



Government of Tamil Nadu  
**State Planning Commission**



**REPORT**

**2024**

## **Chief Minister's Breakfast Scheme: Impact on Children in Primary Classes in Government Schools Interim Report (Second Phase)**

# **Chief Minister's Breakfast Scheme: Impact on Children in Primary Classes in Government Schools**

## **Interim Report (Second Phase)**



**State Planning Commission,  
Government of Tamil Nadu, Chennai.**

**2024**

*Published by*  
**State Planning Commission**  
Government of Tamil Nadu

**2024**

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# Effect of breakfast scheme on attendance, engagement in class and academic performance among primary school students and perception of the scheme among teachers and parents

## 1. Background

The Tamil Nadu government introduced the Chief Ministers' Breakfast Scheme in July 2022, for the first time in the state. As the most essential meal of the day, breakfast should never be neglected. Since children rush to school early in the morning, many children skip breakfast. Skipping breakfast makes young children weary, angry, and restless. Under the program, breakfast is provided to pupils in classes 1 to 5 in the school itself to ensure children attend classes without hunger.

This scheme has been implemented through local bodies expanding to cover all districts of Tamil Nadu. A prepared meal consisting of 150–500 grams of breakfast with sambar and veggies is provided to each student. The government also provides the breakfast menu for five working days (Monday to Friday). The quantity of raw material is 50 grams per child per day. Locally available millet-based breakfast is given for at least 2 days a week. This will ensure approximately 293.40 calories of energy, 9.85 grams of protein, 5.91 grams of fat, 1.64 grams of iron and 20.41 grams of calcium for each child.

The government sanctioned a sum of Rupees 33.56 crore for the Chief Minister's Breakfast Scheme on June 27, 2022. In the first phase, the scheme was implemented in 1,545 government primary schools and 1,14,094

students received breakfast in schools from September 2022. In the first phase, Corporations, Municipalities and Panchayats were selected based on prevalence of anaemia (as per NHFS-5 data), economic backwardness (as per SBGF), habitations of tribal population and inaccessibility of the areas.

A study by State Planning Commission of Tamil Nadu showed that there was an increase in attendance in 90% schools following the introduction of Chief Ministers' Breakfast Scheme. The scheme was then upscaled to all the government primary schools in August 2023 to cover 31,008 government primary schools across rural and urban areas benefiting about 17 lakh students from classes I to V at a cost of Rs 404.41 crore. An evaluation of the scheme in terms of attendance, academic performance and nutritional improvement was essential to understand the impact of this program. Hence, an evaluation study was planned with the following objectives.

- To find the effect of breakfast scheme on school attendance rate among primary school students
- To find the effect of breakfast scheme on engagement in class and their academic performance among primary school students
- To understand the perception about the scheme among the teachers and parents of the primary school students.
- To assess the change in nutritional status of the primary school students.

## **2. Methodology**

The evaluation was planned as a longitudinal survey to understand the impact of the scheme on the nutritional status, academic performance and attendance rate. Hence a quarterly follow-up is included to assess the same.

**Table 1: Study design – Mixed Method**

Objective	Study Design	Respondent	Tools	Indicator
To find the effect of breakfast scheme on school attendance rate among primary school students	Secondary data analysis		Records on school attendance - Secondary data from School Department	Attendance of primary school students in the selected schools for the period: September to November 2022 Academic year 2023
To find the effect of breakfast scheme on engagement in the class and their academic performance among primary school students				
Engagement in the class	Prospective Design	Class teachers of the respective students	Questionnaire	Academic performance rating scale
Academic performance	Secondary Data		Records on Examination Marks -Secondary data from School Department	1 <sup>st</sup> Midterm and Quarterly Exam total Marks of 2022 and 2023 for class 1-5 of the selected schools
To understand the perception about the scheme among the teachers and the parents of the primary school students.				
Perception about the scheme among the teachers	Qualitative design	School teachers	Focus group discussion using checklist for qualitative component	
Perception about the scheme among Parents of the school students	Mixed Methods	Parents of the primary school students	Survey using Questionnaire. Focus group discussion using checklist	
To assess the nutritional status using anthropometry of the school students				
Nutritional status using anthropometry.	Quantitative Study- Prospective Study design	School Children	Weighing scale Stadiometer Growth Chart	Percentage malnourished



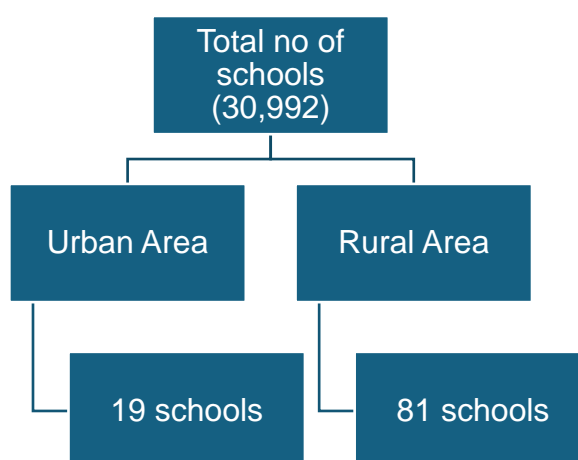
## Sample Size:

Assuming 50% of the schools to have at least 10% increase in attendance rate following breakfast scheme, the required sample size is:

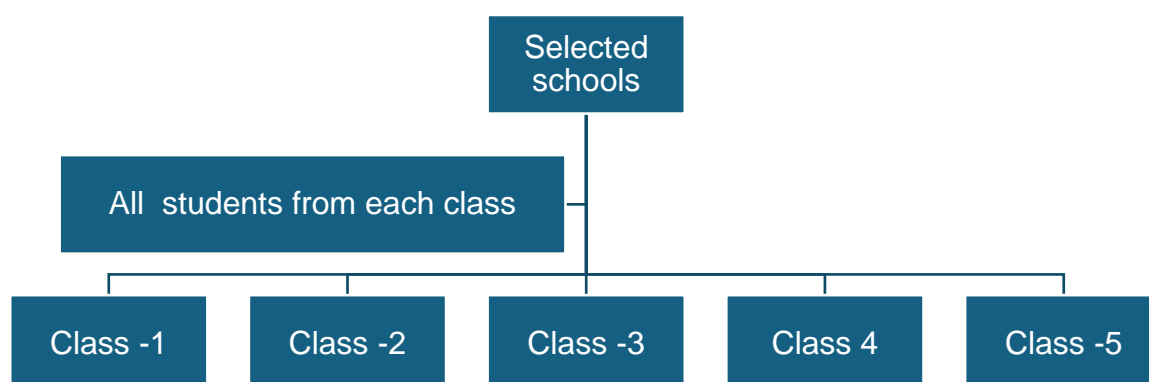
$\frac{Z\alpha^2 PQ}{d^2}$ , at 5% alpha error, and 10% precision, the required sample size is 96 schools, rounded off to 100.

**Figure 1 Sampling**

## Sampling (List of schools)



**Figure 2 Parents and students' selection in each school**



Totally from 100 schools, all the school students in the selected school were included for the purpose of the study. The selected students are followed up every 3 months once for a year and the following information is obtained.

**Table 2: Data collection methods used for CMBFS evaluation**

Component	Baseline December 2023	Follow-up: 1 March 2024	Follow-up: 2 June 2024	Follow-up: 3 September 2024	Follow-up: 4 December 2024
Engagement in class using questionnaire from their class teacher.	✓		✓	✓	✓
Anthropometric measurements – Height, Weight	✓	✓	✓	✓	✓
Academic performance in terms of total marks scored	✓	✓	✓	✓	✓
Attendance for the preceding quarter	✓	✓	✓	✓	✓
Study of implementation process	✓				
Parental Perception	✓				
FGD among parents and teachers	✓		✓	✓	✓

The parents of the selected students were interviewed once for understanding their perception towards the breakfast scheme.

## 2.1 Data Collection Method

Data is collected by the Community Medicine departments of government medical colleges in the districts. Each college is covering the schools selected in their district. Permission to do the data collection was obtained from the Directorate of School Education in the state and the same was communicated to the districts. The heads of the selected schools were communicated. The list of students from each class in the selected school was obtained.

## 2.2 Baseline Survey - December 10- 20, 2023

The school headmaster/mistress were informed on the purpose of the survey. The process of the implementation of the breakfast scheme was assessed using Questionnaire. The information about the purpose of the survey was given and consent for their wards to participate in the study obtained. The parents of the students were invited to participate in the survey and consent obtained. Parental survey was conducted in schools and done using semi-structured questionnaire. The data was collected from 100 schools (81 from rural areas and 19 from urban areas) students of 4152 and 1297 rural and urban respectively. The socio-demographic profile<sup>1</sup> of the students and their engagement in class questionnaire was filled by the respective class teachers for all students. Anthropometry (height and weight) of all the primary school students was measured using stadiometer and bathroom weighing scale.

## 2.3 Follow-up: 1

The students were followed up in 3 months between **March 20 and March 12, 2024** for anthropometry and academic performance by the Community Medicine departments of Government medical colleges. The data was collected from 90 schools<sup>2</sup> (74 from rural areas and 16 from urban areas) students of 3761 and 1346 rural and urban respectively. The socio-demographic profile<sup>3</sup> of the students, along with their academic performance, attendance rate and anthropometric measurements were collected from the school students, recorded by their respective class teachers. Anthropometry measurements (height and weight) of all the primary school students was done using stadiometer and bathroom weighing scale.

## 2.4 Follow-up: 2

The students were followed up in 3 months during **June 2024** for anthropometry and academic performance by the Community Medicine

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<sup>1</sup> Socio-demographic variable collected from students were locality, Gender, Caste and Religion.

<sup>2</sup> In the total of 100 schools selected for assessment, 90 schools' data were collected for the 1<sup>st</sup> follow-up visit in which 3 schools' data will be included in the further analysis and remaining 7 schools were not conducted due to logistic difficulties.

<sup>3</sup> Socio-demographic variable collected from students were locality, Gender, Caste and Religion.

departments of Government medical colleges. The data was collected from 100 schools (19 from urban and 81 from rural) students of **3983 and 966 rural and urban** respectively. The socio-demographic profile<sup>4</sup> of the students, attendance rate, their engagement in class and anthropometric measurements were collected from the school students, recorded by their respective class teachers. Anthropometry measurements (height and weight) of all the primary school students was done using stadiometer and bathroom weighing scale.

The new academic year began in June 2024. Hence, there were changes in the composition of the study participants. There was new enrolment to class 1 and other classes. Students of Class 5 in the last academic year were no longer the beneficiary of the scheme, hence they were not followed up henceforth.

The results are presented as a comparison<sup>5</sup> between the follow-up: 2 assessment conducted in June 2024 and the baseline study conducted in December 2023. In follow-up: 2<sup>6</sup>, newly admitted students of this academic year were assessed.

**Qualitative component** – After obtaining informed consent from teachers and parents –Focused Group Discussion (FGD) was conducted. In the baseline survey FGDs were conducted at Chennai, Madurai, Trichy and Virudhunagar, which was facilitated, and audio recorded by faculty member from the Department of Community Medicine who are trained in qualitative methods with research experience.

In follow-up: 2, FGDs/KII were conducted at Ramanathapuram, Thoothukudi, Tiruvallur and Dharmapuri during June, 2024.

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<sup>4</sup> Socio-demographic variable collected from students were locality, Gender, Caste and Religion.

<sup>5</sup> In comparison, current year new admission students and students who passed out in this academic year were excluded.

<sup>6</sup> In results, current academic year students (Inclusion of newly admitted students (1165) with exclusion of passed out students (1612)) were entered in column of follow-up: 2<sup>@</sup>



<b>Qualitative component conducted among districts</b>			
<b>District</b>	<b>No of FGDs among Parents</b>	<b>No of FGD/KII among teachers</b>	<b>Conducted Period</b>
Chennai	1	1	December-2023
Madurai	1	1	December-2023
Virudhunagar	1	1	December-2023
Tiruchirappalli	1	1	December-2023
Tiruvallur	1	1	June-2024
Thoothukudi	2	2	June-2024
Ramanathapuram	2	2	June-2024
Dharmapuri	2	2	June-2024

### 3.Results

#### 3.1 Attendance Rate

**Table 3: Comparison of attendance rates between follow-up and baseline survey**

Attendance rate (A.R)													
Socio-demographic variable		Baseline Survey (December 2023)		Follow-up: 1 (March 2024)		F2-F1	Follow-Up: 2 (June 2024)		F2- BS	Follow-up: 2 (June 2024)®			
		A.R (%) Mean ± S. D	IG p-value	A.R (%) Mean ± S. D	IG p-value	Paired Test (p-value)§	A.R (%) Mean ± S. D	IG p-value	Paired Test (p-value)§	No. of Children⁸	A.R (%) Mean ± S. D	IG p-value	
Locality	Total	3625	90±11.2	-	-	89.3±11.2	-	91.7±12.9	-	<.001	4949	90.4±15	-
	Rural	3021	89.8±11.3	0.002*	0.013*	89.1±11.5	0.013*	91.5±13	0.077*	<.001	3983	90.3±15.1	0.205*
	Urban	604	91.3±10.2			90.3±9.3		92.6±12.5		<.001	966	90.9±14.5	
Gender	Girls	1809	90.2±11	0.322*	0.259*	89.5±11.1	0.259*	92.3±12.2	0.003*	<.001	2490	90.9±14.7	0.015*
	Boys	1816	89.9±11.3			89.1±11.2		91.1±13.6		<.001	2459	89.9±15.3	
	BC	708	91±9.1			90.6±9.8		93.1±12.1		<.001	1009	91.2±14.3	
Caste	MBC	1330	91.5±8.9			91.4±8.6		93.1±10.9		<.001	1734	91.9±13.2	
	SC	1291	89.2±12.6	<.001#	<.001#	88.2±11.7	<.001#	90.5±13.9	<.001#	<.001	1795	89.4±15.7	<.001#
	ST	182	84.1±15.7			78.8±18.5		89.9±11.9		<.001	219	88.5±16.7	
	Others	107	85±15.2			86±11.9		83.8±20.8		<.001	169	82.9±20.2	
	Don't know	7	93.4±4.2			89.9±6.6		86.7±30.4		<.001	23	90±24.9	
Religion	Hindu	3443	90±11.2			89.3±11.2		91.8±12.9		<.001	4673	90.4±15	
	Muslim	92	88±13.1	0.047#	0.004#	87.3±11.9	0.004#	86.1±16.8	<.001#	<.001	146	84.8±17.5	<.001#
	Christian	89	91.6±7.1			91.9±7.6		96.1±7.4		<.001	129	95.3±9.9	
	Don't know	1	97.8±			100		100		<.001	1	100	

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe; IG- Independent Group sample; S.D- Standard Deviation; BS- Baseline Survey; F1- Follow-up:1; F2- Follow-up: 2; A.R- Attendance rate; p-value kept significant at <0.05.

\*- The Independent Samples t Test was done to compare the attendance rate between two groups.

# - ANOVA test was done to compare the attendance rate among multiple groups.

\$ -paired samples t-test was done to compare the attendance rate between follow-up and baseline.

@-includes data of all students including new admission.

<sup>7</sup>In comparison, current year new admission students and students who passed out in this academic year were excluded

<sup>8</sup>Current academic year students (Inclusion of newly admitted students (1165) with exclusion of passed out students (1612)) were entered in column of follow-up:2<sup>@</sup>

In Follow-up-2, there was a significant increase in attendance rates across gender and locality. The overall attendance rate in follow-up:2 showed an increase compared to the baseline. Among various religious categories, Muslims had lower proportion of attendance rate.

### 3.2 Number of days of Absenteeism among students

**Table 4: Comparison of number of days of absenteeism among students between follow-up and baseline survey**

Absent (Days)															
Socio-demographic variable		No. of Children <sup>9</sup>	Baseline Survey (December 2023)		Follow-up: 1 (March 2024)		F2-F1	Follow-up: 2 (June 2024)		F2- BS	Follow-up: 2 (June 2024) <sup>@</sup>				
			Median (IQR) (Days)	IG p-value	Median + IQR (Days)	IG p-value	Paired Test (p-value) <sup>\$</sup>	Median + IQR (Days)	IG p-value	Paired Test (p-value) <sup>\$</sup>	No. of Children <sup>10</sup>	Media n + IQR (Days)	IG p-value		
Locality	Total	3625	1.2(1.8)		1.3±2		< .001	0(2)		< .001	4949	1(2)			
	Rural	3021	1.4(1.8)	< .001 <sup>*</sup>	1.3±2.3	0.372	< .001	0(2)	0.04 <sup>*</sup>	< .001	3983	1(2)	0.246 <sup>*</sup>		
	Urban	604	1.2(1.6)		1.3±2		< .001	0(2)		0.027	966	0(2)			
Gender	Girls	1.2	1.6(1.6)	0.416 <sup>*</sup>	1.3±2	0.293	< .001	0(2)	< .001 <sup>*</sup>	< .001	2490	0(2)	0.007 <sup>*</sup>		
	Boys	1.2	1.8(1.8)		1.3±2.3		< .001	1(2)		< .001	2459	1(2)			
	BC	708	1.2(1.6)		1.3±1.7		< .001	0(1)		< .001	1009	0(2)			
Caste	MBC	1330	1.2(1.4)		1±2		< .001	0(2)		< .001	1734	0(2)			
	SC	1291	1.4(1.8)	< .001 <sup>#</sup>	1.7±2.5		< .001	1(2)	< .001 <sup>#</sup>	< .001	1795	1(2)	< .001 <sup>#</sup>		
	ST	182	2(2.5)		3±5.9		< .001	1(2)		< .001	219	1(2)			
	Others	107	1.9(2.8)		2.3±2.7		0.062	1(4)		0.132	169	1(4)			
	Don't know	7	0.9(1.4)		1.5±1.4		0.233	0(0.8)		0.726	23	0(0.5)			
	Hindu	3443	1.2(1.7)		1.3±2		< .001	092)		< .001	4673	1(2)			
Religion	Muslim	92	1.8(2.2)	0.005 <sup>#</sup>	2.1±2.5	0.004 <sup>#</sup>	0.009	2(3)	< .001 <sup>#</sup>	0.366	146	2(3)	< .001 <sup>#</sup>		
	Christian	89	1.2(1.4)		1.3±1.7		< .001	0(1)		< .001	129	0(1)			
	Don't know	1	1.2		0±0		0.009	0		0.329	1	0			

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe; IG- Independent Group sample; BS- Baseline Survey; F1- Follow-up-1; F2- Follow-up-2; A.R- Attendance rate; p-value kept significant at <0.05.

\* - Mann-Whitney U Test was done to compare the number of days of absenteeism among students between two groups.

<sup>#</sup> - Kruskal-Wallis Test was done to compare the number of days of absenteeism among students between multiple groups.

<sup>§</sup> - Wilcoxon signed-rank Test was done to compare the number of days of absenteeism among students between follow-up and baseline.

<sup>@</sup> - includes data of all students including new admission.

<sup>9</sup>In comparison, current year new admission students and students who passed out in this academic year were excluded

<sup>10</sup>Current academic year students (Inclusion of newly admitted students (1165) with exclusion of passed out students (1612)) were entered in column of follow up-2<sup>@</sup>

There was a significantly lower absentee rate in follow-up: 2 compared to baseline and follow-up

### 3.3 Average Entry time to school

**Table 5: Comparison of students reaching school between follow-up: 2 and baseline survey**

Average Entry time to school		Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n-3751	Follow-up: 2 (June 2024) <sup>@</sup> n-4847
<b>Total</b>	<b>07.00am-07.30am</b>	71(1.89%)	8(0.21%)	13(0.26%)
	<b>07.30am-08.00am</b>	152(4.05%)	112(2.99%)	149(3.01%)
	<b>08.00am-08.30am</b>	1442(38.44%)	1674(44.63%)	1879(37.97%)
	<b>08.30-09.00am</b>	1983(52.87%)	1879(50.09%)	2795(56.48%)
	<b>after 09.00am</b>	103(2.75%)	78(2.08%)	113(2.28%)
<b>Rural</b>	<b>07.00am-07.30am</b>	27(0.87%)	7(0.23%)	12(0.3%)
	<b>07.30am-08.00am</b>	147(4.72%)	107(3.43%)	144(3.62%)
	<b>08.00am-08.30am</b>	1274(40.87%)	1415(45.4%)	2219(55.71%)
	<b>08.30-09.00am</b>	1626(52.17%)	1554(49.86%)	1554(39.02%)
	<b>after 09.00am</b>	43(1.38%)	34(1.09%)	54(1.36%)
<b>Urban</b>	<b>07.00am-07.30am</b>	44(6.94%)	1(0.16%)	1(0.1%)
	<b>07.30am-08.00am</b>	5(0.79%)	5(0.79%)	5(0.52%)
	<b>08.00am-08.30am</b>	168(26.5%)	259(40.85%)	576(59.63%)
	<b>08.30-09.00am</b>	357(56.31%)	325(51.26%)	325(33.64%)
	<b>after 09.00am</b>	60(9.46%)	44(6.94%)	59(6.11%)
<b>Female</b>	<b>07.00am-07.30am</b>	28(1.49%)	3(0.16%)	5(0.2%)
	<b>07.30am-08.00am</b>	71(3.78%)	51(2.72%)	67(2.69%)
	<b>08.00am-08.30am</b>	692(36.87%)	802(42.73%)	1377(55.3%)
	<b>08.30-09.00am</b>	1036(55.19%)	980(52.21%)	980(39.36%)
	<b>after 09.00am</b>	50(2.66%)	41(2.18%)	61(2.45%)
<b>Male</b>	<b>07.00am-07.30am</b>	43(2.3%)	5(0.27%)	8(0.33%)
	<b>07.30am-08.00am</b>	81(4.32%)	61(3.26%)	82(3.34%)
	<b>08.00am-08.30am</b>	750(40.02%)	872(46.53%)	1418(57.67%)
	<b>08.30-09.00am</b>	947(50.53%)	899(47.97%)	899(36.56%)
	<b>after 09.00am</b>	53(2.83%)	37(1.97%)	52(2.12%)
<b>BC</b>	<b>07.00am-07.30am</b>	13(1.76%)	0	1(0.1%)
	<b>07.30am-08.00am</b>	10(1.36%)	6(0.81%)	8(0.79%)
	<b>08.00am-08.30am</b>	249(33.74%)	290(39.3%)	546(54.11%)
	<b>08.30-09.00am</b>	441(59.76%)	427(57.86%)	427(42.32%)
	<b>after 09.00am</b>	25(3.39%)	15(2.03%)	27(2.68%)
<b>MBC</b>	<b>07.00am-07.30am</b>	40(2.92%)	2(0.15%)	3(0.17%)
	<b>07.30am-08.00am</b>	36(2.63%)	49(3.57%)	67(3.86%)
	<b>08.00am-08.30am</b>	663(48.36%)	720(52.52%)	1058(61.02%)
	<b>08.30-09.00am</b>	603(43.98%)	583(42.52%)	583(33.62%)
	<b>after 09.00am</b>	29(2.12%)	17(1.24%)	23(1.33%)
<b>SC</b>	<b>07.00am-07.30am</b>	18(1.34%)	5(0.37%)	6(0.33%)
	<b>07.30am-08.00am</b>	79(5.9%)	55(4.11%)	69(3.84%)
	<b>08.00am-08.30am</b>	474(35.4%)	575(42.94%)	1001(55.77%)

	<b>08.30-09.00am</b>	727(54.29%)	668(49.89%)	668(37.21%)
	<b>after 09.00am</b>	41(3.06%)	36(2.69%)	51(2.84%)
<b>ST</b>	<b>07.00am-07.30am</b>	0	1(0.55%)	2(0.91%)
	<b>07.30am-08.00am</b>	27(14.84%)	2(1.1%)	5(2.28%)
	<b>08.00am-08.30am</b>	38(20.88%)	67(36.81%)	99(45.21%)
	<b>08.30-09.00am</b>	112(61.54%)	104(57.14%)	104(47.49%)
	<b>after 09.00am</b>	5(2.75%)	8(4.4%)	9(4.11%)
<b>Others</b>	<b>07.00am-07.30am</b>	0	0	1(0.59%)
	<b>07.30am-08.00am</b>	0	0	0
	<b>08.00am-08.30am</b>	18(15.93%)	22(19.47%)	77(45.56%)
	<b>08.30-09.00am</b>	92(81.42%)	89(78.76%)	89(52.66%)
	<b>after 09.00am</b>	3(2.66%)	2(1.77%)	2(1.18%)
<b>Don't Know</b>	<b>07.00am-07.30am</b>	0	0	0
	<b>07.30am-08.00am</b>	0	0	0
	<b>08.00am-08.30am</b>	0	0	14(60.87%)
	<b>08.30-09.00am</b>	8(100%)	8(100%)	8(34.78%)
	<b>after 09.00am</b>	0	0	1(4.35%)
<b>Hindu</b>	<b>07.00am-07.30am</b>	70(1.97%)	8(0.23%)	13(0.28%)
	<b>07.30am-08.00am</b>	151(4.25%)	112(3.15%)	149(3.19%)
	<b>08.00am-08.30am</b>	1390(39.1%)	1605(45.15%)	2650(56.71%)
	<b>08.30-09.00am</b>	1855(52.18%)	1756(49.4%)	1756(37.58%)
	<b>after 09.00am</b>	89(2.5%)	74(2.08%)	105(2.25%)
<b>Muslim</b>	<b>07.00am-07.30am</b>	1(1.04%)	0	0
	<b>07.30am-08.00am</b>	0	0	0
	<b>08.00am-08.30am</b>	8(8.33%)	21(21.88%)	69(47.26%)
	<b>08.30-09.00am</b>	76(79.17%)	73(76.04%)	73(50%)
	<b>after 09.00am</b>	11(11.46%)	2(2.08%)	4(2.74%)
<b>Christian</b>	<b>07.00am-07.30am</b>	0	0	0
	<b>07.30am-08.00am</b>	0	0	0
	<b>08.00am-08.30am</b>	44(44.44%)	47(47.48%)	75(58.14%)
	<b>08.30-09.00am</b>	52(52.53%)	50(50.51%)	50(38.76%)
	<b>after 09.00am</b>	3(3.03%)	2(2.02%)	4(3.1%)
<b>Don't know</b>	<b>07.00am-07.30am</b>	0	0	0
	<b>07.30am-08.00am</b>	1(100%)	0	0
	<b>08.00am-08.30am</b>	0	1(100%)	1(100%)
	<b>08.30-09.00am</b>	0	0	0
	<b>after 09.00am</b>	0	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe

@-includes data of all students including new admission.

There was a reduction in students arriving school after 9 am across socio-demographic variables, except for the ST caste category, which showed a slight increase in follow-up: 2 compared to baseline. In follow-up: 2, students from rural areas arrived earlier than urban students. Among caste and religion groups, ST and Christians had slightly higher proportion of students arrived after 9 am.

### 3.4 Students utilising the breakfast and noon meal scheme

**Table 6: Comparison of students utilising the breakfast and noon meal scheme between follow-up: 2 and baseline survey**

		Students utilise the breakfast scheme regularly				Students utilise the noon meal scheme regularly		
Socio-demographic variable		Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024) <sup>@</sup> n-4847	Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024) <sup>@</sup> n-4847	
Total		3645(97.17%)	3633(96.85%)	4783(96.65%)	3596(95.87%)	3606(96.13%)	4747(95.92%)	
		3024(97.02%)	3004(96.38%)	3843(96.49%)	2995(96.09%)	2985(95.77%)	3817(95.83%)	
Locality	Rural	621(97.95%)	629(99.21%)	940(97.31%)	601(94.8%)	621(97.95%)	930(96.27%)	
	Urban	1820(96.96%)	1812(96.54%)	2395(96.19%)	1782(94.94%)	1793(95.53%)	2395(96.2%)	
Gender	Girls	1825(97.39%)	1821(97.17%)	2388(97.11%)	1814(96.8%)	1813(96.75%)	2388(97.11%)	
	Boys	719(97.43%)	703(95.26%)	959(95.05%)	708(95.94%)	715(96.88%)	969(96.04%)	
Caste	BC	1318(96.13%)	1336(97.45%)	1681(96.94%)	1318(96.13%)	1322(96.43%)	1665(96.02%)	
	MBC	1313(98.06%)	1311(97.91%)	1754(97.72%)	1290(96.34%)	1286(96.04%)	1725(96.1%)	
	SC	182(100%)	181(99.45%)	218(99.54%)	181(99.45%)	182(100%)	219(100%)	
	ST	107(94.69%)	96(84.96%)	150(88.76%)	93(82.3%)	93(82.3%)	146(86.39%)	
	Others	6(75%)	6(75%)	21(91.3%)	6(75%)	8(100%)	23(100%)	
	Don't know	3453(97.13%)	3446(96.93%)	4521(96.75%)	3408(95.87%)	3420(96.2%)	4485(95.98%)	
Religion	Hindu	93(96.88%)	90(93.75%)	136(93.15%)	93(96.88%)	90(93.75%)	137(93.84%)	
	Muslim	98(98.99%)	96(96.97%)	125(96.9%)	94(94.95%)	95(95.96%)	124(96.12%)	
	Christian	1(100%)	1(100%)	1(100%)	1(100%)	1(100%)	1(100%)	
	Don't know							

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe

<sup>@</sup>-includes data of all students including new admission.

There was a slight decrease in students utilizing the breakfast scheme regularly in follow-up: 2 compared to baseline. However, there was a slight increase in the utilization of the noon meal scheme. In follow-up: 2, based on locality, breakfast scheme utilization was higher than the noon meal scheme utilized by students. Among castes, ST students depended more on both schemes than others.

### 3.5 Proportion of students with hospitalisation and acute ailments history

**Table 7: Comparison of students' proportion with hospitalisation and acute ailments history between follow-up: 2 and baseline survey**

Socio-demographic variable	Proportion with hospitalisation history in the past 3 months			Proportion with acute ailments in the past 3 months		
	Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847	Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847
<b>Total</b>	75(2%)	38(1.01%)	51(1.03%)	580(15.46%)	194(5.17%)	272(5.5%)
<b>Locality</b>						
Rural	62(1.99%)	30(0.96%)	38(0.95%)	498(15.98%)	175(5.61%)	234(5.88%)
Urban	13(2.05%)	8(1.26%)	13(1.35%)	82(12.93%)	19(3%)	38(3.93%)
<b>Gender</b>						
Girls	33(1.76%)	17(0.91%)	24(0.96%)	266(14.17%)	87(4.64%)	125(5.02%)
Boys	42(2.24%)	21(1.12%)	27(1.1%)	314(16.76%)	107(5.71%)	147(5.98%)
<b>Caste</b>						
BC	19(2.58%)	7(0.95%)	11(1.09%)	99(13.42%)	56(7.59%)	82(8.13%)
MBC	30(2.19%)	17(1.24%)	23(1.33%)	208(15.17%)	75(5.47%)	100(5.77%)
SC	21(1.57%)	12(0.9%)	15(0.84%)	199(14.86%)	52(3.88%)	75(4.18%)
ST	5(2.75%)	2(1.1%)	2(0.91%)	70(38.46%)	8(4.4%)	11(5.02%)
Others	0	0	0	4(3.54%)	3(2.66%)	4(2.37%)
Don't know	0	0	0	0	0	0
<b>Religion</b>						
Hindu	69(1.94%)	37(1.04%)	50(1.07%)	562(15.81%)	160(4.5%)	228(4.88%)
Muslim	1(1.04%)	1(1.04%)	1(0.69%)	11(11.46%)	10(10.42%)	13(8.9%)
Christian	5(5.05%)	0	0	6(6.06%)	24(24.24%)	31(24.03%)
Don't know	0	0	0	1(100%)	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe

@ -includes data of all students including new admission.

There was a decrease in the proportion of students being hospitalized and experiencing ailments; this could have been due to annual leave before follow-up: 2, during which teachers might not have known about past ailments of students accurately.



## 3.6 Engagement in class

**Table 8: Comparison of students' following teacher instructions, completing written work and attention without prompting between follow-up: 2 and baseline survey**

Socio-Demographic Variable	Following teacher instructions			Completing written work			Attention without prompting		
	Baseline Survey (December 2023) n-3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847	Baseline Survey (December 2023) n-3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ (June 2024)@	Baseline Survey (December 2023) n-3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ (June 2024)@ n-4847
<b>Total</b>	2133(56.87%)	1885(50.25%)	2446(49.43%)	1932(51.51%)	2004(53.43%)	2512(50.77%)	1655(44.12%)	1424(37.96%)	1797(36.32%)
	330(8.8%)	263(7.01%)	379(7.66%)	390(10.4%)	309(8.24%)	456(9.22%)	536(14.29%)	368(9.81%)	536(10.83%)
<b>Sometimes</b>	1288(34.34%)	1603(42.74%)	2123(42.91%)	1429(38.1%)	1438(38.34%)	1980(40.02%)	1560(41.59%)	1959(52.23%)	2615(52.85%)
<b>Often</b>	1813(58.17%)	1566(50.24%)	1960(49.22%)	1650(52.94%)	1706(54.73%)	2090(52.49%)	1407(45.14%)	1225(39.3%)	1487(37.34%)
<b>Rural</b>	201(6.45%)	194(6.22%)	275(6.91%)	247(7.92%)	239(7.67%)	351(8.82%)	379(12.16%)	267(8.57%)	390(9.79%)
<b>Sometimes</b>	1103(35.39%)	1357(43.54%)	1747(43.87%)	1220(39.14%)	1172(37.6%)	1541(38.7%)	1331(42.7%)	1625(52.13%)	2105(52.86%)
<b>Often</b>	320(50.47%)	319(50.32%)	486(50.31%)	282(44.48%)	298(47%)	422(43.69%)	248(39.12%)	199(31.39%)	310(32.09%)
<b>Urban</b>	129(20.35%)	69(10.88%)	104(10.77%)	143(22.56%)	70(11.04%)	105(10.87%)	157(24.76%)	101(15.93%)	146(15.11%)
<b>Sometimes</b>	185(29.18%)	246(38.8%)	376(38.92%)	209(32.97%)	266(41.96%)	439(45.45%)	229(36.12%)	334(52.68%)	510(52.8%)
<b>Often</b>	1142(60.84%)	1001(53.33%)	1300(52.21%)	1037(55.25%)	1067(56.85%)	1342(53.9%)	878(46.78%)	781(41.61%)	980(39.36%)
<b>Female</b>	139(7.41%)	108(5.75%)	163(6.55%)	167(8.9%)	117(6.23%)	183(7.35%)	234(12.47%)	147(7.83%)	220(8.84%)
<b>Sometimes</b>	596(31.75%)	768(40.92%)	1027(41.25%)	673(35.86%)	693(36.92%)	965(38.76%)	765(40.76%)	949(50.56%)	1290(51.81%)
<b>Often</b>	991(52.88%)	884(47.17%)	1146(46.62%)	895(47.76%)	937(50%)	1170(47.6%)	777(41.46%)	643(34.31%)	817(33.24%)
<b>Male</b>	191(10.19%)	155(8.27%)	216(8.79%)	223(11.9%)	192(10.25%)	273(11.11%)	302(16.12%)	221(11.79%)	316(12.86%)
<b>Sometimes</b>	692(36.93%)	835(44.56%)	1096(44.59%)	756(40.34%)	745(39.76%)	1015(41.29%)	795(42.42%)	1010(53.9%)	1325(53.91%)
<b>Often</b>	485(65.72%)	424(57.45%)	549(54.41%)	405(54.88%)	443(60.03%)	561(55.6%)	385(52.17%)	312(42.28%)	400(39.64%)
<b>BC</b>	58(7.86%)	37(5.01%)	54(5.35%)	66(8.94%)	42(5.69%)	75(7.43%)	82(11.11%)	62(8.4%)	100(9.91%)
<b>Sometimes</b>	195(26.42%)	277(37.53%)	406(40.24%)	267(36.18%)	253(34.28%)	373(36.97%)	271(36.72%)	364(49.32%)	509(50.45%)
<b>Often</b>	785(57.26%)	714(52.08%)	885(51.07%)	735(53.61%)	758(55.29%)	920(53.09%)	613(44.71%)	549(40.04%)	665(38.37%)
<b>MBC</b>	115(8.39%)	79(5.76%)	102(5.89%)	146(10.65%)	85(6.2%)	113(6.52%)	200(14.59%)	114(8.32%)	157(9.06%)
<b>Sometimes</b>	471(34.35%)	578(42.16%)	746(43.05%)	490(35.74%)	528(38.51%)	700(40.39%)	558(40.7%)	708(51.64%)	911(52.57%)
<b>Often</b>	719(53.7%)	644(48.1%)	869(48.41%)	647(48.32%)	692(51.68%)	887(49.42%)	531(39.66%)	481(35.92%)	631(35.15%)



	<b>Rarely</b>	125(9.34%)	107(7.99%)	172(9.58%)	146(10.9%)	125(9.34%)	190(10.59%)	204(15.24%)	142(10.61%)	210(11.7%)
	<b>Sometimes</b>	495(36.97%)	588(43.91%)	754(42.01%)	546(40.78%)	522(38.98%)	718(40%)	604(45.11%)	716(53.47%)	954(53.15%)
	<b>Often</b>	74(40.66%)	49(26.92%)	60(27.4%)	77(42.31%)	58(31.87%)	70(31.96%)	75(41.21%)	38(20.88%)	44(20.09%)
<b>ST</b>	<b>Rarely</b>	25(13.74%)	29(15.93%)	37(16.9%)	25(13.74%)	44(24.18%)	54(24.66%)	30(16.48%)	41(22.53%)	48(21.92%)
	<b>Sometimes</b>	83(45.6%)	104(57.14%)	122(55.71%)	80(43.96%)	80(43.96%)	95(43.38%)	77(42.31%)	103(56.59%)	127(57.99%)
	<b>Often</b>	62(54.87%)	49(43.36%)	72(42.6%)	61(53.98%)	49(43.36%)	61(36.1%)	47(41.59%)	39(34.51%)	46(27.22%)
<b>Others</b>	<b>Rarely</b>	7(6.2%)	11(9.74%)	14(8.28%)	7(6.2%)	13(11.5%)	22(13.02%)	19(16.81%)	9(7.97%)	18(10.65%)
	<b>Sometimes</b>	44(38.94%)	53(46.9%)	83(49.11%)	45(39.82%)	51(45.13%)	86(50.89%)	47(41.59%)	65(57.52%)	105(62.13%)
	<b>Often</b>	8(100%)	5(62.5%)	11(47.83%)	7(87.5%)	4(50%)	13(56.52%)	4(50%)	5(62.5%)	11(47.83%)
<b>Don't know</b>	<b>Rarely</b>	0	0	0	0	0	2(8.7%)	1(12.5%)	0	3(13.04%)
	<b>Sometimes</b>	0	3(37.5%)	12(52.17%)	1(12.5%)	4(50%)	8(34.78%)	3(37.5%)	3(37.5%)	9(39.13%)
	<b>Often</b>	2016(56.71%)	1779(50.04%)	2303(49.29%)	1832(51.53%)	1896(53.33%)	2371(50.75%)	1543(43.4%)	1357(38.17%)	1712(36.64%)
<b>Hindu</b>	<b>Rarely</b>	311(8.75%)	247(6.95%)	357(7.64%)	372(10.46%)	291(8.19%)	429(9.18%)	508(14.29%)	346(9.73%)	502(10.75%)
	<b>Sometimes</b>	1228(34.54%)	1529(43.01%)	2012(43.07%)	1351(38%)	1368(38.48%)	1872(40.07%)	1504(42.31%)	1852(52.1%)	2458(52.61%)
	<b>Often</b>	46(47.92%)	46(47.92%)	64(43.84%)	41(42.71%)	51(53.13%)	70(47.95%)	51(53.13%)	28(29.17%)	40(27.4%)
<b>Muslim</b>	<b>Rarely</b>	12(12.5%)	8(8.33%)	12(8.22%)	9(9.38%)	8(8.33%)	14(9.59%)	15(15.63%)	11(11.46%)	17(11.64%)
	<b>Sometimes</b>	38(39.58%)	42(43.75%)	70(47.95%)	46(47.92%)	37(38.54%)	62(42.47%)	30(31.25%)	57(59.38%)	89(60.96%)
	<b>Often</b>	70(70.71%)	60(60.61%)	79(61.24%)	58(58.59%)	56(56.57%)	70(54.26%)	60(60.61%)	39(39.39%)	45(34.88%)
<b>Christian</b>	<b>Rarely</b>	7(7.07%)	8(8.08%)	10(7.75%)	9(9.09%)	10(10.1%)	13(10.08%)	13(13.13%)	10(10.1%)	16(12.4%)
	<b>Sometimes</b>	22(22.22%)	31(31.31%)	40(31.01%)	32(32.32%)	33(33.33%)	46(35.66%)	26(26.26%)	50(50.51%)	68(52.71%)
	<b>Often</b>	1(100%)	0	0	1(100%)	1(100%)	1(100%)	1(100%)	0	0
<b>Don't know</b>	<b>Rarely</b>	0	0	0	0	0	0	0	1(100%)	1(100%)
	<b>Sometimes</b>	0	1(100%)	1(100%)	0	0	0	0	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe  
 @-includes data of all students including new admission.

Overall, there was an increase in students following teacher instructions, paying attention without prompting, and completing written work in follow-up: 2 compared to the baseline. In these categories, rural students performed better than urban students. Similarly, girls performed better than boys. Among various caste categories, ST category students had higher proportion of following the teachers' instructions, paid attention in class, and completed assignments.

**Table 9: Comparison of students' recalling from previous day lessons  
between follow-up: 2 and baseline survey**

Recalling from previous day lessons				
Socio-Demographic Variable		Baseline Survey (December 2023) n- 3751	Follow-up:2 (June 2024) n- 3751	Follow-Up:2 (June 2024) <sup>@</sup>
Total	Average	1803(48.07%)	2011(53.61%)	2649(53.54%)
	Quickly	1504(40.1%)	1411(37.62%)	1832(37.03%)
	Slow	444(11.84%)	329(8.77%)	467(9.44%)
Rural	Average	1551(49.76%)	1683(53.99%)	2138(53.69%)
	Quickly	1271(40.78%)	1179(37.83%)	1483(37.24%)
	Slow	295(9.46%)	255(8.18%)	361(9.07%)
Urban	Average	252(39.75%)	328(51.74%)	511(52.9%)
	Quickly	233(36.75%)	232(36.59%)	349(36.13%)
	Slow	149(23.5%)	74(11.67%)	106(10.97%)
Female	Average	885(47.15%)	963(51.31%)	1296(52.05%)
	Quickly	814(43.37%)	783(41.72%)	1007(40.44%)
	Slow	178(9.48%)	131(6.98%)	187(7.51%)
Male	Average	918(48.99%)	1048(55.92%)	1353(55.05%)
	Quickly	690(36.82%)	628(33.51%)	825(33.56%)
	Slow	266(14.19%)	198(10.57%)	280(11.39%)
BC	Average	317(42.95%)	372(50.41%)	517(51.24%)
	Quickly	351(47.56%)	316(42.82%)	414(41.03%)
	Slow	70(9.49%)	50(6.78%)	78(7.73%)
MBC	Average	660(48.14%)	771(56.24%)	980(56.55%)
	Quickly	552(40.26%)	482(35.16%)	600(34.62%)
	Slow	159(11.6%)	118(8.61%)	153(8.83%)
SC	Average	662(49.44%)	677(50.56%)	894(49.81%)
	Quickly	498(37.19%)	535(39.96%)	715(39.83%)

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	Slow	179(13.37%)	127(9.49%)	186(10.36%)
ST	Average	93(51.1%)	116(63.74%)	135(61.64%)
	Quickly	59(32.42%)	40(21.98%)	51(23.29%)
	Slow	30(16.48%)	26(14.29%)	33(15.07%)
OTHERS	Average	65(57.52%)	68(60.18%)	106(62.72%)
	Quickly	42(37.17%)	37(32.74%)	46(27.22%)
	Slow	6(5.31%)	8(7.08%)	17(10.06%)
Don't know	Average	6(75%)	7(87.5%)	17(73.91%)
	Quickly	2(25%)	1(12.5%)	6(26.09%)
	Slow	0	0	0
Hindu	Average	1722(48.44%)	1915(53.87%)	2503(53.57%)
	Quickly	1413(39.75%)	1327(37.33%)	1725(36.92%)
	Slow	420(11.81%)	313(8.81%)	444(9.5%)
Muslim	Average	52(54.17%)	48(50%)	81(55.48%)
	Quickly	35(36.46%)	40(41.67%)	50(34.25%)
	Slow	9(9.38%)	8(8.33%)	15(10.27%)
Christian	Average	29(29.29%)	47(47.48%)	64(49.61%)
	Quickly	55(55.56%)	44(44.44%)	57(44.19%)
	Slow	15(15.15%)	8(8.08%)	8(6.2%)
Don't know	Average	0	1(100%)	1(100%)
	Quickly	1(100%)	0	0
	Slow	0	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe  
 @-includes data of all students including new admission.

More than 90 percent of students were able to recall the previous lessons in follow-up: 2 compared to the baseline. Among various caste categories, ST category students had higher proportion of difficulty in recalling previous lessons.



**Table 10: Comparison of students' skills of handwriting, reading and speaking between follow-up: 2 and baseline survey**

Socio-Demographic Variable		Engagement								
		Handwriting skills			Reading skills			Speaking skills		
		Baseline Survey (December 2023)n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847	Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-Up: 2 (June 2024)@ n-4847	Baseline Survey (December 2023) n- 3751	Follow-Up: 2 (June 2024) n- 3751	Follow-Up: 2 (June 2024)@ n-4847
<b>Total</b>	<b>Above Average</b>	1086(28.95%)	1031(27.49%)	1252(25.3%)	1095(29.19%)	1028(27.41%)	1262(25.51%)	1162(30.98%)	1126(30.02%)	1400(28.29%)
	<b>Average</b>	2304(61.42%)	2385(63.58%)	3202(64.71%)	2240(59.72%)	2343(62.46%)	3152(63.7%)	2319(61.82%)	2361(62.94%)	3168(64.03%)
	<b>Below Average</b>	361(9.62%)	335(8.93%)	494(9.98%)	416(11.09%)	380(10.13%)	534(10.79%)	270(7.2%)	264(7.04%)	380(7.68%)
<b>Rural</b>	<b>Above Average</b>	906(29.07%)	864(27.72%)	1026(25.77%)	926(29.71%)	860(27.59%)	1041(26.14%)	968(31.06%)	938(30.09%)	1160(29.13%)
	<b>Average</b>	1928(61.85%)	1984(63.65%)	2550(64.04%)	1878(60.25%)	1962(62.95%)	2516(63.18%)	1944(62.37%)	1984(63.65%)	2531(63.56%)
	<b>Below Average</b>	283(9.08%)	269(8.63%)	406(10.2%)	313(10.04%)	295(9.46%)	425(10.67%)	205(6.58%)	195(6.26%)	291(7.31%)
<b>Urban</b>	<b>Above Average</b>	180(28.39%)	167(26.34%)	226(23.4%)	169(26.66%)	168(26.5%)	221(22.88%)	194(30.6%)	188(29.65%)	240(24.85%)
	<b>Average</b>	376(59.31%)	401(63.25%)	652(67.5%)	362(57.1%)	381(60.1%)	636(65.84%)	375(59.15%)	377(59.46%)	637(65.94%)
	<b>Below Average</b>	78(12.3%)	66(10.41%)	88(9.11%)	103(16.25%)	85(13.41%)	109(11.28%)	65(10.25%)	69(10.88%)	89(9.21%)
<b>Female</b>	<b>Above Average</b>	628(33.46%)	596(31.75%)	718(28.84%)	611(32.55%)	575(30.63%)	702(28.19%)	625(33.3%)	615(32.77%)	776(31.17%)
	<b>Average</b>	1110(59.14%)	1165(62.07%)	1594(64.02%)	1087(57.91%)	1154(61.48%)	1577(63.33%)	1117(59.51%)	1167(62.17%)	1567(62.93%)
	<b>Below Average</b>	139(7.41%)	116(6.18%)	178(7.15%)	179(9.54%)	148(7.89%)	211(8.47%)	135(7.19%)	95(5.06%)	147(5.9%)
<b>Male</b>	<b>Above Average</b>	458(24.44%)	435(23.21%)	534(21.73%)	484(25.83%)	453(24.17%)	560(22.78%)	537(28.66%)	511(27.27%)	624(25.39%)

	Average	1194(63.71%)	1220(65.1%)	1608(65.42%)	1153(61.53%)	1189(63.45%)	1575(64.08%)	1202(64.14%)	1194(63.71%)	1601(65.13%)
	Below Average	222(11.85%)	219(11.69%)	316(12.86%)	237(12.65%)	232(12.38%)	323(13.14%)	135(7.2%)	169(9.02%)	233(9.48%)
BC	Above Average	242(32.79%)	209(28.32%)	256(25.37%)	242(32.79%)	207(28.05%)	254(25.17%)	250(33.88%)	224(30.35%)	279(27.65%)
	Average	450(60.98%)	487(65.99%)	683(67.69%)	438(59.35%)	476(64.5%)	671(66.5%)	455(61.65%)	479(64.91%)	676(67%)
	Below Average	46(6.23%)	42(5.69%)	70(6.94%)	58(7.86%)	55(7.45%)	84(8.33%)	33(4.47%)	35(4.74%)	54(5.35%)
MBC	Above Average	399(29.1%)	387(28.23%)	457(26.37%)	423(30.85%)	398(29.03%)	479(27.64%)	419(30.56%)	404(29.47%)	487(28.1%)
	Average	820(59.81%)	868(63.31%)	1118(64.51%)	801(58.43%)	856(62.44%)	1101(63.53%)	851(62.07%)	880(64.19%)	1137(65.61%)
	Below Average	152(11.09%)	116(8.46%)	158(9.12%)	147(10.72%)	117(8.53%)	153(8.83%)	101(7.37%)	87(6.35%)	109(6.29%)
SC	Above Average	339(25.32%)	372(27.78%)	465(25.91%)	341(25.47%)	360(26.89%)	455(25.35%)	410(30.62%)	433(32.34%)	556(30.98%)
	Average	866(64.68%)	845(63.11%)	1141(63.57%)	832(62.14%)	836(62.44%)	1127(62.79%)	826(61.69%)	810(60.49%)	1090(60.72%)
	Below Average	134(10.01%)	122(9.11%)	189(10.53%)	166(12.4%)	143(10.68%)	213(11.87%)	103(7.69%)	96(7.17%)	149(8.3%)
ST	Above Average	59(32.42%)	33(18.13%)	38(17.35%)	57(31.32%)	33(18.13%)	36(16.44%)	55(30.22%)	36(19.78%)	42(19.18%)
	Average	100(54.95%)	105(57.69%)	129(58.9%)	92(50.55%)	95(52.2%)	122(55.71%)	100(54.95%)	111(60.99%)	133(60.73%)
	Below Average	23(12.64%)	44(24.18%)	52(23.74%)	33(18.13%)	54(29.67%)	61(27.85%)	27(14.84%)	35(19.23%)	44(20.09%)
OTHERS	Above Average	46(40.71%)	26(23.01%)	30(17.75%)	32(28.32%)	27(23.89%)	31(18.34%)	25(22.12%)	28(24.78%)	33(19.53%)
	Average	61(53.98%)	76(67.26%)	116(68.64%)	69(61.06%)	75(66.37%)	115(68.05%)	82(72.57%)	74(65.49%)	114(67.46%)
	Below Average	6(5.31%)	11(9.74%)	23(13.61%)	12(10.62%)	11(9.74%)	23(13.61%)	6(5.31%)	11(9.74%)	22(13.02%)
Don't know	Above Average	1(12.5%)	4(50%)	6(26.09%)	0	3(37.5%)	7(30.44%)	3(37.5%)	1(12.5%)	3(13.04%)
	Average	7(87.5%)	4(50%)	15(65.22%)	8(100%)	5(62.5%)	16(69.57%)	5(62.5%)	7(87.5%)	18(78.26%)



	Below Average	0	0	2(8.7%)	0	0	0	0	0	2(8.7%)
Hindu	Above Average	1043(29.34%)	977(27.48%)	1184(25.34%)	1052(29.59%)	978(27.51%)	1198(25.64%)	1107(31.14%)	1073(30.18%)	1334(28.55%)
	Average	2170(61.04%)	2260(63.57%)	3021(64.66%)	2106(59.24%)	2221(62.48%)	2977(63.72%)	2191(61.63%)	2235(62.87%)	2982(63.83%)
	Below Average	342(9.62%)	318(8.95%)	467(10%)	397(11.17%)	356(10.01%)	497(10.64%)	257(7.23%)	247(6.95%)	356(7.62%)
	Above Average	27(28.13%)	29(30.21%)	37(25.34%)	24(25%)	25(26.04%)	33(22.6%)	32(33.33%)	28(29.17%)	37(25.34%)
Muslim	Average	53(55.21%)	60(62.5%)	96(65.75%)	57(59.38%)	58(60.42%)	91(62.33%)	54(56.25%)	61(63.54%)	98(67.12%)
	Below Average	16(16.67%)	7(7.29%)	13(8.9%)	15(15.63%)	13(13.54%)	22(15.07%)	10(10.42%)	7(7.29%)	11(7.53%)
Christian	Above Average	16(16.16%)	25(25.25%)	31(24.03%)	18(18.18%)	25(25.25%)	31(24.03%)	22(22.22%)	25(25.25%)	29(22.48%)
	Average	80(80.81%)	64(64.65%)	84(65.12%)	77(77.78%)	63(63.64%)	83(64.34%)	74(74.75%)	65(65.66%)	88(68.22%)
	Below Average	3(3.03%)	10(10.1%)	14(10.85%)	4(4.04%)	11(11.11%)	15(11.63%)	3(3.03%)	9(9.09%)	12(9.3%)
	Above Average	0	0	0	1(100%)	0	0	1(100%)	0	0
Don't know	Average	1(100%)	1(100%)	1(100%)	0	1(100%)	1(100%)	0	0	0
	Below Average	0	0	0	0	0	0	0	1(100%)	1(100%)

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe  
 @-includes data of all students including new admission.

There was an improvement in students' handwriting, reading, and speaking abilities in follow-up: 2 compared to the baseline. Among locality, urban category students had higher proportion of poor engagement skills. Similarly, among various castes and religions categories, ST and Muslim students had higher proportion of poor engagement skills.

## 3.7 Engagement in sports and extracurricular activities

Table 11: Comparison of students' engagement in sports and extracurricular activities between follow-up: 2 and baseline survey

Socio-Demographic Variable		Engagement					
		Sports activities			Extracurricular activities		
		Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847	Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up: 2 (June 2024)@ n-4847
<b>Total</b>	<b>Often</b>	2080(55.45%)	1863(49.67%)	2406(48.63%)	1888(50.33%)	1370(36.52%)	1727(34.9%)
	<b>Rarely</b>	233(6.21%)	219(5.84%)	291(5.88%)	251(6.69%)	424(11.3%)	573(11.58%)
	<b>Sometimes</b>	1438(38.34%)	1669(44.5%)	2251(45.49%)	1612(42.98%)	1957(52.17%)	2648(53.52%)
<b>Rural</b>	<b>Often</b>	1794(57.56%)	1602(51.4%)	2007(50.4%)	1611(51.68%)	1184(37.99%)	1449(36.39%)
	<b>Rarely</b>	183(5.87%)	161(5.17%)	223(5.6%)	195(6.26%)	354(11.36%)	474(11.9%)
	<b>Sometimes</b>	1140(36.57%)	1354(43.44%)	1752(44%)	1311(42.06%)	1579(50.66%)	2059(51.71%)
<b>Urban</b>	<b>Often</b>	286(45.11%)	261(41.17%)	399(41.3%)	277(43.69%)	186(29.34%)	278(28.78%)
	<b>Rarely</b>	50(7.89%)	58(9.15%)	68(7.04%)	56(8.83%)	70(11.04%)	99(10.25%)
	<b>Sometimes</b>	298(47%)	315(49.69%)	499(51.66%)	301(47.48%)	378(59.62%)	589(60.97%)
<b>Female</b>	<b>Often</b>	1029(54.82%)	930(49.55%)	1198(48.11%)	954(50.83%)	708(37.72%)	880(35.34%)
	<b>Rarely</b>	113(6.02%)	101(5.38%)	137(5.5%)	107(5.7%)	185(9.86%)	261(10.48%)
	<b>Sometimes</b>	735(39.16%)	846(45.07%)	1155(46.39%)	816(43.47%)	984(52.42%)	1349(54.18%)
<b>Male</b>	<b>Often</b>	1051(56.08%)	933(49.79%)	1208(49.15%)	934(49.84%)	662(35.33%)	847(34.46%)
	<b>Rarely</b>	120(6.4%)	118(6.3%)	154(6.27%)	144(7.68%)	239(12.75%)	312(12.69%)
	<b>Sometimes</b>	703(37.51%)	823(43.92%)	1096(44.59%)	796(42.48%)	973(51.92%)	1299(52.85%)
<b>BC</b>	<b>Often</b>	461(62.47%)	359(48.65%)	466(46.18%)	425(57.59%)	272(36.86%)	354(35.08%)
	<b>Rarely</b>	30(4.07%)	37(5.01%)	46(4.56%)	37(5.01%)	71(9.62%)	94(9.32%)
	<b>Sometimes</b>	247(33.47%)	342(46.34%)	497(49.26%)	276(37.4%)	395(53.52%)	561(55.6%)
<b>MBC</b>	<b>Often</b>	768(56.02%)	703(51.28%)	868(50.09%)	699(50.99%)	491(35.81%)	589(33.99%)
	<b>Rarely</b>	100(7.29%)	72(5.25%)	91(5.25%)	110(8.02%)	148(10.8%)	190(10.96%)



	Sometimes	503(36.69%)	596(43.47%)	774(44.66%)	562(40.99%)	732(53.39%)	954(55.05%)
	Often	705(52.65%)	684(51.08%)	921(51.31%)	636(47.5%)	506(37.79%)	654(36.44%)
SC	Rarely	78(5.83%)	87(6.5%)	115(6.41%)	79(5.9%)	145(10.83%)	202(11.25%)
	Sometimes	556(41.52%)	568(42.42%)	759(42.28%)	624(46.6%)	688(51.38%)	939(52.31%)
	Often	77(42.31%)	71(39.01%)	85(38.81%)	78(42.86%)	65(35.71%)	80(36.53%)
ST	Rarely	22(12.09%)	15(8.24%)	22(10.05%)	19(10.44%)	46(25.28%)	54(24.66%)
	Sometimes	83(45.6%)	96(52.75%)	112(51.14%)	85(46.7%)	71(39.014%)	85(38.81%)
	Often	63(55.75%)	43(38.05%)	58(34.32%)	43(38.05%)	31(27.43%)	38(22.49%)
OTHERS	Rarely	3(2.66%)	8(7.08%)	17(10.06%)	6(5.31%)	14(12.39%)	31(18.34%)
	Sometimes	47(41.59%)	62(54.87%)	94(55.62%)	64(56.64%)	68(60.18%)	100(59.17%)
	Often	6(75%)	3(37.5%)	8(34.78%)	7(87.5%)	5(62.5%)	12(52.17%)
Don't know	Rarely	0	0	0	0	0	2(8.7%)
	Sometimes	2(25%)	5(62.5%)	15(65.22%)	1(12.5%)	3(37.5%)	9(39.13%)
	Often	1973(55.5%)	1769(49.76%)	2282(48.84%)	1791(50.38%)	1292(36.34%)	1631(34.91%)
Hindu	Rarely	220(6.19%)	205(5.77%)	275(5.89%)	239(6.72%)	407(11.45%)	544(11.64%)
	Sometimes	1362(38.31%)	1581(44.47%)	2115(45.27%)	1525(42.9%)	1856(52.21%)	2497(53.45%)
	Often	44(45.83%)	41(42.71%)	58(39.73%)	41(42.71%)	34(35.42%)	43(29.45%)
Muslim	Rarely	7(7.29%)	7(7.29%)	9(6.16%)	5(5.21%)	9(9.38%)	15(10.27%)
	Sometimes	45(46.88%)	48(50%)	79(54.11%)	50(52.08%)	53(55.21%)	88(60.27%)
	Often	62(62.63%)	53(53.54%)	66(51.16%)	55(55.56%)	43(43.43%)	52(40.31%)
Christian	Rarely	6(6.06%)	7(7.07%)	7(5.43%)	7(7.07%)	8(8.08%)	14(10.85%)
	Sometimes	31(31.31%)	39(39.39%)	56(43.41%)	37(37.37%)	48(48.49%)	63(48.84%)
	Often	1(100%)	0	0	1(100%)	1(100%)	1(100%)
Don't know	Rarely	0	0	0	0	0	0
	Sometimes	0	1(100%)	1(100%)	0	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe  
@-includes data of all students including new admission.

In follow-up: 2, student engagement in sports activities increased, while participation in other extracurricular activities slightly decreased compared to the baseline.



### 3.8 Food adequacy

**Table 12: Comparison of food adequacy for students  
between follow-up: 2 and baseline survey**

Food Adequacy				
Socio-Demographic Variable		Baseline Survey (December 2023) n- 3751	Follow-up: 2 (June 2024) n- 3751	Follow-up:2 (June 2024) <sup>@</sup> n-4847
Total	Adequate	3525(93.98%)	3603(96.08%)	4751(96.04%)
	More than what I can eat	192(5.12%)	107(2.85%)	140(2.83%)
	not Adequate - I want more	34(0.91%)	40(1.07%)	56(1.13%)
Rural	Adequate	2932(94.07%)	2978(95.54%)	3798(95.38%)
	More than what I can eat	157(5.04%)	105(3.37%)	135(3.39%)
	not Adequate - I want more	28(0.9%)	34(1.09%)	49(1.23%)
Urban	Adequate	593(93.53%)	625(98.74%)	953(98.76%)
	More than what I can eat	35(5.52%)	2(0.32%)	5(0.52%)
	not Adequate - I want more	6(0.95%)	6(0.95%)	7(0.73%)
Female	Adequate	1771(94.35%)	1808(96.32%)	2402(96.47%)
	More than what I can eat	89(4.74%)	56(2.98%)	68(2.73%)
	not Adequate - I want more	17(0.91%)	13(0.69%)	20(0.8%)
Male	Adequate	1754(93.6%)	1795(95.84%)	2349(95.6%)
	More than what I can eat	103(5.5%)	51(2.72%)	72(2.93%)
	not Adequate - I want more	17(0.91%)	27(1.44%)	36(1.47%)
BC	Adequate	710(96.21%)	709(96.07%)	975(96.63%)
	More than what I can	23(3.12%)	18(2.44%)	22(2.18%)

*Chief Minister's Breakfast Scheme – Interim Report (Second Phase)*

	eat			
	not Adequate - I want more	5(0.68%)	11(1.49%)	12(1.19%)
MBC	Adequate	1307(95.33%)	1335(97.45%)	1692(97.69%)
	More than what I can eat	46(3.36%)	23(1.68%)	27(1.56%)
	not Adequate - I want more	18(1.31%)	12(0.88%)	13(0.75%)
SC	Adequate	1211(90.44%)	1266(94.55%)	1683(93.76%)
	More than what I can eat	119(8.89%)	58(4.33%)	83(4.62%)
	not Adequate - I want more	9(0.67%)	15(1.12%)	29(1.62%)
ST	Adequate	179(98.35%)	175(96.15%)	212(96.8%)
	More than what I can eat	1(0.55%)	5(2.75%)	5(2.28%)
	not Adequate - I want more	2(1.1%)	2(1.1%)	2(0.91%)
OTHERS	Adequate	110(97.35%)	110(97.35%)	166(98.23%)
	More than what I can eat	3(2.66%)	3(2.66%)	3(1.78%)
	not Adequate - I want more	0	0	0
Don't know	Adequate	8(100%)	8(100%)	23(100%)
	More than what I can eat	0	0	0
	not Adequate - I want more	0	0	0
Hindu	Adequate	3416(96.12%)	3335(93.81%)	4484(96%)
	More than what I can eat	105(2.95%)	189(5.32%)	138(2.95%)
	not Adequate - I want more	33(0.93%)	31(0.87%)	49(1.05%)
Muslim	Adequate	96(100%)	95(98.96%)	146(100%)
	More than what I can	0	1(1.04%)	0

	eat			
	not Adequate - I want more	0	0	0
Christian	Adequate	90(90.91%)	94(94.95%)	120(93.02%)
	More than what I can eat	2(2.02%)	2(2.02%)	2(1.55%)
	not Adequate - I want more	7(7.07%)	3(3.03%)	7(5.43%)
Don't know	Adequate	1(100%)	1(100%)	1(100%)
	More than what I can eat	0	0	0
	not Adequate - I want more	0	0	0

BC- Backward Caste, MBC – Most Backward Caste, SC- Scheduled Caste, ST- Scheduled Tribe  
@-includes data of all students including new admission.

There was a slight increase in the proportion of students who felt that the quantity of food provided by the breakfast scheme in follow-up: 2 was adequate compared to the baseline.

**Table 13: Food Adequacy among class wise distribution for current academic year follow-up: 2**

<b>Food Adequacy among class wise distribution for current academic year follow-up: 2 (June 2024)@</b>					
	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
Adequate	755(95.21%)	762(94.89%)	973(96.72%)	1025(96.51%)	1121(96.14%)
More than what I can eat	24(3.03%)	35(4.35%)	26(2.54%)	20(1.88%)	34(2.91%)
not Adequate - I want more	14(1.77%)	6(0.75%)	7(0.69%)	17(1.6%)	11(0.94%)

@-includes data of all students including new admission.

Among students, class 1<sup>st</sup> and 4<sup>th</sup> students felt less adequate of food quantity.

### 3.9 Comparison of Malnutrition status between follow-up and baseline

**Table 14: Comparison of Malnutrition status  
between follow-up: 2 and baseline**

	Follow-up: 2 (June 2024)					
	Category	Severe Thinness	Thinness	Normal	overweight	Obese
Baseline Study (December 2023)	Severe Thinness	140 (45.5 %)	80 (25.9%)	86 (27.9 %)	2 (0.6%)	0
	Thinness	127 (22.9 %)	193 (34.8 %)	222 (40.1 %)	11 (1.9 %)	1 (0.2 %)
	Normal	108 (4.5 %)	269 (11.3%)	1865 (78.3 %)	133 (5.6 %)	8 (0.3%)
	overweight	4 (1.9 %)	3 (1.5%)	59 (28.9 %)	111 (54.4 %)	27 (13.2 %)
	Obese	0	1 (0.9 %)	5 (4.5 %)	29 (25.9%)	77 (68.8 %)

Better		Good		Poor		Bad	
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The chi-square test indicates significant changes in the distribution of weight categories (overweight, obesity, normal weight, thinness, severe thinness) between the baseline and follow-up: 2. There is a notable decrease in severe thinness, thinness, overweight and an increase in normal weight individuals from baseline to follow-up: 2, suggesting improvement in overall nutritional status.

**Table 15: Comparison of nutritional status between  
follow-up: 2 and baseline**

Nutritional status		Follow-up:2 (June 2024)	
		Normal	Any Malnutrition
(December 2023) Baseline Study	Normal	1865(78.3%)	518(21.7%)
	Any Malnutrition	372(16.6%)	806(83.4%)

Students with normal baseline nutritional status showed 78.3% retention rate in normal status at follow-up: 2, with 21.7% transitioning to malnutrition. Those initially classified with malnutrition maintained this status in 83.4% of cases at follow-up: 2, while 16.6% improved to normal nutritional status.

The slight increase in malnutrition could have been due to the annual holidays before the 2<sup>nd</sup> follow-up, during which the students did not utilize the breakfast and noon meal scheme.

### 3.10 Comparison of Malnutrition status between follow-up (1 and 2)

**Table 16: Comparison of Malnutrition status between follow-up (1 and 2)**

	Follow-up-2 (June 2024)					
	Category	Severe Thinness	Thinness	Normal	overweight	Obese
Follow-up-1 (April 2024)	Severe Thinness	163 (59.3 %)	72 (26.2 %)	38 (13.8%)	2 (0.7 %)	0
	Thinness	107 (18.1%)	244 (41.3 %)	230 (38.9 %)	10 (1.7 %)	0
	Normal	86 (3.8 %)	203 (8.9 %)	1838 (81.4 %)	127 (5.6%)	5 (0.2 %)
	overweight	0	0	61 (29.0 %)	123 (58.6 %)	26 (12.4 %)
	Obese	0	0	2 (1.9 %)	20 (19.2 %)	82 (78.8 %)
<div> <div>Better</div> <div>Good</div> <div>Poor</div> <div>Bad</div> </div>						

The chi-square test indicates significant changes in the distribution of weight categories (overweight, obesity, normal weight, thinness, severe thinness) between the follow-up: 1 and follow-up: 2. Normal status relatively stable. There is an improvement from obese and overweight category. Also, notable decrease in thinness category.

**Table 17: Comparison of nutritional status between follow-up (1 and 2)**

Nutritional status		Follow-up: 2(June 2024)	
		Normal	Any Malnutrition
Follow-up: 1 (March 2024)	Normal	1838(81.4%)	421(18.6%)
	Any Malnutrition	331(15.3%)	849(84.7%)

Students with normal follow-up: 1 nutritional status showed 81.4% retention rate in normal status at follow-up: 2, with 18.6% transitioning to malnutrition. Those initially classified with malnutrition maintained this status in 84.7% of cases at follow-up: 2, while 15.3% improved to normal nutritional status.

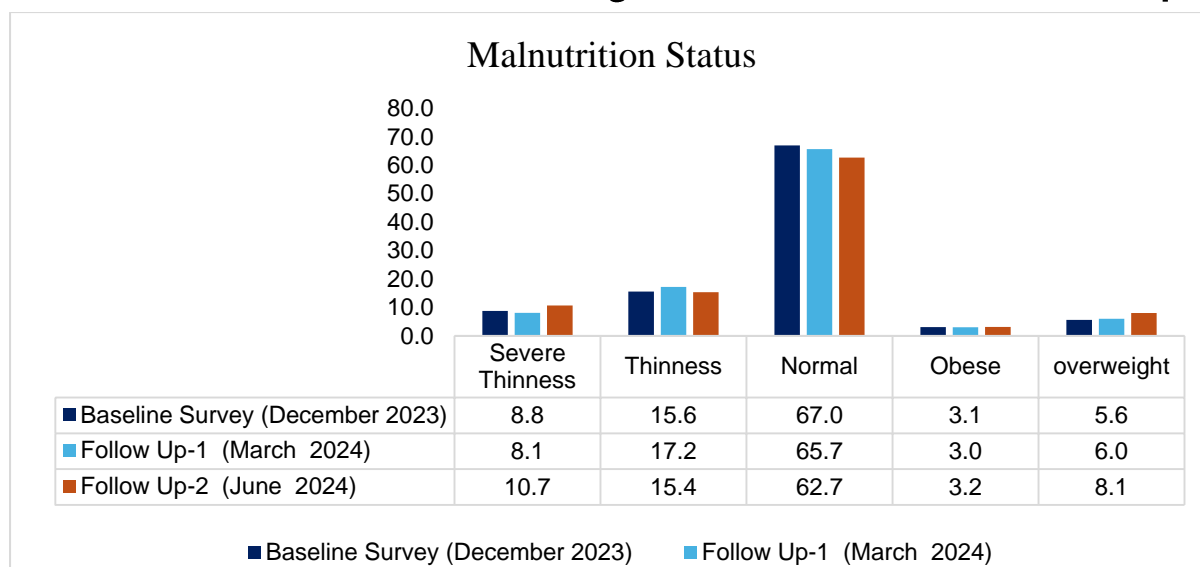
### 3.11 Comparison of Malnutrition status between follow-up: 2 and baseline -based on gender and locality

**Table 18: Comparison of Malnutrition status between follow-up: 2 and baseline based on Gender and Locality**

Cross Study			Follow-up: 2(June 2024)	
			Normal	Any Malnutrition
Boy (1781)	(December 2023) Baseline Study	Normal	831(75.3%)	273(24.7%)
		Any Malnutrition	202(19.6%)	475(80.4%)
Girl (1780)		Normal	1034(80.8%)	245(19.2%)
		Any Malnutrition	170(14.1%)	331(85.9%)
Rural (2950)		Normal	1560(78.3%)	433(21.7%)
		Any Malnutrition	302(16.2%)	655(83.8%)
Urban (607)		Normal	305(78.2%)	85(21.8%)
		Any Malnutrition	70(18.7%)	151(81.3%)

Normal rates were higher among girl (80.8%) compared to Boys (75.3%). Malnutrition rates were higher in rural areas (83.8%) compared to urban areas (81.3%), whereas normal rates were slightly higher in rural areas (78.3%) compared to urban areas (78.2%).

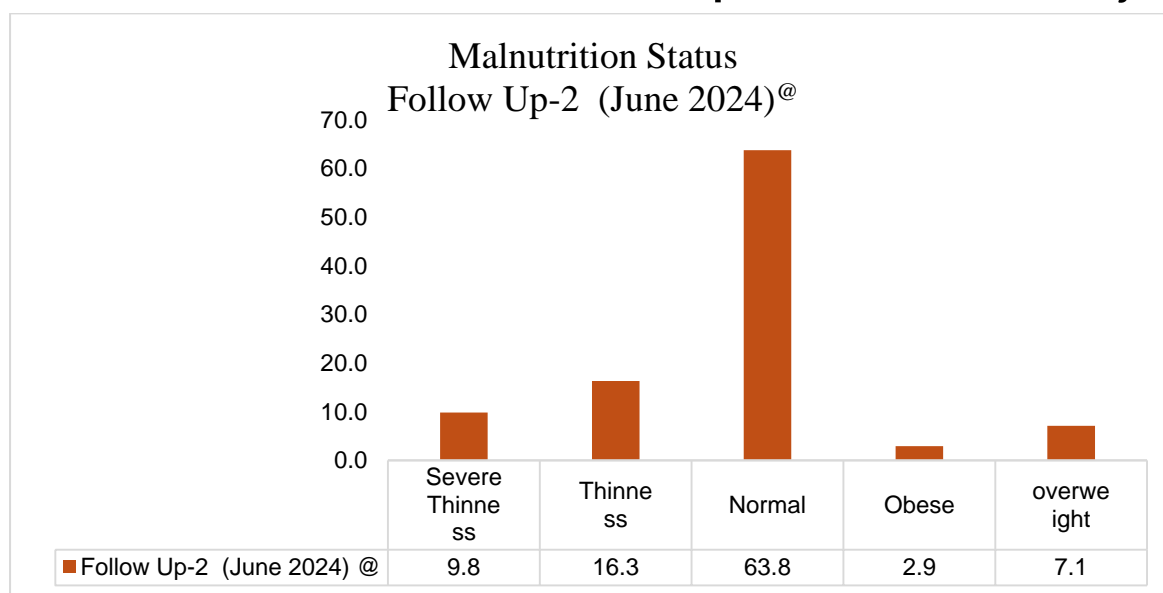
### 3.12 Prevalence of malnutrition among students in Baseline and follow-up



**Figure 3 Prevalence of different types of malnutrition among students in Baseline and follow-up**

The bar graph compares malnutrition status in a baseline study, follow-up: 1 and follow-up: 2 study. It shows decrease in "normal" status but decrease in "thinness" from baseline to follow-up: 2, slight increase in severe thinness and overweight category from baseline to follow-up: 2.

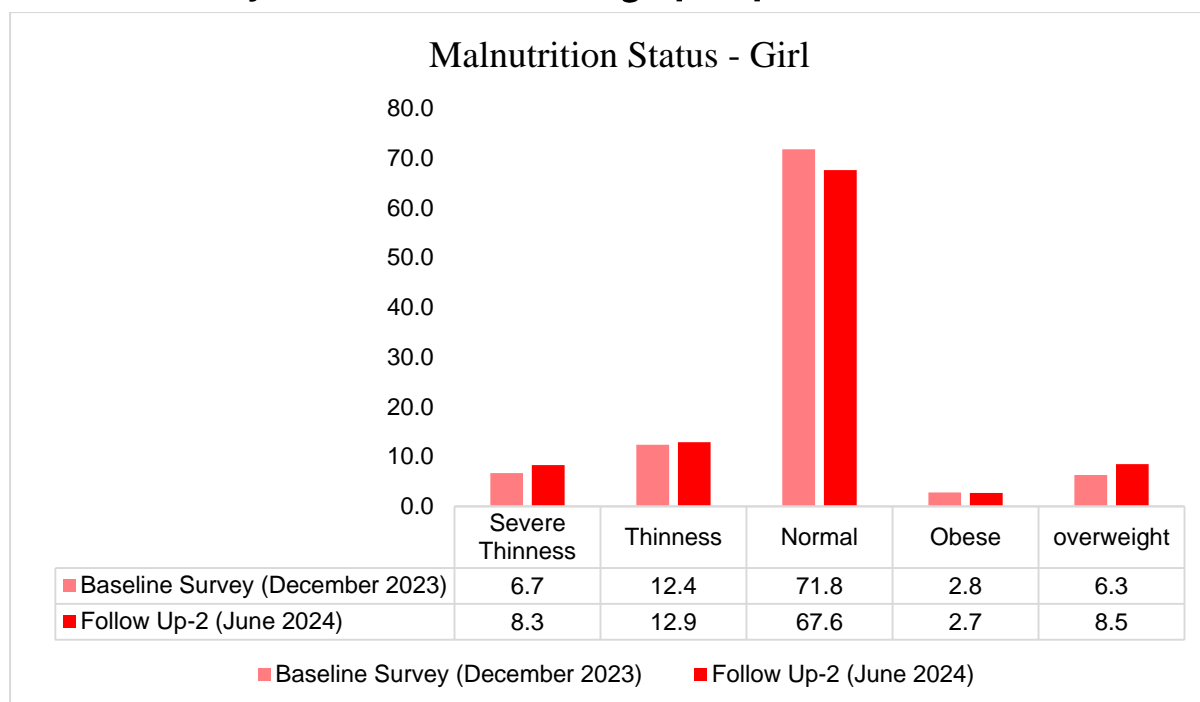
### 3.13 Prevalence of malnutrition in follow-up: 2 of current academic year



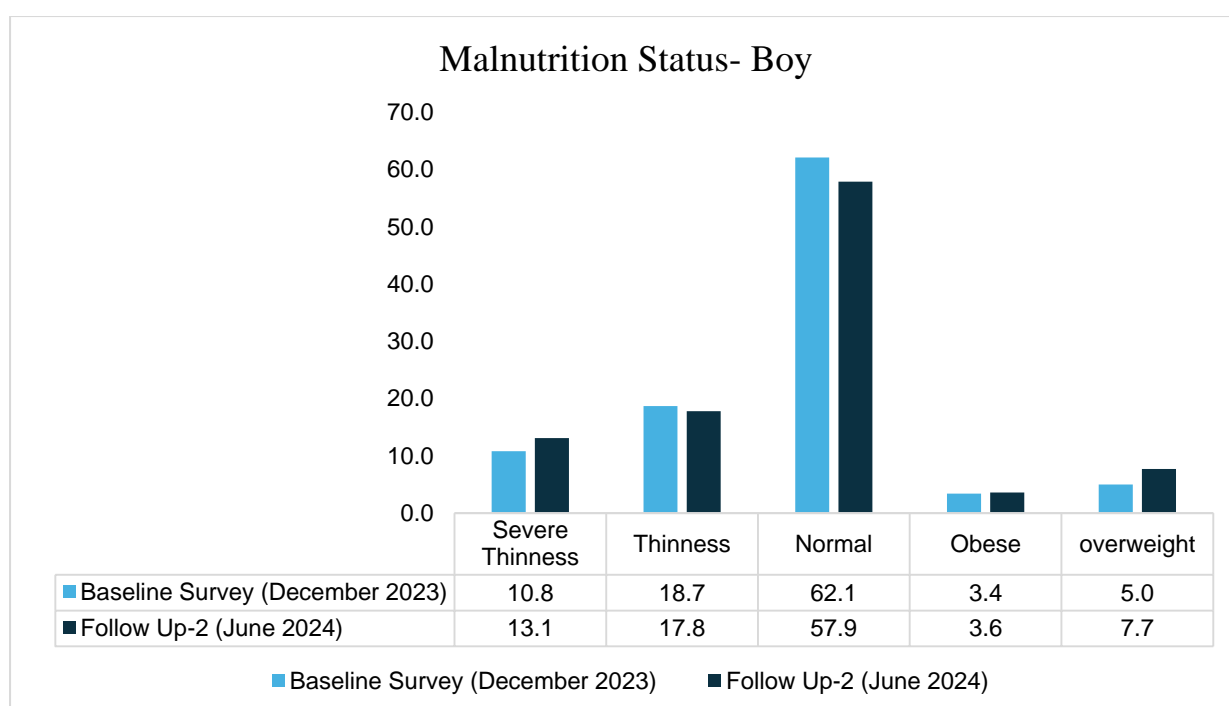
<sup>@</sup>-includes data of all students including new admission

**Figure 4 Prevalence of different types of malnutrition among students in follow-up: 2**

### 3.14 Comparison of prevalence of malnutrition between follow-up: 2 and baseline survey based on socio-demographic profile

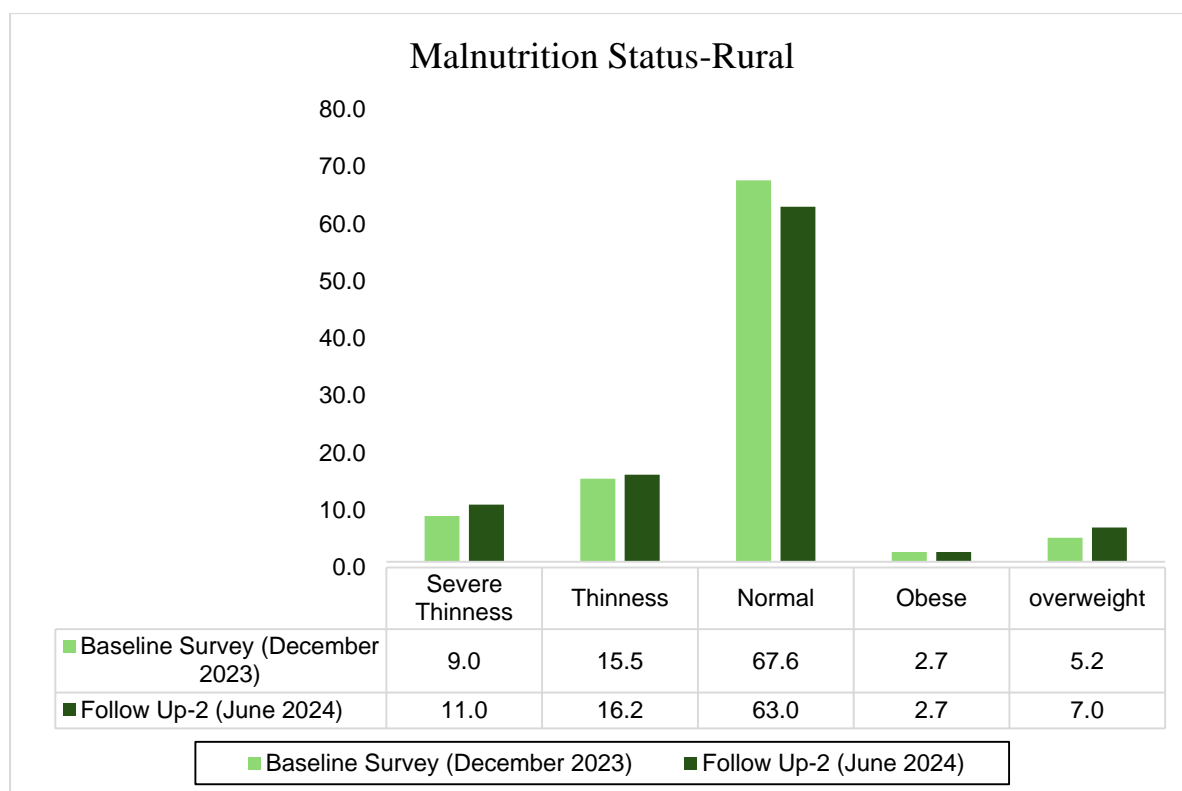


**Figure 5 Prevalence of different types of malnutrition among girl students in Baseline and follow-up: 2**

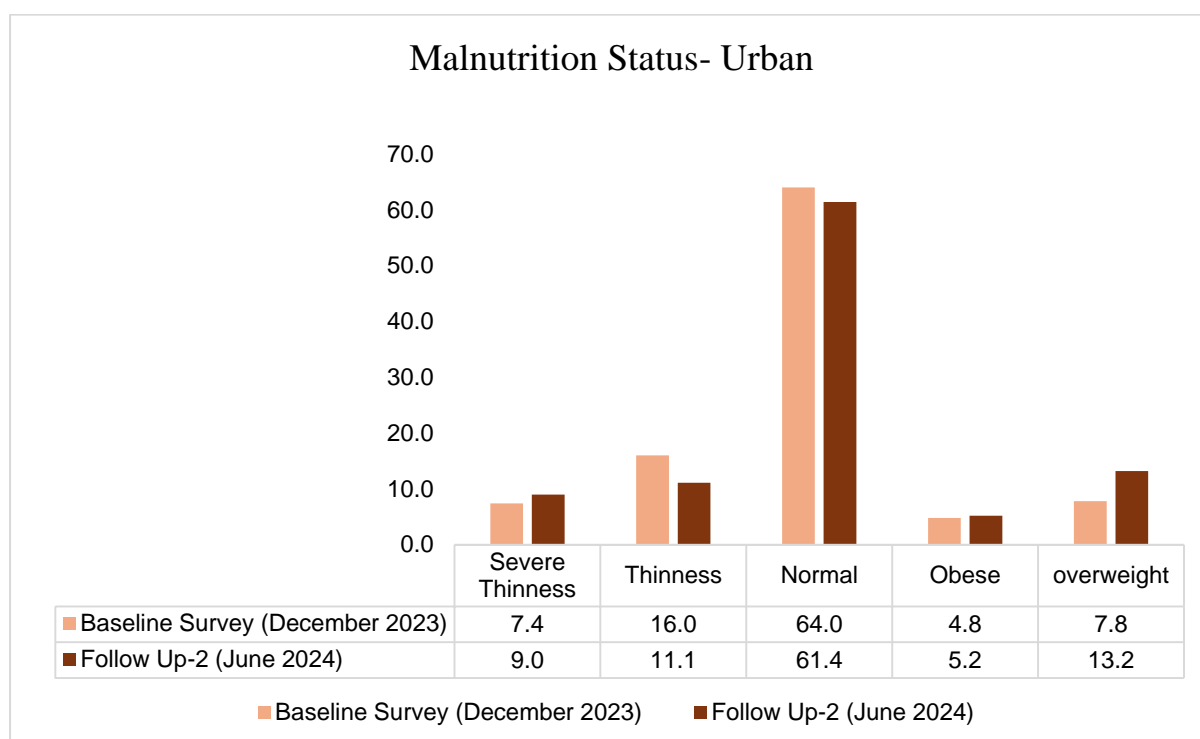


**Figure 6 Prevalence of different types of malnutrition among boy students in Baseline and follow-up: 2**

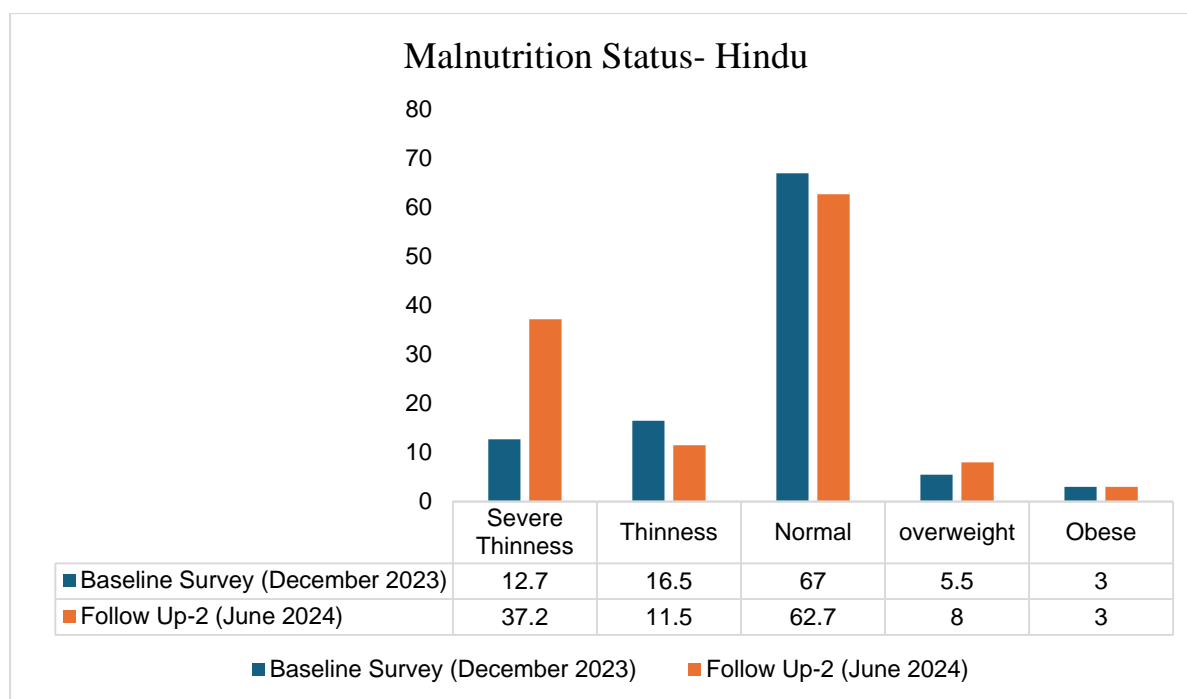




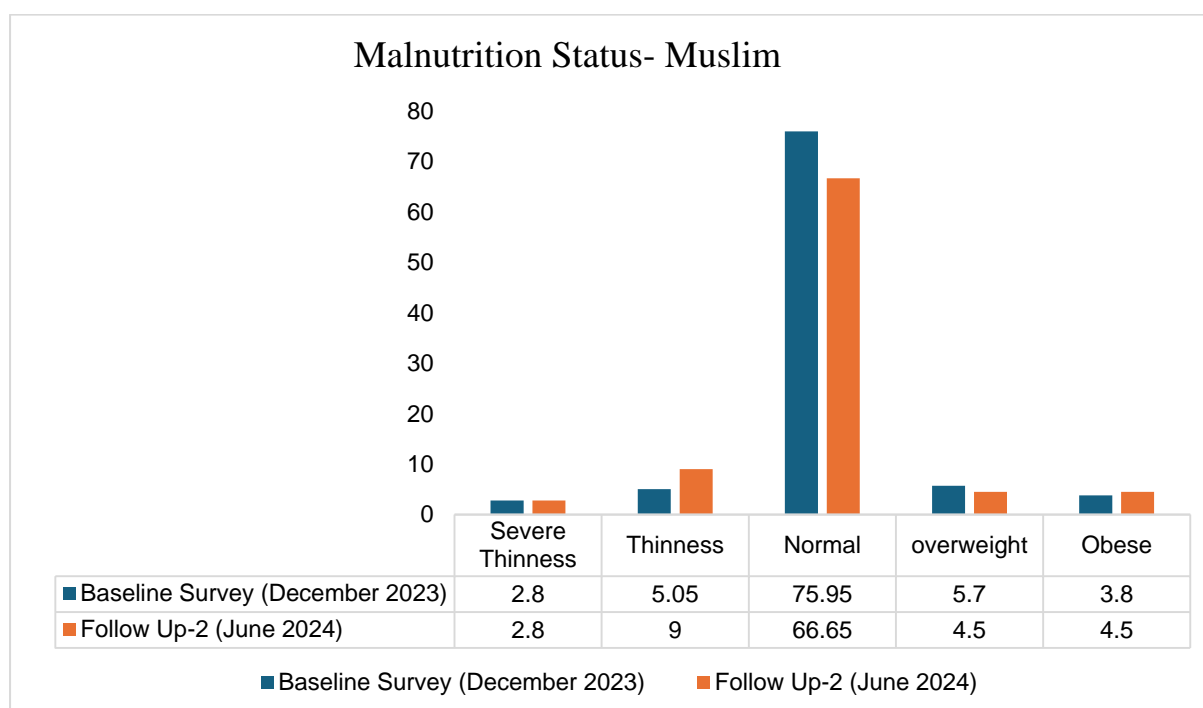
**Figure 7 Prevalence of different types of malnutrition among rural students in Baseline and follow-up: 2**



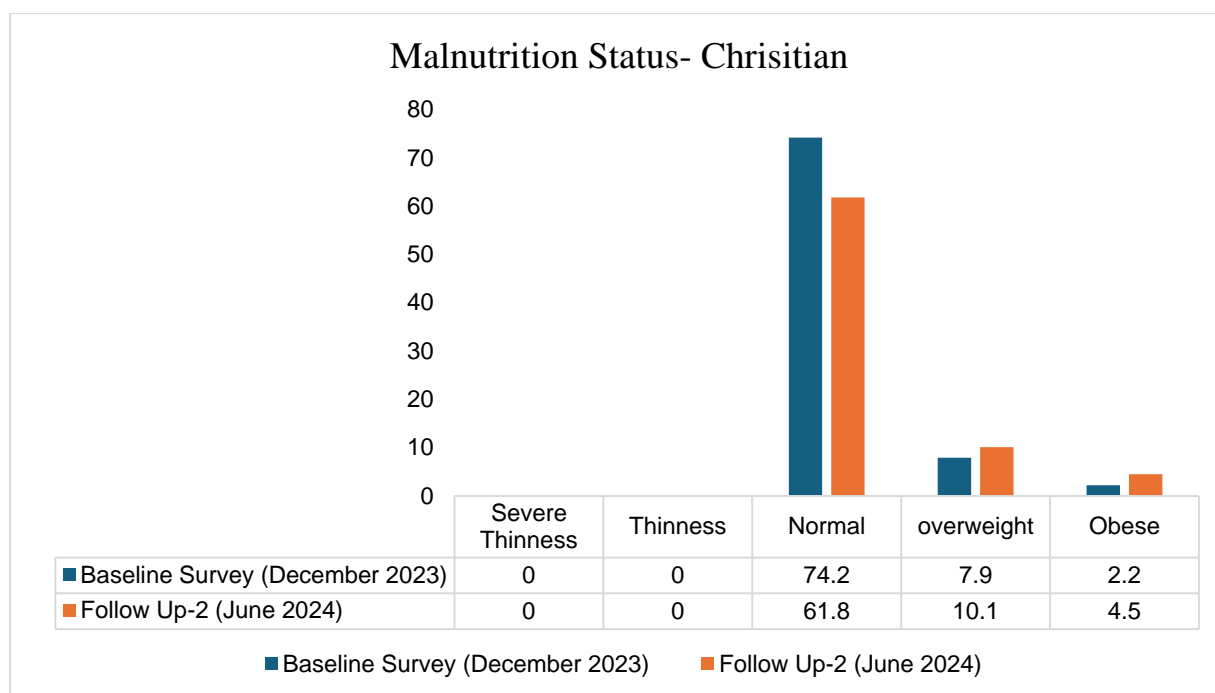
**Figure 8 Prevalence of different types of malnutrition among urban students in Baseline and follow-up: 2**



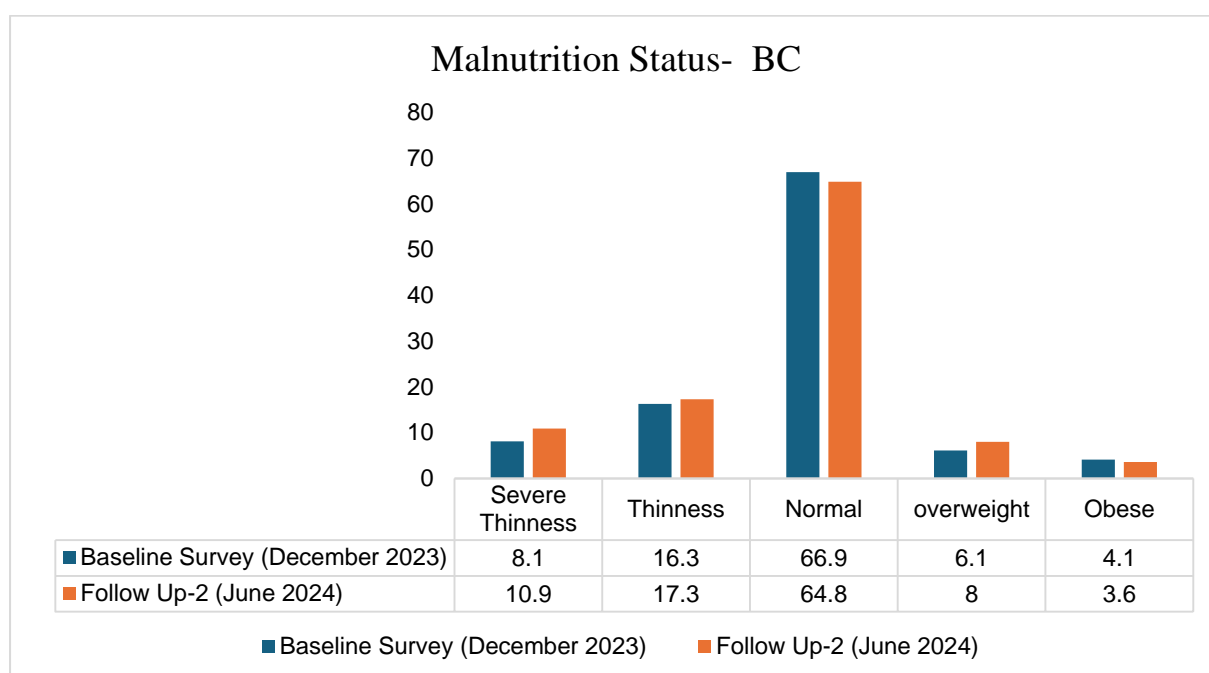
**Figure 9 Prevalence of different types of malnutrition among Hindu religious category students in Baseline and follow-up:2**



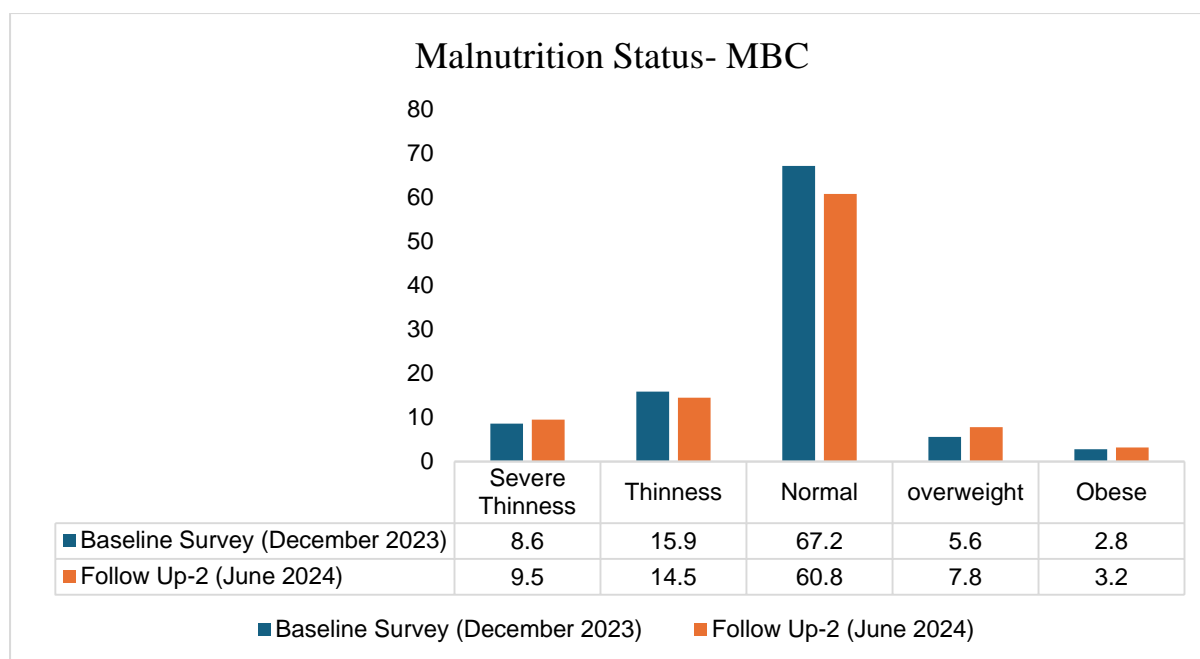
**Figure 10 Prevalence of different types of malnutrition among Muslim religious category students in Baseline and follow-up: 2**



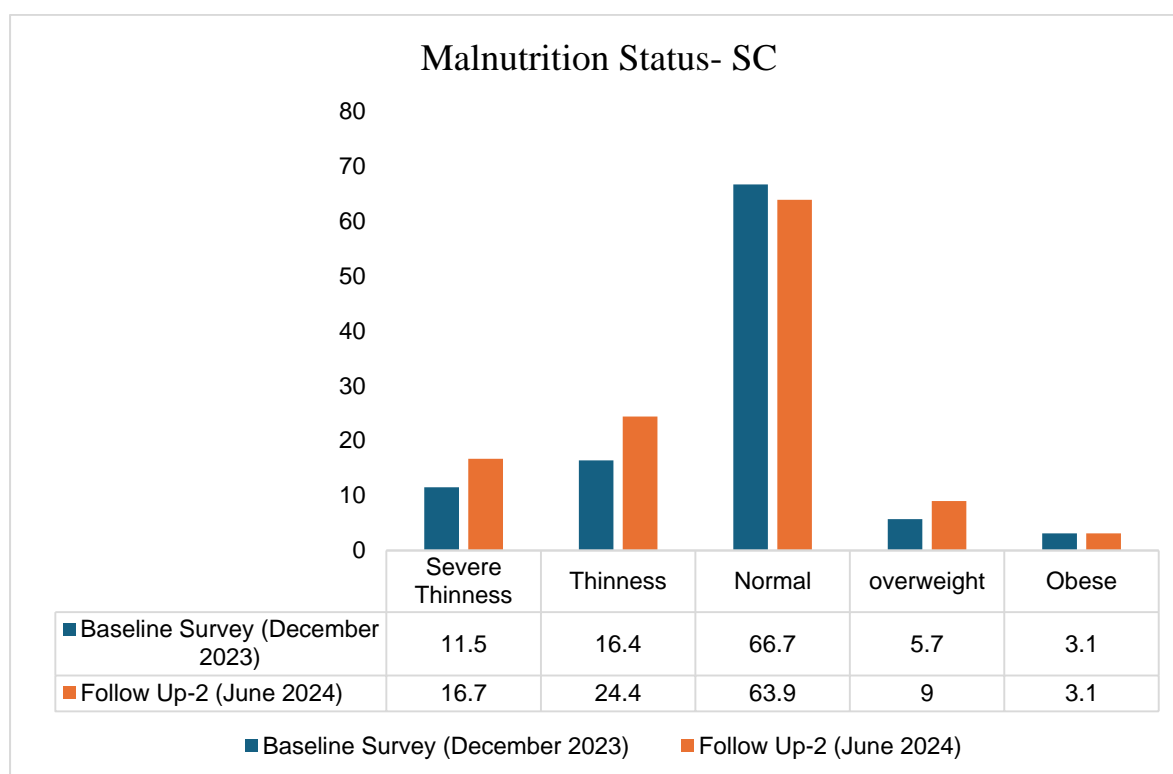
**Figure 11 Prevalence of different types of malnutrition among Christian religious category students in Baseline and follow-up: 2**



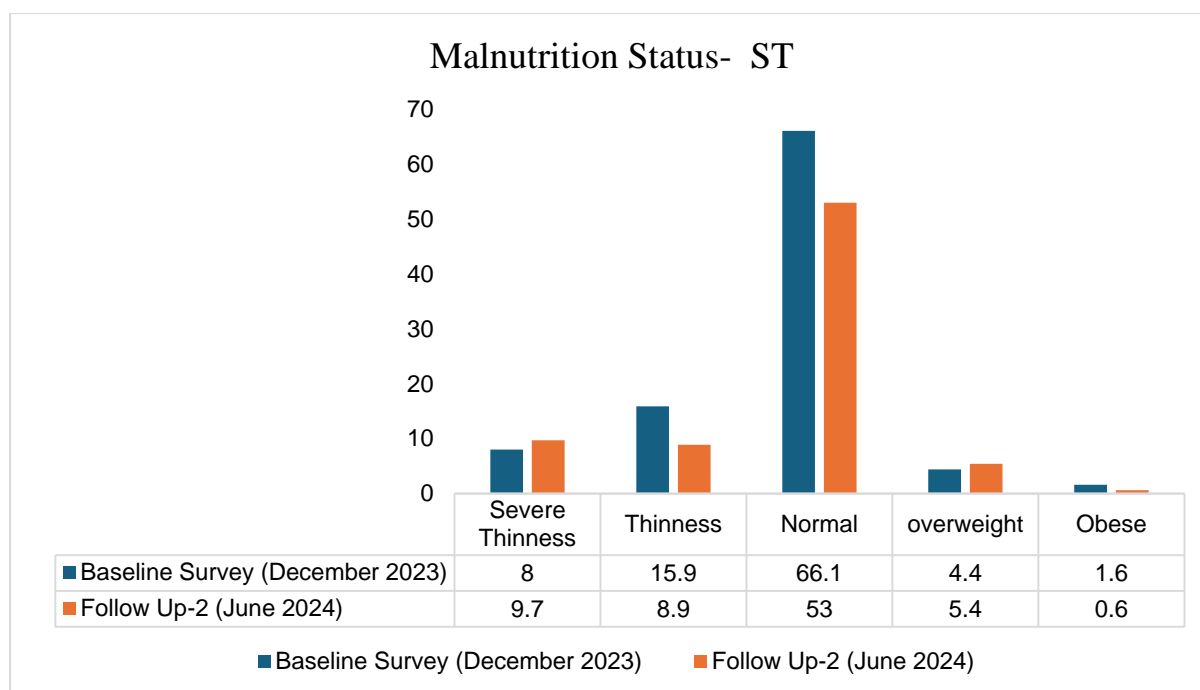
**Figure 12 Prevalence of different types of malnutrition among 'BC' caste category students in Baseline and follow-up: 2**



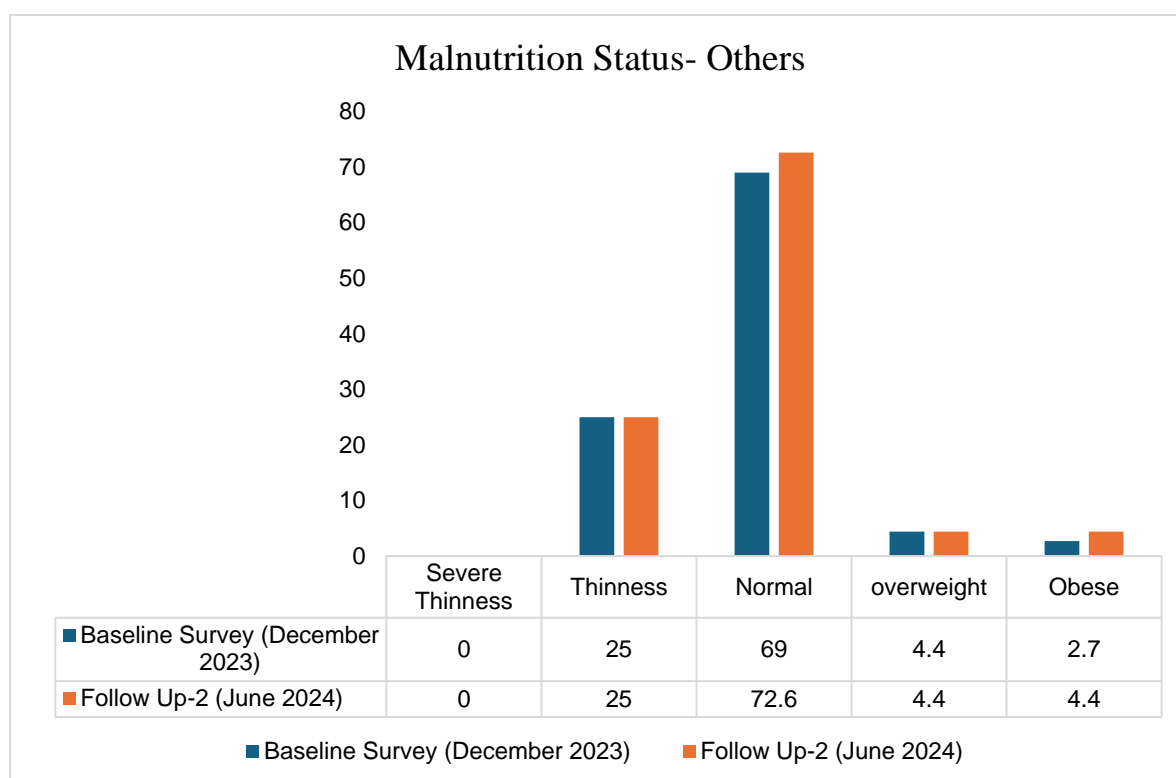
**Figure 13 Prevalence of different types of malnutrition among ‘MBC’ caste category students in Baseline and follow-up: 2**



**Figure 14 Prevalence of different types of malnutrition among ‘SC’ caste category students in Baseline and follow-up:2**



**Figure 15 Prevalence of different types of malnutrition among ‘ST’ caste category students in Baseline and follow-up: 2**



**Figure 16 Prevalence of different types of malnutrition among ‘others’ caste category students in Baseline and follow-up:2**



## Qualitative Report

Effect of the breakfast scheme on attendance, engagement in the class and academic performance among primary school students and perception of the scheme among teachers and parents in Tamil Nadu

Focus group discussion was conducted among school teachers and parents to understand their perception towards breakfast scheme in 4 randomly selected districts – Ramanathapuram, Thoothukudi, Tiruvallur and Dharmapuri in **July 2024**. Separate FGDs were conducted for teachers and parents. In school with fewer teachers, Key Informant Interview was conducted.

### **Research Team and Reflexivity**

**Personal Characteristics** – The research team included faculty members from the Department of Community Medicine of the respective district, who is trained in qualitative methods with research experience.

**Site** – The focus group discussions were conducted in the schools at the time convenient to the participants.

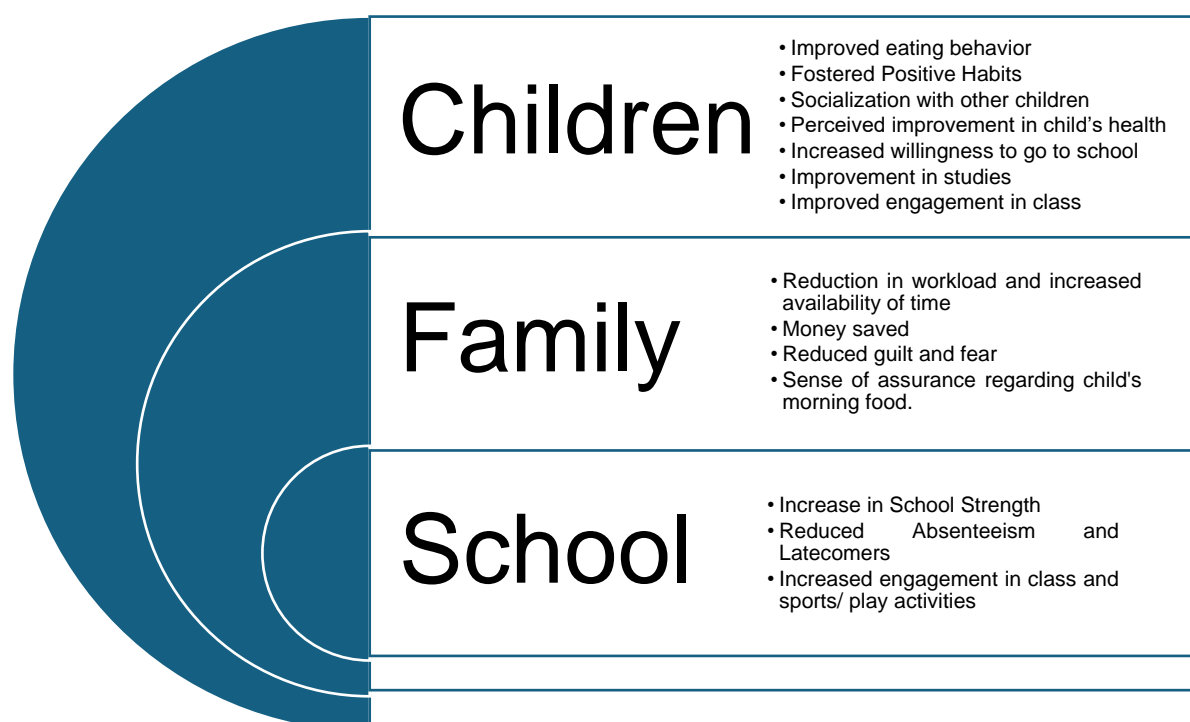
Thematic analysis was employed to identify key themes and patterns from the qualitative data collected during key informant interviews, and focus group discussion. Qualitative content analysis was done using an inductive approach, using both manifest and latent content analysis. Triangulation of data was done. The transcripts and field notes were read repeatedly and assigned with initial codes. Similar codes were grouped into sub-themes and related sub-themes are attributed to overarching themes.

## Key findings of the study

- The breakfast scheme has been transformative for rural children especially, providing nutritious meals and improving their focus and - well-being. With many parents away at work, this initiative ensures that no child starts their day hungry.
- Overall, the scheme was felt as a welcome move and a needed scheme by the parents and teachers. It was also felt that the scheme was implemented well, as it was evident by the quotes on the quality of the food. The scheme was perceived as a necessary and beneficial initiative. It was felt useful both by the parents and teachers for various reasons, like the children going to school early and making it convenient for the parents to send their children to school as they were assured about their children's food.

The scheme has impacted the children, family and the school positively in various dimensions as given below.

### Impact of the Breakfast scheme on children, family and school



## QUOTES FROM TEACHERS

### (Taken from Focus Group Discussions)

- இந்த திட்டத்தின் மூலம் வழங்கப்படும் காலை உணவு சூடாகவும், சுவையானதாகவும் ஆரோக்கியமானதாகவும் உள்ளதால் குழந்தைகள் தினந்தோறும் காலை உணவிற்குப்பின் மகிழ்ச்சியாக வகுப்பிற்கு வருகின்றனர்.

The children are attending the classes happily every day after having their breakfast since the breakfast provided through this scheme is hot, tasty, and healthy

- வறுமைக்கோட்டிற்கு கீழ் உள்ள தாய்மார்கள் தேசிய ஊரக வேலை உறுதித் திட்டத்தின் கீழ் பணிக்கு காலையிலேயே செல்வதால் அவர்களது குழந்தைகள் சரிவர காலை உணவு உண்பதில்லை. தற்போது, இத்திட்டத்தின் மூலம் குழந்தைகள் பள்ளிகளில் நண்பர்களுடன் சேர்ந்து தாமதமாகவே காலை உணவை விரும்பி உண்கின்றனர்.

The children of mothers working Under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGA) often miss breakfast at home. Now, through this scheme, children are happily eating breakfast on their own with their friends in schools."

- குழந்தைகள் பெரும்பாலும் இல்லங்களில் காலை உணவாக சோறு அல்லது அரிசி கஞ்சி உண்டனர். தற்போது, இத்திட்டத்தின் மூலம் ஒவ்வொருநாளும் ஒவ்வொரு வகையான காலை உணவினை சுவையாகவும், தரமாகவும் மற்றும் போதிய அளவிலும் குழந்தைகள் உண்டு மகிழ்கின்றனர்

The program has transformed the breakfast habits of children by providing a diverse range of tasty and nutritious meals, moving away from the monotonous rice or rice porridge they were used to eating at home."

- பெற்றோர்கள் இதற்குமுன்னர் தங்கள் குழந்தைகள் காலை உணவு உண்பதில்லை, மற்றும் உணவு உண்ணபோதிய



நேரமில்லை போன்ற புகார்கள் கூறிவந்தனர். தற்போது இந்தநிலை மாறி காலை உணவை பள்ளிகளில் விரும்பி உண்பதாக கூறுகின்றனர்.

Parents used to express concerns about their children skipping breakfast due to time constraints. However, this program has successfully addressed this issue, with parents now reporting that their children are eagerly consuming breakfast at school

- கிராமப்புறங்களில் உள்ள குழந்தைகள் பெரும்பாலும் வீட்டில் வழங்கப்படும் அரிசிகஞ்சியினை விரும்பாமல் கடைகளில் உள்ள நொறுக்கு தீணிகளை வாங்கி உண்டுவிட்டு பள்ளிகளுக்குச் சென்றுவந்தனர். தற்போது, இத்திட்டத்தின் மூலம் குழந்தைகள் அவர்தம் பள்ளிகளிலேயே தரமான காலை உணவினை உண்கின்றனர்.

Rural children often skip homemade rice porridge and instead preferred to buy and eat snacks from shops before going to school. Now, through this program, children are eating nutritious breakfast at their schools.

- குழந்தைகள் தனது நண்பர்களுடன் சேர்ந்து பள்ளியில் காலை உணவை மீதம்வைக்காமல் விரும்பி உண்பதனால் உணவுவீணாவது தவிர்க்கப்படுகிறது.

Significant reduction in wastage of Food is observed since, children happily eat their breakfast at school with their friends without wasting.

- கடந்தவருடம் முதல் வகுப்பில் படித்த குழந்தைகள் வயதுக்கு ஏற்ற உயரம் இல்லாமல் குறைந்த உயரத்துடன் காணப்பட்டனர். தற்போது இத்திட்டச் செயல் பாட்டிற்கு பின்பு இரண்டாவது வகுப்பில் உள்ள அதே குழந்தைகள் வயதுக் கேற்ற உயரத்துடன் காணப்படுகின்றனர்.

The scheme had a significant impact on the physical and cognitive development of students. Children who were stunted in growth last year have now achieved normal height for their age.

- தினந்தோறும் சத்துள்ள காலை உணவு உட்கொள்வதால் வயிற்றுப்புண், பசியால் மயக்கம் அடைவது போன்றவை தவிர்க்கப்படுகிறது. இத்திட்டத்தின் மூலம் குழந்தைகள் நாள் முழுவதும் சோர்வடையாமல் புத்துணர்ச்சியுடன் வகுப்பறையில் செயல்படுவதால் அவர்களின் கற்றல்திறனும் மேம்பட்டுள்ளது.

The daily nutritious breakfast has not only addressed nutritional deficiencies but also enhanced their overall well-being, leading to improved concentration and academic performance.

## QUOTES FROM PARENTS

### (Taken from Focus Group Discussions)

- கிராமப்புறங்களில் விவசாயம் சார்ந்த வேலைகளை செய்யும் தாய்மார்களின் குழந்தைகள் இத்திட்டத்தின் மூலம் பள்ளிகளில் ஊட்டச்சத்து நிறைந்த காலை உணவு உண்பதால் கவலையின்றி விடியற் காலையிலேயே வேலைக்குச் செல்வதற்கு ஏதுவாக உள்ளதாக கூறுகின்றனர்.

Rural women farmers have expressed relief that their children are now receiving nutritious breakfasts at school, allowing them to begin their workday earlier.

- வறுமை கோட்டிற்கு கீழ்உள்ள குடும்பங்களைச் சேர்ந்த குழந்தைகள் வீட்டில் போதிய உணவு இல்லாமலும், நேரமின்மையால் உணவு சமைக்க இயலாததாலும், பசியுடன் பள்ளிக்கு சென்றார்கள். தற்போது இத்திட்டத்தின் மூலம் தரமான காலை உணவினை உண்கின்றனர்.

- Children from below poverty line families, who previously went to school hungry due to lack of food at home and time to prepare it, are now receiving nutritious breakfast through this program.
- இத்திட்டத்தின் மூலம் வழங்கப்படும் காலை உணவானது தரமான காய்கறிகளைக் கொண்டு சமைக்கப்படுவதால் ஆரோக்கியமானதாகவும், சுவையானதாகவும் மற்றும் வீட்டுஉணவிற்கு நிகரானதரத்தில் இருப்பதாலும், குழந்தைகள் காலை உணவினை தவறாமல் தினந்தோறும் விரும்பி உண்கிறார்கள்.

The breakfast provided under this scheme are made with quality vegetables and it is healthy delicious and similar to home-cooked food. As a result, children enjoy eating their breakfast every day without fail

- இத்திட்டத்திற்கு முன்பு, குழந்தைகள் காலை உணவினை ஊட்டிவிட்டால் மட்டுமே உண்பர். மேலும், சிலசமயங்களில் காலை உணவு சாப்பிட மறுத்து அடம்பிடிப்பர். தற்போது தாமாகவே அவர்களது பள்ளிகளில் காலை உணவை விரும்பி உண்கின்றனர்.
- Before this program, children would only eat their breakfast if they were fed. Moreover, they would sometimes refuse to eat breakfast. Now, they voluntarily enjoy their breakfast at school.
- குழந்தைகள் நேரத்திற்கு சரிவர சாப்பிடாமல் இருந்தமையால் அடிக்கடி நோய்வாய்ப்பட்டு அவதியுற்றனர். தற்பொழுது சரியான நேரத்திற்கு காலை உணவு உண்பதால் புத்துணர்ச்சியுடன் ஆரோக்கியமாக உள்ளனர்.

Before this scheme, due to irregular breakfast, children often fell sick. Now, with regular breakfast, they are healthy and energetic.

# Chief Minister's Breakfast Scheme: Impact on Children in Primary Classes in Government Schools

## Interim Report (Second Phase)

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Publication by:

**State Planning Commission**

5th Floor, Ezhilagam, Chepauk,  
Chennai - 600 005



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