

**ROYAL GOVERNMENT OF BHUTAN**



**Medium-Term Debt Management Strategy**  
(FY2020/21 to FY2022/23)

**Department of Macroeconomic Affairs**  
**Ministry of Finance**

**30 March 2021**

## Foreword

The government is formulating the budget for the new fiscal year 2021-22 amidst the COVID-19 pandemic, which has severely disrupted the economy. The economic disruptions have impacted government revenue, requiring the government to resort to borrowing to finance increased fiscal deficit.

Though the economy is expected to rebound in the medium term, the government's fiscal position is projected to remain in high deficit during the next fiscal year. Thus, the government's financing requirement in the medium term is projected to be significantly higher than the pre-pandemic years, which will further accelerate the public debt accumulation. Thus, it is imperative that we have in place the financing strategy that minimizes government's financing cost and broaden the financing sources.

Therefore, formulation and publication of this Medium-Term Debt Management Strategy (MTDS) is timely. The MTDS clearly outlines financing strategy to be implemented in the medium term (FY2020/21 to FY 2022/23) to achieve two debt management objectives set out in the Public Debt Policy 2016: minimize government financing cost and support development of efficient domestic capital market.

The financing strategy to be implemented during this MTDS period is maximizing external concessional borrowings to minimize financing cost, and issuing T-Bills and bonds in the domestic market to facilitate development of domestic debt market in the country. This financing strategy has been selected based on rigorous analysis of cost and risks of several alternative financing strategies using the Analytical Tool developed by the World Bank and the IMF.

The Ministry of Finance, in collaboration with other relevant agencies, will work towards fully implementing the strategies outlined in the MTDS. However, this will not be a static document. The strategy will be reviewed annually to check if the assumptions continue to hold true and the strategies remain relevant, based on changing macro-fiscal situations in the country.

The implementation of this MTDS will lower the government financing cost at prudent level of risks, while also supporting the development of efficient domestic debt market. Further, the MTDS help in improving the risks management framework of our public debt, ultimately leading to effective public debt management in the country, ensuring that country's public debt remain sustainable.

  
(Nangay Tshering)  
FINANCE MINISTER

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## **List of abbreviations and acronyms**

<b>ADB</b>	Asian Development Bank
<b>ATM</b>	Average Time to Maturity
<b>ATR</b>	Average Time to Refixing
<b>BoBL</b>	Bank of Bhutan Limited
<b>CC</b>	Convertible Currency
<b>DMD</b>	Debt Management Division
<b>DMEA</b>	Department of Macroeconomic Affairs
<b>DPA</b>	Department of Public Accounts
<b>FYP</b>	Five-year Plan
<b>GDP</b>	Gross Domestic Product
<b>GFN</b>	Gross Financing Need
<b>GoI</b>	Government of India
<b>IDA</b>	International Development Association
<b>IFAD</b>	International Fund for Agriculture Development
<b>INR</b>	Indian Rupee
<b>JICA</b>	Japan International Cooperation Agency
<b>LDC</b>	Least Developed Countries
<b>MEF</b>	Macroeconomic Framework
<b>MoF</b>	Ministry of Finance
<b>MTDS</b>	Medium-term Debt Management Strategy
<b>NPPF</b>	National Pension and Provident Fund
<b>Nu.</b>	Ngultrum
<b>PHP-I</b>	Punatshangchu Hydroelectric Project-I
<b>PPG</b>	Public and Publicly Guaranteed
<b>PV</b>	Present Value
<b>RGoB</b>	Royal Government of Bhutan
<b>RMA</b>	Royal Monetary Authority
<b>SCF</b>	Standby Credit Facility
<b>T-Bills</b>	Treasury Bills

## 1 Introduction

The Public Debt Policy 2016 requires the government to formulate a Medium-Term Debt Management Strategy (MTDS) that lays out “the roadmap to achieve the objectives of public debt management set out in the debt policy”. The objectives of public debt management set out in the policy are as follows:

- 1) Meeting the public sector’s financing needs and timely servicing of debt, at the lowest possible cost at a prudent degree of risks in the medium to long run.
- 2) Supporting the development of an efficient domestic capital market in the long run.

Thus, this MTDS outlines financing strategies to achieve the debt management objectives articulated in the Public Debt Policy 2016. Though, it would be challenging to fully achieve both the objectives in the medium term, the government will strive towards achieving them by instituting appropriate fiscal and monetary measures.

During MTDS period (FY 2020/21 to FY 2022/23), to help achieve the two debt management objectives, government will maximize the external concessional borrowing to meet the gross financing need (GFN), while also meeting some portion of GFN from the domestic market through issuance of T-Bills and bonds<sup>1</sup>.

The larger proportion of external concessional borrowings will reduce the government’s financing cost because of lower interest rate for the concessional loans. On the other hand, the financing from domestic sources through issuance of T-Bills and bonds would activate the primary and secondary debt markets, thus contributing towards developing an efficient capital market in the country.

This MTDS also presents a brief analysis of existing debt portfolio, and updates on developments in debt management area after the last MTDS (FY 2013/14 to FY 2017/18) was adopted. The potential funding sources— with their benefits and risks— have also been identified. After that, a summary of country’s medium-term macroeconomic outlook is provided, which is followed by modelling of financing strategies to be pursued during this MTDS period.

Finally, based on the analysis, the optimal financing strategy—the one that lowers the financing cost and has the potential to contribute towards developing domestic capital market— has been selected that the government will implement during this MTDS period. In addition, the document lists several activities that the Ministry of Finance will pursue to facilitate development of domestic debt market.

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<sup>1</sup> This strategy was selected based on the MTDS Analytical Tool (MTDS AT), an excel-based tool developed by the World Bank and the IMF.

## 2 Debt management objective and the scope of the MTDS

### 2.1 Debt management objective

The Public Debt Policy 2016<sup>2</sup> sets out two objectives of the public debt management, as follows:

- 1) Meet the public sector’s financing needs and debt service obligations at timely manner at the lowest possible cost, consistent with a prudent degree of risks.
- 2) Support the development of an efficient domestic capital market in the long run.

Since the policy is still effective and operational, the financing strategy during this MTDS period will be targeted towards achieving these two debt management objectives. However, the primary debt management objective in the medium term will be minimizing the government’s financing cost, while also trying to facilitate the development of efficient domestic capital market.

The government will facilitate gradual development of efficient capital market, by first focusing on the development of government bond market in medium term. The development of efficient government bond market will be critical in the medium term, given the projected increase in resource gap due to high fiscal deficit during the period.

### 2.2 Scope of this MTDS

This MTDS covers public and publicly guaranteed (PPG) debt and spans three financial years (from FY 2020/21 to FY 2022/23). PPG debt is defined in the Public Debt Policy 2016 as “the debt of the public sector (i.e., of the Royal Government of Bhutan, the Royal Monetary Authority of Bhutan (RMA) and Public Corporations).” However, the debt servicing for the corporate debt and the RMA are excluded in the calculation of GFN since the debt servicing is made directly by the corporation and RMA and does not affect the government’s cash flow.

### 2.3 Legal and policy framework for the MTDS

The Public Debt Policy 2016 requires the government to prepare an MTDS that lays out “the roadmap to achieve the objectives of public debt management set out in the policy.” The debt policy also requires an annual update of the strategy. However, unlike in some other countries, there is no law requiring the government to formulate and publish the MTDS.

The formulation of this MTDS is a step towards fully operationalizing the debt policy, which can help ensure that the **“government’s financing decisions are prudent and public debt is maintained at a sustainable level”**— the main objective of the Public Debt Policy 2016.

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<sup>2</sup> <https://www.mof.gov.bt/wp-content/uploads/2014/07/PublicDebtPolicy2016.pdf>

### 3 Analysis existing debt portfolio

#### 3.1 Summary of total PPG debt<sup>3</sup>

The summary of PPG debt stock as of 31 December 2020 is presented in the table below:

Table 1. Summary of PPG Debt Hydro

Category	31-Dec-2020
<b>Total Public Debt</b>	<b>225,026.228</b>
Percent of GDP	122.6%
<b>External Debt</b>	<b>218,639.508</b>
Percent of GDP	119.1%
Percent Total Public Debt	97.2%
<b>Domestic Debt</b>	<b>6,386.720</b>
Percent of GDP	3.5%
Percent of Total Public Debt	2.8%

The total public debt stock as of 31 December 2020 stood at Nu.225.026 billion, constituting 122.6% of the FY 2020/21 GDP. Of the total public debt, external debt comprised Nu.218.639 billion (96.2%) and domestic debt Nu.6.386 billion (3.8%).

The external debt is further bifurcated into hydro and non-hydro debt (Table 2):

#### 3.2 External debt by hydro and non-hydro

Table 2 presents disaggregation of external debt by hydropower debt and non-hydro power debt, 31 December 2020

Table 2. External Debt by Hydro Debt and Non-hydro Debt

Category	Amount (Million Nu.)
<b>(A) Hydropower Debt</b>	<b>161,519.889</b>
Percent of GDP	88.0%
Percent of Total External Debt	73.9%
<b>(B) Non-Hydro Debt</b>	<b>57,119.619</b>
Percent of GDP	31.1%
Percent of Total External Debt	26.1%

The bifurcation into hydro debt and non-hydro debt is important due to the special nature of hydropower loans availed from the Government of India (GoI). First, the debt servicing for hydropower project loans from GoI starts only one year after the project's mean commercial operation date. As a result, the hydropower project starts generating revenue a year before the debt servicing for the projects begins; this feature of the hydro loans from GoI guarantees that

<sup>3</sup> The MTDS quantitative analysis in the Analytical Toolkit was done FY 2019/20 debt data (30 June 2020 cut-off date)



the hydropower company has revenue inflows, and the central bank has adequate INR reserve for debt servicing to the GoI.

Second, the GoI has guaranteed to buy the country’s surplus electricity, ensuring a market certainty for electricity generated from GoI-financed projects in Bhutan. Besides, India’s growing energy demand assures a stable market for Bhutan’s surplus power.

Third, the price for electricity export to India is fixed at cost plus a margin. This means if a project’s cost increases – which proportionately increases the loan financing – the export price also increases. This price-fixing model ensures that higher debt servicing cost due to the escalation of the project cost is mitigated by a higher export revenue.

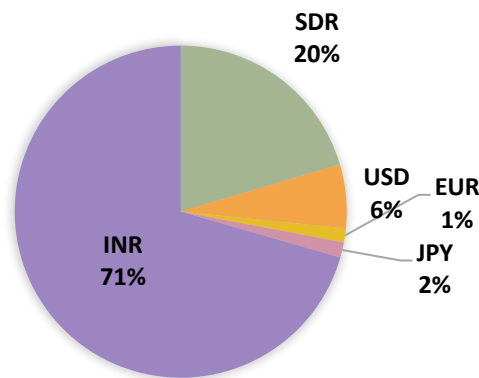
Till now the hydropower revenue has been able to meet the hydro debt servicing cost without much difficulty. For example, in the last 15 years, the average annual debt service coverage ratio of all the hydropower companies combined was 3.53. Looking forward, from 2021 to 2040, the average annual debt service coverage ratio is expected to be about 2.6.

Risks from non-hydro debt are relatively low because non-hydro debts are mostly concessional loans from multilateral development banks such as ADB, IDA, and IFAD. These loans are highly concessional with a long grace period (from 8 to 10 years), low-interest rate (from 0.75% to 1.5%), and long repayment periods (from 24 to 30 years).

### 3.3 External debt by currency composition

Figure 1 present external debt by currency composition:

Figure 1. External Debt by currency composition

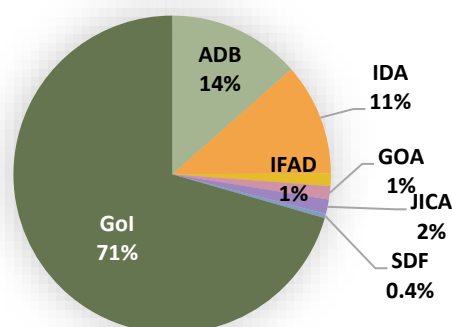


The largest portion of the external was denominated in INR, followed by SDR and then USD.

### 3.4 External debt by creditors

Figure 2 below presents external debt by major creditors as of 31 December 2020.

Figure 2. External Debt by Creditor

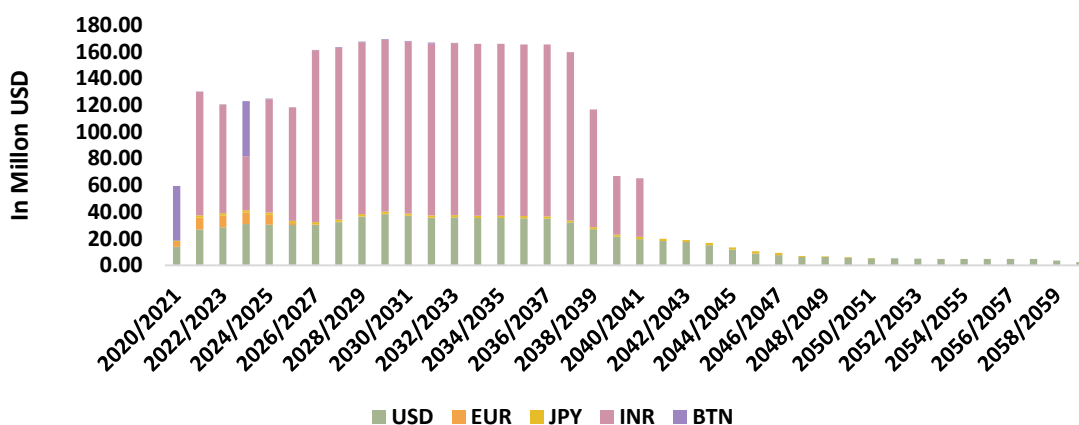


GoI is Bhutan's largest creditor, followed by ADB and IDA. The debt owed to GoI is mainly on account of the loan availed for developing hydropower projects in the country: the hydropower debt made up 95.5% of the total debt owed to the GoI, and the standby credit facility (SCF), which availed due to the INR shortage in FY 2011/12, made up the rest.

### 3.5 Repayment profile of existing debt

Figure 3 presents the projection of principal repayment of the existing debt, disaggregated by currencies of the denomination:

Figure 3. Repayment Profile of existing Debt



The largest proportion of principal repayment will be in INR to GoI for the hydropower debt. The rest are repayments in other foreign currencies (mainly US\$) for loans availed for financing budgetary programs and projects from multilateral development banks, such as the ADB and World Bank.

The repayment is projected to increase significantly from FY 2025/26 with the start of the repayment for the Punatsangchhu-I hydroelectric project (PHP-I). By then, the repayments for all the ongoing hydropower projects would have been started. However, despite the significant rise in repayment, the electricity export revenue would be able to adequately cover the hydro loan repayments.

### 3.6 Cost and risk of existing debt

Table 3 summarizes the cost and risks indicators of the existing debt portfolio as of 31 December 2020.

Table 3. Cost and Risk Indicator of existing Public Debt

Cost & Risk Indicators		External	Domestic	Total
<b>Nominal Debt (Million Nu.)</b>		218,639.508	6,386.720	225,026.228
<b>Nominal Debt as percent of GDP</b>		119.1%	3.5%	122.6%
<b>Weighted Average Interest Rate</b>		7.2%	4.0%	7.3%
<b>Refinancing Risks</b>	Average Time to Maturity (Years)	11.7	2.3	11.4
	Debt Maturing in 1 Year (% of Total)	1.7%	47.2%	5.1%
<b>Interest Rate Risks</b>	Average Time to Refixing (Years)	11.2	2.3	11.0
	Debt Refixing in 1 Year (% of Total)	6.1%	47.2%	9.3%
	Fixed Rate Debt (% of Total)	95.5%	100.0%	98.4%
<b>Forex Risk</b>	CC Debt (% of Total)			28.6%
	Short-term CC Debt (% of Gross Reserve)			0.0%

**Refinancing risk:** The refinancing risks of the external debt remains low with the average time to maturity (ATM) of 11.7 years and debt maturing in one year constituting only 5.1% of the total debt stock. However, the refinancing risk for domestic debt is comparatively higher as 47.2% of the existing domestic debt is expected to mature in one year.

**Interest rate risk:** Likewise, the interest rate risk for external debt remains low with the fixed-interest debt making up 95.5% of the total external debt, and the debt subject to interest rate refixing in one year at 6.1%. Nonetheless, the interest rate risk for domestic debt is high as 47.2% of the domestic would be subject to a new interest rate within one year.

**Exchange rate risks:** The exchange rate risk is low as only 28.6% of the total debt are denominated in foreign currencies (CC-denominated debt) other than INR. While nearly all the PPG debt is denominated in foreign currency, the foreign exchange rate risk is limited as the bulk of public debt comes from hydropower-related loans from India.

External debt servicing of hydropower loans is covered by revenues from hydropower exports to India, which offsets the financing needs created by the loans. The arrangement reduces currency risk because streams of assets (electricity export receipts) and liabilities (hydropower debt) are both denominated in INR, to which the Bhutanese currency (Ngultrum) is pegged.

## 4 Evaluation of the last MTDS and other developments

Bhutan's first MTDS with a five-year time horizon was prepared in 2013. The primary objective of the last MTDS was to “maximize concessional borrowings from multilateral and bilateral creditors” to minimize the borrowing cost. However, unlike the current MTDS, the previous MTDS did not include a financing strategy based on quantitative analysis.

The strategy included targets on several debt indicators to be achieved by the end of FY 2017/18, which were all achieved due to stability of the portfolio and prudent management of the public debt<sup>4</sup>. The previous MTDS also focused on organizational strengthening, improving cash management, developing the domestic debt market, and improving debt reports.

### *The Cabinet issued the first Public Debt Policy in 2016*

The Public Debt Policy 2016 was approved by the Cabinet in August 2016. The main objective of the policy was “to ensure that financing decisions are prudent and public debt maintained at a sustainable level”. The policy provides a broad guiding principle for raising domestic and external debt, categorized by types of liability (direct or contingent), and sector of the borrower.

The policy also lays out different types of institutional arrangements for efficient debt management, and the kind and frequency of risk assessment and monitoring that should be performed to achieve the objectives of the policy.

### *Prepared “Debt Market Development Strategy” in 2014*

The ‘Debt Market Development Strategy’ was published by the Department of Public Accounts in April 2014. The strategy was prepared by the Ministry of Finance, with technical assistance from the ADB.

The document sets forth the policies that the Ministry of Finance and the RMA will adopt to develop deep and liquid markets for government debt. Further, the document sets forth strategies to achieve the objective of developing deep and liquid markets for government debt.

One of the milestones to be achieved due after this strategy as follows:

- DPA started publishing the T-Bills auction calendar at the beginning of the fiscal year.
- RSEBL issued and adopted rules on Clearing and Settlement
- RMA has initiated the development of the T-Bills auction system.
- T-Bill auction conducted using multiple price systems as per the strategy to reduce reliance on captive investors.
- Monthly cash forecasting started; earlier, the cash forecasting was done quarterly.
- Quarterly debt report was further refined to include cost and risks of debt stock and other portfolio analysis.

These milestones have helped in gradually developing the government securities market, especially the primary market for the T-Bills.

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<sup>4</sup> Indicator included the Average Time to Maturity (ATM), Average Time to Re-fixing, CC-denominated debt (percent of total), debt maturing in 1 year (percent of total), and fixed-interest debt (percent of total).

***Developed Long-term Bond Issuance Strategy, and Rules and Regulation for Issuance of Government Bond***

Ministry of Finance, in collaboration with the RMA, prepared a long-term bond issuance strategy. The strategy lays out the types of bonds and tenors of bonds to be issued, how coupons would be determined, and the strategy to ensure a broad-based ownership of the government bond.

The Ministry of Finance also approved the Rules and Regulation on the issuance of government bonds in June 2020. The rules provide detailed procedures on the issuance of government bonds, including the method of issuance, payment of coupon and principal, issuance calendar, and the listing of government bonds.

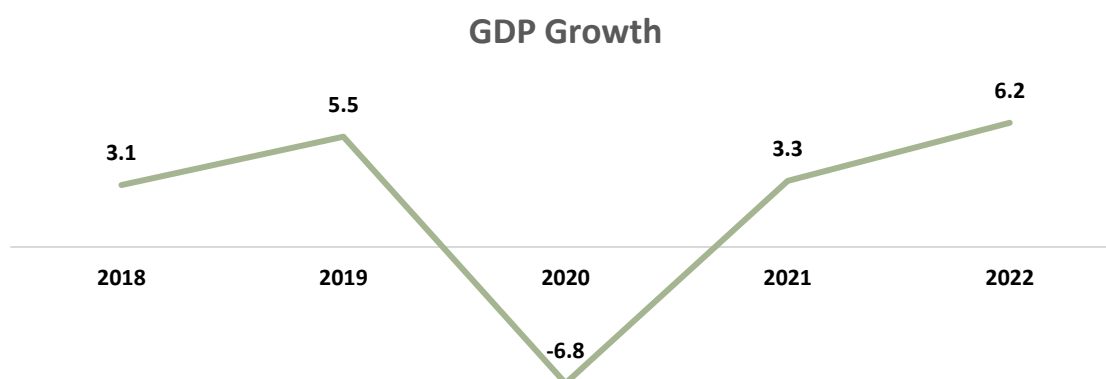
Based on the strategy and the Rules, the first government bond of Nu.3 billion was issued in September 2020, with an overwhelming investor response (the bond was oversubscribed by 3 times). The second government bond of 10-year maturity were issued in February 2021 on a yield-based auction. The bid-to-cover ratio was 3.14, indicating strong demand for government bond in the market.

## 5 Medium-term macroeconomic outlook

### 5.1 GDP growth

In 2019, the economy grew by 5.5%, up from 3.1% in 2018. GDP growth is expected to contract by -6.8% due to disruption of economic activities in the country after the COVID-19 pandemic. The two nation-wide lockdowns and other stringent containment measures further exacerbated the economic disruption in 2020.

Figure 4. GDP growth outlook



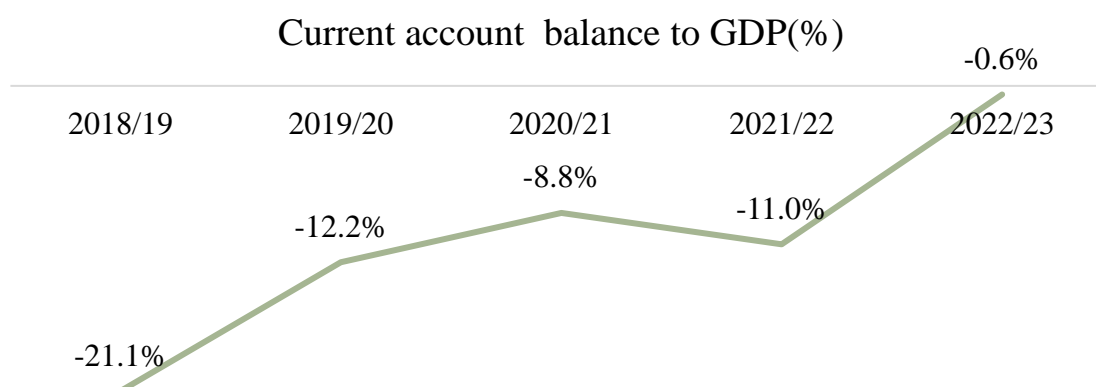
The covid-19 pandemic devastated the country's service sector, the hardest hit being the tourism and allied businesses. The pandemic also severely disrupted the industry sector, especially the construction and mining activities due to a shortage of labor and materials

However, economic growth is projected to rebound to 3.3% and 6.2% in FY 2021/22 and FY2022/23 (the final two fiscal years of the 12<sup>th</sup> five-year plan), due to expected rebound tourism and allied businesses, and the industry sector, especially the construction sector.

### 5.2 Current account balance

The current account deficit is expected to narrow in FY 2020-21, with the reduction in imports due to the Covid-19 pandemic. Despite the pandemic, the economy managed to continue with a certain level of trade to support the flow of essential goods and services.

Figure 5. Current Account Balance outlook



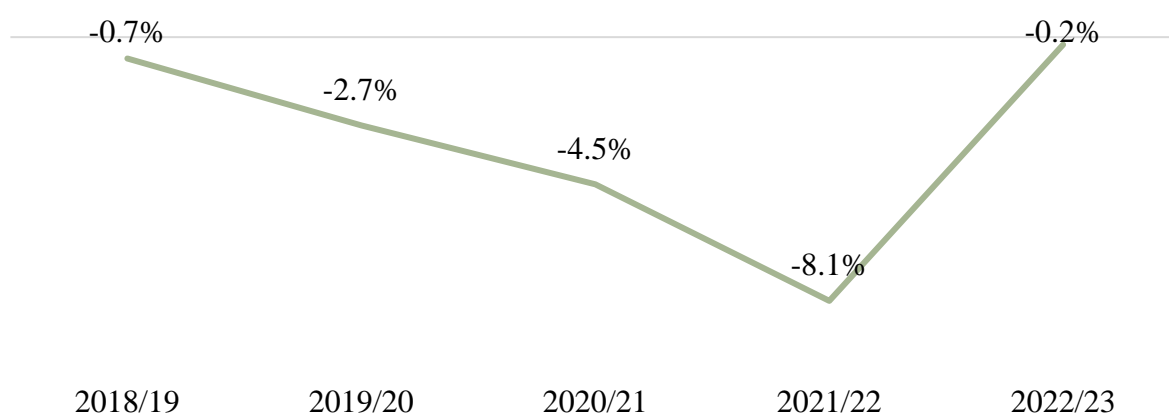
The current account deficit is expected to improve from 12.2% of GDP in FY 2019/20 to 8.8% in FY 2020/21. The narrowing of the current account deficit in 2020/21 compared to FY 2019/20 is mainly due to improvement in the goods and services trade, from a deficit of Nu.21.9 billion in 2019 to Nu. 13.8 billion in 2020.

The current account balance is projected to improve significantly in FY 2022/23, reflecting an increase in hydropower exports after the commissioning of Punatshangchu Hydroelectric Project-II (PHP-II) in December 2022.

### 5.3 Primary balance

The disruption of economic activities due to the recent lockdown will invariably impact the implementation of capital works and lead to deterioration in the revenue position.

Figure 6. Primary Balance Outlook (percent of GDP)



The Covid-19-induced pandemic has disrupted businesses in the country, which has severely reduced the government's tax revenue. The deferment of the business income tax exacerbated the drop in tax revenue. As a result, the primary balance is projected to deteriorate in the medium term.

The primary deficit to GDP is estimated to deteriorate to 4.5% in FY2020/21 and to worsen further to a deficit of 8.1% in FY 2021/22. The worsening of the primary deficit in FY 2020/21 reflects a decline in revenue from all major sources except the hydropower sector. The tax revenue is projected to decline by almost 19% (year-on-year) in FY 2020/21 compared to the FY before.

The primary deficit is expected to increase to -8.1% of GDP in FY 2021/22 due to a large increase in capital expenditure without a commensurate increase in revenue. Capital expenditure is projected to increase by 68% (year-on-year), while revenues are expected to increase only by 19% (year-on-year).

However, the primary deficit is projected to improve to -0.2% in FY 2022/23 as capital expenditure tapers off at the end of the 12<sup>th</sup> five-year plan. In FY 2022/23.

## 5.4 Medium-term macro-fiscal risks

1. ***Downside risk to growth:*** The economy has been severely affected by COVID-19. Recovery from the recession could be delayed further given the unpredictability of the pandemic's course. The most severe risk to the outlook is a scenario of a large-scale community transmission with prolonged mobility restrictions that would result in substantial social and economic costs.
2. ***Inflationary Pressure:*** Inflationary pressures have increased with the onset of the pandemic. As inflationary pressure builds up in India, domestic inflation has also been on the rise since 52 percent of the CPI basket is imported. Domestic food prices remain elevated due to disruption in the supply chains.
3. ***External Risk:*** A slower recovery globally and in India could impact Bhutan's external trade and financing because of strong linkages between tourism and trade. Weaker demand from India could adversely impact production and exports from non-hydro industries. The revival of tourism is also dependent on the external environment given the international travel restrictions and changing consumer behavior.
4. ***Fisk risks:*** While domestic resources have decreased significantly due to the disruption in economic activities, the current expenditure has remained at pre-COVID levels. As a result, it will be challenging to cover current expenditures from the domestic resources, as mandated by the constitution, Art. 14.



## 6 Potential Funding Sources

This section provides a brief overview of the government’s potential funding sources and the cost and risks associated with various financing sources.

### 6.1 External sources

The government currently avails concessional financing from multilateral development partners such as IDA, ADB, International Fund for Agricultural Development (IFAD), and Japan International Cooperation Agency (JICA) for financing budgetary programs and projects. On the other hand, for large capital investment, such as hydropower development, the financings are mainly from the GoI.

The external concessional financing from ADB, IDA, and IFAD will still remain the government’s preferred financing source for a foreseeable future, since financing from these institutions are cost effective and long-term. The high concessional terms (low fixed interest rate, long grace period, and long repayment period) of loans from these sources help mitigate refinancing risks and interest rate risks.

The cost and risk characteristics of potential funding sources are briefly stated in Table 6 below.

Table 4. Potential Financing Sources

Funding Source	Financing terms	Benefits and potential risks
<b>1. External Sources</b>		
World Bank (IDA Regular)	Maturity period: 40 years Grace period: 10 years Interest rate: 0.75%	<b>Benefit:</b> highly concessional; lowers financing cost; receive technical assistance with the financing <b>Risk:</b> exchange rate risks since financing is in foreign currency
ADB (OCR)	Maturity period: 32 years Grace period: 8 years Interest rate: 1% during grace period; 1.5% after grace period	<b>Benefit:</b> highly concessional; lowers financing cost; receives technical assistance with the financing <b>Risk:</b> exchange rate risks since financing is in foreign currency period
IFAD	Maturity period: 40 years Grace period: 10 years Interest rate: 0.75%	<b>Benefit:</b> highly concessional; lowers financing cost; receives technical assistance with the financing <b>Risk:</b> exchange rate risks since financing is in foreign currency period
JICA	Maturity period: 40 years Grace period: 10 years Interest rate: 0.1%	<b>Benefit:</b> highly concessional; lowers financing cost; receives technical assistance with the financing <b>Risk:</b> exchange rate risks since financing is in foreign currency period
EIB	Maturity period: 25 years Grace period: 5 years  <b><u>For Borrowings in EURO</u></b> Fixed Interest rate: 1.2% -1.5%	<b>Benefit:</b> highly concessional; lowers financing cost; technical assistance with the financing <b>Risk:</b> exchange rate risks since financing is in foreign currency period; higher interest

	<b><u>For borrowing in USD</u></b> Fixed interest rate: 2.7%-3%	compared to other concessional financing sources
<b>Domestic Sources</b>		
T-Bills	<b>1 month – 1 year</b> <b>Discount rate: 1%- 2.8%</b>	<b>Benefit:</b> lower cost (discount rate) compared to other domestic financing instruments. <b>Risk:</b> higher refinancing risks due to lower maturity period
Bonds	<b>3- year to 10 years</b> Expected coupon rate: 4%- 7%	<b>Benefit:</b> help diversify funding sources for the government; facilitate the development of the domestic capital market; develop benchmark yield curve for the market. <b>Risks:</b> Limited available financing. Weaken government’s fiscal position due to higher interest cost

## 6.2 Domestic sources

Currently, domestic funding is limited. The government resorts to domestic financing only if the financing from external concessional windows is inadequate since the financings from concessional windows are much cheaper. However, in the medium term, the domestic financing is expected to increased due to gross financing need.

Therefore, the MoF has been striving to develop the government securities market in the country. This started with the adoption of Operations Guidelines for Treasury Bills in 2009, and revision of the guidelines in 2014 to incorporate auction method for the sale of T-Bills. Currently, the MoF issues T-Bills every month through competitive auction; the Department of Public Accounts also publishes an auction calendar for T-Bills on the MoF website.

In June 2020, the MoF approved Rules and Regulation for Issuance of Government, which culminated in the issuance of the first government bond in September 2020. The first issuance of followed by the issuance of a 10-year government bond in February 2021 using a yield-based auction. Both the issuance received an overwhelming response from investors, indicating a strong appetite for government securities in the market.

However, the domestic bond market is still in the infant stage of development. Though there are several corporate bonds listed in the stock market, there is hardly any trading in the secondary market. Thus, enhancing liquidity in the bond market will be important stoke to the development of domestic bond market in the country. And government bond issuances can play a critical role in increasing activities in both the primary and secondary market, thus boosting the development of an efficient capital market in the country.

## Box 1 – Topics related to the Domestic Market

**The focus on market development efforts should be on the primary market and conditional to the current economic situation and the existing market structure.** Market development improvements will likely happen gradually and the MoF should experiment with the instrument being issued and how they are issued, and openly discuss potential initiatives with market participants.

**Coordination with cash management is key.** For market development purposes, borrowing decisions must be not only driven by cash needs, but that broader market development objectives are taken into account when deciding what and when to issue (regular presence – whether there is a cash need or not – will be a requirement for any meaningful market development strategy).

**Monetary policy is focused on keeping the peg to the Indian rupee and is implemented through changes in reserve requirements.** The current monetary policy toolkit implies that RMA effectively creates demand for government securities, partly explaining the very low-interest rates (the annual interest rate on T-Bills is currently below 1.7 percent). The monetary policy framework was recently reviewed, and bills with maturities shorter than three months were re-introduced. Interbank activity to even out liquidity among banks is extremely limited and no secondary market exists.

**Overdraft from the central bank has diminished with the increase of T-Bill issuances.** Cash management contributes to market uncertainty and uncertainty about issuance volume since the government has recourse to overdrafts from RMA and Bank of Bhutan (BoB). The latter is especially important, since the interest rate the government pays on overdrafts in BoB in periods of cash shortage distorts the behavior of the largest bidder (BoB) in the auctions, preventing a ‘true’ market-clearing price.

**The investor-base is very narrow comprising 5 banks of uneven size and 2 non-banks (pension and insurance).** The dominating bank in the T-bill auctions is BoB, which is 80 percent government-owned and the holder of the government accounts outside of RMA. The National Public Pension Fund (NPPF) has large and growing investment needs, but in the absence of government securities, mainly rely on member loans to generate investment returns. NPPF does not currently participate in T-bill auctions due to the low-interest rates. Looking forward and taking into account that NPPF will continue growing over the next decades, there is a potential and constant demand for long-term securities. This will be important from the governments’ perspective since demand is expected to be high and constant. On the other hand, since NPPF will be a ‘hold-to-maturity investor, they will likely only contribute to market development at the margin. No regular meetings are held with the market participants.

**Clearing and settlement are undertaken through the stock exchange.** The market infrastructure appears to be working well, but would, in its current set-up, not support active market trading or an effective repo-market. Efforts to de-materialize securities are ongoing.

**The first government bond of 3-year maturity of Nu 3 billion was issued in September 2020.** The coupon rate was fixed administratively at 6.5%, and the issue was offered for public subscriptions. The RMA received subscriptions for Nu. 9.109 billion against the offered amount of Nu. 3 billion (subscription-to-cover ratio of 3.04). The second government bond (10-year bond of Nu. 700 million) was issued through competitive bidding, using a yield-based auction in February 2021. The cut-off yield stood at 3.98%, with a bid-to-cover ratio of 4.14.

## 7 Modelling MTDS

### 7.1 Key assumptions

The following table presents the key baseline macro-fiscal assumptions in the simulation of the strategies:

Table 5. Key macro-fiscal assumptions in this MTDS

Million Nu.	FY		
	FY 2020/21	2021/22	FY 2022/23
Revenue & Grant	45,768.79	54,460.66	47,546.69
Primary Expenditure	54,367.87	64,654.50	54,221.82
Budgeted Interest Payment	2,027.70	3,205.08	3,159.52
International Reserve (Million US \$)	1,391.61	1,451.15	1,792.87
GDP	183,550.80	197,508.61	217,112.61

Source: MEF, MFCTC

Further, the Ngultrum is depreciated against all three major convertible currencies in which Bhutan's public debt is denominated. It is assumed that the current policy of pegging the Ngultrum to Indian Rupee at par will remain unchanged for the foreseeable future.

Table 6. Exchange Rate assumptions

	FY 2020/21	FY 2021/22	FY 2022/23
USD	5.19%	3.75%	3.61%
EUR	4.1%	2.2%	2.1%
JPY	1.4%	12.5%	15.8%

### 7.2 Description of alternative financing strategies

The government has to meet its GFN either from external or domestic sources, depending on the government's cost and risk tolerance.

For this MTDS, the cost and risks simulation is based on four alternative financing strategies—different combinations of the external borrowings and the domestic borrowings. The strategy that leads to the lowest cost and risk combination will be pursued. However, the MTDS will be updated, or reviewed annually to ensure that appropriate strategy is selected for achieving the debt management objective.

It is assumed that 100% of the external borrowings are from concessional fixed-rate windows from multilateral development banks, such as the ADB, IDA, and IFAD. This is in line with the Government's past and recent external borrowings pattern and preferences.

The four alternative strategies are briefly described below.

**Strategy 1(S1): Baseline**

The proportion of external borrowing in this strategy is based on the indicative concessional lending from multilateral development banks, such as the ADB, the World Bank, and the IFAD. The strategy assumes that the financing needs that cannot be met from concessional borrowings are met from domestic sources through the issuance of T-Bills and long-term bonds.

The external and domestic financing proportion is presented in the table below:

*Table 7. Strategy 1(Baseline)*

<b>Strategy 1(S1)</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>FY 2022/23</b>
<b>External Financing (% of GFN)</b>	<b>49%</b>	<b>30%</b>	<b>21%</b>
<b>The instrument-wise proportion of domestic financing</b>			
T-Bill	90%	80%	60%
3-Year Bond	10%	20%	20%
5-Year Bond			20%

**Strategy 2(S2): External concessional borrowings to meet 80% of GFN**

The strategy envisages meeting 80% of the GFN through external borrowings, and the balance from the domestic market through the issuance of T-Bills and bonds of varying maturities.

*Table 8. Strategy 2: External concessional borrowings to meet 80% of GFN*

<b>S2</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>FY 2022/23</b>
<b>External Financing (% of GFN)</b>	<b>80%</b>	<b>80%</b>	<b>80%</b>
<b>The instrument-wise proportion of domestic financing</b>			
T-Bill	90%	50%	20%
3-Year Bond	10%	30%	30%
5-Year Bond		20%	50%

A higher proportion of external concessional borrowings will reduce costs. This strategy gradually reduces the issuance of T-Bills, while increasing the issuance of medium-term bonds. This strategy also introduces 5-year bonds from the second year and increases the proportion of 5-year bonds over the years; this is mainly aimed at gradually lengthening the maturity of the benchmark bonds.

**Strategy 3(S3): External concessional borrowings and domestic borrowing each to meet 50% of the GFN**

In strategy 3, the external borrowing is set to meet 50% of the GFN, and domestic borrowings to meet the other half of the GFN, as shown below:

Table 9. Strategy 3: External concessional borrowings and domestic borrowing each to meet 50% of the GFN

<b>S3</b>	<b>FY 2020/21</b>	<b>FY 2021/22</b>	<b>FY 2022/23</b>
<b>External Financing (%)</b>	<b>50%</b>	<b>50%</b>	<b>50%</b>
<b>The instrument-wise proportion of domestic financing</b>			
T-Bill	90%	50%	30%
3-Year Bond	10%	30%	30%
5-Year Bond		20%	30%
7-Year Bond			10%

In this strategy, the maturity of the domestic debt portfolio is further lengthened by issuing 7-year bonds from FY 2022/23 to meet 10% of the domestic financing requirement.

**Strategy 4(S4): External concessional borrowings to meet 10% of the GFN**

S4 builds an extreme case, where 90% of GFN are met from domestic sources using five maturities of government securities.

Table 10. Strategy 4: External concessional borrowings to meet 10% of the GFN

<b>S4</b>	<b>FY</b>		
	<b>FY 2020/21</b>	<b>2021/22</b>	<b>FY 2022/23</b>
<b>External Financing (%)</b>	<b>10%</b>	<b>10%</b>	<b>10%</b>
<b>The instrument-wise proportion of domestic financing</b>			
T-Bill	90%	10%	0%
3-Year Bond	10%	30%	20%
5-year Bond	0%	30%	30%
7-Year Bond	0%	30%	40%
10-Year Bond	0%	0%	10%

This strategy was introduced for analytical purposes only, to illustrate changes in cost and risk parameters if domestic borrowing became more important in the future.

### 7.3 Description stress tests

The robustness of each candidate strategy is evaluated by applying interest rate and exchange shocks as described below:

- **Shock 1:** A one-time Ngultrum depreciation of 30% is introduced in FY 2021/22, which is similar to the exchange rate shock in the Debt Sustainability Analysis (DSA).
- **Shock 2:** A depreciation rate of 5% is introduced in FY 2021/22 in combination with the interest rate shock. The depreciation rate was derived by taking the average annual depreciation rate of the past 20 years plus one standard deviation.

Stress testing with an exchange rate shock is important for gauging the variability of cost and risks of external debt under the worst-case scenario to enable the debt managers make appropriate choice between external and domestic financing

### 7.4 The outcome of the strategy simulation

The figure below illustrates the performance of the four strategies based on four cost-risk indicators: (i) present value (PV) of debt to GDP ratio, (ii) interest-to-GDP ratio, (iii) interest-to-revenue ratio; and (iv) external debt service to international reserves ratio, at the end of MTDS period (as at end of 2022/23).

Figure 7. Simulation Outcome: External Debt to GDP

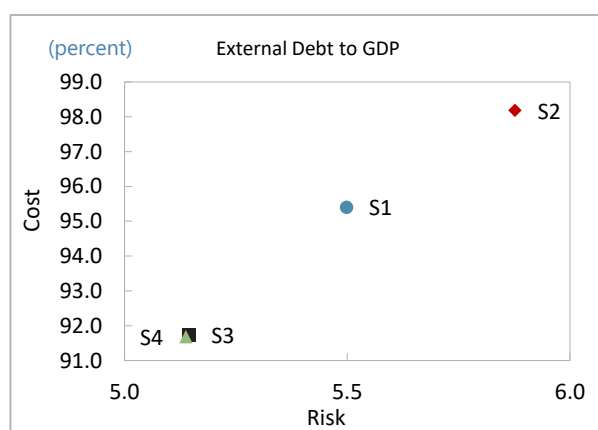


Figure 8. Simulation Outcome: PV of Debt to GDP

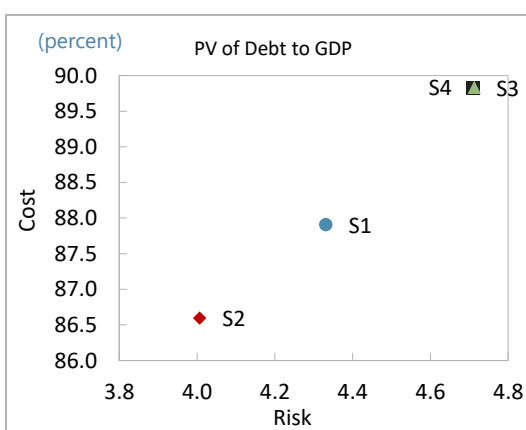
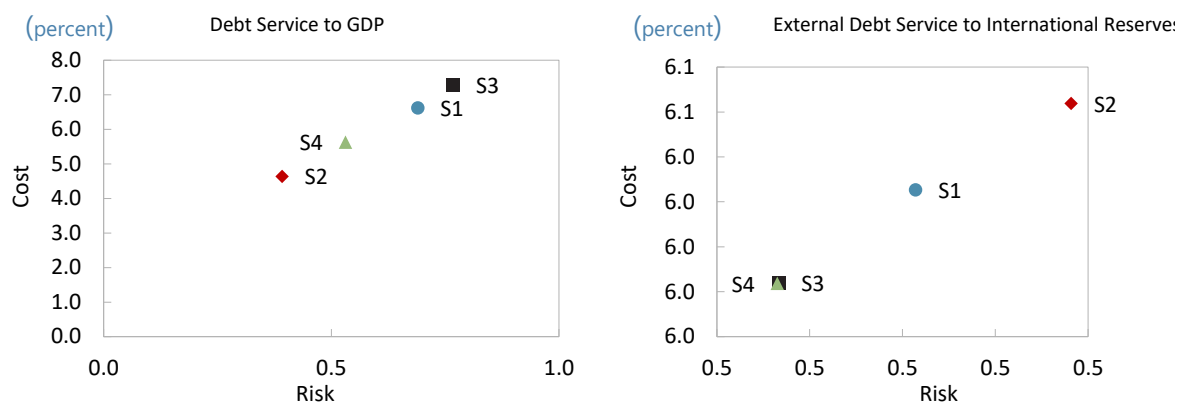


Figure 9. Simulation Outcome: Debt Service to GDP

Figure 10. Simulation Outcome: External Debt Service to International Reserves



The debt servicing cost is the main criteria for selecting the financing strategy that will be implemented in this MTDS, in line with the debt management objective of lowering the financing cost.

S2 results in the lowest debt servicing costs. As shown in figure 9, which ranks the four strategies in the cost (total debt service to GDP ratio)/risk space, S2 has the lowest interest cost and risk relative to the other strategies. The debt service to GDP ratio under S2 is about 4.8%, whereas the ratio under S1 is above 5%. S3 and S4 result in higher debt servicing costs (above 6%) due to the higher share of domestic borrowing, which is costlier than external financing. S3 and S4 have been introduced mainly for analytical purposes and are less feasible due to the nascent stage of the domestic debt market.

While S2 increases exchange rate risks, it leads to lower refinancing risks and interest rate risks relative to S1. While the external debt to GDP ratio is higher under S2 (98%) relative to S1 (89%), reflecting the higher share of external borrowing under S2, the PV of debt to GDP ratio under S2 (96%) is lower than under S1 (101%). S2 results in a higher share of foreign currency debt, but exchange rate risks are low as the majority of the foreign currency debt is denominated in INR. Refinancing and interest rate risks under S2 are lower than those under S1.

Overall, the simulation of the four financing strategies shows that S2 is the most appropriate and feasible strategy to achieve the debt management objectives. A potential risk of pursuing S2 is the inability of the government to raise the required amount of financing (80% of GFN) from external concessional windows.

The cost-risk indicators of the four strategies are further summarized in the table below:

Table 11. The Cost and Risk Indicators of the four strategies

Risk Indicators		2020	As at end 2023			
		Current	S1	S2	S3	S4
Nominal Debt as percent of GDP		120.6	115.6	115.7	115.6	115.6
PV of debt as percent of GDP		108.8	100.7	95.9	106.4	106.4
Interest payment as percent of GDP		1.4	1.9	1.7	2.3	2.2
Implied interest rate (percent)		1.1	2.8	2.5	3.3	3.1
Refinancing risk	Debt maturing in 1yr (percent of total)					
	Debt maturing in 1yr (% of GDP)	4.0	9.3	4.1	8.1	5.2
		5.2	10.8	4.7	9.3	6.0



	ATM External Portfolio (years)	11.3	10.9	11.9	9.3	9.3
	ATM Domestic Portfolio (years)	1.7	1.6	2.7	2.6	3.6
	ATM Total Portfolio (years)	11.2	10.0	11.7	8.0	8.2
Interest rate risk	ATR (years)	10.7	9.6	11.4	7.7	7.9
	Debt refixing in 1yr (percent of total)	8.9	12.9	7.7	11.8	8.9
	Fixed rate debt incl T-bills (percent of total)	94.9	96.1	96.1	96.1	96.1
	T-bills (percent of total)	0.6	5.2	0.2	3.6	0.7
FX risk	FX debt as % of total	99.0	89.2	97.7	79.7	79.6
	ST FX debt as % of reserves	7.1	6.1	6.1	6.1	6.1

Overall, the simulation of the four financing strategies shows that S2 is the most appropriate and feasible strategy to achieve the debt management strategy: the S2 leads to the lowest financing cost without enhancing the risks much compared to other strategies. Through S2 increases the foreign currency debt, which increases exchange rate risks, S2 leads to lower refinancing risks and interest rate risks.

However, much of the foreign currency debt is denominated in Indian Rupee, to which Bhutanese Ngultrum is pegged at par. Therefore, although pursuing S2 would accumulate a higher level of foreign currency debt, the exchange rate risks arising from implementing S2.

### 7.5 Preferred strategy and the rationale

S2 is the preferred strategy to achieve the stated debt management objective of lowering the financing cost and facilitating the development of an efficient domestic capital market. While the higher proportion of external concessional financing (80%) under S2 lowers the cost with some elements of risk, the financing of 20% of the GFN from the domestic market through the issuance of bonds is expected to facilitate the development of the domestic debt market.

Given that 80% of the GFN are financed from external sources, the exposure to exchange rate risks is projected to increase under S2. Therefore, it will be critical to monitor exchange rate movements and design a hedging strategy to mitigate exchange rate risks.

### 7.6 The MTDS in summary

In general, the government's MTDS for the next three fiscal years can be summarized as follows:

- i. Maximize concessional borrowings from multilateral and bilateral creditors to minimize the government's financing cost and risks;
- ii. Meet some portion of the government's total financing requirement through the issuance of T-Bills and varying maturity bonds to facilitate the development of domestic debt market in the country; and
- iii. Maintain the external debt burden indicators within the thresholds prescribed by the Public Debt Policy 2016.

Following are the broad set of targets to be achieved within this MTDS period:

- i. Meet 60%-80% of the gross financing need (GFN) from the external concessional windows;
- ii. Meet 20%-40% of the GFN from domestic sources, mainly through the issuance of medium and long-term bonds;
- iii. Maintain fixed-rate debt above 95% of the total debt to mitigate interest rate risks;
- iv. Gradually reduce the issuance of T-Bills for deficit financing; Use T-Bills primarily for the management of short-term revenue shortfall;
- v. Gradually develop the domestic market. Adopt auction as the primary method for the sale of government bonds;
- vi. Broaden the investor base - use the retail debt market.

## **8 Planned Initiatives for the development of a domestic debt market**

For domestic borrowing through the issuance of T-Bills and Bonds, the following systems and initiatives will be carried out.

***Develop Government Securities Issuance System:*** The Ministry of Finance in collaboration with RMA will develop an online system to receive bond subscriptions/bids and allot the bond, to make it easier for the investors to buy government securities. Besides, a credible, transparent system would make the issuance process more secure, boosting investor confidence in the process.

***Initiate consultation meetings with investors:*** The Ministry of Finance will initiate consultation meetings with government securities investors. The main objective of such meetings would be to discuss investor's preferences in terms of bond tenor and size to gain market knowledge to formulate a better issuance strategy.

***Introduce bond issuance calendar:*** The Ministry of Finance would work towards publishing a bond issuance calendar to reduce uncertainty and encourage more participation. The issuance calendar would contain general information about the planned issuance, such as the issue date, the tenor of the bond, and the tentative issue amount.

***Produce education materials on government bonds:*** Although the financial institutions know about investing in government bonds, the retail investors and the public are less familiar with government bonds. To broaden the investor base for government bonds, the Ministry of Finance in collaboration with the RMA will develop educational material on government bonds, such a brochures/pamphlets and short videos covering the basics of government bond, including issuance process, coupon payment process, and risks and benefits of investing in a government bond.

## **9 Revision of the MTDS**

Although the financing strategy could vary from year to year based on the government's cost and risk preferences, the broad objectives of debt management are expected to remain unchanged as articulated in the Public Debt Policy 2016.

The MoF will review the strategy annually to incorporate changes in macro-fiscal position and government's cost and risk preferences.

## **10 Conclusion**

This MTDS covering three fiscal years (from FY 2020/21 to FY 2022/23) fulfills one of the requirements for risks assessment and monitoring stipulated in the Public Debt Policy 2016. As required by the public debt policy, this MTDS has outlines financing strategy, based on rigorous cost and risks analysis, to help achieve the objectives of public debt management.

The financing strategy during medium term is designed at meeting a major share of the government's financing needs from external concessional sources to minimize financing costs—the primary objective for debt management in the medium term.

To facilitate the development of the efficient capital market, the strategy envisages financing some portion of gross financing need (GFN) from domestic market through regular issuance of bonds and T-Bills. The implementation of this strategy is expected activate the primary and secondary market, thus facilitating broader capital market development in the country.

This MTDS will not be a static document. The MoF will review the strategy annually to ensure that current strategy holds true under changing fiscal and monetary situation in the country.

## 11 Glossary

<b>Average Time to Maturity</b>	The weighted average time of maturity of all the principal repayments in the portfolio.
<b>Average Time to Refixing</b>	The weighted average time until all the principal payments in the debt portfolio become subject to new interest rate
<b>Bid-to-Cover Ratio</b>	The total bids received are divided by bid accepted and allotted. In the case of a bond auction, the ratio indicates how strong the demand for the government bond is.
<b>Bond</b>	A debt instrument that gives the holders the unconditional right to fixed payments or contractually determined variable payments on a specified date or date.
<b>Concessional Loans</b>	Loans that are extended on terms substantially more generous than market loans.
<b>Convertible Currency (CC) Debt</b>	External debt is other than those denominated in Indian Rupee.
<b>Debt Service</b>	The payments in respect of both principal and interest.
<b>Exchange rate risks</b>	The risk of an investment or instrument changing in value due to changes in exchange rates
<b>Grace period</b>	The period from which the loan agreement is signed to the first repayment of principal.
<b>Gross Financing Need</b>	The fiscal deficit, plus repayments, plus any other transactions that require financing.
<b>Interest rate risks</b>	The vulnerability of funding costs to higher interest rates, for example, when variable rates are reset and/or fixed rate debt needs to be refinanced.
<b>The present value of debt</b>	The discounted sum of all the future debt services at a given interest rate.
<b>Public Debt</b>	The debt of the public sector (i.e., RGoB, RMA, and Public Corporations).
<b>Rollover/Refinancing risks</b>	The possibility that the Government(borrower) cannot refinance by borrowing to repay the existing debt that matures.
<b>Treasury Bills</b>	The short-term debt instruments issued by the RGoB. Treasury bills are zero-coupon securities and pay no interest. They are issued at a discount and redeemed at the face value at maturity.

