

Public Financial Management and Budgeting for Children: Evidence from Telangana, India

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Abstract

Telangana is the newest State in India, formed in June 2014. We focussed on an ex-post analysis on State's public financial management for children (C-PFM), incorporating the fiscal marksmanship of such spending. We observed that there are 58 child-specific schemes and programs across seven departments in Telangana, in which, the education sector has 79.48 percent of total child budgeting, constituting 8.45 percent of the total expenditure of the State. However, the outcome indicators showed that there are wide intra-State differentials related to selected indicators. The anthropometric indicators also reveal that malnutrition is a major challenge in the State . The Covid 19 pandemic has widened the digital divide in the education sector. The inferences from the public finance analysis for children (PF4C) undertaken in our paper provides the *baseline analysis* for the post-covid fiscal strategy for PF4C in Telangana.

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Introduction

Against the backdrop of covid-19 pandemic, the public finance analysis for children (PF4C) undertaken in our paper aims to provide the *baseline analysis* for the post-covid fiscal strategy for PF4C in Telangana. Telangana, the new State of India, was formed on June 2, 2014 as per Andhra Pradesh Re-organisation Act, 2014. Telangana has significant development related projects including Public Finance for Children (PF4C). However, the economic growth in Telangana has fallen sharply due to COVID-19.

In Telangana, children of 0-14 years age group constitute about 30 percent of the total population. The anthropometric data suggests that Telangana is a State with high *stunting* (low height for age) at 28.1 percent, *wasting* (low weight for height) at 18 percent, and iron deficiency at 60.7 percent. The State has a high infant mortality rate (IMR) at 28 per 1000 children and an under-five mortality rate (U5MR) at 32 per 1000 children. The maternal mortality rate as high as 81 per 1000 live births. The gender differentials in literacy rates is marked at 75.04% (boys) and 57.99% (girls). Against this backdrop, we analyse the public finance for children (PF4C) in the context of Telangana. The public finance analysis for children (PF4C) analysis provides the baseline analysis for the post-covid fiscal strategy for PF4C in Telangana.

The PF4C aims at examining the detailed Demand for Grants to understand how the State has intended to spend on children, and how much of budgetary allocation is met, and linked to the outcomes. The significant deviation between “what is intended” and “what is incurred” is studied through fiscal marksmanship.

The rest of the paper is organized as follows. Section 1 presents the fiscal scenario with growth performance and briefly analyzes the public expenditure on the social sector. Section 2 analyses the child budgeting of the State. An outcome-based analysis of child budgeting is provided in section 3. Section 4 concludes.

I. Economic Growth and Fiscal Space

The economic growth in Telangana has fallen sharply due to COVID-19 . The real growth rate of gross state domestic product (GSDP) in Telangana was lower than the national average (Table 1). The industrial sector contributed about 18% to GSDP in 2018-19. The tertiary sector contributed about 65% of value-added within the State generates from the tertiary sector (Table 2).

Table 1: Real GSDP/GDP growth rate for Telangana and India

Real GSDP/GDP growth rate for Telangana and India		
Economic growth in Telangana has fallen sharply due to COVID-19 - but not as sharply as India		
Growth	Real GSDP/GDP Growth Rate (%)	
Year	India	Telangana
2014-15	6.8	7.4
2015-16	11.6	8.0
2016-17	9.3	8.3
2017-18	9.7	6.8
2018-19	8.3	6.5
2019-20	7.9	4.0
2020-21	-1.26	-8.0
Source : Directorate of Economics and Statistics; Ministry of Statistics and Programme Implementation		

The rate of urbanization in Telangana is 38.90 percent, which exceeds the national rate of urbanization (31.20 percent) as per the Census of India, 2011. The State has promising scope of strengthening its fiscal base, given the tax buoyancy is more than one (Ghosh and Chakraborty, 2019).

Table 2: Sectoral Economic Growth: Telangana and India

Year	Growth Rate (%)		Share in national GDP (%)	Sectoral Contribution in Gross Value Added at Current Prices		
	Telangana	India		Primary	Secondary	Tertiary
2015-16	11.6	8	4.09	17.5	20.3	62.2
2016-17	9.4	8.2	4.13	18.2	18.2	63.6
2017-18	10.2	7.2	4.25	18.2	18	63.8
2018-19	10.5	6.8	4.39	18	17.3	64.7
Source: Economic Survey 2018-19 and 2019-20 and Socio-Economic Outlook 2020, Telangana						

The compound annual growth rate (CAGR) of tax revenue at aggregate level was higher than national average for Telangana (Table 3) . The growth rate of excise tax was 38.10 per cent during 2016-19, while that of sales tax and SGST was 14 per cent (Table 3).

The tax GSDP ratio is highest in Telangana among the Indian States, which was 7.5 per cent at the aggregate level of own taxes during 2016-19 (Table 4). The tax-GSDP ratio for excise was 1.1 for Telangana when highest was for Chhattisgarh at 1.4 per cent. The SGST plus sales tax to GSDP ratio was 5.2 per cent for the same period.

Table 3: Tax Revenue: CAGR for Telangana and India

Growth in tax revenue (%)	CAGR (2016-19)	
	Telangana	India
Tax components		
State's Own Tax Revenue	15.90%	12.10%
Sales tax + SGST	14.00%	15.30%
Stamps and registration fees	18.30%	12.70%
Excise	38.10%	15.40%
Motor vehicles tax	5.30%	14.50%

Source: RBI State Finances: A Study of Budgets (various years)

Table 4: Tax to GSDP ratio for Telangana and India GS (2016-19 average)

Tax to GSDP ratio (%)				
Particular	Telangana	India	Highest State	Highest State Name
SOTR	7.5	6.3	7.5	Telangana
SGST + sales tax	5.2	4.3	5.3	Kerala
Stamps and registration fees	0.6	0.6	1.1	Maharashtra
Excise	1.1	0.8	1.4	Chhattisgarh
Motor vehicles tax	0.5	0.4	0.5	Kerala

Source : Revenue data - RBI State Finances : A Study of Budgets (various years), GSDP data - RBI Handbook of Statistics on Indian States (Table 17), SOTR/GSDP data - 15th Finance Commission report annexure

The tax buoyancy - the responsiveness of tax revenue to increase in GDP - was 1.4 per cent in Telangana (Table 5). The tax buoyancy of motor vehicle tax, SGST plus sales tax, excise and stamps and registration fees registered above unity for the period 2016-19.

Table 5: Tax buoyancy for Telangana and India (2016-19 average)

Particular	Telangana	India	Highest State	Highest State Name
SOTR	1.4	1.3	2.1	Maharashtra
SGST + sales tax	1.2	1.0	2.9	Bihar
Stamps and registration fees	1.4	0.6	1.5	Haryana
Excise	3.0	1.1	3.7	West Bengal
Motor vehicles tax	1.4	1.2	2.1	Haryana

Source : Revenue data - RBI State Finances : A Study of Budgets (various years), GSDP data - RBI Handbook of Statistics on Indian States (Table 17)

The analysis in this paper is confined to the prior pandemic period to provide baseline analysis for post- pandemic fiscal policy strategy. Telangana, since the formation of the State in 2014-15, has no revenue deficit (Table 6). Since 2015-16, the fiscal deficit has risen above 3% of GSDP.

Table 6: Debts and Deficits (% of GSDP)

Indicator	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Revenue Deficit	0.073	0.041	0.21	0.459	0.041	0.665
Fiscal Deficit	-1.86	-3.20	-3.35	-3.52	-3.36	-2.81
Outstanding liabilities	17.51	18.74	22.51	24.23	24.77	23.00

Source: Ghosh and Chakraborty (2019); Basic Source: Finance Accounts, Government of Telangana

The interest payment as a percent of its own revenue receipts is about 16 percent in recent years (Table 7). The interest payment burden in the total revenue receipts is around 10.55% as per the 2019-20 and 9.80% in 2018-19. The debt-GSDP ratio in Telangana over the years is lower than the stipulated limit of FRBM at 25 percent.

Table 7: Interest Payments and Outstanding Liabilities

Indicator	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Interest Payment/Own Revenue Receipt (%)	14.63	13.90	14.80	16.84	16.07	15.38
Interest Payment/Total Revenue Receipt (%)	10.24	9.93	10.40	12.20	9.80	10.55
Outstanding liabilities	17.51	18.74	22.51	24.23	24.77	23.00

Source: Ghosh and Chakraborty, 2019; Basic source: Finance Accounts, Government of Telangana

Telangana initiated sovereign debt with an elongated maturity structure of about 15 years on average, with its highest limit about 40 years. The RBI noted that the maturity structure of Telangana debt profile is with the weighted average maturity of market borrowings at 14.79 years at end-March 2019. Telangana owes 75.40 percent of its total outstanding debt for more than seven years of maturity (RBI, 2019). The maturity structure was aimed at decreasing the refinancing risks in the short-term and alleviates the debt servicing cost.

In terms of the social service expenditure as a share of GSDP, Telangana is ranked at 15, out of 18 non-special category States (Table 8). In this State, the percentage of social sector expenditure to GSDP has reduced by 2.8 percentage points.

Table 8: Social Service Expenditure to GSDP (%)

State/UT (Per cent)	2017-18	2018-19	2018-19	2019-20	Change in (SSE/GSDP) from 2018-19 to 2019-20
Non- Special Category States					
Andhra Pradesh	9.0	10.4	8.1	10.4	2.3
Bihar	14.1	17.8	19.7	19.4	-0.3
Chhattisgarh	12.4	13.3	14.0	12.7	-1.3
Goa	7.1	8.8	8.8	8.6	-0.2
Gujarat	4.6	4.7	4.9	4.6	-0.3

Jharkhand	10.6	12.6	12.6	11.7	-0.9
Haryana	5.7	6.2	6.0	5.8	-0.2
Karnataka	5.7	6.6	6.4	5.7	-0.7
Kerala	5.8	6.2	5.9	5.8	-0.1
Madhya Pradesh	10.2	10.4	9.9	10.6	0.7
Maharashtra	4.4	5.6	5.8	6.0	0.2
Odisha	10.3	11.4	11.7	12.3	0.6
Punjab	3.6	5.0	4.7	4.9	0.2
Rajasthan	9.1	9.7	9.7	9.7	0.0
Tamil Nadu	4.9	5.2	5.4	4.9	-0.5
Telangana	6.7	8.6	8.1	5.3	-2.8
Uttar Pradesh	8.5	10.7	11.5	11.5	0.0
West Bengal	8.8	7.9	8.5	7.5	-1.0
Rank of Telangana (Highest to Lowest)	11	10	10	15	
Special Category States					
Arunachal Pradesh	24.8	24.7	31.2	27.9	-3.3
Assam	9.7	13.1	14.9	12.8	-2.1
Himachal Pradesh	9.0	10.4	10.5	10.1	-0.4
Jammu & Kashmir	13.4	15.7	19.6	17.4	-2.2
Manipur	17.8	21.8	26.0	21.9	-4.1
Meghalaya	15.3	19.4	19.4	20.7	1.3
Mizoram	21.5	15.2	20.5	15.5	-5.0
Nagaland	19.0	20.1	17.6	18.4	0.8
Sikkim	9.7	8.8	11.5	10.2	-1.3
Tripura	12.7	13.5	14.2	13.5	-0.7
Uttarakhand	7.2	8.1	7.4	7.7	0.3
Union Territories					
NCT Delhi	3.2	4.1	3.6	4.0	0.4
Puducherry	7.6	-	8.0	7.6	-0.4
All States and UTs	7.0	8.0	8.1	8.0	-0.1

Source: (Basic Data), RBI: State Finances: A Study of Budgets of 2019-20

Telangana spent around 44% of its total revenue expenditure on social services during 2017-18 and 2018-19 (Table 9). Nevertheless, in 2019-20 the ratio of social sector expenditure to total revenue expenditure declines to 37.86 percent for Telangana.

Table 9: Social Sector Expenditures as % of Total Expenditure in Revenue Account				
Year	2017-18	2018-19	2018-19	2019-20
Non-Special Category States				
Andhra Pradesh	48.81	52.93	50.81	51.58
Bihar	39.41	40.33	40.33	40.1
Chhattisgarh	43.34	41.08	38.61	36.81
Goa	39.41	40.33	40.33	40.1
Gujarat	41.54	41.15	42.43	40.66

Jharkhand	38.42	39.78	39.75	40.4
Haryana	38.31	40.12	38.71	38.32
Karnataka	41.16	42.23	41.97	39.29
Kerala	35.89	33.56	34.56	31.28
Madhya Pradesh	37.88	34.7	39.32	37.93
Maharashtra	38.52	41.1	42.96	44.39
Odisha	41.14	42.58	43.3	42.5
Punjab	24.77	24.68	24.41	25.28
Rajasthan	36.38	38.11	39.45	40.11
Tamil Nadu	35.62	35.61	36.17	33.94
Telangana	43.65	44.13	44.1	37.86
Uttar Pradesh	31.65	34.42	33.38	35.37
West Bengal	42.24	43.16	43.08	43.35
Rank of Telangana (Highest to Lowest)	4	3	3	14
Special Category States				
Arunachal Pradesh	36.24	31.08	37.28	35.78
Assam	43.34	41.08	38.61	36.81
Himachal Pradesh	38.21	38.29	39.41	38.5
Jammu & Kashmir	32.06	29.79	34.96	34.03
Manipur	27.71	27.02	28.1	27.47
Meghalaya	37.37	35.62	35.62	37.56
Mizoram	0.38	0.35	0.39	0.38
Nagaland	25.11	26.81	28.87	27.23
Sikkim	36.9	30.91	37.94	35.44
Tripura	41.99	41.18	42.31	44.14
Uttarakhand	37.58	39.26	37.32	38.04
Rank of Telangana (Highest=1 to Lowest)	5	5	5	21
Source: Reserve Bank of India State Finances 2019-20				

II.I Budgeting for Children

India commenced the first child-related policy initiative through the National Plan of Actions for Children (NPAC) in 1992 as part of the Eighth 5-year plan in the post-UNCRC period. The Convention on Right of Child (CRC) in Vienna in 1993 strengthens the

approaches towards a child-friendly world. The Article 4 of Constitution of India relates to such rights. The 9th 5-year plan (1997-2002) retains child-specific goals like no child remains illiterate, hungry, or lacks medical care. Such effort was the first endeavor of the Government of India to include nutrition, health, and education in a compact form—explicitly targeting children. The initiative was continued in the 10th 5-Year Plan (2002-2007) where the Government of India included 12 key areas in NPAC.

The public expenditure gets treated as a proxy to measure the government's commitment towards fulfilling child rights to the Convention on Rights of the Child, 1989 (Dhar, 2019). Dhar (2019) analyses the dimensions of principles of equity and inclusiveness to uphold the 'social' aspect of budgeting. PF4C also aims to 'adjustments with a human face' (Gore, 2009; Osher, 2009) through a categorization analysis of child-focused expenditure. Such an attempt gets termed as 'social accountability' (Kumar et al., 2016; Minujin & Ferrer, 2016). The UNICEF 2019 analysis across 16 selected States of India in 2019 provided a State-specific ranking analysis of child development index and health and nutrition index over 2014-18. The UNICEF study revealed that the States with relatively sound economic bases also have a relatively lower proportion of child-specific expenditure to their respective GSDPs. The UNICEF study revealed that Telangana attained 0.64 and 0.68 scores in child development index and health and nutrition index, respectively, compared to the national scores of 0.48 and 0.49 (UNICEF, 2019). Telangana secured its rank at three, after the States of Kerala and Tamil Nadu. One of the findings of the UNICEF study was the fact that the States attempted for an improved allocation towards children in general; yet the size of the budget is small.

The child-specific expenditure by the State is given in Table 10. The total child-specific expenditure of Telangana as a percentage to GSDP is only at 1.61% in 2017-18. In the following year, the percentage declined to 1.55%, and in the 2019-20 budget proposed only 1.05% of GSDP allocation to child-centric expenditure.

Table 10: Child Budget Estimates as % of Discretionary Spending , Telangana: 2019-20

% of the Total State Expenditure				
Expenditure	2017-18	2018-19	2018-19	2019-20
Child-specific	8.45	7.68	8.09	6.96
% of Discretionary Spending (Total Expenditure minus Interest Payment)				
Child-specific	9.14	8.22	8.73	7.72
% of child-specific to SSE	30.16	21.58	22.38	23.84
% of GSDP	1.61	1.55	1.51	1.05
Source: (Basic Data), Detail Demand for Grants (various years)				

The child-specific expenditure is 6.96 % of the total expenditure of the State as per 2019-20 (Table 10). The total child-specific expenditure as a percentage of the discretionary spending was 9.14% in 2017-18., and declined to 8.09% in 2018-19 and 6.97% in 2018-19. A substantial size of expenditure in child budgeting was on the construction of capital-intensive assets for education and sports (like schools, residential schools, stadium).

Table 11: Distribution (%) of Child Specific Expenditure

Departments	2017-18	2018-19	2018-19	2019-20
School Education	86.79	78.73	78.45	79.48
Sports and Youth Services	0.05	0.05	0.05	0.04
Social Welfare	2.82	7.77	7.43	4.4
Tribal Welfare	2.46	4.02	3.99	3.95
Backward Classes Welfare	0.02	0.03	0.03	0.04
Minority Welfare	0.15	0.22	0.23	0.03
Women, Child, and Disabled Welfare	7.7	9.18	9.83	12.07

Source: (Basic Data), Detail Demand for Grants (various years)

The child specific allocations were identified in seven departments, including school education, sports and youth services, social welfare, tribal welfare, backward class, minority welfare and women, child and disabled welfare (Table 11). The significant share was from department for education. The education department has three distinct demands for grants - school education, higher education, and technical education. The present analysis focuses on school education only. The significant scheme in the department of education is “Samagra Shiksha” (Education for all). The Women, Child and Disabled Welfare Department, Social Welfare Department, and Tribal Welfare Department have allocation towards the child-centric welfare schemes like scholarships, and nutrition programs. The Department of Youth Advancement, Backward Classes Welfare, and Minority Welfare focused on the programmes related to inclusion and empowerment. The Nutrition Meals program has got the maximum share of total scheme expenditure by the Education Department of Telangana in the budget proposal of 2019-20.

Table 12: Child-specific Scheme expenditure: Nutrition

Scheme Name	2017-18	2018-19	2018-19	2019-20
School Education	49.9	50.5	47.1	57.9
Youth Advancement, Tourism and Culture Department	0.9	0.3	0.3	0.1
Social Welfare	2.3	2.2	2.0	0.0
Tribal Welfare	46.9	47.1	50.6	42.0
% of Nutrition Expenditure to total Child Scheme Expenditure	20.5	23.8	23.0	32.6

Source: (Basic data), Budget of Telangana, 2019-20

Four departments have nutrition programs, which constituted 32.6 % of the total child scheme in the year 2019-20 (Table 12). It showed a 9-percentage point improvement over 2018-19. The re-categorisation of child budgeting into protection, regulation, economic and financial empowerment, and social sector empowerment (Table 13) is based on the rationale that such re-categorisation helps to understand the efficacy of the budgetary allocation for children towards the fundamental principles of equity and efficiency (Table 13).

Table 13 Re-Categorisation of Child Specific Expenditure

(%)				
Year	2017-18	2018-19	2018-19	2019-20
Protection	0.85	1.14	1.03	1.48
Regulatory	1.26	0.61	0.54	0.39
Economic	12.75	26.87	28.07	22.95
Financial	2.11	1.94	2.13	1.92
Social	83.03	69.43	68.22	73.26

Source: Author's Calculations; Basic Source: Budget of Telangana, 2019-20

Table 13 reveals that child-focused expenditure of Telangana prioritizes social sector empowerment, which is followed by economic empowerment. Besides centrally sponsored schemes like ICDS, SABALA, Financial Inclusion Camp in unique nutrition campaign, Rashtriya Madhyamik Shiksha Abhiyan, Samagra Shiksha, Scheme for providing education to Madrasas, Minorities and Disabled, Kishore Shakti Yojana, Mid-day Meal, National Cadet Corps Training under youth welfare programs, there are a lot of State-sponsored schemes that have been initiated in the new State for social sector empowerment. For example, to strengthen the central schemes, Telangana initiated assistance to adolescent girls, nutritious meals programme for children till class eight, and a special focus to grade 9 and 10 students, state central library, and others. The financial empowerment mainly incorporates various scholarships (i.e., direct cash transfer) constituting about 2.11% of total scheme-oriented child-centric expenditure in 2017-18, which subsequently decreased to 1.92 percent in 2019-20 budget proposal. These are either Prativa scholarship or pre-matric scholarship. The share of expenditure on economic empowerment has increased to 22.95% in 2019-20 from 12.75% in 2017-18. The protection category received only 1.48% in 2019-20. The Department of Women, Child and Disabled Welfare implements the child protection schemes (the centrally sponsored schemes are ICPS).

Fiscal marksmanship captures fiscal forecasting errors (Chakraborty et al., 2019). The analysis reveals that the highest overestimation gets observed for capital outlay. The fiscal marksmanship analysis reveals that the allocations for Department of Women, and Child and Disabled Welfare were underestimated.

III: Outcomes

India ranks 115 out of 162 countries in SDG Preparedness Index Report 2019², falling behind a few neighbouring countries like Bhutan, Nepal, and Sri Lanka. Significant progressivity gets noticed in alleviating child marriage through legal steps in increasing program initiatives to educate and empower girls and public awareness campaigns (Global Childhood Report, 2019). As per this source, India marks improvement in child health and survival by scoring up 769 from 632.

² <https://dashboards.sdginde.org/>

Table 14: Fiscal Marksmanship	
Components (in Rs Lakhs)	BE/RE 2018-19
Total Child Specific scheme expenditure	1.09
Total Revenue Expenditure	1.05
Total Capital Outlay	1.24
Total Social sector Expenditure	1.06
Total Expenditure	1.08
Total Expenditure minus Interest payments	1.09
Total Expenditure on Nutrition	1.13
Sectoral Child Specific Expenditure	
Women, Child and Disabled Welfare	0.96
Backward Classes Welfare	1.00
Minority Welfare	1.00
School Education	1.03
Tribal Welfare	1.03
Social Welfare	1.07
Sports and Youth Services	1.14
Total Expenditure of the Department	
Women, Child and Disabled Welfare	0.96
Backward Classes Welfare	1.02
Minority Welfare	1.06
School Education	1.03
Tribal Welfare	1.03
Social Welfare	1.06
Sports and Youth Services	1.11

Source: (Basic data), Budget of Telangana, 2019-20

Table 15: Score Performance on Development: Telangana		
Selected Scores	Telangana	India
Overall SDG score	61	57
State/India overall SDG Rank	4	115
Human Development Score, 2018	0.67	0.65
Sustainable Child Development Index	0.65	0.48

Source: "SDG: States of the States", 2020.

Telangana attains an above-national SDG score at 61 based on the 13 SDGs (Table 15). This score places Telangana to secure the fourth rank out of 29 States of India. The SDG score for Telangana is above the National Human Development score (United Nations, 2018) and Sustainable Child Development Index (Chang et al., 2018). However, the State suffers from intra-regional disparities (Human Development Report: Telangana, 2017)³. The average years of schooling in 2011-12 for Hyderabad district was about eight years as against to about four years for district Medak⁴. The urban-rural difference in the infant

³ http://ecostat.telangana.gov.in/PDF/PUBLICATIONS/Human_Development_Report_2017.pdf

⁴ Ibid, page no, 142

mortality rate is noticeable as the under-five mortality rate in rural Telangana is almost two times higher in urban Telangana.

Table 16: Key Development Indicators of Children: Telangana

Indicators	Telangana	India
% of children 6-13 years who are out of school	Null	2.97
% of Births Registered	94.6	88.3
% of Children who are stunted	28.1	38.4
Infant Mortality Rate at birth	28	41
Under 5 Mortality Rate	32	50
U5MR ⁵ for Telangana Urban: Rural	20 for urban	38 for rural
Maternal mortality rate (per 1000)	81	130
SDG rank among States	4	-

Source: SDG India Index-Baseline Report 2018 by NITI Aayog, for Telangana; SDG report 2019 by Bertelsmann Stiftung and Sustainable Development Solutions Network and SDG India Index-Baseline Report 2018 by NITI Aayog, seen in "State of India's Environment, 2020"- Annual report from Down to Earth

The anthropometric data showed that 28 % of children are stunted (Table 16). Telangana performs better than the all India level in terms of infant mortality rate as well as under-five child mortality rate and maternal mortality rate.

Table 17: Prevalence of Anaemia among the Children and Mothers in Telangana

Indicators	Urban	Rural	Total
Children 6 to 59 months	51.9	67.5	60.7
Non pregnant women (15 to 49 years)	55.4	58.2	56.9
Pregnant (15 to 49 years)	41.7	55.1	48.2
All women (15 to 49 years)	54.9	58.1	56.6

Source: NFHS-4, Fact Sheet, State- profile –Telangana

The prevalence of anaemia is a severe area of concern for Telangana (Table17). Iron deficiency during pregnancy gets reflected in the poor health of the child at the time of birth. 60.7% of children in the age group of 6 to 59 months in Telangana suffer from anemia above the national average (58.5%). The 'Children in India, 2018' study by MOSPI identifies that a total of 24.7% of children is affected by mild anemia, 33.5% of the moderately affected while 2.5% of children suffer from acute anaemia in Telangana in 2015-16⁶. The table 17 reveals that the severity of anaemia is deeper in rural Telangana than its urban counterpart. Children across 6 to 59 months and women across 15 to 49 years- both these two groups are affected by anemia at the rate of around 60% to 56%,

⁵ <http://rchiips.org/NFHS/NFHS-4Reports/Telangana.pdf>

⁶

http://www.mospi.gov.in/sites/default/files/publication_reports/Children%20in%20India%202018%20%E2%80%93%20A%20Statistical%20Appraisal_26oct18.pdf page number -86

respectively. It implies about 3/5th of these groups are anaemic. Only about 10% of children in Telangana are privileged to consume a minimum acceptance diet⁷ (Table 18).

Table 18: Selected Indicators on Nutrition, Telangana		
Nutrition indicators (%)	Telangana	India
Total children age 6-23 months receiving an adequate diet	10.1	9.6
Wasted children	18.1	21
Severely wasted children	4.8	7.5
Underweight children	28.4	35.8
Source: NFHS-4		

Around 30% children in Telangana are underweight; 18% are wasted. However, the State is better than the national level.

The outcome of CNNS-2016-18 strengthens the findings of NFHS-4. As per CNNS, only 6.4% of the State's children aging between 6 to 23 months receive a minimum acceptable diet. Telangana faces another struggle with an intake of Vitamin A rich food and vegetables, especially among the children aged 2-4 years as well as among 5-9 years as per CNNS. However, the severity of iron deficiency has been seen to be reduced among 10-19 years of children. The CNNS detects that stunting and underweight- in both cases, more than 30% of children of Telangana within 0-4 years are affected.

The prevalence of a wide scale of anemia also is detrimental to the sustained growth of the State, and it is contrasting to the agricultural achievements of Telangana by gaining significant success in livestock production, poultry production at the National level (Socio-Economic Outlook, 2018).

Table 19 Selected Indicators: Telangana		
Education Indicators	Telangana	India
Total fertility rate (%) (children per woman)	1.8	2.2
Total wanted fertility rate⁸ (%)	1.6	1.8
Male literacy rate (%)	83.4	85.7
Female Literacy Rate (%)	65.5	68.4

⁷ The Minimum Acceptable Diet (MAD) for children 6-23 months old, is one of eight core indicators for assessing infant and young child feeding (IYCF) practices developed by the WHO. It changes across child groups. Breastfed children 6-23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day / Breastfed children 6-23 months of age. Non-breastfed children 6-23 months of age who received at least 2 milk feedings and had at least the MDD not including milk feeds and the minimum meal frequency during the previous day / Non-breastfed children 6-23 months of age (Source: WHO)

⁸ Wanted fertility rate-“The average number of children a woman would have by the end of her childbearing years if she bore children at the current age- excluding unwanted births.”-source: National Report, NFHS 2015-16; <http://rchiips.org/NFHS/NFHS-4Reports/India.pdf>

Women with 10 or more years of schooling (%)⁹	43.6	35.7
Male Literacy rate on elementary education¹⁰ (%)	75	82.1
Female Literacy rate on elementary education (%)	57.9	65.5
Gross enrolment ratio (Primary education)	103.13	97.87
Gross enrolment ratio (Secondary education)	80.73	79.16
Gender parity index	1, 1.05	1.03, 1.02
% of schools with drinking water facility	93.8	96.8
% of schools with midday meal	96.2	97.6
% of girl's enrolment	48.5	48.4
Transition from primary to upper primary (%)	98.2	90.1

Source: State Fact Sheet Telangana, page number-3 and National Fact Sheet, NFHS-4, 2015

Mean years of schooling is a realistic indicator of children's education than the macro indicators like literacy rates and enrolment ratios (Table 19). The average years of schooling in Telangana records 7.29 years, which proclaims higher than the all India's average 6.5 years of schooling¹¹ with a significant fall in upper primary school enrolment compared to primary school enrolment (NUEPA, 2016). However, this State attains ninth rank (out of 16 selected States) in terms of net attendance ratio in upper primary schools.

The growth of a child needs to be supported by the combination of in-house and out-house environments. Apart from school, education, Table 20 highlights few basic human-accessibilities in the household sector relating to child-partial outcomes.

Table 20 Selected Household Indicators of Telangana

Household Indicators	Telangana	India
Households using an improved sanitation facility (%)	50.5	48.4
Households with a piped sewer system¹²	29.2	17
Households with an improved drinking-water source¹³ (%)	77.9	89.9

Source: State Fact Sheet Telangana, page number-3 and National Fact Sheet, NFHS-4, 2015

Table 21 reveals that child mortality rates – NMR, IMR and U5MR- has declined over the years in Telangana. Table 22 shows that the share of fully immunized children (%) have increased in most districts over time.

⁹ Source: NFHS Fact sheet Telangana, 2015-16

¹⁰ DISE Report, page numbers- 2 and 66;

¹¹ http://ecostat.telangana.gov.in/PDF/PUBLICATIONS/Human_Development_Report_2017.pdf, page number 18

¹² NSS Report No. 584: Drinking Water, Sanitation, Hygiene and Housing Condition in India

¹³ Piped water **into dwelling**/yard/plot, public tap/standpipe, tube well, protected dug well, protected spring, rainwater, community RO plant

Table 21: Child Mortality Rates, across Time

Current status of Child Mortality Rate		
Particular	2015-16	2019-20
Neonatal Mortality Rate (NMR)	20	16.8
Infant Mortality Rate (IMR)	27.7	26.4
Under 5 Mortality Rate (U5MR)	31.7	29.7
Source : National Family Health Survey - Round 4 and 5		
<i>NMR - No. of neonatal death per 1,000 live births</i>		
<i>IMR - No. of infant deaths per 1,000 live births</i>		
<i>U5MR - No. of under 5 death per 1,000 live births</i>		

Table 22: Telangana and erstwhile districts comparison between 2015-16 and 2019-20 for fully immunized children

Telangana and erstwhile districts comparison between 2015-16 and 2019-20 for fully immunized children		
Particular	NFHS-4 (2015-16)	NFHS-5 (2019-20)
Telangana	67.5	79.1
Adilabad	70	74.1
Hyderabad	67.9	73.8
Karimnagar	84.3	77.6
Khamman	62.4	83.9
Mahabubnagar	45	86
Medak	81.4	71.7
Nalgonda	69	75.5
Nizamabad	64.2	82
Rangareddy	68.1	81.8
Warangal	67	76.1
Source : National Family Health Survey-5		
Note: Fully Immunized Children 12-23 months (BCG, Measles and three doses of Pentavalent vaccine) based on information from either vaccination card or mother's recall; For NFHS-5 estimates, new to old district mapping is used to compute weighted averages for erstwhile districts using district population as weights		

Table 23 shows the per cent of underweight children across districts in Telangana. Hyderabad has 18.9 per cent of underweight children. However, this is much below the State-average.

Table 23: Underweight percentages across districts in Telangana

Particular	Number
Hyderabad	18.9
Medchal-Malkajgiri	25.0
Bhadradi	25.3
Rajanna	26.1
Khammam	26.2
Mahabubabad	26.3
Yadadri	27.2
Mancherial	27.4
Karimnagar	27.5
Nalgonda	28.0
Rangareddy	29.5
Siddipet	37.9
Suryapet	30.1
Jangaon	30.9
Nagarkurnool	30.9
Jagtial	32.3
Mahabubnagar	33.0
Narayanpet	33.0
Peddapalli	33.1
Wanaparthy	33.2
Nirmal	33.4
Sangareddy	29.6
Warangal Urban	36.0
Jayashankar	36.7
Mulugu	36.7
Vikarabad	37.1
Warangal Rural	37.9
Nizamabad	38.4
Kumuram Bheem	41.1
Jogulamba	41.7
Medak	42
Kamareddy	43.9
Adilabad	52.0
State-average	31.8
Source : National Family Health Survey-5, 2019-20	
Note: NFHS-5 was conducted before the districts of Mulugu and Narayanpet were formed. In this map, their scores are the same as that for Jayashankar and Mahabubnagar (the districts they were bifurcated from) respectively.	

Table 24 revealed the per cent of children who received adequate diet, in the age group of 6-23 months.

Table 24: Total children in the age ground of 6-23 months who received adequate diet

Total children in the age group of 6-23 months who received adequate diet	
% of children in the age group of 6-23 months who received adequate diet	
Particular	Number
Nizamabad	18.4
Suryapet	15.1
Siddipet	14.1
Peddapalli	13.8
Jagtial	13.6
Jayashankar	12.6
Mulugu	12.6
Bhadradi	12.4
Medak	12.3
Kamareddy	11.7
Vikarabad	11.1
Medchal-Malkajgiri	10.9
Jangaon	10.7
Nirmal	10.5
Karimnagar	10.3
Adilabad	9.6
Kumuram Bheem	9.4
Warangal Urban	9.3
Khammam	8.7
Rajanna	7.8
Wanaparthi	7.5
Jogulamba	7.2
Rangareddy	7.2
Nalgonda	7.1
Sangareddy	6.4
Mancherial	5.9
Mahabubnagar	5.4
Nagarkurnool	5.4
Narayanpet	5.4
Warangal Rura	5.1
Hyderabad	4.8
Yadadri	3.9
Mahabubabad	3.4
State-average	9.2

Source: National Family Health Survey - 5, 2019-20

Note: NFHS-5 was conducted before the districts of Mulugu and Narayanpet were formed. In this map, their scores are the same as that for Jayashankar and Mahabubnagar (the districts they were bifurcated from) respectively.

Table 25: District-wise student enrolment in government schools as a share of total enrolment, 2018-19

District-wise student enrolment in government schools as a share of total enrolment , 2018-19	
Share of government school enrolment (%)	
Particular	Number
State average	44
Kumuram Bheem	74.6
Mulugu	73.9
Medak	73.2
Vikarabad	70
Narayanpet	69.5
Adilabad	69.5
Kamareddy	67.9
Jogulamba	66.8
Mahabubabad	65.8
Nagarkurnool	64.6
Siddipet	62.6
Jayashankar	62.5
Bhadradi	62.4
Rajanna	61.2
Jangaon	59.7
Mahabubnagar	59.5
Wanaparthy	59.2
Nirmal	55.3
Yadadri	54.9
Warangal Rural	54.2
Nalgonda	53.6
Mancherial	53.3
Suryapet	51.4
Sangareddy	51.3
Jagitial	51
Khammam	50.8
Nizamabad	47.6
Peddapalli	46.8
Karimnagar	35.5
Warangal Urban	29.2

Rangareddy	26.2
Hyderabad	20.1
Medchal-Malkajgiri	14.6
Source : UDISE+ / Census 2011	
Note: Government schools here include schools run by the Department of School Education, other departments (including Tribal Welfare Department and Social Welfare Department), local body schools and government-aided schools.	

IV: Conclusion

We focussed on an ex-post analysis on State's public financial management for children (C-PFM), incorporating the fiscal marksmanship of such spending. We found from the public finance for children (PF4C) analysis that there are 58 child-specific schemes and programs across seven departments in Telangana, with education sector has the significant share in child budgeting at 79.48 percent of total child budgeting, which is 8.45 percent of the total expenditure of the State. However, the outcome indicators showed that there are wide within- State differentials related to selected indicators. The inferences from the public finance analysis for children (PF4C) undertaken in our paper provides the *baseline analysis* for the post-covid fiscal strategy for PF4C in Telangana.

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