Education and Health Spending in South Asian Countries in 2019

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Abstract
This paper analyses in depth on education and health spending in South Asia and its impact on educational and health outcomes respectively in the region for the year 2019. We undertook this study using data published by UNESCO, World Bank and WHO. The objective of this report is to paint a broad picture of how governments in South Asia spend their resources on the social sector, focusing on health and education which are commonly seen as public policy priorities.

For the case of health spending in South Asia, there is no clear relationship between the amount spent in each sector and the related outcomes, as countries with similar levels of expenditure may vary in terms of performance.

For the case of education spending in South Asia, we see that a similar proportion of public spending on education can lead to completely different outcomes. This heterogeneity may be due to lack of administrative capacity, inadequate use of public resources directed to education, and inequality of spending incidence etc.

We have analysed government expenditure on health and education in India separately, and the role of state governments in the health outcomes of states. In India, we see that strong disparities exist in government health and education expenditure across states.

Keywords: Spending on Education, Spending on Health, South Asia, Gross Domestic Produce, GDP, World Bank, UNESCO, United Nations, Human Development Indicator, HDI, World Health Organisation, WHO

Introduction

Government spending on the social sector is crucial to ensure that South Asia's population has access to basic health care, education and social safety nets - key elements in policymakers' strategies to reduce poverty and improve overall well-being. Investments in the social sector are also known to generate positive externalities, given that an educated and healthy population benefits society as a whole—a

widespread accumulation of human capital can improve productivity, increase tax collection, reduce disease transmission etc.

According to the report by De Janvry and Sadoulet, the market often fails to deliver health and education services, at least to those who cannot afford them, leading to underinvestment and limited access to basic services, which in turn can have long-lasting and even irreversible effects on the population's well-being. Such gaps in government provision of social services and adequate safety nets also mean that households are more vulnerable to financial distress caused by unemployment, pregnancy, old age, excessive expenditures on health and education etc. This can lead to situations where households resort to informal systems, such as uncertified medical assistance or relying on family networks for financial support, which are common practices in South Asia.

These factors illustrate the case for the need for public investment in the provision of social services. Therefore, governments have the duty of anchoring their expenditures to the development needs of their country, to ensure that the population can develop their skills and health to have a decent quality of life without suffering financial hardships. Of course, it is not only the level of spending that matters - policymakers should also be concerned about efficiency and equity when allocating resources to different parts of the social sector.

Our motivation while choosing this particular topic was to realise the impact education and health spending has on a country's educational and health outcomes. Since these expenditures have a huge impact on a country's development we were inspired to dwell and conduct a deep study on the same.

Literature Review

Expenditure on Health in South Asia

Universal health care, as described in the Sustainable Development Goals (SDGs) , has two important dimensions: service coverage and financial protection. Thus, moving towards universal health care means ensuring that:

- the population has access to essential health care services;
- no one needs to suffer financial hardship to have access to necessary health care they need (United Nations, 2019).

Achieving universal health care seems to be an aspiration of governments in every country of the region (Scammell et al., 2016). However, despite the improvement of health outcomes, there is still much to be done in South Asia, and progress has been uneven across the region. This is illustrated by the huge variation in life expectancy at birth, ranging from 64 years in Afghanistan to 78 in Maldives. Similarly, while only Maldives and Sri Lanka have achieved SDG mortality rate targets, other countries (Afghanistan in particular) still have a long way to go.

However, there is no consensus on the benchmark indicating which level of public spending is enough to meet a country's development needs (World Bank, 2018b; Jowett et al., 2016).

Expenditure on Education in South Asia

According to a UNESCO report, South Asia is home to more than 11 million out-of-school children of primary school age. The number is even higher for lower secondary students, as 18 million South Asian

adolescents are not attending school. The proportion of out-of-school children is particularly high in Bhutan and Pakistan. In contrast, some countries are coming close to universal basic education for primary and lower secondary education: in Sri Lanka and Maldives, nearly all children of these age groups attend school, and this is also true for Nepal, but only for primary education (UNESCO, 2019).

According to a IPC-IG report, the overall low level of public spending as a share of GDP, of the social sectors, education is typically the one receiving the most public funding in the South Asian region, which suggests that it is considered a priority. The only exception is Maldives, where health expenditure is higher.

Scenario of Health and Education Spending in India

India is a lower middle income South Asian country. In India, the world development report has observed that providing health and education services can help create jobs and can also contribute to improved standard of living. Development initiatives undertaken by planners have been driven by these concerns and are reflected in increasing importance being assigned to the provisioning of social services by the central and state governments since the inception of the Plan era.

According to RBI reports (2013) (Balbir Kaur, Sangita Misra and Anoop K. Suresh), public sector outlays on health and education services have been on the rise, with the increase being significant since the Sixth Five Year (FY) Plan. The public sector outlay as a proportion of total expenditure more than doubled from 14.4% in the Sixth FY Plan to 30.2% in the Eleventh Plan and is projected at 34.7% in the 12th FY Plan.

The report also says that significant disparities persist across states when it comes to expenditure of state governments on social services in India. It is quite shocking that the states lagging behind with regard to expenditure on social sector have not attempted to catch up with the better-performing states through higher allocations of expenditure for social sector which is a key contributor to human development outcomes. The per capita social sector expenditure in the lagged states remained significantly lower than that of the leading states, resulting in the persistence of disparities in Human Development Indicators (HDI) across states during the 2000s.

Social sector expenditures have been found to have a positive impact on social outcomes and hence, enhancing such expenditures from their low levels in India is viewed as crucial to achieving overall human development goals.

Hypothesis

Countries' education and health expenditures on an average are positively related to their education and health outcomes respectively.

Data and Methodology

We have relied on secondary research for our research paper.

We based our analyses on country-level data on government expenditure in each social sector as well as key indicators of aggregate health and education outcomes of the population of South Asian countries.

We made use of the data retrieved from international databases that use a uniform approach to the collection of data on social expenditures. Regarding data sources, numbers for government spending on health were retrieved from the World Health Organisation's Global Health Expenditure Database (2019). This data set is particularly complete, as it also disaggregates current health expenditure by source (government, out-of-pocket spending, external etc.).

Public education expenditure was extracted from the United Nations Educational, Scientific and Cultural Organisation (UNESCO) Institute for Statistics (2019).

As for data on social outcomes and other indicators, other data sources were used, such as the World Economic Outlook (International Monetary Fund - IMF), World Development Indicators (World Bank), Human Development Indicators (United Nations Development Programme - UNDP) etc.

For India, we obtained state wise data from the RBI site, and the country's overall data from the World Bank site. We made use of secondary data obtained from the official site of NITI Aayog for our analysis.

Analysis and Results

1. Key Development Indicators in South Asia

Table 1

Country	GDP growth	Income group (1)	HDI (2)	Poverty rate (3)	Gini Index (4)
Afghanistan	2.2	Low-income	0.498	54.5	
Bangladesh	7.4	Lower-middle income	0.608	14.8	32.4
Bhutan	7.3	Lower-middle income	0.612	1.5	37.4
India	7.3	Lower-middle income	0.64	21.2	35.7
Maldives	4.8	Upper-middle income	0.717	7.3	38.4
Nepal	6.3	Low-income	0.574	15	32.8
Pakistan	5.4	Lower-middle income	0.562	3.9	33.5
Sri Lanka	3.3	Upper-middle income	0.77	0.8	39.8

Source: World Bank (2019): Income Group; UNDP (2019): Human Development Index; IMF (2019): GDP Growth; World Bank (2019): Poverty Rate and Gini Index

Notes

(1) The World Bank classifies as low-income countries those with a GNI per capita of USD1,025 or less in 2018; as lower middle-income economies those with a GNI per capita between USD1,026 and USD3,995; as upper middle-income economies those with a GNI per capita between USD3,996 and USD12,375; and as high-income economies those with a GNI per capita of USD12,376 or more.

(2) HDI = Human Development Index - an index ranging from 0 to 1 that combines three indicators: life expectancy at birth (health indicator), the geometric average of mean years of schooling for adults and expected years of schooling for school-aged children (education indicator), and the log of GNI adjusted by Purchasing Power Parity (PPP) per capita (income indicator).

(3) Poverty rates are measured as the poverty headcount ratio at USD1.90 a day (2011 PPP, percentage of population), except for Afghanistan, as the indicator was only available using the national poverty line.

(4) The Gini Index is an indicator of income inequality. It measures how far the distribution of income in a country differs from a situation of perfect equality, represented by a Gini Index of zero. A Gini Index of 100, on the contrary, corresponds to perfect inequality.

Despite the strong growth in Gross Domestic Product (GDP) that most South Asian countries have been experiencing, all of them (except Maldives and Sri Lanka) are classified as low-income or lower-middle-income countries (as per their level of Gross National Income (GNI) per capita, refer to Note 1 under Table 1). Moreover, the fact that different types of deprivations and social exclusion continue to affect large shares of the population suggests that the resources generated from economic growth were not consistently invested in the social sector (and thus that there is little redistribution of gains from growth).

South Asian countries differ considerably in terms of their level of development: the regional average Human Development Index is around 0.6, ranging from 0.5 (Afghanistan) to 0.8 (Sri Lanka) (UNDP, 2019). Poverty continues to affect millions of people in the region; incidence is particularly high in Bangladesh, Nepal, India and Afghanistan, while Bhutan, Maldives and Sri Lanka have the lowest rates (World Bank, 2019).

Income inequality (which is particularly high in Sri Lanka, Maldives and Bhutan) and other forms of social exclusion such as limited access to public services hinder development across the region.

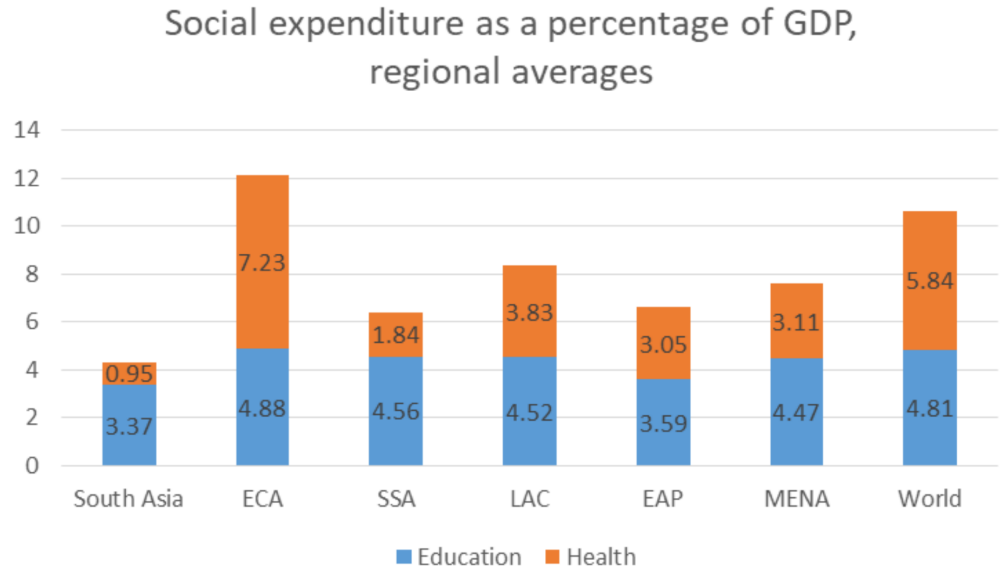
Challenging geographical settings in the region hamper the provision of public services (World Bank, 2019) - such is the case in Nepal, where a significant share of the population lives in remote locations with limited access to basic health services, and in Maldives, where the population is spread across around 200 islands. Policymakers also struggle to provide public services to people living in emergency settings (UNICEF Regional Office for South Asia, 2014).

The demographic contexts vary widely across South Asia. In some countries, public investment must keep up with the needs of a huge population (India) or density (Bangladesh and Maldives). The population remains relatively young in most countries: in Afghanistan, Nepal and Pakistan, over half the population is under 24 years old, but other countries have an ageing population (e.g. Sri Lanka) (United Nations Department of Economic and Social Affairs, 2019). As countries experience different stages of the demographic transition, it is crucial for governments to invest in human capital to make the most of their demographic dividend.

2. Social Spending in South Asia

The below figure (Figure 1) compares South Asia's average social spending as a percentage of GDP to those of other regions, revealing that the region is lagging behind in all sectors, as average government expenditures on health, education and social assistance as a percentage of GDP are the lowest of all regions.

Figure 1

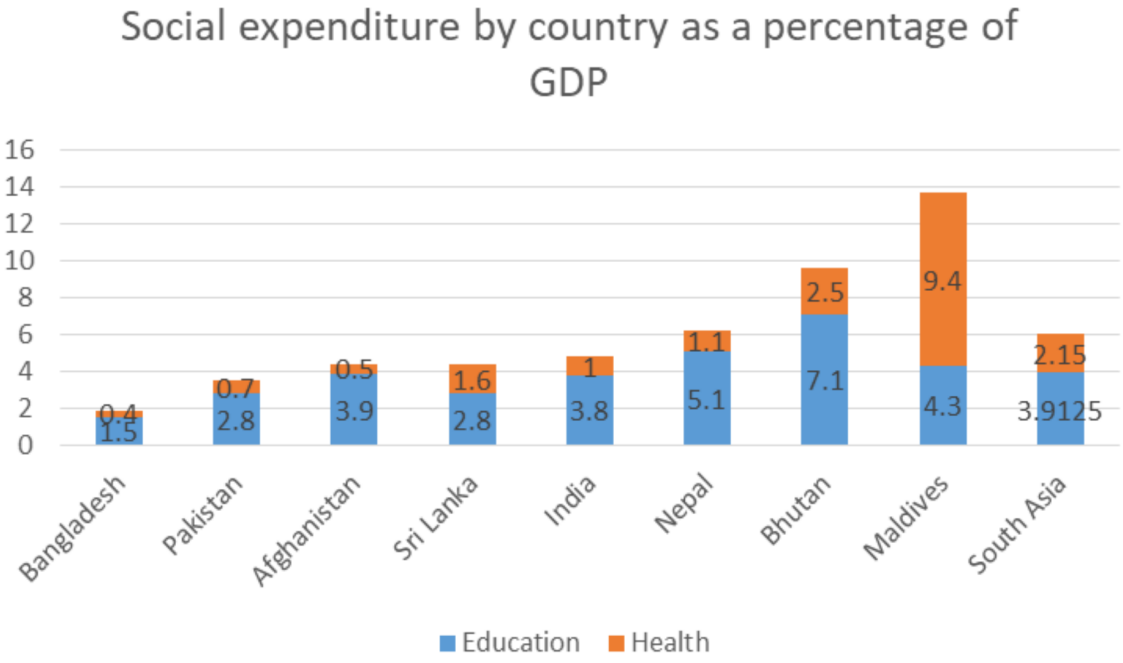


Source: World Bank (2019) and International Labour Organisation (2019)

Note

ECA = Europe and Central Asia; SSA = Sub-Saharan Africa; LAC = Latin America and Caribbean; EAP = East Asia and Pacific; MENA = Middle East and North Africa.

Figure 2



Source: World Health Organisation (2019), UNESCO (2019) and World Bank (2019)

Figure 2 provides a first overview of social spending in South Asia, revealing a great heterogeneity within the region.

When adding up government spending on health, education, Bhutan and Maldives have the highest public social spending (they are also two of the countries with the highest total government expenditures

as a share of GDP) in the region. Bhutan devotes comparatively more public funds to education than its neighbours, while Maldives spends the most on health.

At the other end of the spectrum, Bangladesh has the lowest share of spending on both health and education.

Though there is evidence of the critical role of public spending for improving social and economic development outcomes, especially for low- and middle-income countries, there is no consensus on the benchmark indicating which level of public spending is enough to meet a country's development needs (World Bank, 2018b; Jowett et al., 2016).

There is also no clear relationship between the amount spent in each sector and the related outcomes, as countries with similar levels of expenditure may vary in terms of performance. For instance, as we will see further in the report, Maldives and Sri Lanka have the best health and education outcomes of the region, but public expenditure in Maldives is considerably higher than in Sri Lanka. Other important factors explain differences in outcomes, as both supply-side and demand-side challenges to the provision of social services affect the effectiveness of public spending. Some of these points will be developed in the following chapters, which focus on health, education and social assistance spending in South Asia.

3. Health Outcomes in South Asia

The importance of government participation in health care financing (typically as opposed to a high proportion of out-of-pocket spending) is shown in Figure 3, which shows its correlation to key population health outcomes in South Asian countries: life expectancy tends to be higher and child and maternal mortality rates lower when government spending as a share Current Health Expenditure (CHE) is higher.

Figure 3: Government Spending as a Proportion of Current Health Expenditure vs. Life Expectancy and Maternal Mortality Rates, 2000-2019

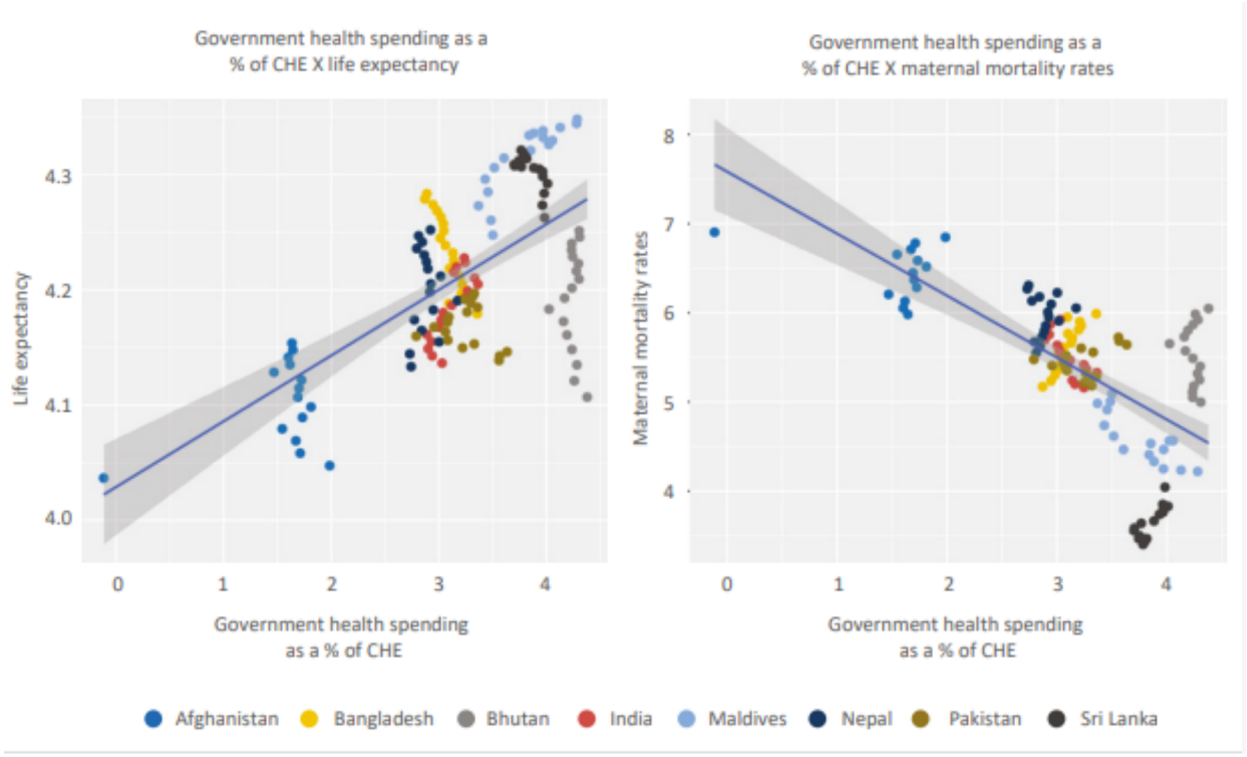


Table 2: Health Indicators of South Asian Countries in 2019

	Financial protection				Outcomes					Coverage			
	Government expenditure				Life expectancy at birth	Mortality rates			Underweight prevalence (3)	Immunisation			% of births attended by skilled health staff
	% of GDP	% of government expenditures	Per capita (PPP)	% of current health expenditures		Maternal (1)	Infant (2)	Under 5 (2)		DPT (4)	Measles (4)	HEPB3 (5)	
Afghanistan	0.5	2.0	8.3	5.1	64	396	51.5	67.9	25	65	62	65	50.5
Bangladesh	0.4	3.4	16.3	18.0	73	176	26.9	32.4	32.6	97	94	97	49.8
Bhutan	2.6	8.3	216.8	74.0	71	148	25.6	30.8	12.8	98	97	98	89
India	0.9	3.1	61.4	25.4	69	174	32	39.4	35.7	88	88	88	81.4
Maldives	7.7	20.2	1181.7	72.6	78	68	6.8	7.9	17.8	99	99	99	99.5
Nepal	1.2	5.3	29.0	18.6	71	258	27.8	33.7	27	90	90	90	58
Pakistan	0.8	3.9	40.2	27.9	67	178	61.2	74.9	31.6	75	76	75	69.3
Sri Lanka	1.7	8.6	211.8	43.1	75	30	7.5	8.8	20.5	99	99	99	99.95
Average	2.0	6.8	220.7	35.6	70.8	178.5	29.9	37.0	25.4	88.9	88.1	88.9	74.7
Median	1.0	4.6	50.8	26.7	70.6	175.0	27.4	33.1	26.0	93.5	92.0	93.5	75.4

Notes: DPT = Diphtheria, pertussis and tetanus; HEPB3 = Hepatitis B (three doses); (1) Modelled estimate, per 100,000 live births; (2) Per 1,000 live births; (3) Percentage of children under 5 years; (4) Percentage of children aged 12–23 months; (5) Percentage of children aged 1 year.

Source: World Health Organisation (2019) and World Bank (2019)

Table 2 compares public spending in the health sector to key health outcomes for all countries in South Asia. Maldives, Bhutan and Sri Lanka have the best indicators of financial protection, in the sense that

government health spending (as a share of GDP, per capita, of total government expenditures and of current health expenditures) are the highest in the region.

Maldives is the country in the region spending the most on public health by all measures, making it an outlier in South Asia in terms of health spending. One exception is the share of government spending in total health expenditure, but it is not far behind Bhutan, and the indicator is over 70% for both countries (whereas for all other countries, the government participates in less than half of health spending). Accordingly, they have the lowest out-of-pocket expenditures of the region (Figure 4). Maldives has experienced the fastest increase in public health spending since circa 2005, both as a share of GDP and in per capita terms. Health outcomes are among the best in the region for most indicators, as can be illustrated by the impressive life expectancy at birth, which is close to 78 years.

While Bhutan follows in second place in terms of financial protection, some of its health outcomes are lagging behind: life expectancy is not very high (around the regional average) but has increased by around 5 years since 2005, and mortality rates have steadily decreased.

In terms of broad coverage, immunisation rates are above 97%, and 89% of births are attended by skilled health staff. Both of these indicators are significantly higher than the regional average. Bhutan has the lowest underweight prevalence in the region, but it is high nonetheless, at 12.8% of children under 5.

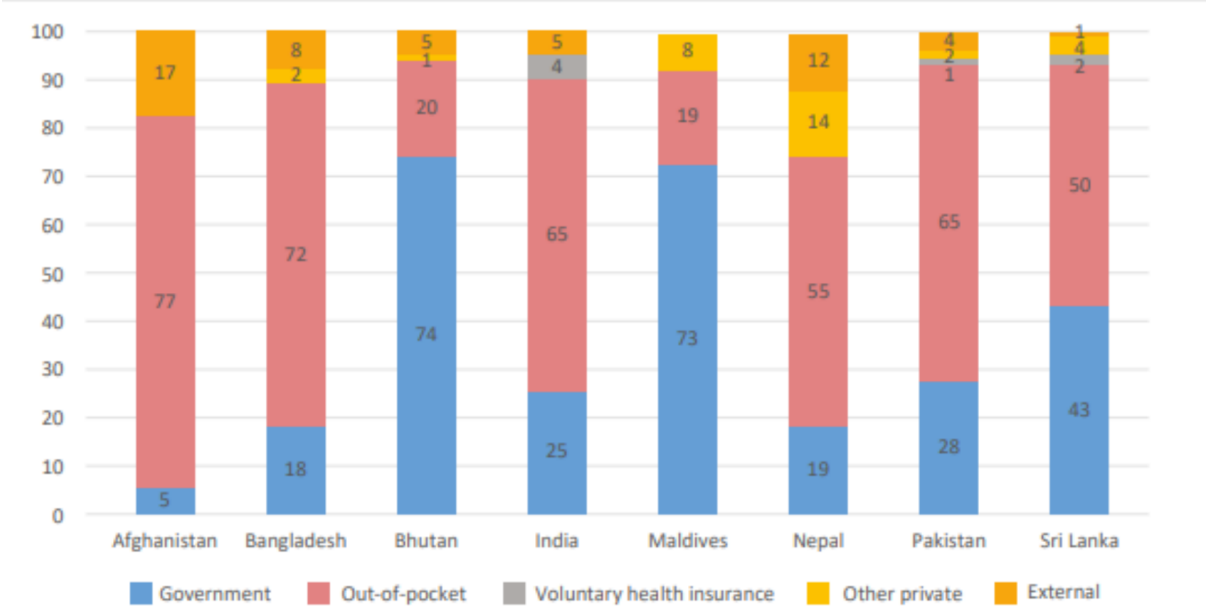
Sri Lanka also has an overall positive outlook. Government health expenditure as a percentage of GDP is not exactly exceptional, but when measured as a share of total government spending, it stands out from most countries in the region. The Government of Sri Lanka is responsible for over 40% of current health expenditures, while out-of-pocket expenditures represent over half (Figure 4).

Health outcomes in Sri Lanka are among the best in the region, with the second highest life expectancy and extremely low mortality rates (especially maternal, which are the lowest in the region). The country has almost 100% immunisation rates, and nearly all births are attended by skilled health staff.

At the other end of the spectrum, Afghanistan directs a mere 2% of government spending to health, which corresponds to around 0.5% of the country's GDP and 5% of total current health expenditures. Overall, the health outlook in Afghanistan is worrying, as out-of-pocket expenditures are the highest in the region (as shown in Figure 4), and life expectancy and immunisation rates are the lowest. Mortality rates (especially maternal) are extremely high, which might be partially explained by the fact that only half of births are estimated to be attended by skilled staff. However, Afghanistan has experienced a decrease in mortality rates and an increase in the share of births attended by skilled staff since the early 2000s.

Bangladesh also has extremely low health financial protection, especially when considering health spending as a percentage of GDP, in per capita terms and as a share of current health expenditures. Public health spending as a share of GDP has even slightly decreased since 2005, and out-of-pocket health expenditure is worryingly high in the country (exceeding 70%) (as shown in Figure 4). Health outcomes, however, are not exactly among the worst in the region, and the trends are actually rather positive: life expectancy is above the regional average, mortality rates and, to a lesser extent, underweight prevalence have been steadily decreasing, and immunisation rates are increasing.

Figure 4: Sources of Health Financing as a Percentage of Current Health Expenditures



Pakistan is also at the low end of the spectrum in terms of health expenditure and outcomes: as a share of GDP, government spending on health is only higher than that of Afghanistan and Bangladesh. Out-of-pocket expenditures are also very high (see Figure 4), and life expectancy is the second lowest in the region. Moreover, health indicators of underweight prevalence, mortality rates, immunisation and skilled attendance at birth have been improving but remain at worrying levels, which indicates the need for investment in maternal and child health care interventions.

India's government spending on health care is lower than the regional average, and out-of-pocket spending is very high (see Figure 4). Health outcomes are usually not far from the regional average, except for underweight prevalence, which is the highest in the region. However, the overall scenario seems to have been improving since the early 2000s, especially when considering coverage indicators such as immunisation rates and skilled attendance at birth (exceeding 80%, which is above the regional average and has almost doubled).

Nepal's government expenditures on health as a share of GDP are around the average for the region, and slightly above the average in terms of total government spending. When measured as per capita spending and as a share of total current health expenditures, however, government expenditures are only higher than those of Afghanistan and Bangladesh. Out-of-pocket spending (see Figure 4) is a bit lower than the regional average. Regarding key health outcomes, Nepal usually fares slightly better than several South Asian countries (for all indicators except maternal mortality rates and underweight prevalence). Mortality rates have been decreasing, though maternal mortality rates remain quite high, and less than 60% of births are attended by skilled health staff. However, it should be noted that Nepal has seen the greatest improvement of this last indicator since circa 2005, as it has more than tripled.

Nevertheless, this regional comparison shows us that countries with similar levels of health spending (especially countries where this level is low) can have widely different performance when it comes to service and financial coverage. Sri Lanka, for instance, has achieved outstanding health indicators with lower spending than countries such as Maldives and Bhutan. This indicates that, beyond increasing the

allocation of resources to the health sector, governments can focus on improving expenditure management and service delivery to broaden access to essential health care and reduce the burden of health spending on households (Jowett et al., 2016).

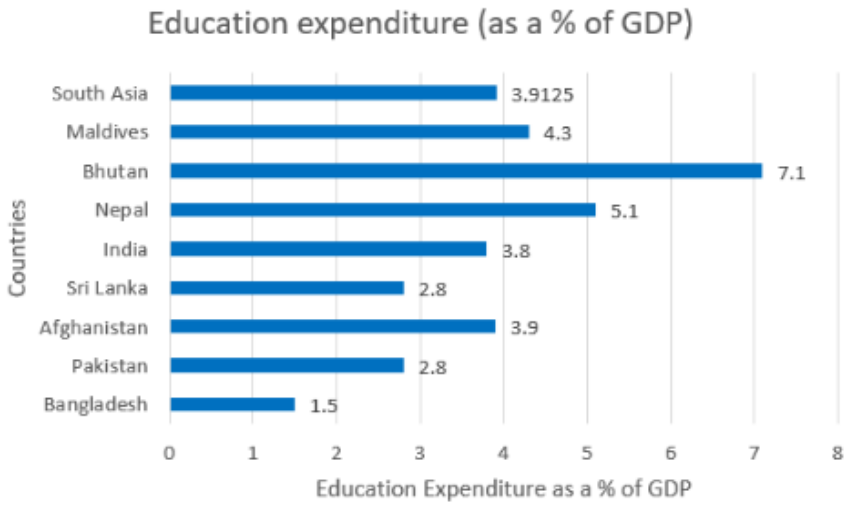
4. Paradox in Bangladesh

Bangladesh is often cited as an example of success demonstrating how a Low-Income Country (LIC) can rapidly improve its health outcomes at very low cost. In the last five decades, its health outcomes have improved dramatically faster than in countries that started with a similar baseline, and it was one of the top 10 countries that met Millennium Development Goal (MDG). This success in health outcomes was achieved by a country with very low expenditures in health care. In 2013, the Lancet published a series of articles aiming to explain the paradox of a country with exceptional health achievements despite widespread poverty and weak health systems; it emphasised how Bangladesh, emerging after the war of independence with very weak health systems, witnessed the development of 'successful pluralism' in health care instead of a failing fragmented system. The Lancet Series explained the success by the extensive use of mostly female Community Health Workers (CHWs) for Family Planning (FP), the support of innovative Non-Governmental Organisations (NGOs), and the constitutionally enshrined right to health. In 2017, the Government of Bangladesh (GoB) published its own assessment of the country's success, highlighting the role played by the Government and its partnership with Development Partners (DPs), NGOs, and civil society in rapid health gains and also underscored the contribution of social awareness creation, female empowerment, increased literacy rates, remarkable poverty reduction, social safety nets, women and child friendly health services, and the Sector-Wide Approach (SWAp).

Given the unusually low government expenditure in Bangladesh, the improvements in outcomes had to rely on turning what could have been a weak and fragmented health system into a system of successful pluralism - a successful combination of public, private, and NGO services and efforts.

5. Education Expenditure in South Asia

Figure 5



Source : World Bank (2019)

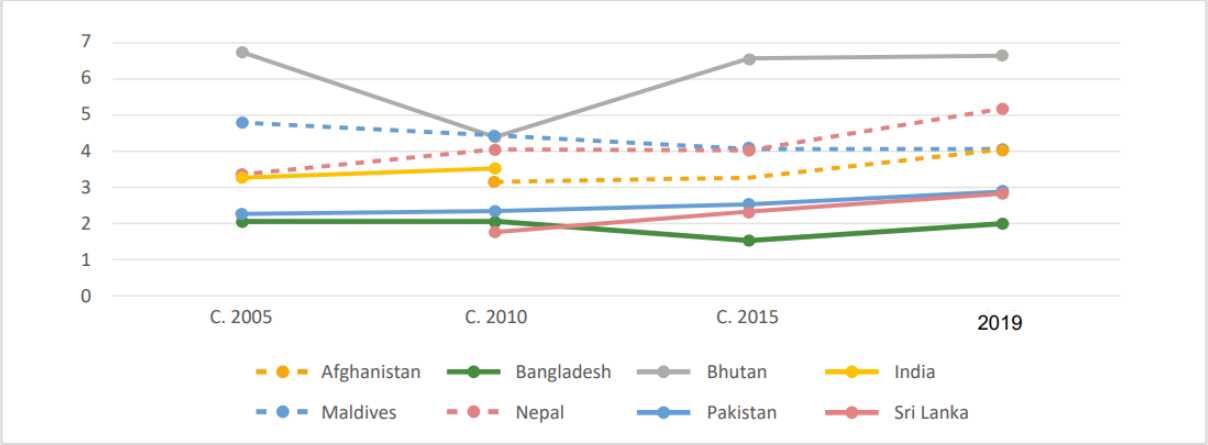
The above graph depicts the expenditure on education in South Asia according to 2019, World bank data. We see that South Asian countries spend, on an average, around 4% of GDP on education, which remains below the world average (4.8%).

Bhutan (7.1%), Nepal (5.1%) and Maldives (4.3%) spend more than the regional average on education. On the other hand, India, Pakistan, Sri Lanka, Afghanistan and Bangladesh all have government spending on education below 4% of GDP (below regional average).

The Education 2030 Framework for Action (UNESCO, 2015) proposes that governments must allocate 4% to 6% of their GDP and/or 15% to 20% of total public expenditure to education, ensuring efficient spending and prioritising the most marginalised groups. According to these benchmarks, both South Asia's regional average and its countries considered individually are close to the lower limit of or below the recommended expenditure.

Figure 6

Education expenditure as a share of GDP, circa 2005, 2010, 2015 and 2019

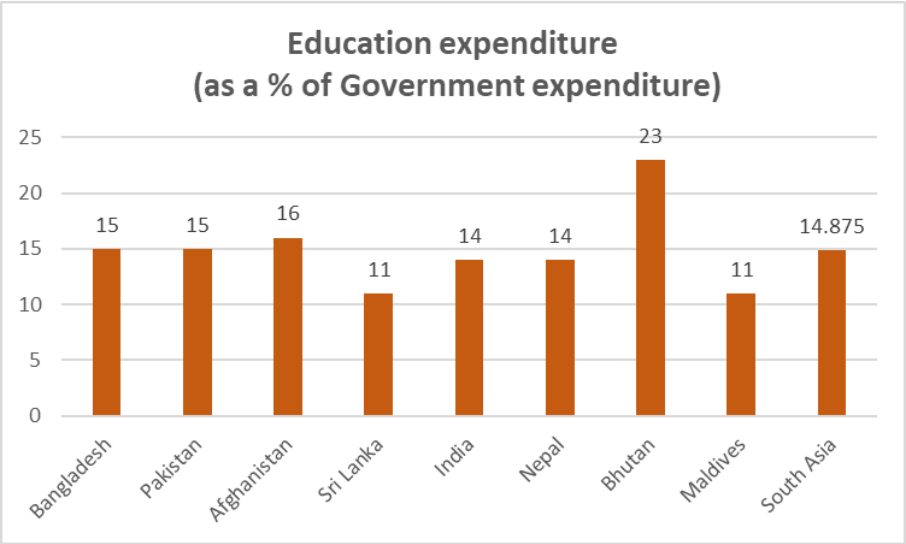


Note: Because of the gaps in education expenditure data, we chose to aggregate this indicator by three-year periods (circa 2005 for the 2004–2006 period, circa 2010 for the 2009–2011 period and circa 2015 for the 2014–2015 period), adding the latest available data. i.e. 2019.

Source: UNESCO (2019)

The above graph shows how government expenditures on education across South Asia have evolved since 2005. We can see that education spending as a share of GDP has increased since circa 2010 in Afghanistan, Bhutan, Nepal, Pakistan and Sri Lanka. Meanwhile, it has decreased in Bangladesh and Maldives. However, note that we are only considering public expenditure on education as a percentage of GDP, without delving deeper into each country's macroeconomic fiscal indicators. Therefore, we do not consider whether a smaller proportion of GDP going to education might still mean increased allocations for the sector in real terms. In Maldives and Bangladesh, for example, GDP has increased significantly between 2010 and the latest available year for which data is available. This means that even though education expenditure as a share of GDP has decreased, the actual allocation of funds for education has increased in real terms.

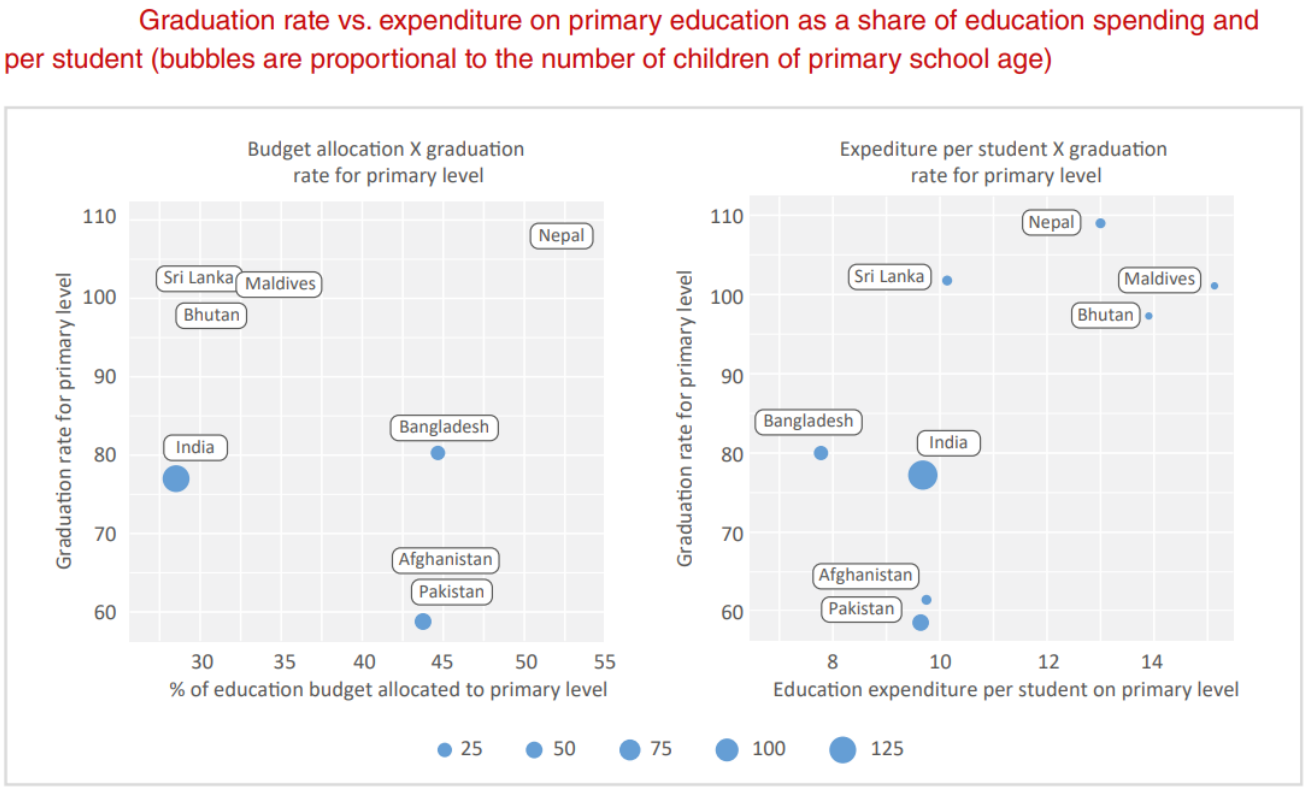
Figure 7



Source: UNESCO, 2019

Figure 7 shows the expenditure on education as a percentage of government expenditure. The South Asian countries allocate more than 10% of the government budget to education expenditures (in Bhutan, the share exceeds 20%), and the regional average is around 15% (against 7% for health).

Figure 8



Note: Primary education expenditure per student is measured as a share of per capita GDP.

Source: UNESCO (2019) & World Bank (2019)

In the above graph, we analyse the outcome of primary education spending on graduate level at primary level. We see that even though Bangladesh, Afghanistan and Pakistan spend almost the same proportion of their educational budget on primary education, their graduate rates vary in the primary level. We also notice that India has the largest number of primary school age students. Even though Sri Lanka spends a very low proportion of their education budget on primary level education, they have a high graduate level for primary education.

In the second part of the graph we notice that Bangladesh has the least education expenditure per student on primary level but better outcomes than India, Afghanistan, Pakistan that has a higher education expenditure per student on primary level.

This implies that there are other factors impacting the graduate levels such as the quality of the institutions in these countries.

6. Analysing the Education Outcomes in the Country in Comparison to the Expenditure on Education in the Country

To see whether government priorities are in line with South Asian countries' needs, we can compare expenditure on each level of education with relevant educational outcomes:

Table 3

Education indicators for South Asian countries, latest available data

	Government expenditure								Outcomes/coverage											
	% of GDP	% of gov. spending	% of education budget (1)			per student, % of GDP per capita			Literacy rates		Graduation rates (gross)		School enrolment (net)				OOSC			
	Total	Total	P	S	T	P	S	T	Adult	Youth	P	Ls	P	S	Ls	Us	T	P	Ls	Us
Afghanistan	4.1	15.7	57	24	16	10.0	11.0	41.5	43.0	65.4	60.6	37.5		48.6	53.5	31.3	8.5			58.3
Bangladesh	2.0	14.6	45	39	15	7.7	10.2	30.8	73.9	93.3	87.0	71.1	90.5	63.7	65.8	46.3	17.6	5.0	25.7	42.0
Bhutan	6.6	22.8	32	56	10	13.8	32.1	54.6	66.6	93.1	93.0	86.5	88.0	70.2	67.3	30.7	10.5	8.1	12.0	27.7
India	3.8	14.1	28	41	29	9.8	16.8	49.2	74.4	91.7	76.9	70.1	92.3	61.6	66.3	44.5	27.5	2.3	14.9	47.9
Maldives	4.1	11.3	36	22	21	14.5		29.9	97.7	98.8	109.6	97.8	95.4	47.0	92.3		14.5	4.1	10.1	34.3
Nepal	5.2	14.2	54	33	11	13.0	11.0	25.4	67.9	92.4	117.6	89.5	96.3	57.5	57.6	38.3	11.8	3.5	5.3	24.1
Pakistan	2.9	14.5	44	29	11	7.7	15.2	63.8	59.1	74.5	57.9	46.1	67.7	38.5	27.0	25.5	10.1	24.6	29.8	51.5
Sri Lanka	2.8	11.3	33	51	13	10.1	10.3	26.4	91.9	98.9	102.6	103.0	99.1	89.0	97.3	78.3	19.0	0.7	1.3	18.9
Average	3.9	14.8	41	37	16	10.8	15.2	40.2	71.8	88.5	88.1	75.2	89.9	59.5	65.9	42.1	14.9	6.9	14.2	38.1
Median	4.0	14.4	40	36	14	10.1	11.0	36.2	70.9	92.7	90.0	78.8	92.3	59.6	66.0	38.3	13.1	4.1	12.0	38.1

Notes: P = Primary; S = Secondary; Ls = Lower secondary; Us = Upper secondary; T = Tertiary; OOSC = out-of-school children.

Data for pre-primary and other post-secondary education were not included due to the high proportion of missing information.

Some information was very out of date for some countries, especially Maldives.

Source : UNESCO (2019)

In Table 3, we use variables such as Literacy rates, graduation rates, school enrolment and OOSC (out of school children) as the educational outcomes. We measure the government expenditure on education as a percentage of GDP, as a percentage of government spending, as a percentage of education budget, as a percentage of GDP per capita.

Countries that spend on education (expenditure as a percentage of GDP) more than the regional average of 3.9% are Bhutan, Nepal, Maldives.

Bhutan has the highest spending as a share of GDP, but its education outcomes are not as good as they could be, also because some outcomes take longer to mature than others - in which case the mismatch between expenditure and outcomes shouldn't necessarily be interpreted as poor performance of the entire system. The country devotes almost a quarter of government expenditures to education, but only 67% of the adult population is literate, and the proportion of out-of-school children of primary school age is among the highest in the region. The country fares a bit better than other South Asian countries in terms of secondary education, as expenditure per student is by far the highest in the region, and school enrolment and lower secondary completion rates are above the regional average.

After Bhutan, Nepal spends the most on education. It spends most of its education budget on primary education (54%), and the expenditure per student in terms of GDP per capita is also quite high compared to other South Asian countries (only Bhutan and Maldives have higher numbers). Overall, primary education outcomes in Nepal are quite encouraging: net enrolment and completion rates are well above the regional average. However, Nepal still has room for improvement when it comes to secondary education, as school enrolment remains low.

Maldives has some of the best outcomes in the region, with the highest literacy rates (almost 100% for both adults and youth) and primary school enrolment, and the lowest rate of out-of-school children (primary education) in the region.

India, Pakistan, Sri Lanka and Bangladesh all have government spending on education below 4% of GDP.

While Bangladesh has the lowest education expenditures in the region, its literacy rates and school enrolment exceed the regional average.

Sri Lanka is an even more surprising case, as it has the second lowest spending but among the best outcomes in the region. The country's literacy rates (adult and youth) are above 90%, and school enrolment indicators are the highest in the region (except for tertiary education, where the country comes after India). Accordingly, Sri Lanka has extremely low rates of out-of-school children, estimated at 0.7% for primary education and 1.6% for lower secondary. Although this favourable situation is largely due to good educational system performance, it is also the result of favourable structural factors. Sri Lanka is an upper middle-income country, which means that a significant share of the population can afford certain out-of-pocket expenditures, reducing the need for public expenditure. The country has attained universal primary education and has a well-developed educational system, which reduces the pressure of investing in infrastructure, therefore freeing up resources that can be employed in recurring costs and accommodate the rising demand for secondary education. Sri Lanka is in the last stage of its

demographic dividend: with a decreasing school-age population, there is progressively less strain on the system.

India's government spending on education policies is about the same as the regional average. In terms of outcomes of basic education, India still has much room for improvement, especially with the high proportion of out-of-school children of lower secondary age (15%, amounting to around 11 million children). India has the highest enrollment in tertiary education in the region (27%).

Finally, Pakistan is also at the low end of the distribution regarding government spending on education. The situation is particularly alarming, as school enrolment and literacy rates remain extremely low. Around a quarter of Pakistan's children are out of school; of the over 20 million out-of-school children in South Asia of primary and lower secondary age, around half live in Pakistan.

Result

The analyses conducted in this chapter showed that a similar proportion of public spending on education in different countries can lead to completely different outcomes since many other factors (including structural aspects) can play relevant roles in determining how expenditures affect outcomes. Possible explanations for this heterogeneity can be system and institutional-level features namely: lack of administrative capacity, inadequate use of public resources directed to education, and inequality of spending incidence.

More public investment in education does lead, on average, to better education outcomes, but this relationship depends strongly on factors such as a country's income, institutions, demography etc., which should be key inputs to determining current and future financial needs (UNICEF, 2015).

India

7. Expenditure on Social Sector, Education and Health: A State wise Picture for the NSC States

Table 4

	Social Sector			Education			Health		
	1990s	2000s	2010-13	1990s	2000s	2010-13	1990s	2000s	2010-13
Andhra Pradesh	6.5	6.5	7.4	2.3	2.1	2.5	0.8	0.7	0.8
Bihar	12.0	10.5	10.9	5.9	5.1	4.6	1.6	1.1	1.0
Chhattisgarh	NA	8.1	11.5	NA	2.3	4.2	NA	0.6	0.9
Goa	8.2	6.4	7.9	4.0	2.8	3.4	1.6	1.0	1.2
Gujarat	5.4	5.4	5.3	2.6	2.1	2.1	0.7	0.5	0.6
Haryana	4.7	4.7	5.5	2.1	2.0	2.4	0.6	0.4	0.5
Jharkhand	NA	9.8	10.0	NA	3.5	3.6	NA	1.1	0.9
Karnataka	6.5	6.3	7.2	2.8	2.7	2.8	0.9	0.7	0.7
Kerala	5.2	5.5	6.0	2.7	2.7	3.0	0.7	0.8	0.9
Madhya Pradesh	9.5	7.8	9.3	3.6	2.7	3.4	1.1	0.8	0.9
Maharashtra	5.0	5.0	5.3	2.3	2.6	2.5	0.6	0.5	0.5
Odisha	7.7	7.1	8.2	3.3	3.0	3.3	0.9	0.7	0.7
Punjab	4.1	4.0	4.8	2.4	2.1	2.3	0.7	0.6	0.7
Rajasthan	6.9	7.8	7.0	3.1	3.3	3.0	1.0	0.9	0.8
Tamil Nadu	6.4	5.9	6.5	2.8	2.3	2.4	0.9	0.7	0.7
Uttar Pradesh	6.2	7.0	9.3	3.0	3.1	4.0	0.9	1.0	1.1
West Bengal	5.8	5.5	6.9	2.9	2.7	3.1	0.9	0.8	0.8
Total	6.1	6.2	7.0	2.8	2.6	2.9	0.8	0.7	0.7

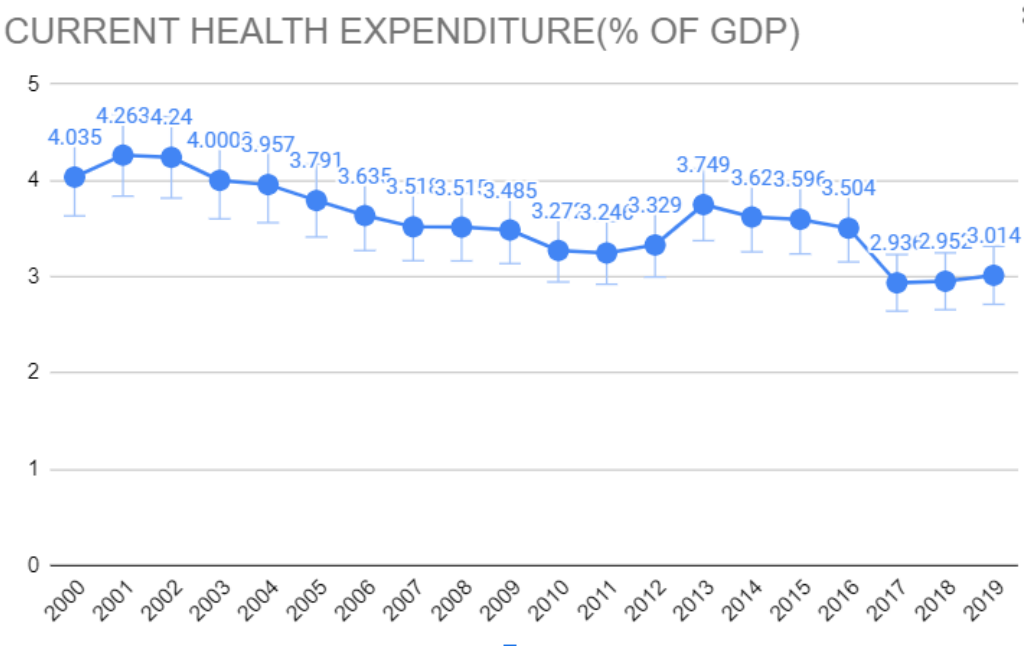
Source: Reserve Bank of India

In Table 4, we can see state-wise comparison of expenditure on social sector, health and education during 1990-91 to 2000-01, 2001-02 to 2009-10 and 2010-11 to 2012-13 for the 17 non-special category (NSC) states.

Social sector expenditure as a percentage of Gross State Domestic Product (GSDP) was in the range of 4.8% to 11.5% during 2010-13 in the case of NSC states. While the variation in health expenditure as a percentage of GSDP was in the range of 0.5% to 1.2%, the Education Expenditure-GDP ratio showed larger inter-state variations of 2.1% to 4.6%.

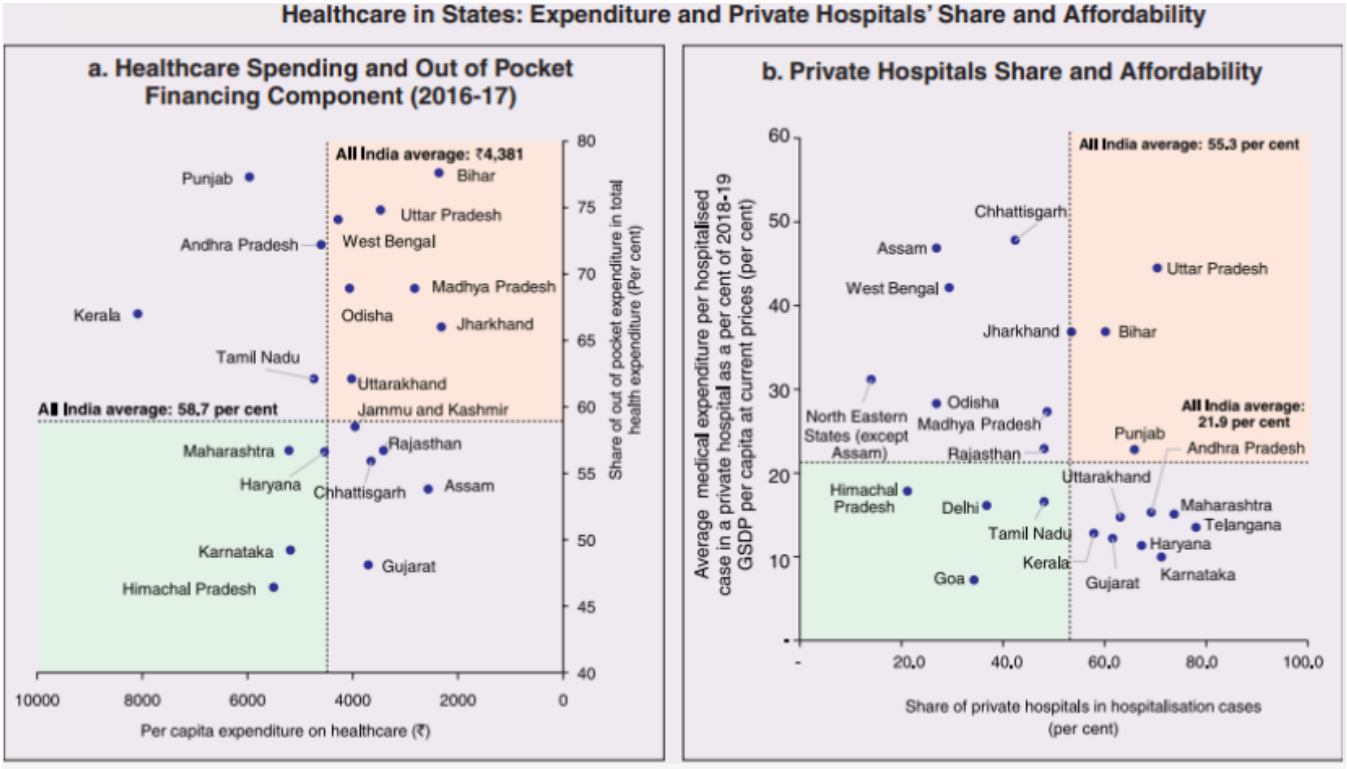
Majority of the states exhibited an increase in social sector expenditure (including health and education expenditure) when compared with 2001-02 to 2009-10. It may be noted that a decline in health expenditure between 2001-12 may have been compensated through higher private sector expenditure on health during these years. It is also argued that fiscal consolidation at the state level has been achieved primarily at the cost of lower health and education spending.

Figure 9



Above graph shows that for India, CHE as a percentage of GDP has not shown much variation, and has stayed between a minimum of 3.24% and a maximum of 4.26%.

Figure 10



Source: Reserve Bank of India

In the above graph that shows per capita health expenditure, states in the top right corner of the matrix (shaded red) perform poorly on healthcare spending which is funded by a high out of pocket component share, suggesting that they have the lowest government spending on healthcare on a per capita basis. Conversely, states in the bottom left corner (shaded green) are the best performing on both these metrics, highlighting the key role played by government finance in healthcare of these states.

Kerala is the exception, with significantly higher healthcare spending per capita than all other states, driven by higher than average government spending as well as out of pocket spending.

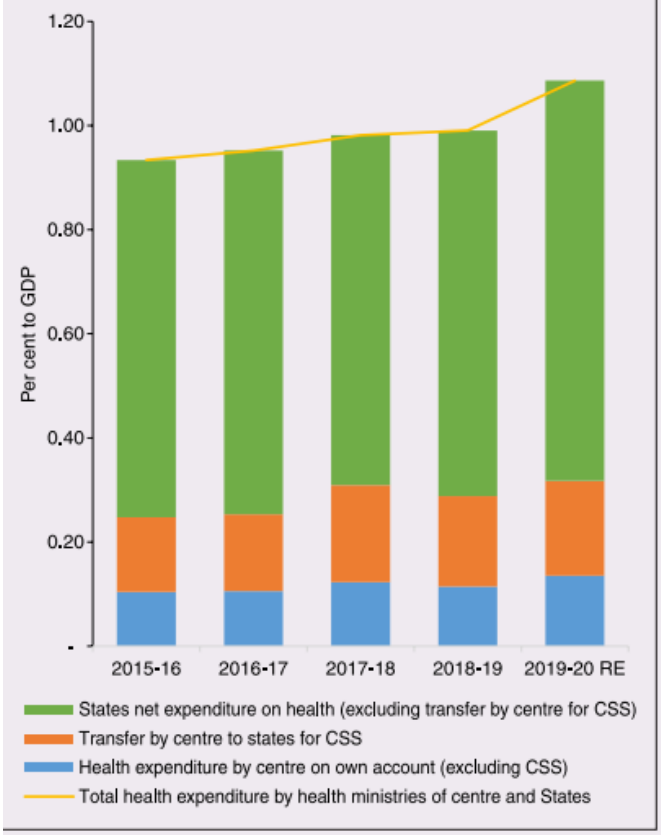
In terms of the share of private hospitals in hospitalised cases and its affordability, states in the top right corner of the matrix (shaded red) have a higher reliance on private hospitals and at the same time, the cost of hospitalisation in these facilities (relative to their GSDP per capita) is higher than the all India average, and there are states in the bottom left corner (shaded green) where the reliance on private hospitals is low and they are relatively more affordable.

Thus we see that significant inter-state disparities exist in access to and affordability of healthcare. Himachal Pradesh acquits itself well in providing government healthcare as well as in keeping private healthcare affordable, while Uttar Pradesh, Bihar and Jharkhand will need some catching up. Individuals' spending on healthcare is low in these states, financed largely from out of pocket, relying on private facilities and prevents medical access to the poor. This requires urgent attention from state governments to prepare their states to meet the healthcare challenge from COVID-19 and future pandemics. In graph b, graph in terms of healthcare human resources, the availability of which is crucial to deal with the health fallout from COVID-19, the number of doctors per unit of population in India is

broadly comparable with countries in Asia with similar demographic characteristics. However, there are significant state-level differences: Southern states (except Telangana) have significantly better coverage of medical doctors while the coverage in low-income states of Uttar Pradesh, Bihar and Jharkhand is among the lowest in the country. These states also have an abysmally low number of registered nurses and midwives vis-à-vis their population size.

Figure 11

a. Health Expenditure by Centre and States



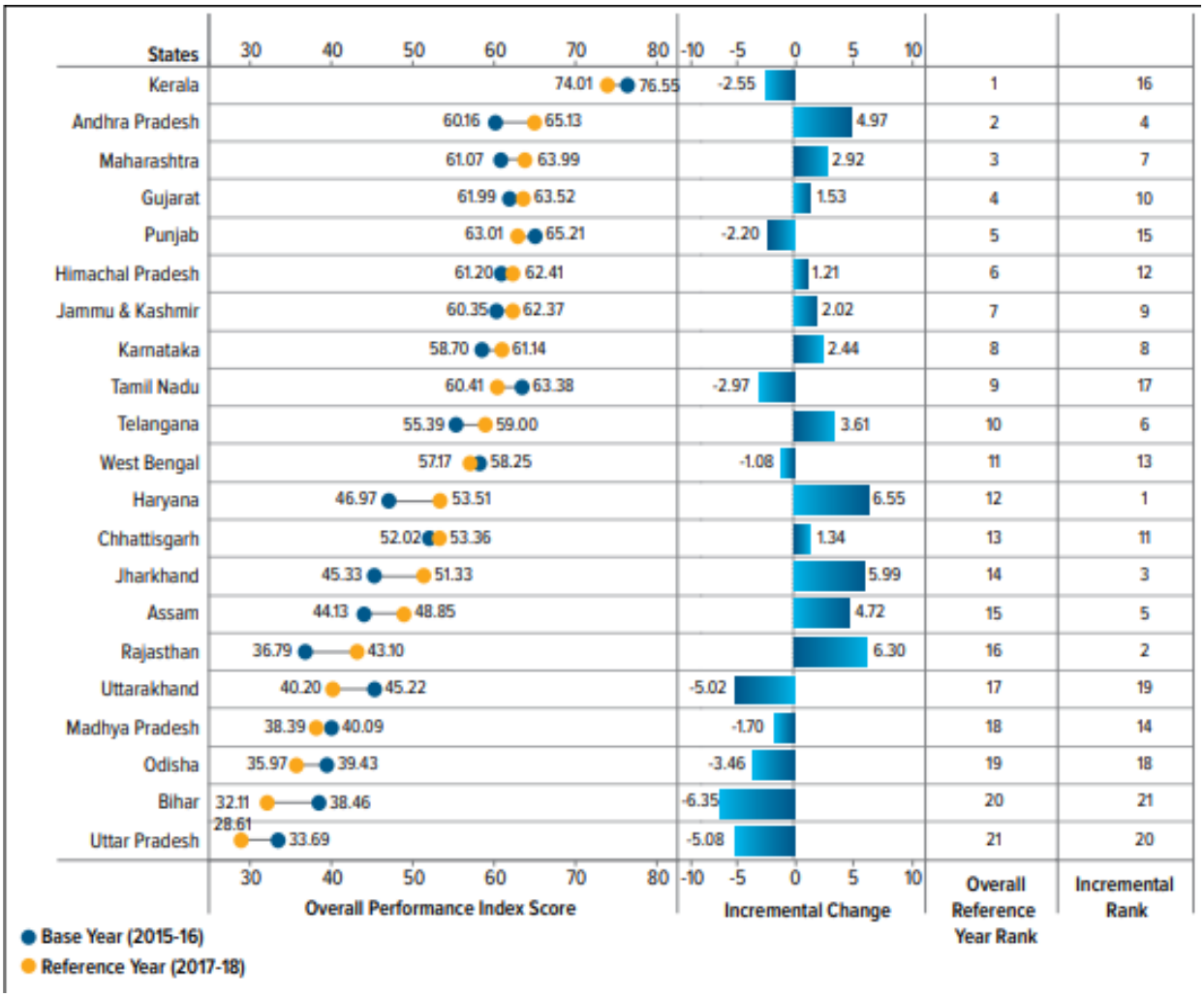
b. States' Healthcare Expenditure

State / UT	GSDP per Capita (₹)	State Health Expenditure (2019-20 BE)		
		Per Capita (₹)	Per cent of GSDP	Per cent of Total Revenue Expenditure
Delhi	3,94,216	3,808	1.0	16.7
Haryana	2,60,286	1,778	0.7	5.3
Karnataka	2,32,874	1,462	0.6	5.3
Kerala	2,25,484	2,085	0.9	5.8
Telangana	2,25,047	1,534	0.7	5.3
Gujarat	2,24,896	1,610	0.7	7.1
Uttarakhand	2,20,257	2,367	1.1	6.8
Maharashtra	2,16,169	1,295	0.6	4.8
Tamil Nadu	2,15,049	1,602	0.7	5.8
Himachal Pradesh	2,11,325	3,780	1.8	7.6
Punjab	1,72,149	1,357	0.8	4.6
Andhra Pradesh	1,68,083	2,261	1.3	6.4
N E states (excluding Assam)	1,26,715	3,717	2.9	7.5
Rajasthan	1,23,343	1,706	1.4	6.8
West Bengal	1,19,637	988	0.8	5.9
Jammu and Kashmir	1,09,769	3,163	2.9	7.7
Odisha	1,09,416	1,501	1.4	6.3
Chhattisgarh	1,08,058	1,711	1.6	6.3
Madhya Pradesh	99,025	1,284	1.3	5.9
Assam	94,385	2,053	2.2	8.8
Jharkhand	82,430	1,111	1.3	6.3
Uttar Pradesh	74,402	1,065	1.4	6.6
Bihar	47,541	781	1.6	5.9
All States	**1,45,491**	**1,482**	**1.0**	**6.3**

Sources: Union budget documents; State budgets; and MOSPI.

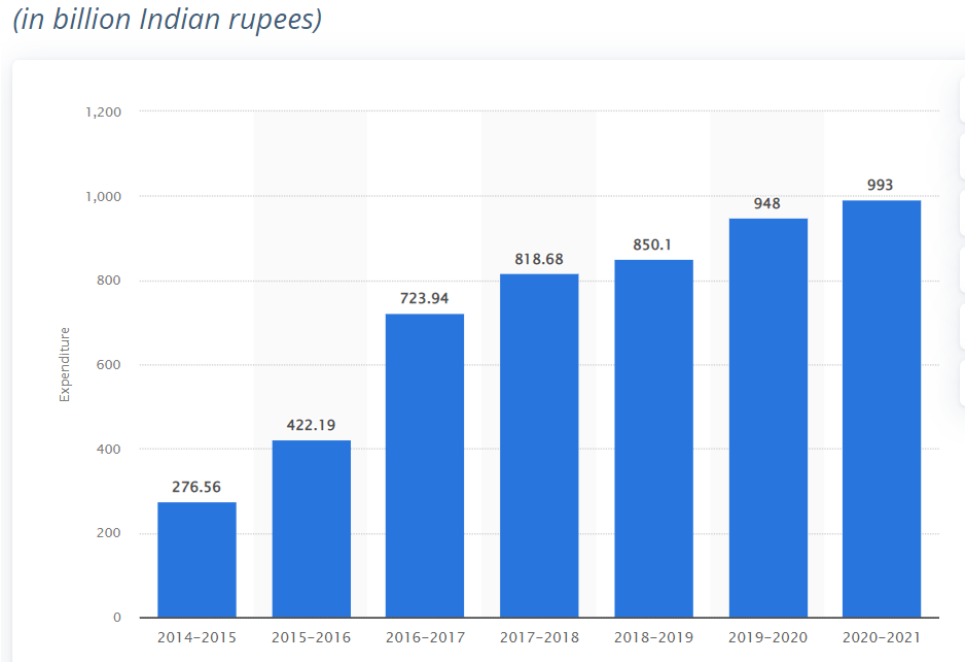
States have the overwhelming share (87.5% in 2019-20) in government spending on healthcare, which is partially financed through transfers by the centre for CSS. Total healthcare spending by health ministries of the centre and states was 1.1% of GDP in 2019-20 RE, up from 0.9% of GDP in 2015-16 (Chart 11.a). There is a difference in healthcare spending per capita across states and it is because of their varying capacity (Chart 11.b). Though funding from CSS health schemes – National Health Mission (NHM), Rashtriya Swasthya Bima Yojna (RSBY), and Pradhan Mantri Jan Arogya Yojana (PMJAY) – has played a role in correcting the imbalances in healthcare spending across states, it has not been enough to compensate for the inherent fiscal disabilities of poorer states.

Figure 12



Among the larger states, seven of the top ten States on overall performance also continued to improve on their Health Index scores from the Base Year (2015-16) to the Reference Year (2017-18), while several of the least-performing States further deteriorated, leading to a wider performance gap across the larger states. Among the top ten performers, seven had made further improvements in overall performance scores (Andhra Pradesh, Maharashtra, Gujarat, Himachal Pradesh, Jammu & Kashmir, Karnataka and Telangana). However, among the six lowest performing States (Uttar Pradesh, Bihar, Odisha, Madhya Pradesh, Uttarakhand, and Rajasthan), five had declined in the overall performance scores, with the exception of Rajasthan which improved the score by 6.30 points. Among the eight EAG (Empowered Action Group - Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Uttaranchal and Uttar Pradesh) States, only three of the States Rajasthan, Jharkhand and Chhattisgarh showed improvement in the overall performance between 2015-16 and 2017-18. While it is important to identify the challenges faced by the EAG States that hinders improvement in performance, the impressive improvement in some EAG States provides learning opportunities for the rest to identify effective actions to improve their overall performance scores.

Figure 13



Education Spending in India

Above graph shows state wise expenditure on education as a ratio of aggregate expenditure for all Indian states. The ratio is highest for NCT Delhi and lowest for Telangana.

Figure 14

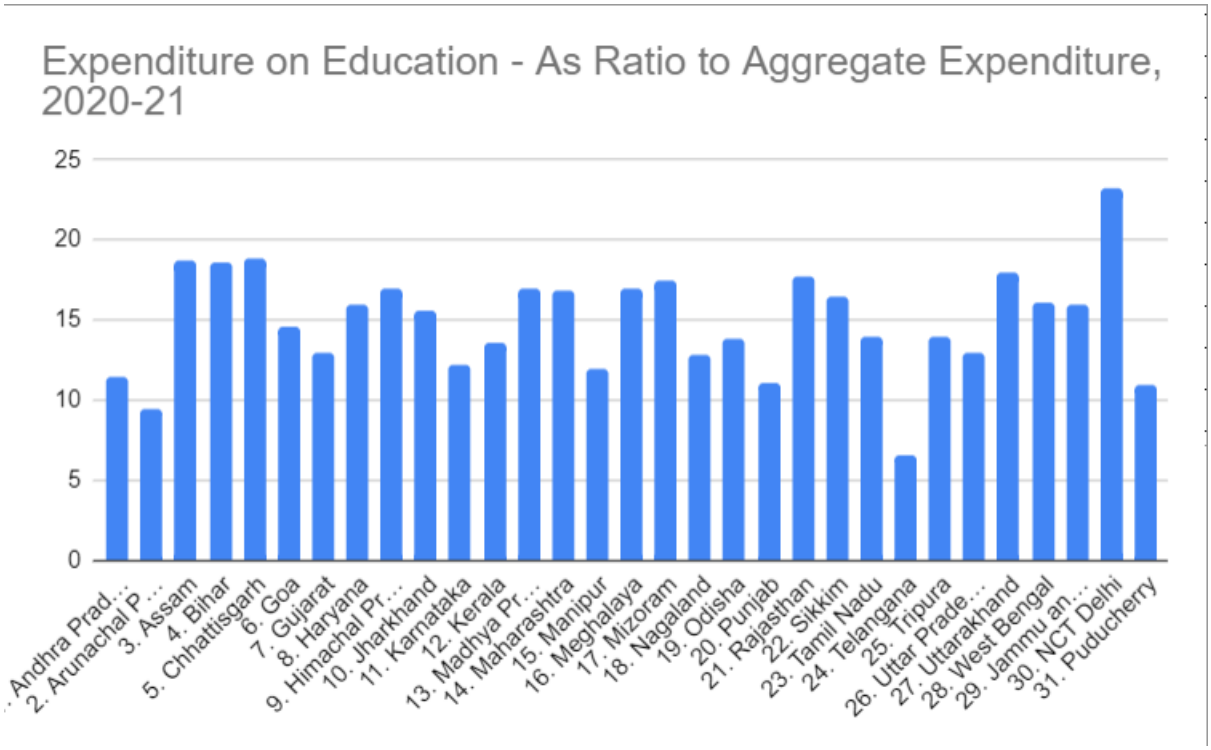


Table 5

Table 3:Trends in State-Wise Expenditure on Education as Percentage of GSDP

Year	AP	AS	BH	GU	HR	HP	J&K	JHA	KA	KE	MP	MH	OR	PN	RJ	TN	UP	WB	MEAN	CV
1990-91	2.93	4.29	4.70	3.27	2.43	6.72			3.45	5.64	3.16	2.70	4.24	2.74	4.01	4.13	3.85	3.98	3.9	28.9
1991-92	2.77	4.76	4.38	3.52	2.30	6.18			3.21	4.87	3.20	2.87	3.94	2.62	3.89	3.96	3.18	3.29	3.7	27.1
1992-93	3.07	4.98	4.20	2.84	2.56	6.24			3.34	4.69	3.13	2.61	4.17	2.39	3.95	3.65	3.63	3.19	3.7	27.9
1993-94	2.54	5.25	6.18	2.80	2.14	5.63	5.72		3.13	4.45	3.41	2.39	3.75	2.34	3.75	3.04	2.98	3.08	3.7	35.2
1994-95	2.46	4.99	6.52	2.47	2.10	5.22	5.77		3.04	4.31	3.36	2.36	3.73	2.28	3.53	2.82	3.10	2.90	3.6	37.0
1995-96	2.17	5.06	8.28	2.63	2.22	5.48	5.78		3.05	3.76	3.54	2.35	3.49	2.36	3.62	2.86	3.23	2.67	3.7	44.1
1996-97	2.22	4.95	6.86	2.40	2.13	5.43	5.83		2.97	3.70	3.55	2.37	4.07	2.38	3.46	2.84	3.06	2.97	3.6	38.8
1997-98	2.36	5.12	7.49	2.53	2.24	6.06	5.97		3.03	3.62	3.37	2.51	3.76	2.69	3.37	2.83	3.09	2.60	3.7	41.7
1998-99	2.48	5.36	6.60	2.98	2.85	6.55	5.59		3.04	3.54	3.77	2.55	4.17	3.10	3.82	3.32	3.74	2.64	3.9	34.4
1999-00	2.57	4.81	8.39	3.11	2.46	5.93	5.10		2.98	3.80	3.82	2.95	4.51	2.70	3.76	3.29	3.27	3.70	4.0	37.7
2000-01	2.58	5.28	7.01	3.32	2.29	5.78	5.19		3.22	3.63	3.49	3.73	4.06	2.49	3.99	3.00	3.40	3.19	3.9	32.8
2001-02	2.47	4.89	5.34	2.64	2.26	5.36	5.19	3.66	3.11	3.20	2.45	3.44	3.75	2.30	3.77	2.89	3.20	2.90	3.5	30.1
2002-03	2.43	4.60	5.02	2.57	2.01	5.06	4.70	4.90	2.95	3.44	2.66	2.99	3.83	2.54	3.76	2.63	2.97	2.62	3.4	29.8
2003-04	2.47	5.00	5.45	2.20	1.86	4.85	4.40	3.25	2.88	3.20	2.31	2.77	3.12	2.31	3.27	2.43	2.78	2.39	3.2	33.5
2004-05	3.50	4.69	4.06	1.97	1.75	4.51	3.96	2.91	2.62	2.75	2.28	2.45	2.57	2.20	3.11	2.15	2.83	2.39	2.9	29.8
2005-06	3.64	4.24	5.36	1.76	1.83	4.47	4.20	3.48	2.50	2.56	2.38	2.21	2.72	2.12	3.30	2.05	3.11	2.42	3.0	34.0
2006-07	3.51	4.26	5.32	1.76	1.81	4.70	4.18	3.58	2.53	2.57	2.59	2.13	2.43	1.84	2.91	2.01	3.27	2.39	3.0	35.6
2007-08	3.17	4.29	4.88	1.74	1.87	4.82	4.22	3.31	2.56	2.61	2.43	2.01	2.53	1.79	2.82	2.02	3.22	2.37	2.9	34.9
2008-09	3.05	4.06	4.84	1.65	2.16	4.88	4.44	4.37	2.80	2.68	2.61	2.23	3.03	1.87	3.34	2.22	3.11	2.34	3.1	33.0
2009-10	3.10	4.26	4.76	1.93	2.38	4.75	5.26	3.47	2.60	2.60	2.86	2.62	3.41	1.93	3.49	2.31	3.19	3.03	3.2	30.4
2010-11	3.94	5.06	4.05	2.19	2.29	5.03	5.57	3.28	2.73	2.63	3.25	2.58	3.35	1.92	3.03	2.37	3.61	3.12	3.3	31.5
2011-12	3.97	4.28	4.13	2.03	2.14	4.25	4.82	2.74	2.07	2.61	3.16	2.35	2.99	2.04	2.69	2.08	3.63	3.07	3.1	29.9
2012-13	4.05	4.42	5.12	1.94	2.06	4.33	4.42	2.58	2.15	2.59	2.90	2.33	2.79	2.29	2.65	2.09	3.66	2.92	3.1	32.3
2013-14	4.03	4.73	4.75	1.94	1.89	4.00	4.48	2.16	2.03	2.56	3.15	2.32	2.85	2.04	2.79	2.22	3.42	2.76	3.0	33.1
2014-15	3.21	5.70	4.82	1.93	2.17	4.12	4.59	2.67	2.01	2.56	3.45	2.24	3.24	2.15	3.15	2.32	3.49	2.95	3.2	33.9
2015-16	2.81	4.70	5.15	1.87	2.04	3.88	5.64	3.22	1.86	2.59	3.30	2.19	3.52	2.25	3.12	2.23	4.06	2.70	3.2	35.7
2016-17	2.54	4.97	4.79	1.69	1.99	4.17	5.05	3.48	1.75	2.74	3.38	2.07	3.09	2.12	3.24	2.07	4.20	2.73	3.1	36.1
2017-18	2.52	4.90	5.12	1.68	1.88	4.30	5.72	3.01	1.66	2.71	3.35	2.01	3.34	1.96	3.25	2.02	3.22	2.51	3.1	40.2
2018-19#	2.27	6.23	6.79	1.71	1.96	4.79	8.55	3.64	1.71	2.52	3.54	N.A	3.61	2.20	3.84	2.02	3.45	2.57	3.6	54.2
X1	2.6	5.0	6.4	2.9	2.3	5.9	5.7	--	3.1	4.2	3.4	2.6	4.0	2.6	3.7	3.3	3.3	3.1		
CV1	11.4	6.0	23.9	12.8	10.1	8.4	4.9	--	5.1	16.1	7.0	8.4	7.7	10.0	5.7	14.9	9.4	14.7		
X2	3.1	4.8	5.1	2.0	2.0	4.6	5.0	3.3	2.4	2.8	2.9	2.5	3.2	2.1	3.2	2.3	3.4	2.7		
CV2	19.7	11.5	15.0	20.7	9.2	10.4	20.4	19.2	20.3	11.9	15.2	19.4	14.6	10.0	12.1	12.8	11.0	10.6		
X3	2.9	4.8	5.5	2.3	2.1	5.1	5.2	3.3	2.7	3.3	3.1	2.5	3.4	2.3	3.4	2.6	3.3	2.8		
CV3	20.0	9.9	22.1	24.3	11.7	15.6	18.0	19.2	20.0	25.9	14.6	16.0	16.4	13.5	12.0	23.2	10.3	13.9		

Source: Authors calculations using data of Statistics, study of State Finances: A Study of Budgets, Reserve Bank of India, 2020 Source: Central Statistics Office.

Note: #- Revised Estimate, X1, X2, X3 are the averages for the 1991 to 2000, 2001to 2019 and overall periods, and CV1, CV2,CV3 are the corresponding coefficient of variations.

In the above table, we analyse 18 states over a period of 29 years from 1990-91 to 2018-19 to get a clear idea about how states are taking efforts towards the commitment of development in the education sector. For the purpose of analysis, the period of 29 years has been divided into two phases as First Phase (1990-91 to 1999-2000) and Second Phase (2000-01 to 2018-19). It can be observed from the table that states like Bihar, Himachal Pradesh, Assam, and Jammu and Kashmir have incurred the recommended 6% expenditure of GSDP education in one or few financial years. Even rich states like Gujarat, Maharashtra, Punjab, and Haryana never spent 6% of GSDP on education over the period from 1990-91 to 2018-19. Only one state (Bihar) of 18 states could maintain on an average 6% of GSDP spending on education during the first phase (1990-91 to 1999-2000), that too failed in the second phase (2000-01 to 2018-19). Bihar could maintain 6% or more than that for seven consecutive years (1993-94 to 1999-2000) during the ten years tenure of the first phase. The average ratio of expenditure on education to GSDP ranged between a minimum of 2.9% to 4.0% for all selected states over the period. It is observed that the value of the Coefficient of Variation (CV) has increased from 28.9 in 1990-91 to 54.2 in 2018-

19 and ranged between lowest values 27.1 in 1991-92 to the highest value 54.2 in 2018-19. This reflects that there are huge interstate disparities in expenditure on education and moreover that disparities have increased at a rapid rate over the period. During the first phase on an average rate of spending on education was highest in Bihar (6.4%) followed by Himachal Pradesh (5.9%), Jammu and Kashmir (5.7%), and the lowest rate witnessed in high-income states like Haryana (2.3%) followed by Maharashtra, Punjab, Andhra Pradesh with the Public Expenditure on Education:It may be noted that in total of 17 states (Jharkhand emitted), four states invested in an average more than 5% on education, two states Kerala and Orissa spent 4%, six states spent 3 or more than 3% whereas five high-income states have spent less than even 3% of GSDP on education.

Table 6

State	Per Capita Public Education Expenditure (INR)	Rank	Real NSDP per capita (INR)	Rank
Top five states in terms of education expenditure (Ranks 1-5)				
Himachal Pradesh	2314.4	1	36327.66	6
Haryana	1543.6	2	49945.90	1
Maharashtra	1479.2	3	39602.34	4
Assam	1404.9	4	18734.02	13
Kerala	1163.3	5	41203.87	2
Middle Ranked States (Ranks 6-11)				
Karnataka	1097.5	6	29279.9	9
Punjab	1056.6	7	36287.7	7
Tamil Nadu	1048.3	8	36417.6	5
Orissa	1047.9	9	18935.4	12
Gujarat	1015.3	10	40244.1	3
Rajasthan	984.4	11	23304.3	11
Bottom five states (Ranks 12-16)				
West Bengal	929.4	12	28486.34	10
Andhra Pradesh	896.4	13	30719.32	8
Uttar Pradesh	723.6	14	15501.40	15
Bihar	625.9	15	12068.39	16
Madhya Pradesh	621.4	16	16739.98	14

In the above table, 16 Indian states are ranked according to their respective per capita public education expenditure (Column 3) and Net State Domestic Product (NSDP) per capita (Column 5) in 2010. richer states spend more on education compared to the poorer states. Overall, the rankings achieved by the states conform to that belief. High-income states such as Haryana, Kerala and Maharashtra have some of the highest investments in education in India. But, there are exceptions too. Assam, despite being a low-income state (ranked 13th out of the 16 states) ranks very high in terms of education spending. Himachal Pradesh ranks 1st in terms of per capita spending but does not come even among the richest five states. Some of the richest states like Tamil Nadu and Gujarat register a mediocre performance when it comes to state spending on education.

Table 7: Trends in Public Expenditure on Education

Year	2000-01	2010-11	2013-14	2017-18 (RE)	2019-20 (BE)
Expenditure As % to GDP	4.14	3.1	3	2.8	3.1
As % to total expenditure	14.4	11.4	11.6	10.7	10.6
As % to total expenditure on social services	45.28	46.1	46.7	42.4	40.7

Source: Economic Survey of India 2003-04, 2013-14, 2019-20.

The above table discloses that the public expenditure on education in terms of percentage to GDP is decreased over the period instead of increase. The expenditures are inadequate as compared to its requirements for maintaining the global standards in the education sector. India's public expenditure on education declined from 4.14% of GDP in 2000-01 to around 3.1% in 2019-20, but the well-known Kothari Commission had considered 6% of GDP is ideal for development in the education sector. Hence the spending on education is around half of the Commission's recommendation, in addition, the most serious thing is that recent trends in public expenditure on education is downward instead of upward.

Table 8: Total Expenditure on Education by Education and Other Departments (Rs. in Crores)

Year	Exp By States	Exp. By Centre	Stats + Centre	Exp. By States as % of total Expe	Exp. By Centre as % of total Expe	States as % of GDP	Centre as % of GDP	States + Centre as % of GDP
2000-01	72290.53	10195.95	82486.48	87.64	12.36	3.63	0.51	4.14
2001-02	65746.19	14119.52	79865.71	82.32	17.68	3.03	0.65	3.68
2002-03	69350.7	16156.63	85507.33	81.10	18.90	2.97	0.69	3.66
2003-04	71978.28	17100.97	89079.25	80.80	19.20	2.74	0.65	3.4
2004-05	78668.14	18025.96	96694.1	81.36	18.64	2.65	0.61	3.26
2005-06	90018.94	23209.77	113228.7	79.50	20.50	2.66	0.68	3.34
2006-07	103147.5	34236.52	137384	75.08	24.92	2.61	0.87	3.48
2007-08	115877.9	39919.37	155797.3	74.38	25.62	2.53	0.87	3.4
2008-09	141091.3	47977.59	189068.8	74.62	25.38	2.66	0.9	3.56
2009-10	177232.8	64023.23	241256	73.46	26.54	2.9	1.05	3.95
2010-11	212817.5	80660.73	293478.2	72.52	27.48	2.94	1.11	4.05
2011-12	247855.9	86074.52	333930.4	74.22	25.78	2.84	0.99	3.82
2012-13	278375.3	89757.6	368132.9	75.62	24.38	2.8	0.9	3.7
2013-14	318249.8	112629	430878.8	73.86	26.14	2.83	1	3.84
2014-15	373457.3	133391.8	506849.1	73.68	26.32	3	1.07	4.07
2015-16	448475.1	138964.5	587439.6	76.34	23.66	3.26	1.01	4.27
2016-17	504560.5	163834.6	668395.1	75.49	24.51	3.31	1.07	4.38
Average	198187.9	64134.02	262321.9	77.18	22.82	2.90	0.86	3.76

This gives details about the share of the state and the central government in total expenditure on education. In 2001, the states' share in expenditure on education was around 88% that declined to 72%. 52% in 2010-11, and slightly increased up to 75.49% in 2016-17.

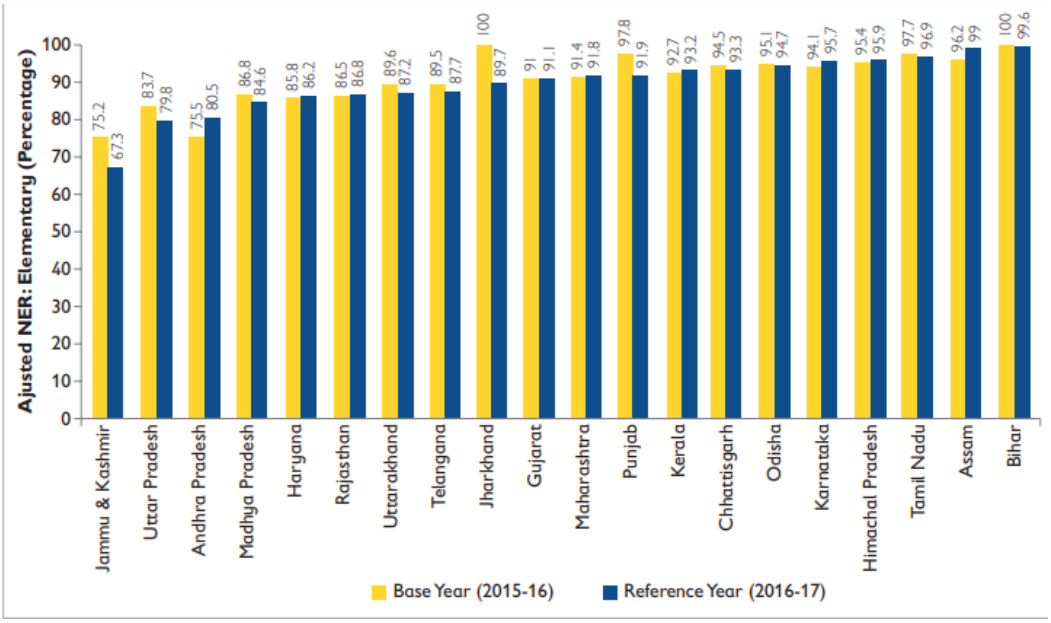
While the centres' contribution was 12.36% in 2000-01 that increased 27.48% in 2010-11, but it decreased to 24. 51% in 2016-17.

The state governments' share varies between a maximum of 87.64% to a minimum of 72.52% and spends an average of 77.18% of total expenditure on education. The central government share varies between a minimum of 12.36% to a maximum of 27.48% and it spends an average of 22.82% of total expenditure.

The above table discloses the trend that the share of states has declined and the central government share has gradually increased. Despite the state's share declining over the period, the state governments contributed the lion share of total expenditure on education.

The total expenditure on education in the country during the period of 2000-01 to 2016-17 expenditure on education was average 3.76% of GDP. in that the state governments' share was on average 2.90% of GDP while the central government's share was stuck at 0.86% of GDP. The decline of states' share in total expenditure on education indicates that the state government's commitments toward the education sector have declined over the period.

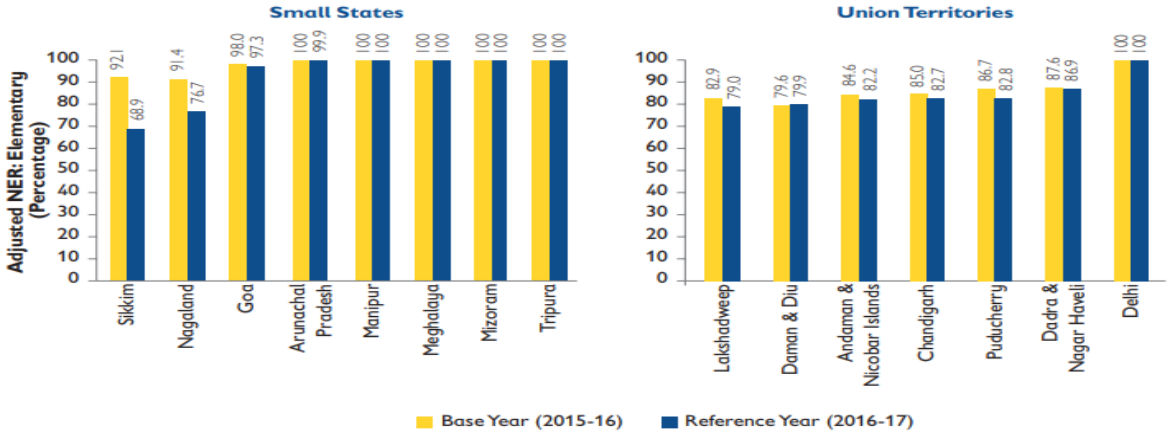
Figure 15(a): Large states
Indicator: Adjusted Net Enrolment Ratio (NER) at Elementary Level



Source: Niti Aayog

Adjusted NER refers to the total number of pupils in a particular stage of school education enrolled either in the corresponding stage or the next stage of school education expressed as a percentage of the corresponding population. Reference year data shows that 18 States and UTs reported an adjusted NER greater than 90.0%. In contrast, Nagaland, Sikkim and Jammu & Kashmir reported the lowest adjusted NERs of 76.7%, 68.9% and 67.3% respectively.

Figure 15(b) : Small States and UTs



For most States and UTs, there is very little difference between their adjusted NER for 2015-16 and 2016-17. However, in the case of Sikkim, Nagaland, Jharkhand and Jammu & Kashmir, there was a decrease of five percentage points or more in their adjusted NER over this period.

Conclusion

The overall low level of government spending on health, education seems to explain, to some extent, why most countries in South Asia are lagging behind in key development outcomes. There has been uneven progress towards universal health care, education and coverage of social safety nets, and the achievement of these Development goals require greater mobilisation and management of resources. Policymakers should make the most of economic, political and demographic opportunities to strengthen and fulfil commitments to provide health care, education and social safety nets.

As South Asian countries continue to struggle with many forms of social exclusion (e.g. poverty, inequality and informality), which are caused to some extent by gaps in the provision of health care, education and social assistance, governments should ensure that investments in these sectors reach those who are most in need. Moreover, policymakers need to align their spending on social sectors with their country's development needs, which means, inter alia, taking concrete steps to put political intent into practice (through legal and budgetary commitments, for instance) and setting expenditure targets according to countries' and sectors' specific contexts.

In India, the main problem states seem to struggle with is the disparity in health and education expenditure that exists across states. This requires urgent attention from state governments to prepare their states to meet the healthcare challenge from COVID-19 and future pandemics. In India it is also the need of the hour that we meet the recommended 6% of GSDP on education criteria. To conclude, state governments need to ensure that their social sector spending is protected to achieve inclusive and sustainable development in the medium to long-term.

High income states which are fiscally better placed should be the front runners in pursuing this objective.

As there are different government sectors competing to capture the often scarce public resources, it is crucial that policymakers rely on evidence on the effectiveness and efficiency of current spending to make better-informed decisions.

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