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Public Expenditure on Health in Nepal: A Narrative Summary

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Public Expenditure on Health in Nepal: A Narrative Summary

This Narrative Summary on Public Expenditure for Health in Nepal was written by Ali Hamandi, Faraz Salahuddin, and Jewelwayne Salcedo Cain with support from Mamata Ghimire and the JLN DRM collaborative facilitation team in the World Bank, comprising Aditi Nigam and Danielle Elena Bloom.

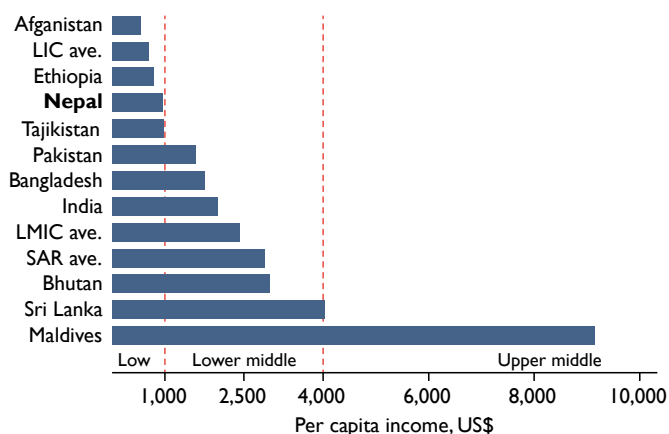
The purpose of this narrative summary is to inform the Government of Nepal's (GoN) ongoing efforts to increase government spending on health. Specifically, this narrative summary aims to (1) examine the level of general government expenditures (GGE) currently being expended on health in Nepal, and to (2) demonstrate how trends in public spending on health have interacted with the country's macro-fiscal situation over time. Such analyses are intended to set the stage for assessing domestic resource mobilization (DRM) options for health, especially as Nepal's economy weathers the effects of the COVID-19 pandemic, and as its health sector is further prioritized. This is especially vital in the Sustainable Development Goals (SDG) era, which highlights that universal health coverage (UHC) will require increased DRM; that is, the willingness and ability of countries to increase domestically sourced public financing for health in an efficient, equitable, and sustainable manner.

BACKGROUND

Nepal, officially the Federal Democratic Republic of Nepal, is a landlocked country with an estimated population of 29 million (2019) in the World Bank's (WB) South Asia Region (SAR). With its lower-middle income status¹, Nepal is one of the fastest-growing economies in the world. In 2018, its per capita income was US\$970, comparable to that of Ethiopia and Tajikistan (Figure 1).

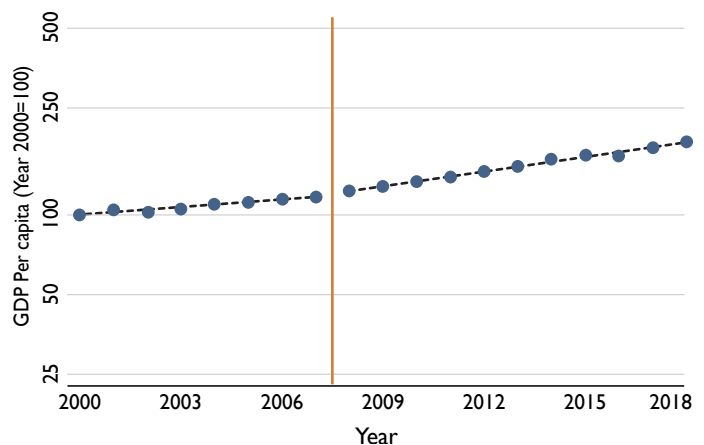
Nepal's Gross Domestic Product (GDP) per capita growth (% annual), reached 4.9% in FY 2018. This marks a departure from historically tepid growth: annual economic growth rates, in per capita terms, averaged 2.0% between 2000 and 2007, increasing to an average of 3.3% between 2008 and 2017 (Figure 2)². In cumulative constant per capita terms, the size of Nepal's economy grew by 61% over the period 2000-17.

Figure 1: Per capita income (US\$)



Source: Estimates are from the World Bank World Development Indicators (WDI) database, 2018 and are for the latest available year.

Figure 2: Per capita GDP in Nepal



Source: World Health Organization (WHO) Global Health Expenditure Database (GHED) 2019.

Note: The vertical line represents a structural break in the growth trend. A structural break is a statistical identifiable year after which there is found to be a significant shift in the growth trend.

¹ Serajuddin U and N Hamadeh. 2020. "New World Bank country classifications by income level: 2020-2021. World Bank Blogs. Published July 1, 2020. Accessed February 18, 2021.

² Tandon, A., J. Cain, C. Kurowski, A. Dozol, and I. Postolovska. 2020. From slippery slopes to steep hills: Contrasting landscapes of economic growth and public spending for health. *Social Science & Medicine*. Volume 259, 113171.

In 2017, total government expenditures comprised 27 percent of Nepal's GDP (Table 1), driven largely by increasing levels of government revenues (24 percent of GDP) and tax revenues (21 percent of GDP). These numbers are particularly high when compared with the average for low-income countries and countries in the South Asia (SAR) region, respectively - but lower than the average for low and middle-income countries combined. Nepal's tax revenues, for example, surpass the 15 percent benchmark that has recently been highlighted in a study by the International Monetary Fund (IMF) as necessary to sustaining economic growth.³ Generally, Nepal's total government expenditure has remained in the 13 to 27 percent of GDP range over the 2000-2017 period.⁴

Table 1: Comparison of Fiscal Outcomes

Country	Government expenditures	Government revenues		Government deficit/surplus
		Total	Tax	
Afghanistan	26	25	8	-1
Bangladesh	14	10	8	-3
Bhutan	31	27	12	-3
Ethiopia	18	15	12	-3
India	27	20	18	-7
Maldives	30	27	21	-3
Nepal	27	24	21	-3
Pakistan	21	16	12	-6
Sri Lanka	19	14	13	-5
Tajikistan	36	30	19	-6
SAR average	24	20	14	-4
LIC average	23	19	13	-3
LMIC average	31	27	17	-4

Source: Estimates are from the IMF World Economic Outlook (WEO) database and the IMF World Revenue Longitudinal Database and are for the latest available year

NEPAL'S HEALTH SYSTEM: AN OVERVIEW

Despite political turmoil and historically weak economic growth, Nepal has made steady and significant progress in health outcomes over the past several decades (Table 2).

Life expectancy increased to 70 years in 2017, up from about 38 years in 1960. The infant mortality rate has also declined from 216 per 1,000 live births in 1960 to 27 per 1,000 live births in 2018. And the maternal mortality ratio declined from 553 to 186 per 100,000 live births between 2000 and 2017 (Figure 3). Nepal

Table 2: Comparison of Health Outcomes

Country	Population (millions)	Life expectancy	Fertility ^a	Infant mortality ^b	Under-five mortality ^c	Adult survival ^d	Maternal mortality	Childhood stunting
Afghanistan	36	64	4.6	47	62	64	638	41
Bangladesh	165	72	2.1	26	30	76	173	36
Bhutan	0.8	71	2.0	24	30	71	183	34
Ethiopia	105	66	4.4	37	55	67	401	38
India	1339	69	2.2	28	37	71	145	38
Maldives	0.4	78	1.9	7	9	89	53	19
Nepal	29	70	2.0	26	32	75	186	32f
Pakistan	197	67	3.6	56	69	71	140	38
Sri Lanka	21	77	2.2	6	7	84	36	17
Tajikistan	9	71	3.6	30	35	76	17	18
SAR average	1788	71	2.6		35	75	194	32
LIC average	646	63	4.5	48	67	61	483	34
LMIC average	2965	68	3.1	37	39	70	196	27

Source: Estimates are from the World Bank WDI database and the World Health Organization (WHO) Global Health Expenditure Database (GHED) and are for the latest available year. a. Average number of births per woman of reproductive age; b. per 1,000 live births; c. per 1,000 live births; d. Percentage share of the population at age 15 expected to live to age 60; e. per 100,000 live births; f. Central Bureau of Statistics Nepal 2020.

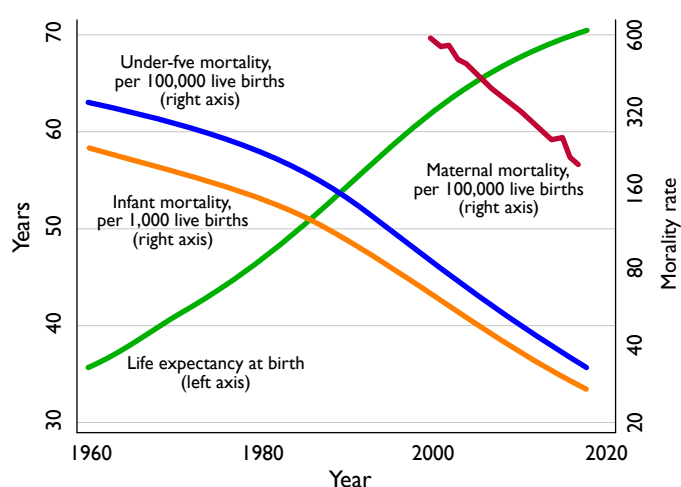
³ Gaspar, V., L. Jaramillo, and P. Wingender. 2016. "Tax Capacity and Growth: Is there a Tipping Point?" IMF Working Paper WP/16/234, Washington, DC: International Monetary Fund.

⁴ Estimates are from the IMF WEO database and the IMF World Revenue Longitudinal Database and are for the latest available year

scored 0.5 on the WB's human capital index (HCI) indicating that a child born in Nepal today would be expected to be only 50% as productive as they could have been with full education and health.⁵

Although significant progress is evident – both relative to its regional neighbors and its income status –

Figure 3: Historical trends in life expectancy, maternal mortality, and under-five mortality in Nepal, 1960-2017



Source: The World Bank World Development Indicators (WDI) 2020.

challenges remain. Nepal continues to face difficulty in ensuring that health care improvements are distributed equitably to all segments of society. For example, the proportion of births attended to by skilled health personnel in rural areas is less than one-fifth of the proportion in urban areas.⁶

Furthermore, the level of out-of-pocket (OOP) spending on health – a proxy indicator for financial protection – is high in Nepal (Table 3). Recent national health accounts estimates indicate that OOP spending, as a share of current health expenditure, was 58 percent in 2017⁷ – a figure indicative of low levels of risk pooling and high potential for catastrophic health expenditures (CHE). An analysis of 2011 household data, for example, indicates that almost 10 percent of Nepalese households incurred catastrophic health expenditure as a result of OOP health spending⁸, the share being higher amongst the poorest quintiles (14 percent) and households in the Far-western region (13 percent).

Table 3: Comparison of Health Spending Across Countries

Country	Health spending		Public spending on health				OOP share of health spending
	Per capita (US\$)	Share of GDP	Per capita (US\$)	Share domestic government	Share SHI	Share external	
Bangladesh	36	2.3	7	89	0	11	74
China	441	5.2	250	51	49	0	36
India	69	3.5	19	86	13	1	62
Indonesia	115	3.0	56	73	26	1	35
Malaysia	384	3.9	194	99	1	0	38
Nepal	48	5.6	12	89	0	11	58
Pakistan	45	2.9	14	97	3	0	60
Philippines	133	4.4	46	82	10	8	53
Sri Lanka	159	3.8	71	96	1	3	50
Thailand	247	3.7	188	92	8	0	11
Vietnam	130	5.5	65	51	45	3	45
SAR average	191	5.3	116	87	2	11	52
LIC average	41	6.3	15	63	4	33	41

Source: Estimates are from the WHO Global Health Expenditure Database and are for the latest available year.

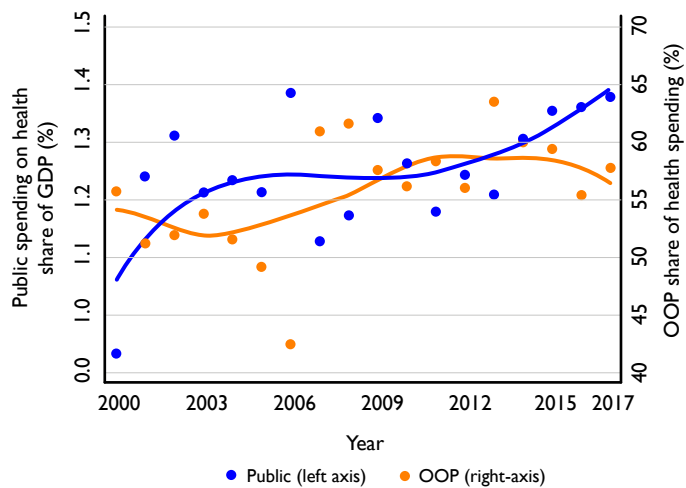
⁵ Estimates are from the World Bank WDI database and for the latest available year.

⁶ Ministry of Health and Population, Nepal; New ERA; and ICF. 2017. Nepal Demographic and Health Survey 2016. Kathmandu, Nepal: Ministry of Health, Nepal.

⁷ Ministry of Health and Population. 2019. Nepal National Health Accounts 2016/17 (Draft), Ministry of Health and Population, Government of Nepal, Kathmandu, Nepal.

⁸ Ghimire, M., Ayer, R. & Kondo, M. 2018 Cumulative incidence, distribution, and determinants of catastrophic health expenditure in Nepal: results from the living standards survey. *Int J Equity Health* 17, 23.

Figure 4: Public spending on health as a share of GDP vs. OOP share of health spending in Nepal, 2000-2017



Source: World Health Organization (WHO) Global Health Expenditure Database (GHED) 2019

The pace of increase in per capita public spending on health (5.2 percent per year) is lower than that of per capita OOP spending on health (5.6 percent per year); as a result, the OOP share of health spending has maintained an upward trend relative to trends in public spending on health as a share of GDP (Figure 4). This indicates lack of progress on Nepal's 'health financing transition'.⁹

Relative to other countries – both in the region and globally – the level of government spending on health as a share of total government expenditures is low. In 2017, around 5 percent of Nepal's public budget was allocated towards health (about 1.2 percent of GDP). This share is low relative to the regional/SAR average of 8 percent. Compared to the average of other low-income countries, Nepal's share is about 4 percentage points lower (Table 4). This suggests that Nepal's public spending on health as share of government expenditure is insufficient – and contributes to the above-mentioned dominance of OOP spending on health.

At the same time, government spending as a share of Total Health Expenditure (THE) is also low, at 25

Table 4: Share of total government expenditure

Country	Share of total government expenditure			
	Health	Education	Military	Debt Service
Bangladesh	3	15	11	14
Brazil	10	16	4	16
China	9	13	6	3
Egypt	5	11	4	25
India	3	14	9	17
Indonesia	9	21	5	10
Malaysia	9	20	5	8
Mexico	11	18	2	14
Nepal	5	17	6	1
Nigeria	5	-	4	12
Pakistan	4	15	18	20
Philippines	8	13	6	9
Russia	9	11	12	1
South Africa	13	19	3	11
Sri Lanka	9	11	11	28
Thailand	15	19	7	3
Turkey	10	8	6	4
Vietnam	10	15	8	7
SAR average	8	15	10	11
LIC average	9	16	7	6

Source: Estimates are from the WHO GHED, the World Bank WDI, and the IMF WEO and are for the latest available year.

percent, with evidence of a decline over the last decade (Table 5). In 2017, about 15 percent of spending on health came from external development partners. OOP spending has dominated the share of THE for decades.

In light of the high levels of OOP spending on health, and the relatively low levels of public spending on health (both as a share of total government expenditures and THE), there are pressures to expand government expenditures on health in Nepal. There has been growing demand to expand the basic package and coverage of free essential health care to all Nepalese. This basic package, initially targeting the poor and marginalized groups of society, has now become free at most local facilities. The latter move was intended to eliminate financial barriers to accessing basic health services; however, access and quality issues, amongst others, remain. Additionally, as the disease burden grows, so has the demand for more comprehensive care, at more affordable costs.

⁹ Fan, Victoria Y., and William D. Savedoff. The health financing transition: a conceptual framework and empirical evidence. *Social science & medicine* 105 (2014): 112-121.

Table 5: Comparison of Health Outcomes

Fiscal Year	Total health spending as share of GDP (%)	Current health spending as share of GDP (%)	GGE-H share of current health spending (%)	GGE-H share of total government expenditure (%)	Out-of-pocket share of current health expenditure (%)	External health expenditure share of current health spending (%)
2000/01	5.0	4.4	29.1	8.7	66.9	21.5
2001/02	5.2	4.6	35.7	11.0	69.6	26.8
2002/03	5.1	4.4	31.8	10.4	71.1	21.6
2003/04	5.7	4.6	39.7	13.6	69.1	22.7
2004/05	5.6	4.5	43.1	14.1	67.0	25.5
2005/06	5.3	4.0	55.5	17.6	65.8	23.7
2006/07	4.9	4.2	36.6	10.2	70.4	26.4
2007/08	5.3	4.4	41.4	11.7	71.3	14.3
2008/09	5.3	4.5	39.8	9.1	65.4	14.8
2009/10	5.2	5.0	32.2	8.5	56.3	15.8
2010/11	5.4	5.1	30.9	8.4	58.5	13.9
2011/12	5.5	5.2	31.3	8.3	56.2	10.7
2012/13	5.8	5.3	22.7	6.8	63.5	13.5
2013/14	6.1	5.8	22.6	6.9	60.0	11.9
2014/15	6.6	6.2	21.7	6.7	59.4	13.7
2015/16	6.7	6.3	21.6	6.2	55.4	14.4
2016/17	6.0	5.5	25.1	5.1	57.8	15.3

Source: Ministry of Health and Population - Nepal National Health Accounts 2016/17 and WHO Global Health Expenditure Database 2019
a. GGE-H refers to General government expenditure on health.

In consequence, the Government introduced a social health insurance (SHI) scheme to address the demands of the Nepalese for more comprehensive quality care, in addition to improved financial protection from adverse health shocks. With the presence of free care for primary care services, services likely to be insured are those provided beyond secondary level and those requiring hospitalization. Given the large level of informality and poverty in the country, introducing a SHI system will likely require subsidization of premiums by the government, further strengthening the case for DRM for health.

An additional challenge includes the Government's ongoing transition to a federal state. While the new constitution, adopted in 2015, has defined roles and responsibilities for the federal, provincial and local governments, there is a fair degree of overlap and ambiguity. Nonetheless, from a health sector perspective, the Federal government's role seems to largely entail setting standards and regulations,

while the provision of basic health services is now under the mandate of the 753 municipalities¹⁰. While federalization can be a positive development, it remains unclear as to how Nepal's basic package of health services will be funded and delivered. As such, the GoN has deemed the development of a Health Financing Strategy (HFS) as a government priority, of which DRM is a component.

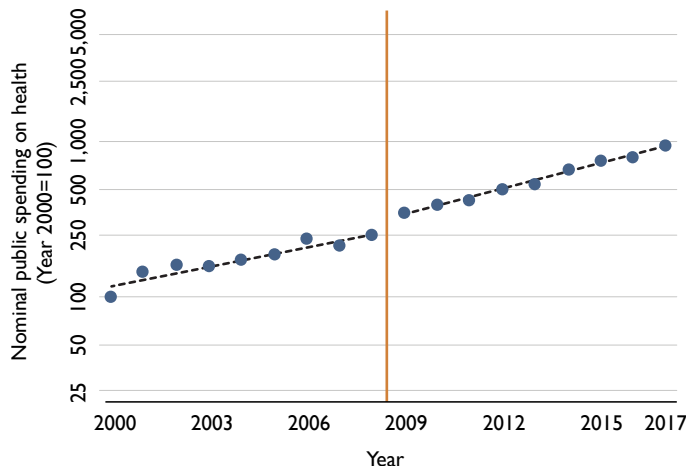
PUBLIC SPENDING ON HEALTH: A DEEP DIVE

As per Nepal's most recent National Health Accounts¹¹, general government health expenditures in nominal terms amounted to Nepali Rupee (NPR) 36.8 billion (~US\$0.35 billion) in 2016/17, up from NPR 5.7 billion (~US\$0.08 billion) in 2000/01, representing a more than six-fold cumulative increase over the 2000/01—2016/17 period and an average annual increase of 13.8 percent in nominal terms. Data from

¹⁰ Government of Nepal. Ministry of Health and Population. The Constitution of Nepal 2015. First published in the Nepal Gazette. Publication date: September 20, 2015.

¹¹ Nepal NHA 2016/17 [Ministry of Health and Population. 2019. Nepal National Health Accounts 2016/17 (Draft), Ministry of Health and Population, Government of Nepal, Kathmandu, Nepal].

Figure 5: Nominal public spending on health in Nepal



Source: World Health Organization (WHO) Global Health Expenditure Database (GHED) 2019.

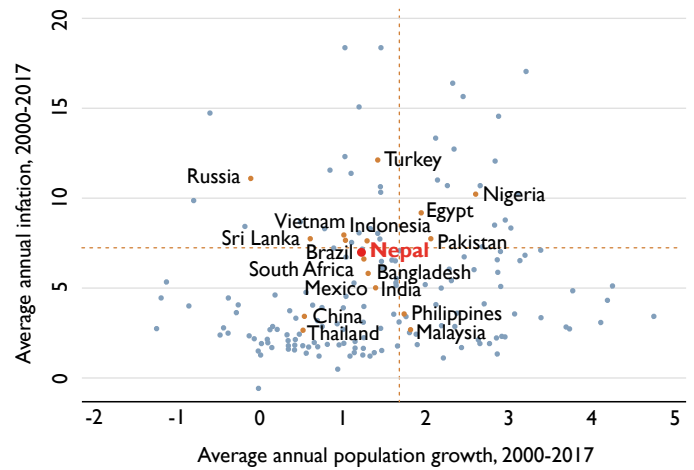
2019 WHO's Global Health Expenditure Database (GHED) show similar numbers: government health expenditures in 2001 was NPR 5.5 billion, increasing to NPR 36.9 billion in 2017. However, it is more useful to examine these trends in constant versus nominal terms as the former is adjusted for both inflation and population growth.

Adjusting for inflation and population growth shows that government spending on health in Nepal has cumulatively grown by almost two and half times since 2000 in per capita constant terms, averaging a growth rate of 5.2 percent per year – almost two times greater than the increase in the size of the economy over the same period.

Nepal has experienced relatively low levels of inflation in recent decades. Over 2000-2017, the inflation rate was 7 percent, which is slightly lower than the average for all low-income countries over the same time period (Figure 6). At 1.2 percent, population growth is also below the average for all low-income countries.

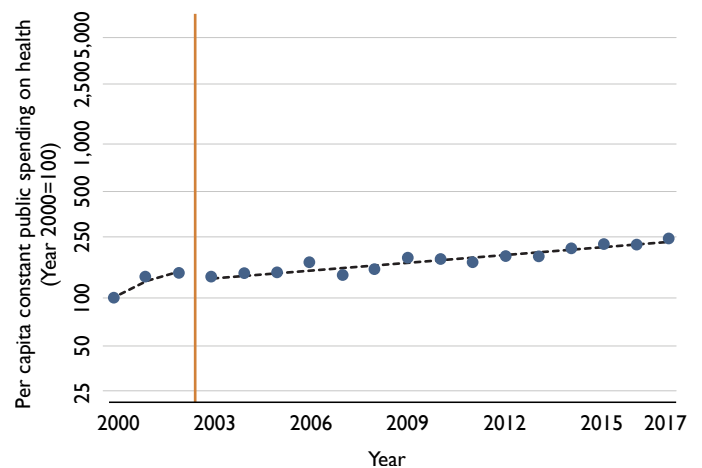
These figures imply that nominal budgetary increases would have needed to exceed at least 8.2 percent

Figure 6: Average annual inflation against average annual population growth in select countries



Source: IMF World Economic Outlook, 2020.

Figure 7: Per capita constant public spending on health in Nepal



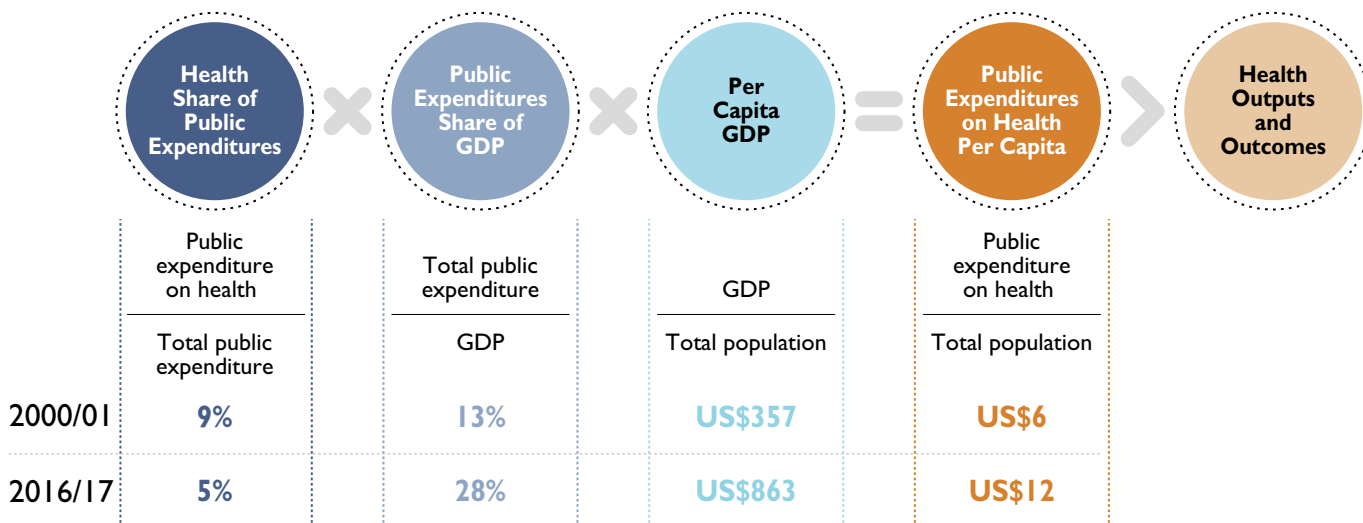
Source: World Health Organization (WHO) Global Health Expenditure Database (GHED) 2019.

(7%+1.2%) per year to per year to maintain similar or higher levels of spending in per capita constant terms.

Notably, although Nepal is an 'accelerator' country for per capita GDP, it can be characterized as a 'steep hill' country when it comes to its per capita constant public spending on health (Figure 7). This is because annual growth was greater than 3 percent per year before and after structural break¹² in 2003.

¹² While some countries have experienced consistently steady linear growth in per capita public spending on health, others show systematic variations in the growth rates over 2000-2017. These large shifts in trends can be captured statistically and a policy-relevant "break-point"—a year when a break in trend for per capita public spending on health—can be identified. Capturing this instability in the growth rates is important in understanding the growth dynamics of public spending for health

Figure 8: Mathematics of Public Expenditure on Health per Capita in Nepal



Source: Author's calculation using data from the WHO GHED 2019.

BROADER TRENDS IN HEALTH FINANCING AND UHC

Per capita GGE on health is the product of three variables: the share of total government spending dedicated to health, total general government spending as a share of GDP, and per capita GDP. For example, Nepal's per capita GDP amounted to US\$863 in 2017 (Figure 8). Of this, 28 percent was total government spending (representing spending across all sectors, including for health) and 5 percent of total government spending represented the share spent on health. Therefore, in 2017, Nepal spent around \$US12 on health. Contrastingly, in 2000, Nepal's per capita GDP was US\$537 with 13 percent representing total government spending of which 9 percent was devoted to health. Therefore, in 2000, Nepal spent around US\$6 on health.

While per capita GDP grew cumulatively by 61 percent in Nepal over 2000-2017, per capita public spending on health more than doubled over the same period. Over 2000 and 2017, the increase in per capita constant government spending on health was primarily due to higher total government expenditures as share of GDP

followed by economic growth. Reprioritization of the health sector's share in total government spending (or lack thereof) compromised on the growth in per capita public spending on health: reprioritization of health decreased from 9 percent of total government spending in 2000 to 5 percent in 2017.

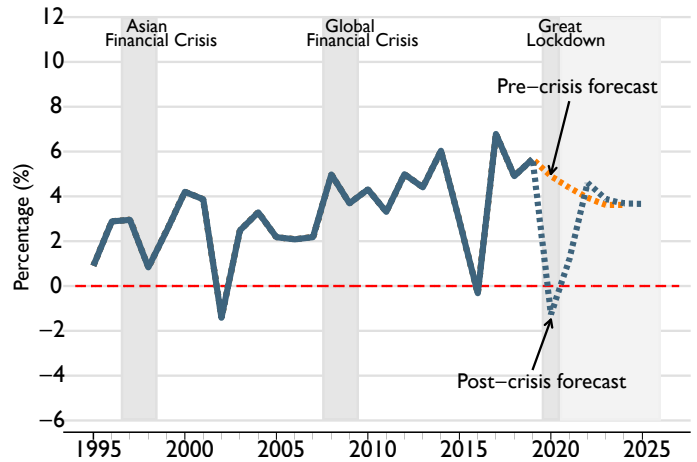
In light of the COVID-19 outbreak – and unlike the past two decades - Nepal cannot continue its reliance on conducive macroeconomic conditions to increase fiscal space for health. Between 2000 and 2017, the increase in per capita government spending on health, as shown above, was primarily due to both higher government spending and economic growth (as measured by GDP per capita). The COVID-19 outbreak has resulted in negative economic growth projections in the short-to-medium term (Figures 9 and 10), underscoring the importance of at least maintaining the share of the public budget dedicated towards health. Additionally, COVID-19 – imposed lockdowns decreased the coverage of key services, including reproductive, maternal, newborn, and child health with institutional deliveries decreasing by 52 percent from March- April 2020¹³. While economic growth may rebound, the level of government spending

¹³ KC A, Gurung R, Kinney MV, Sunny AK, Moinuddin M, Basnet O, Paudel P, Bhattarai P, Subedi K, Shrestha MP, Lawn JE, and M. Målqvist. (2020). Effect of the COVID-19 pandemic response on intrapartum care, stillbirth, and neonatal mortality outcomes in Nepal: a prospective observational study. The Lancet. Global health, 8(10), e1273–e1281. [https://doi.org/10.1016/S2214-109X\(20\)30345-4](https://doi.org/10.1016/S2214-109X(20)30345-4)

devoted to health is low relative to other countries, in both the region and elsewhere. Thus, making certain that the level of public spending on health, as a share of total government spending, does not decline further comprises an important strategy.

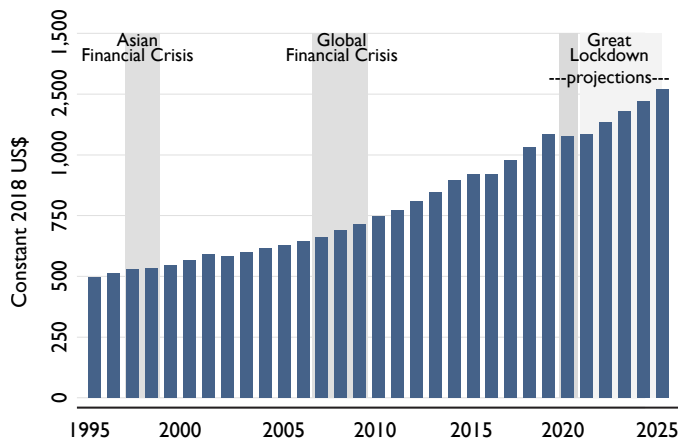
Despite the above-mentioned health financing challenges, Nepal has made steady progress on its UHC service coverage index over 2000-2017, having overtaken the average for low-income countries in recent years (Figure 11). Key health outcomes have improved over time. Thus, it is important for the GoN to sustain and build on this progress, and further prioritize its health sector.

Figure 9: Per capita GDP growth 1996-2025, Nepal



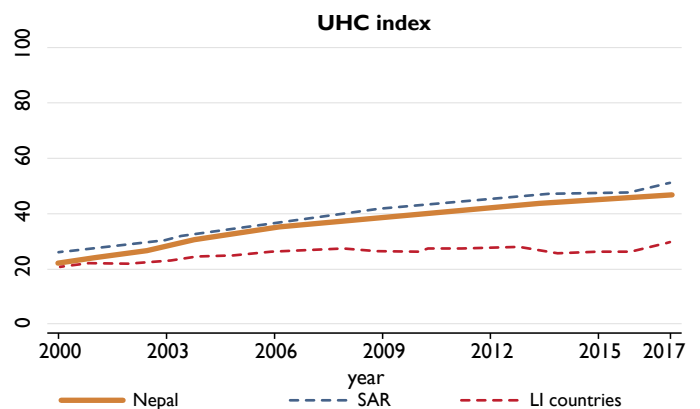
Source: Author's calculation using data from the IMF WEO 2020.

Figure 10: Per capita GDP 1995-2025, Nepal



Source: IMF WEO 2020

Figure 11: UHC Effective Coverage Index



Source: Global Burden of Disease Collaborative Network 2018

GLOSSARY & METHODS¹

Catastrophic Health Expenditure (CHE): occurs when out-of-pocket health spending exceeds 10% or 25% of total household consumption or income).

Constant: Also referred to as ‘real’, refers to the value of a monetary variable with adjustments made to remove the impact of changes in prices of goods and services due to inflation. Constant series show the data for each year in the value of a particular base year. Thus, for example, data reported in constant 2017 prices show data for 2000 to 2017 in 2017 prices. Constant series are important as it is used to measure the true growth of a series (i.e., adjusting for the effects of inflation).

How to Convert a Time Series Variable from Nominal to Constant? Nominal time series data can be converted to constant time series data using a GDP deflator. Constant time series data is calculated by dividing nominal time series data by the GDP deflator (expressed in hundredths term):

$$\text{Constant time series} = \frac{\text{Nominal time series}}{\text{GDP deflator (in hundredths)}}$$

Debt Service Payments: Debt service is a type of government expenditure that covers the repayment of interest and principal on a debt or liability by the government for a particular period of time.

Domestic Resource Mobilization (DRM): the willingness and ability of countries to increase domestically-sourced public financing for health, ideally in an efficient, equitable, and sustainable manner.

Government Deficit/Surplus: The difference between total government revenue and expenditure is called government deficit (if expenditure is greater) or government surplus (if revenue is greater). This is an important fiscal account that measures the extent to which general government is lending financing resources (in the case of government surpluses) or borrowing financial resources from other sectors and nonresidents in order to finance government spending (in the case of government deficits).

Gross Domestic Product (GDP): is a monetary measure of the market value of all the final goods and services produced within a country’s borders in a specific time period, often annually.

Gross National Income (GNI): is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad.

¹ This glossary was adapted from “Glossary & Methods,” in the JLN DRM Collaborative. Ministry of Health & Family Welfare Budgetary Spending in Bangladesh. Domestic Resource Mobilization Collaborative. Joint Learning Network for Universal Health Coverage, 2020. Definitions derived from the present text were added. Other sources consulted were the Global Monitoring Report on Financial Protection in Health (2019), the World Health Organization and the International Bank for Reconstruction and Development, and the World Bank World Development Indicators (2019).

Health Financing Transition: An empirically observed phenomenon that shows that as countries grow and develop there is a rise in health spending but that there is also a change in the composition of health spending with a higher share coming from public and other compulsory prepaid sources and a lower share from external and OOP sources.²

How to Account for Changes in Per Capita Public Spending on Health Over Time? There are different ways to account for changes in per capita public spending on health.³ One way is to focus on uncovering the relative contributions from a sub-set of factors by exploiting a key macroeconomic identity that, in any given years t and $t+1$, the following must hold true:

$$P_t = H_t E_t Y_t$$

$$P_{t+1} = H_{t+1} E_{t+1} Y_{t+1}$$

where P is per capita public financing for health in constant local currency units (LCUs), H is health's share of public expenditure, E is the public expenditure share of GDP, and Y is real GDP per capita in LCUs. Taking the logarithmic difference in $t+1$ versus t (denoted by lowercase with 'hat') of public spending on health must mathematically equal the sum of the logarithmic growth rates in health's share of public expenditures, of aggregate public expenditures as share of GDP, and of GDP per capita:

$$\hat{p}_t = \hat{h}_t + \hat{e}_t + \hat{y}_t$$

In other terms, this implies that the growth rate of public financing for health (\hat{p}_t) over a given time period must be exactly accounted for by changes in GDP per capita (that is, by economic growth, or \hat{y}_t), changes in aggregated public expenditures as share of GDP (\hat{e}_t), and by changes in health's share in aggregate public expenditure (\hat{h}_t).

The log-difference method of calculating growth rates is frequently used in economic growth theory and calculates rates that are a very close approximations to the simple growth rates. The advantage of using this method is that it allows a multiplicative decomposition of the growth rate of a variable into the growth rates of its components.

High Income Countries (HICs): Are currently defined by the World Bank as those countries that in 2018 had per capita income of US\$12,376 or higher.

Human Capital Index: A cross-country benchmarking exercise completed in 2018 by the World Bank Group Human Capital Project.⁴ The index measures the amount of human capital that the average child born in 2018 expects to achieve.

Inflation: An increase in the prices of goods and services over time (a decline in prices is referred to as 'deflation'). Inflation is typically measured in terms of how prices of a representative basket of goods and services changes over time (referred to as changes in the consumer price index) or changes in the prices

² Fan, V. Y., and W. D. Savedoff. 2014. "The Health Financing Transition: A Conceptual Framework and Empirical Evidence." *Social Science and Medicine* 105: 112–121.

³ Tandon, A., J.S. Cain, C. Kurowski, and I. Postolovska (2018). *Intertemporal Dynamics of Public Financing for Universal Health Coverage: Accounting for Fiscal Space Across Countries*. HNP Discussion Paper. Washington, D.C.: World Bank Group. Available: <http://documents.worldbank.org/curated/en/639541545281356938/Intertemporal-Dynamics-of-Public-Financing-for-Universal-Health-Coverage-Accountingfor-Fiscal-Space-Across-Countries>.

⁴ World Bank Group. 2018. *The Human Capital Project*. Washington DC: International Bank for Reconstruction and Development.

of actual goods and services consumed in an economy over time (based on changes in the GDP deflator). The GDP deflator is defined as the ratio of the GDP at market prices in current U.S. dollars to the GDP at market prices in constant (2000) U.S. dollars.⁵

Low Income Countries (LICs): Are currently defined as those countries that in 2018 had per capita income of US\$1,025 or less.

Lower Middle Income (LMI) Countries: Are currently defined by the World Bank as those countries that in 2018 had per capita income between US\$1,026 and US\$3,995.

Nominal: Also referred to as ‘current’, refers to the value of a monetary variable without any adjustments made for changes in prices of goods and services due to inflation.

Non-Tax Revenue: Revenue received by the general government from other revenue sources other than taxes. These include social contributions, grants, and other revenue such as property income, sales of goods and services, and fines, penalties, and forfeits.

Out-of-Pocket (OOP): Households’ out-of-pocket expenditure is a direct payment for health care goods and services from the household primary income or savings (no third-party payer is involved). The payment is made by the user at the time of the purchase of goods or use of services.

Pritchett Landscape: is a way of classifying trend patterns in growth rates of any variable inspired by and building upon Pritchett (2000).⁶ Statistically identifiable policy-relevant ‘break points’ are determined using Pritchett’s method as the year when a break in trend for a variable can be identified by estimating the equation below and finding the breakpoint year (t^*) that minimizes the sum of squared errors over all t :

$$Y_t = a_1 * I(t \leq t^*) + b_1 t * I_1(t \leq t^*) + a_2 * I(t > t^*) + b_2 t * I(t > t^*) + \varepsilon_t$$

where Y is any variable of interest such as per capita GDP or per capita public spending on health, $I()$ is an indicator function (1 if the argument holds; 0 otherwise), $t = [t_0, \dots, T]$ where t_0 is 2000, T is 2017, t^* is the breakpoint year that is chosen subject to the constraint that each segment of the trend covers a minimum of three years (that is, $t^* - t_0 \geq 3$ and $T - t^* \geq 3$) and a and b are the intercept and time-trend slope, respectively, where the suffix 1 or 2 represent the estimates before and after the estimated breakpoint. Once the breakpoint is determined, the landscape of growth patterns is classified as follows:

Pattern	Growth rate	
	Before break	After break
Steep Hill	≥ 5 percent	≥ 5 percent
Hill	≥ 3 percent	≥ 3 percent
Accelerator	0 percent \geq & < 3 percent	≥ 3 percent
Steep Valley	< 0 percent	≥ 5 percent
Plateau	≥ 3 percent	0 percent \geq & < 3 percent
Valley	< 0 percent	0 percent \geq & < 3 percent
Plain	0 percent \geq & < 3 percent	0 percent \geq & < 3 percent
Mountain	≥ 3 percent	< 0 percent
Cliff	0 percent \geq & < 3 percent	< 0 percent
Slippery Slope	< 0 percent	< 0 percent

⁵ World Bank Group Data Catalog. <https://datacatalog.worldbank.org/gdp-deflator-index-2000100-us-series>.

⁶ Pritchett, Lant. 2000. “Understanding patterns of economic growth: searching for hills among plateaus, mountains, and plains (English)”. The World Bank economic review. -- Vol. 14, no. 2 (May 2000), pp. 221-250.

Social Health Insurance (SHI): Social health insurance is a mandatory financing arrangement that ensures access to health care based on a compulsory payment of a non-risk-related contribution by or on behalf of the eligible person. Contributions are raised mainly through wage-related (and occasionally income-related) contributions that are shared between employers and employees. The social health insurance scheme is established by a specific public law, defining, among others, the eligibility, benefit package and rules for the contribution payment.

Tax Revenue: Revenue received by the general government from taxes. Taxes are compulsory, unrequited amounts receivable by government units from individuals, public enterprises, trade, royalties on natural resources and/or foreign aid.

Total Government Expenditure: Total expense and the net acquisition of nonfinancial assets by the government in order to fulfill their role of providing public goods and services and redistribution of income and wealth.

Total Government Revenue: Taxes, social contributions, grants receivable, and other revenue received by the government. Governments collect revenue in order to finance selected public goods and services that they provide to their citizens and to redistribute income and wealth by means of transfers.

Universal Health Coverage (UHC): As defined by the World Health Organization,⁷ means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.⁸

Universal Health Coverage (UHC) Service Coverage Index: Measures the average coverage of essential services that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases and service capacity and access, among the general population (as well among the most disadvantaged population).

Upper Middle Income (UMI) Countries: Are currently defined by the World Bank as those countries that in 2018 had per capita income between US\$3,996 and US\$12,375.

⁷ World Health Organization 2019. "Universal Health Coverage" Accessed September 2020. Last updated January 2021.

⁸ World Health Organization 2021. WHO Universal Health Coverage data portal. Accessed September 2020. Last updated January 2021.

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