweight and obesity among children seems to be on the decline which even though a good sign may be taken as a pointer to reduced food intake of the children in general over the recent past. While imposing restrictions on excessively high calorie ultra

processed food and carrying out intensified efforts to promote healthy lifestyles and healthy food behaviours is important. Promotion of normal growth of children which is carried out through the GMP program of the Ministry of Health should be supported. Conducting complementary feeding classes regularly for parents and caregivers by MOH staff and addressing growth faltering and early risk of overweight need to be given due priority by the health staff.

- Provincial and district authorities should analyze MOH and PHM level data for action and improving the quality of data. Based on available data vulnerable pockets to be identified and relevant information shared with non – health sector to target nutrition sensitive interventions to needy populations.
- Consider tax concession on essential food items required for good nutrition to enable a healthy and balanced diet for vulnerable children and pregnant mothers.
- Ensure uninterrupted supply of Thriposha for pregnant ad lactating women and under 5 years children and supply of micronutrients for mothers and children.
- Strengthen the availability of equipment to monitor nutritional status of mothers and children and other facilities for public health staff
- Vulnerable pregnant mothers, children under 5 years and school children need to be followed up frequently with domiciliary visits. Fuel/transport support for the public health staff is needed in order to monitor them closely and to intervene effectively.
- Ensure sustainable funding mechanism for school midday meal programme considering its importance in the crisis situation
- Communication of media messages on optimum nutrition to the general public.

6. Acknowledgement

- All Medical Officers of Health and their teams for their prompt response and successfully concluding the activity amidst many hardships
- All provincial and district directorates for their continuous support and leadership
- UNICEF Sri Lanka for assisting nutrition month with essential stationaries
- District MCH teams for their guidance, supervisions and close monitoring of whole task
- Director MCH and the team at FHB for the guidance
- All staff members in the Child Nutrition Unit and Monitoring and Evaluation Unit for providing the technical guidance, managing online database and timely analysis of data

Annexure

7.1 Number of children under 5 years with nutrition issues reported in each district 2023

RDHS	Number of under 5 children measured for weight	Number of under 5 children with underweight (moderate + severe)	Total number of children with SAM	Total number of children with MAM	Number of under 5 children with stunting	Number of under 5 children with overweight and obesity
Ampara	19394	3916	248	2066	2140	71
Anuradhapura	66195	13330	956	7031	7567	296
Badulla	57687	11893	685	5692	8141	191
Batticaloa	49504	7733	372	3813	4561	278
Colombo MC	18948	2774	320	1590	1838	125
Colombo	80758	9048	646	4807	4694	341
Galle	64417	10863	836	6224	5606	303
Gampaha	122570	16922	1439	10329	8345	735
Hambantota	47498	8296	457	4766	4464	187
Jaffna	39752	5522	418	3132	3656	309
Kalmunai	44595	5809	284	2552	3941	167
Kalutara	54888	8380	594	4502	4845	291
Kandy	93047	17224	970	7626	11044	376
Kegalle	51045	9228	600	4696	4954	171
Kilinochchi	10056	1408	85	765	983	27
Kurunegala	106137	18647	1432	10879	9857	314
Mannar	10574	1434	92	757	1027	48
Matale	35511	6736	461	3716	4051	142
Matara	53240	9780	661	5315	5231	174
Moneragala	39074	6733	421	3300	4141	161
Mullaitivu	8938	1294	75	750	802	19
NIHS	20230	2941	198	1398	1718	148
NuwaraEliya	50439	13296	711	4588	12717	125
Polonnaruwa	32722	6410	425	3695	3431	103
Puttalam	56744	9245	909	5152	5140	219
Ratnapura	71600	14193	960	7128	9109	325
Trincomalee	39683	7103	402	3079	5096	150
Vavuniya	12438	1846	101	882	1315	54
Sri Lanka	1357684	232004	15758	120230	140414	5850

7.2 Comparison of number of school children measured in 2022 and 2023

RDHS	Students Examined in 2022					Students Examined in 2023				
	Grade 1	Grade 4	Grade 7	Grade 10	Total	Grade 1	Grade 4	Grade 7	Grade 10	Total
Kandy RDHS	3580	4304	2995	3185	14064	1787	2199	2663	2403	9052
Matale RDHS	1038	1291	1699	1600	5628	747	793	1231	1168	3939
NuwaraEliya RDHS	2093	2821	3263	3339	11516	556	722	707	632	2617
Ampara RDHS	965	1130	1356	1270	4721	227	235	365	355	1182
Batticaloa RDHS	840	914	538	475	2767	3169	2979	2528	2515	11191
Kalmunai RDHS	2332	2378	2695	2630	10035	2720	2594	2279	2086	9679
Trincomalee RDHS	2227	2281	2337	2206	9051	941	899	1103	1038	3981
Anuradhapura RDHS	3002	3278	2996	2633	11909	1703	1871	1321	1158	6053
Polonnaruwa RDHS	1502	1636	2271	2189	7598	1070	1216	1747	1573	5606
Kurunegala RDHS	5846	6346	6347	5988	24527	2573	2853	3328	3348	12102
Puttalam RDHS	566	649	771	779	2765	1236	1285	1169	1176	4866
Jaffna RDHS	1689	1955	2274	2274	8192	877	976	616	432	2901
Kilinochchi RDHS	39	43	189	244	515	379	407	564	583	1933
Mannar RDHS	794	917	1156	843	3710	384	396	456	434	1670
Mullaitivu RDHS	199	283	318	410	1210	438	503	520	584	2045
Vavuniya RDHS	324	394	531	505	1754	314	309	467	349	1439
Kegalle RDHS	2247	2836	2674	2899	10656	2108	2582	2692	2672	10054
Ratnapura RDHS	3532	3877	4471	4606	16486	1645	1893	2031	1960	7529
Galle RDHS	3490	3743	3065	3197	13495	592	622	425	457	2096
Hambantota RDHS	3571	3654	3154	3220	13599	2610	2942	3237	3476	12265
Matara RDHS	2956	2940	2675	2693	11264	1827	1975	1773	1718	7293
Badulla RDHS	803	901	1119	1161	3984	806	934	1238	1162	4140
Moneragala RDHS	797	886	706	680	3069	1211	1287	1173	1111	4782
Colombo MC	546	620	773	258	2197	410	478	423	395	1706
Colombo RDHS	4459	5424	5194	5457	20534	4231	5146	4083	4090	17550
Gampaha RDHS	5183	6225	7069	7384	25861	1825	2190	2745	2956	9716
Kalutara RDHS	562	672	577	628	2439	813	885	549	600	2847
NIHS	436	570	358	371	1735	469	643	796	860	2768
Sri Lanka	**55618**	**62968**	**63571**	**63124**	**245281**	**37668**	**41814**	**42229**	**41291**	**163002**

7.3 Reporting rates of school health nutrition month activities

RDHS	2022	2023
Ampara RDHS	70.0	41.7
Anuradhapura RDHS	85.6	49.3
Badulla RDHS	31.6	39.2
Batticaloa RDHS	25.4	100.0
Colombo MC	6.4	8.5
Colombo RDHS	42.7	48.1
Galle RDHS	43.4	13.2
Gampaha RDHS	52.8	24.9
Hambantota RDHS	86.5	94.4
Jaffna RDHS	72.0	23.7
Kalmunai RDHS	93.8	93.8
Kalutara RDHS	15.0	23.5
Kandy RDHS	70.8	50.5
Kegalle RDHS	84.6	87.5
Kilinochchi RDHS	16.7	96.7
Kurunegala RDHS	80.5	41.4
Mannar RDHS	100.0	80.6
Matale RDHS	75.0	70.5
Matara RDHS	56.3	68.8
Moneragala RDHS	38.3	54.3
Mullaitivu RDHS	37.5	67.5
NIHS	32.6	50.0
NuwaraEliya RDHS	105.6	31.8
Polonnaruwa RDHS	65.0	67.5
Puttalam RDHS	21.9	48.2
Ratnapura RDHS	76.8	49.5
Trincomalee RDHS	100.0	77.4
Vavuniya RDHS	56.5	28.3
Sri Lanka	**59.4**	**49.0**