# **ROYAL GOVERNMENT OF BHUTAN**



# PUBLIC DEBT SUSTAINABILITY ANALYSIS

# Department of Macroeconomic Affairs Ministry of Finance

March 2022

#### FOREWORD

Bhutan has achieved tremendous socioeconomic development since it started its modern economic development with the start of the first five-year plan (FYP) in 1961. Today, the country is on the cusp of graduating from the group of least developed countries (LICs). Such progress has been possible due to the far-sighted leadership of the successive Monarchs and the government. In addition, the unwavering support of the bilateral and multilateral development partners played a critical role in the country's socio-economic progress.

The country's earlier development plans and programs were fully financed through financial support from the Government of India (GoI), supplemented by small grants from other multilateral institutions. However, the bilateral and multilateral grants and meager domestic revenue have not been able to meet the increasing country's financing need to support required developmental activities. Therefore, the government has been availing loans to finance the country's developmental activities in the 1970s.

Bhutan availed its first loan from the GoI in the late 1970s for the construction of the Chhukha hydropower project and started availing concessional loans from the Asian Development Bank (ADB) and International Development Association (IDA) starting from the early 1980s. These loans have supported the financing of critical projects, such as hydropower projects and other social projects and programs, thus promoting rapid socioeconomic growth in the country. However, borrowings for hydropower projects and other developmental activities have drastically increased the public debt level in the country.

Although a major portion of the country's public debt is related to hydropower, which is selfliquidating, policymakers and the public have expressed concern about the sustainability of the current public debt level. Thus, it is imperative to periodically assess the risks of public debt distress, so that the government can take timely interventions, if required.

Therefore, this Debt Sustainability Analysis (DSA) report is timely and will go a long way in informing policy makers and the public on the sustainability of the current public debt and debt that would be accumulated due to future financing needs. In addition, this DSA would help the Ministry of Finance in updating its medium-term debt management strategy (MTDS) and in preparing the annual borrowing plan, to ensure government borrowings are carried out in a sustainable manner.

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## **1. INTRODUCTION**

Public debt sustainability has been one of the key anchors of the government's fiscal policy. Thus, the government adopted the Public Debt Policy in 2016 with the key objective "to ensure that financing decisions are prudent and public debt is maintained at a sustainable level."

The Public Debt Policy 2016 also stipulates Debt Sustainability Analysis (DSA) as one of the risk assessment and monitoring tools and requires the MoF to conduct a periodic DSA to monitor the risks and potential vulnerabilities of Bhutan's public debt. Further the policy recommends that the conduct of the DSA be timed in such a manner that it can supplement the biennial DSA conducted jointly by the International Monetary Fund (IMF) and the World Bank as per the Article IV consultations.

However, until now, the MoF has not been able to conduct a periodic DSA due to limited technical capacity. Therefore, the MoF initiated the conduct of its first in-house DSA this year with technical assistance from the World Bank and the IMF, to assess the level of external and public debt distress. Moreover, the outcome of this DSA would guide the government in updating its medium-term debt management strategy (MTDS), and in developing a credible annual borrowing plan. In addition, the DSA would help to timely implement appropriate policy measures if public debt sustainability is at risk.

This DSA was conducted using the revised Debt Sustainability Framework for Low-Income Countries (LIC DSF) developed jointly by the IMF and the World Bank. The LIC DSF helps the country determine the risks of debt distress, taking into account a country's specific debt-carrying capacity and its projected debt burden under both baseline projections and shock scenarios. The mechanical risk rating is based on the breaches of debt burden indicator thresholds under the baseline and shock scenarios, which are determined by the country's debt carrying capacity, categorized as weak, medium, and strong. For the current DSA vintage, Bhutan's debt carrying capacity was assessed as medium.

The macro-fiscal data for this DSA are based on the FY21/22 second-quarter update, which were endorsed by the Macroeconomic Framework Coordination Committee (MFCC) during its quarterly meeting in February 2022. The debt data covers public and publicly guaranteed (PPG) external debt, general government domestic debt and the domestic debt of non-financial state-owned enterprises (SOEs) under the Ministry of Finance. The next DSA will further extend the public debt coverage by including the domestic debt of non-financial SOEs under Druk Holdings and Investment (DHI). The cut-off date for the debt data used is 30 June 2021.

The assessment shows that the country's public debt breaches debt burden indicator thresholds, under both stress test and baseline scenario. Thus, mechanically rated, the country's public debt points towards high risks of distress. However, judgment was applied in line with the LIC DSF guidance note to arrive at a final risk rating of moderate risk for both external and public DSA. Judgment was applied due to unique risk mitigating factors of the country's hydropower debt, which constitutes the largest portion of the public debt portfolio.

This is the first in-house DSA conducted by the Ministry of Finance, Bhutan, which is separate from the biennial DSA conducted by IMF and World Bank as a part of IMF's Article IV consultation. Though the two DSAs use the same framework, the current DSA differs marginally on three fronts: first, this DSA covers domestic debt of SOEs under the Ministry of Finance, which were not covered in the previous DSAs conducted by IMF. Second, the principal recoveries from SOEs for on-lending have been adjusted for calculating the gross financing need, and interest during construction (IDC) for hydropower projects are recognized in the year that projects are commissioned. Third, this DSA report is more educational, by including a section on the LIC DSF methodology so that policymakers and other readers gain better understanding on how the assessment is done.

The subsequent sections are arranged as follows: Section II provides a brief overview of the current debt portfolio, which is then followed by discussion on recent macroeconomic development and macroeconomic assumptions (Section III). Section IV describes the methodology, followed by the discussion of results (Section V) and conclusion (Section VI).

## 2. DEBT PORTFOLIO REVIEW

### 2.1. Total public debt

Total public debt as of 31<sup>st</sup> December 2021 stood at Nu. 239.792 billion, accounting for 126.8% of FY 2021-22 gross domestic product (GDP) estimate. PPG External debt accounted for Nu. 222. 717 billion and domestic debt comprised Nu. 17.074 billion. The chart below shows the total public debt trend over the last five fiscal years:



Except for FY 2018-19, the public debt-to-GDP ratio has been rising steadily for the last five years. The ratio dropped in FY 2018-19 due to fall in domestic debt as a result of the liquidation of Tbills issued in the previous year. However, the ratio rose sharply in FY 2019-20 mainly due to the capitalization of Mangdechhu Hydropower Authority (MHPA)'s IDC of Nu. 12.256 billion and a higher level of hydro loan disbursements during the fiscal year. The public debt-to-GDP rose further at the end of FY 2020-21 to 134.2%; the drastic increase in the ratio was due to higher level of borrowing from both external and domestic borrowing during the year to meet financing requirement for COVID-19 measures.

## 2.2. PPG External debt by hydro and non-hydro

PPG external debt comprised mainly the hydropower debt of Nu. 162.486 billion, constituting 73% of total external debt or 85% of FY 2021-22 GDP. The non-hydro debt stood at Nu. 60.231 billion, accounting for 27% of total external debt or 31.8% FY 2021-22 GDP estimate. The non-hydro-debt-GDP was within the 35% threshold prescribed by the Public Debt Policy 2016.

The differentiation between hydro and non-hydro PPG external debt is particularly important in assessing the debt sustainability risks because of the following reasons:

- 1. Hydropower debts are deemed of lower risks compared to other debt since hydropower debt is self-liquidating: the hydropower export revenue is expected to adequately cover the debt servicing cost, as indicated by the past loans that had been availed for financing large hydropower projects which have been serviced and liquidated without any serious stress.
- 2. The GoI has guaranteed to buy 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.
- 3. 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.

## 2.3. PPG external debt by Indian Rupee(INR) and Convertible Currency(CC)

The INR-denominated stood at Nu. 155.183 billion, making up about 70% of the PPG external debt. The CC-denominated debt—the external debt denominated in foreign currencies other than INR—stood at Nu. 67.533 billion (\$906.74 million), comprising 30% of PPG external debt. The higher proportion of INR-denominated external debt implies lower exchange rate risk as Ngultrum is pegged at par with INR.

## 2.4. PPG external debt by creditors

The chart below presents the PPG external debt composition by creditors, both multilateral and bilateral creditors.



The Government of India (GoI) remains Bhutan's largest creditor (68% of the external loan), followed by the Asian Development Bank (ADB) (15%) and the International Development Association (IDA) (12%). The other remaining five creditor's loan outstanding accounted for only 5.4% of the total external debt. The debt owed to the GoI and the State Bank of India (SBI) is mainly on account of loans availed for financing past and ongoing hydropower projects in the country.

#### 2.5. Evolution of PPG external debt

The following chart shows the evolution of PPG external debt over the last five years (from FY 2016-17 to FY 2020-21)



Except in FY 2018-19, the PPG external debt-to-GDP has been rising over the last five years mainly because of the loan disbursements for ongoing hydropower projects and increased program

borrowings from the ADB and the World Bank. Over the last five years, the hydropower loan disbursement totaled Nu. 42.963 billion, averaging Nu. 8.592 billion per year.

The PPG external debt-to-GDP further rose to 124.2% in FY 2020-21 as a result of larger program borrowings from ADB and World Bank during the FY. During the FY 2020-21 government availed additional borrowings from these two multilateral financial institutions for financing the COVID-19 response measures in the country. The FY saw the highest level of program borrowing from ADB and World Bank compared to any of the past fiscal years. In addition, there are also loan disbursements of Nu. 5.148 billion during the FY for the ongoing hydropower projects. On the other hand, the country's economy recorded its highest contraction in 2020 due to the COVID-19 pandemic, worsening the country's debt-to-GDP ratio.

## **3. PUBLIC DEBT COVERAGE**

The public debt covered for this DSA is briefly describe below:

1. Public and publicly guaranteed external debt: the external debt of the general government, non-financial SOEs, and the central bank.

2. General government domestic debt and the domestic debt of SOEs under the Ministry of Finance (MoF). The domestic debt of SoEs was not covered in earlier DSAs.

	Subsectors of the public sector	Coverage
1	Central government	Х
2	State and local government	Х
3	Other elements in the general government	
4	o/w: Social security fund	
5	o/w: Extra budgetary funds (EBFs)	
6	Guarantees (to other entities in the public and private sector, including to	Х
	SOEs)	
7	Central bank (borrowed on behalf of the government)	X
8	Non-guaranteed SOE debt	X

The public debt coverage is summarized in the following table:

The domestic debt of SOEs under the Druk Holdings and Investments (DHI) has not been covered since these enterprises pose limited fiscal risks. The SOEs under DHI operate on a commercial basis and the government does not provide subsidies to these SOEs. Nevertheless, the next DSA will cover the domestic debts of SOEs under DHI.

## 4. ECONOMY PERFORMANCE AND KEY MACROECONOMIC ASSUMPTIONS

#### 3.1. Economy performance and transition from 1980-2018

Bhutan has achieved unprecedented economic growth during the past 4 decades recording an average annual growth of 7.4 percent. GDP grew from Nu.1.031 billion in 1980 to Nu.167.327 billion in 2018 as the economic base gradually shifted from primary sector to industry and tertiary sectors. GDP per capita also increased substantially during the period reaching USD 3,512 in 2018, which was amongst the highest in the region and also compared with some of the world's small and developing economies.



Further, high economic growth trickled into social development as measured through significant progress in human development and poverty reduction. The human development index (HDI) increased from 0.512 in 2005 to 0.617 in 2017, poverty headcount reduced from 31.2 percent in 2003 to 8.2 percent by 2017, life expectancy at birth increased from 53 in 1990 to 71.5 in 2018, and expected years of schooling increased from 5.4 in 1990 to 12.1 by 2018.

During the past 4 decades of growth and progress, the economy also transitioned from an agrarian society to a hydro-based and service-led economy. The share of agriculture in GDP steeply dropped as the industry sector's share in GDP increased.

## 3.2. Recent developments

The economy grew by 5.7 percent in 2019 compared to 3 percent in 2018, an increase of 2.7 percentage points. The growth was mainly driven by steady performance in the services sector, higher output in the industry sector, primarily with the commissioning of Mangdechhu Hydro Power (MHP), and increased government spending.

However, the economic performance in 2020 was significantly impacted by the COVID-19 pandemic, recording an all-time low of -10.08 percent. The service sector experienced its steepest

decline as demand in consumer-driven sectors like retail, accommodation, and transport were affected. Industries that rely on foreign labor and raw materials led to a decline in industrial output further aggravated by a fall in demand, both international and domestic.

Economic activities are expected to pick up with the successful vaccination program seen as a significant step towards providing herd immunity. A gradual economic recovery is anticipated to be supported by the mass vaccination program, higher capital investment and government consumption, and ongoing fiscal and monetary support. Therefore, economic growth in 2021 and the medium term is expected to rebound and improve based on the assumptions highlighted below.

## **3.3. Macroeconomic assumptions**

This section describes the underlying assumption used for the projection of key macro-fiscal projections for the DSA. The macro-fiscal projections are based on the second-quarter update that was endorsed by the Macroeconomic Framework Coordination Committee during its quarterly meeting in the first week of February 2022. The underlying assumptions for key macro-fiscal indicators are briefly described below.

## 3.3.1. Real sector

Economic activities started to rebound in 2021 as the spread of COVID-19 slowed and containment measures were gradually relaxed. Industrial output grew and trade performance significantly improved due to strong domestic and foreign demand. As a result, the economy is expected to grow by 3.7 percent with a medium-term outlook of around 5 percent on average.

The optimistic medium-term economic recovery is based on the assumption of sustained progress in containing the spread of new variants, the rollout of booster vaccines, and robust policy measures.

The growth in the medium and long-term will be mainly driven by the commissioning of ongoing hydropower projects in the next three years: four large hydropower projects are expected to be completed three years from now as shown in the table below.

Hydropower Project	Capacity	Commissioning Date
PHPA-I	1200 MW	Mar-25
PHPA-II	1020 MW	Jun-23
Kholongchu Hydropower Project	600 MW	Oct-25
Tangsibji Hydropower Project	118 MW	Dec-22

The commissioning of these projects will significantly increase the country's export to India, while also supporting the financing of Bhutan's forthcoming 13<sup>th</sup> five-year plan (FYP) through increased revenue contribution to the Government in the form of royalty and taxes. In addition, the opening

of the country to tourists is also expected to have a significant positive impact on the medium- and long-term economic growth.

## 3.3.2 Fiscal sector

One of the biggest fiscal challenges facing the country is increased spending requirements, while revenue has been falling due to disruption of economic activities by the COVID-19 pandemic. As a result, the fiscal deficit is expected to remain elevated in the short term. To stimulate economic activity, the government will adopt an expansionary fiscal stance during FY 2021-22 and FY 2022-23, the last year of the 12<sup>th</sup> FYP. The expansionary fiscal stance is expected to boost economic growth, enhance tax revenue and generate employment.

For the 13<sup>th</sup> FYP, which will start from July 2023, the annual average growth rate of government investment has been projected at 12%. The domestic revenue is also expected to improve significantly during the plan period due to the commissioning of ongoing hydropower projects, improved collection due to better enforcement, digitization, and fiscal and tax reforms<sup>1</sup>.

## **3.3.4 External sector**

The current account balance is expected to improve significantly in the medium- to long-term, as shown in the below chart.



<sup>&</sup>lt;sup>1</sup> However, the 13<sup>th</sup> FYP is currently at the initial stage of formulation. Therefore, it is difficult to project the level of capital expenditure in the medium to long-term. Nonetheless, the 13<sup>th</sup> FYP is expected to support economic recovery.

The current account surplus is expected to average 0.5% of GDP in the 13<sup>th</sup> five-year plan (2023-2028), in contrast to average annual deficit of 15.9% of GDP in the 12<sup>th</sup> FYP. In the long run (2023-2041), the current account surplus is projected to stabilize at an annual average of around 1.75% of GDP.

The turnaround in current account balance in the medium-to-long term would primarily be driven by increased electricity exports to India after the commissioning of four ongoing mega hydropower projects. The electricity exports in the medium-term (13<sup>th</sup> FYP) are projected to average Nu. 65.77 billion per year, compared to the annual average of Nu. 23.47 billion during the 12<sup>th</sup> FYP. On the other hand, imports related to the construction of hydropower projects are expected to drop significantly after the commissioning of the last hydropower project—Kholongchu Hydropower Project—in October 2025.

Key macroeconomic assumptions	Average (2021- 2031)
Real GDP growth (in percent)	4.61
GDP deflator in US dollar terms (change in percent)	2.57
Growth of exports of G&S (US dollar terms, in percent)	9.75
Growth of imports of G&S (US dollar terms, in percent)	5.13
Government revenues (excluding grants, in percent of GDP)	19.64
Grant-equivalent financing (in percent of GDP)	7.24
Grant-equivalent financing (in percent of external financing)	59.39
Primary Balance (in percent of GDP)	1.32
Non-interest current account balance in percent of GDP	2.80

A summary of medium-term key macroeconomic variables is provided in the table below:

## 3.4. Realism of baseline projections

The realism tools embedded in the LIC DSF framework help evaluate the realism of the baseline scenario, which is critical for credible assessment of debt sustainability. The framework includes four realism tools: (a) drivers of debt dynamics, (b) realism of planned fiscal adjustments, (c) fiscal adjustment-growth relationship, and (d) public investment-growth relationship. The outcomes of the four realism tools are discussed in detail in Annexure-I.

## 3.5. Main risks for the macroeconomic outlook

Although the vaccine rollouts have raised hopes of a turnaround in the pandemic, renewed waves and new variants of the virus pose concerns and risks for the outlook. There is still a lot of uncertainty that surrounds the economic outlook, related to the pandemic path and how successful policy assistance will be in providing a bridge to vaccine-powered normality.

As the risk of new infections heightens, especially due to the third wave, economic recovery might be slower than anticipated. The construction sector, which is already faced with acute labor shortage and escalating prices, is likely to experience a persistent slowdown in the medium term. Further, with the pegged exchange rate regime, any depreciation of INR against USD would raise the cost of imports from third countries and increase the cost of convertible currency debt servicing. Other external risks could also emanate through trade and finance if global output continues to decline. Attracting foreign direct investment (FDI) would be challenging due to uncertainty of the investment climate. The revival of the tourism industry is dependent on the external environment and changing consumer behavior.

While the hydropower sector has mitigated the impact on growth to a large extent, associated risks due to climate change and the need to generate adequate employment opportunities for the youth have heightened the need for diversification. Economic diversification continues to remain a major macroeconomic challenge. Further, the disruption in supply of construction materials and shortage of skilled laborers could also delay the completion of hydro power projects, significantly affecting medium-term economic growth. This could lead to lower electricity exports, a deterioration in the current account balance and the government fiscal balance, which in turn would increase the gross financing needs.

Financial vulnerabilities remain elevated, with pressures on asset quality yet to be reflected in reported asset quality indicators. While the reported non-performing loan (NPL) ratio decreased to 14.1 percent in September 2021 (from 16.3 percent in September 2020), actual asset quality is expected to deteriorate once the interest moratorium and forbearance measures are phased out in June 2022.

## 4. METHODOLOGY

The DSA was conducted using the revised LIC DSF developed jointly by the IMF and the World Bank. The LIC DSF is a standard methodology for conducting standardized debt sustainability analysis, and it is anchored on debt burden indicator thresholds based on the country's debt carrying capacity, measured by a composite indicator (CI).

## 4.1. Country classification and debt indicator thresholds

The LIC DSF classifies a country's debt carrying capacity into three categories— weak, medium, and strong—based on the CI score. The CI "captures the impact of different factors through a weighted average of the World Bank's Country Policy and Institutional Assessment (CPIA)<sup>2</sup> score, the country's real GDP, growth, remittances, international reserves, and world growth".

<sup>&</sup>lt;sup>2</sup> CPIA is an index compiled annually by the World Bank for all IDA-eligible countries. The index consists of 16 indicators grouped into four categories: (1) economic management; (2) structural policies; (3) policies for social inclusion and equity; and (4) public sector management and institutions. Countries are rated on their current status in each of these performance criteria, with scores from 1 (lowest) to 6 (highest).

As of March 2022, Bhutan's debt carrying capacity was classified as medium. Based on the medium debt carrying capacity, the following debt stock and debt servicing thresholds were applied for the external DSA current DSA.

Debt Burden Indicators	Thresholds
Present value (PV) of external debt to GDP	40%
PV of external debt to Exports	180%
PPG Debt Services to Exports	15%
PPG external debt service to Revenue	18%

The benchmark for public debt (PPG external debt plus PPG domestic debt) for the country with medium debt-carrying capacity is the PV of PPG total public to GDP of 55%.

## 4.2 Stress test

Stress tests are useful to determine or gauge the sensitivity of the debt burden indicators to changes in assumptions. For this DSA, the following six standardized stress test outlined in the LIC DSF were applied:

- 1. **Real GDP:** Set to historical average minus one standard deviation, or baseline projection one minus standard deviation, whichever is lower for the second and third years of the projection period.
- 2. **Primary balance:** Primary balance-to-GDP ratio set to its historical average minus one standard deviation, or the baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period.
- 3. **Exports:** Nominal export growth (in USD) set to its historical average minus one standard deviation, or the baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period.
- 4. **Other flows:** Current transfers-to-GDP and FDI-to-GDP ratios set to their historical average minus one standard deviation, or baseline projection minus one standard deviation, whichever is lower in the second and third years of the projection period.
- 5. **Depreciation:** One-time 30 percent nominal depreciation of the domestic currency in the second year of the projection period, or the size needed to close the estimated real exchange rate overvaluation gap, whichever is larger.
- 6. **Combination of 1 through 5:** Apply all individual shocks (1 through 5) at half of the magnitude.

## 4.3. Risk rating mechanism

The risk rating is based on the number of debt thresholds breached under the baseline and stresstest scenarios during the first 10 years of projections. The risk rating criteria is summarized in the table below:

External risk rating	No. of breaches under baseline	No. of breaches under stress test
Low	0	0
Moderate	0	1 or more
High	1 or more with no current repayment difficulties	
	1. Significant or sustained breach	
In debt distress	2. Actual or impending debt restructuring	negotiations
	3. Existence of arrears	

The external risk rating is assigned by comparing the projected evolution of four PPG external debt burden indicators in the first 10 years of the projections under both baseline and stress-test scenarios. However, in addition to the mechanical risks rating summarized in the table, judgment can also be made for arriving at the final risk rating. Using judgment allows taking into account "the country-specific factors that are not fully accounted for in the model". In all of the previous DSA conducted by the IMF and the World Bank, the final risk rating was assigned based on judgment.

#### 5. RESULT AND RISK RATING

#### 5.1. External DSA

The following charts show the evolution of Bhutan's four external debt burden indicators under the baseline and stress-test scenarios. All four debt burden indicators breach their indicative threshold under both baseline and stress tests, as presented in the charts below.



As illustrated in the graphs, the stress tests show that the country's external debt is vulnerable to exchange rate and export shocks, similar to the 2018 DSA conducted jointly by the IMF and World Bank.

At the current level of external debt and projected external borrowing, the PV of external debt-to-GDP ratio is projected to fall to the threshold level by FY 2033/34, and remain below the threshold level thereafter. The two ratios— PV of external debt-to-exports ratio and debt service-to-revenue ratio—under the baseline scenario are expected to remain elevated and above the threshold for the foreseeable future.

### 5.2. Public DSA

The PV of public debt-to-GDP ratio also breaches the benchmark under both baseline scenario and the stress test scenario as presented in the chart below:



As illustrated, the PV of public debt-to-GDP ratio is projected to fall to the threshold level of 55% only by FY 2036-37 under baseline scenario. However, under the extreme shock—growth— the PV of public debt-to-GDP is projected to remain highly elevated throughout the project years.

### 5.3. Final risk rating: moderate

The mechanical results point at high risks of overall and external debt distress, since all the indicators are breached under both baseline scenario and stress tests. However, judgment was used to arrive at the final rating of moderate risk because of the following reasons:

1. More than 70% of the external debt is hydropower debt, majority portion of which is denominated in INR to which Ngultrum is pegged at par, thus mitigating the exchange rate risks. Moreover, hydropower projects which are deemed commercially viable, with a confirmed export market in India.

2. The hydro debt service coverage ratio is quite high, indicating sufficient operating income of the hydropower projects. In addition, debt servicing of hydropower debt contracted from GoI starts only one year after the mean commercial operation date, which means the hydropower projects would have already generated revenue for servicing its debt, thus lowering or eliminating the default risks.

3. The electricity export tariff is fixed based on the total cost of the project plus some margin, which implies that the export tariff is higher if the debt servicing cost is higher due to the increase in total project cost. This ensures that the debt servicing cost is adequately covered by the project's export revenue. The export tariff rates are revised every three years to incorporate changes in costs.

### **ANNEXURE I- OUTPUT CHARTS FROM REALISM TOOLS**

#### 1. Drivers of external debt dynamic

The charts bellow show the main drivers of debt dynamics.



The contribution of the current account and FDI to debt creating flows is projected to be lower in the next five-year period (2021-25), compared to their contribution in the previous five years. The drop is mainly due to the expected improvement in the current account balance in the medium-term due to the increase in electricity exports to India after the commissioning of ongoing hydropower projects. The completion of the hydro projects is also expected to lower imports related to the hydropower project construction, which further improves the current account balance.

On the other hand, the contribution of real GDP growth to the change (reduction) in debt-to-GDP ratio is expected to increase in the next five years. The economic contraction in the last two fiscal years pushed up the public debt-to-GDP ratio. However, with increased vaccination coverage and the easing of the COVID-19 restrictions, the economy is projected to rebound with an average growth rate of 5.2 percent over the next five years, lowering the debt-to-GDP ratio (the absolute value of public debt is projected to increase steadily in the medium term).

#### 2. Realism of planned fiscal adjustment

The chart below shows the country's 3-year primary balance adjustment, compared to other lowincome countries in the sample:



3-Year Adjustment in Primary Balance (Percentage points of GDP)

The primary balance, as a percent of GDP, is expected to improve by 2.2 percentage points by 2023-24 compared to the primary balance in FY 2020-21. Although, the 3-year primary balance adjustment of 2.2 percentage points is in the upper quartile of the distribution, the adjustment is credible: the capital expenditure is projected to be much lower in FY 2023-24, the first year of the 13<sup>th</sup> FYP, significantly improving the primary balance, which had deteriorated in recent years due to increased government spending related to COVID-19 measures. On the other hand, the nominal GDP in FY 2023-24 is projected to be higher due to the recovery of services including wholesale and retail trade, hotel and restaurants. Further, one of the largest hydropower projects—Puna-II— is expected to be fully commissioned by FY 2022-23, drastically increasing the electricity generation and exports. Thus, the comparatively optimistic primary balance adjustment is reasonable.

#### 3. Fiscal adjustment and possible growth path



Fiscal Adjustment and Possible Growth Paths 1/

The baseline GDP growth projection for FY 2021-22 and FY 2022-23 deviate significantly from the possible growth paths under various fiscal multipliers. The deviation results from two factors: first, baseline growth projections assume a rebounding of the economy due to wider vaccine coverage and further easing of the COVID-19 restrictions. Second, the growth projection for FY 2022-23 takes into account the commissioning of the Puna-II hydropower project, drastically boosting economic growth. These two important growth factors are not captured in the standard fiscal multipliers, thus contributing to the large deviation between the baseline growth projection and the growth projection under various fiscal multipliers.

<sup>1/</sup> Bars refer to annual projected fiscal adjustment (right-hand side scale) and lines show possible real GDP growth paths under different fiscal multipliers (left-hand side scale).

### 4. Public investment-growth relationship



The projected private and government investment as a percent of GDP in the current DSA remains similar to the 2018 DSA in the medium-term at around 23% and 6% respectively. Further, the contribution of government capital (5-year average) to real GDP growth is aligned with the previous DSA projections.

## ANNEXURE II: BASELINE AND SENSITIVITY ANALYSIS SCENARIO TABLES

(In percent of GDP, unless otherwise indicated)															
	A	ctual		Projections								Average 8/			
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2031	2041	Historical	Projections		
External debt (nominal) 1/	103.8	114.8	125.3	124.2	138.8	129.4	144.1	133.4	121.4	70.6	14.8	97.1	112.8		
of which: public and publicly guaranteed (PPG)	101.3	111.6	124.2	123.2	138.0	128.7	143.5	133.0	121.0	70.6	14.8	95.0	112.4		
Change in external debt	-2.9	11.1	10.5	-1.1	14.6	-9.4	14.7	-10.7	-12.0	-9.0	-1.8				
Identified net debt-creating flows	22.5	14.0	13.4	17.0	6.1	-0.8	-3.3	-9.5	-10.6	-7.2	-4.0	19.1	-3.7		
Non-interest current account deficit	19.1	11.4	10.9	18.0	10.0	3.5	-0.9	-6.7	-11.1	-7.8	-3.5	20.0	-2.8		
Deficit in balance of goods and services	18.4	12.9	11.8	20.5	11.2	5.9	2.7	-2.1	-6.2	-3.8	-1.9	21.4	0.7		
Exports	31.7	32.4	31.0	32.1	33.4	35.6	39.5	42.4	45.1	36.4	22.1				
Imports	50.2	45.4	42.8	52.5	44.7	41.5	42.3	40.3	38.9	32.6	20.2				
Net current transfers (negative = inflow)	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2		
of which: official	-6.2	-9.0	-8.4	-11.3	-3.3	-3.6	-6.0	-5.6	-5.3	-3.2	-0.2				
Other current account flows (negative = net inflow)	0.9	-1.3	-0.7	-2.3	-1.0	-2.3	-3.5	-4.5	-4.8	-3.9	-1.5	-1.2	-3.4		
Net FDI (negative = inflow)	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2	0.0		
Endogenous debt dynamics 2/	3.8	2.6	2.5	-1.0	-3.9	-4.3	-2.4	-2.8	0.5	0.6	-0.4				
Contribution from nominal interest rate	1.4	1.1	1.4	3.3	2.9	3.5	4.0	4.5	5.4	3.8	0.3				
Contribution from real GDP growth	-4.8	2.5	4.1	-4.2	-6.9	-7.8	-6.4	-7.3	-4.9	-3.2	-0.8				
Contribution from price and exchange rate changes	7.3	-0.9	-3.0												
Residual 3/	-25.4	-2.9	-2.9	-18.1	8.5	-8.6	18.0	-1.2	-1.4	-1.8	2.2	-11.9	-1.2		
of which: exceptional financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
Sustainability indicators															
PV of PPG external debt-to-GDP ratio			138.7	137.3	146.1	137.1	144.3	133.7	121.4	68.0	9.6				
PV of PPG external debt-to-exports ratio			446.9	428.2	436.8	385.6	364.9	315.3	269.1	186.8	43.4				
PPG debt service-to-exports ratio	9.3	5.5	11.4	19.3	21.3	28.7	22.9	26.5	28.6	27.2	6.9				
PPG debt service-to-revenue ratio	16.1	8.0	13.8	33.4	40.6	50.4	49.3	45.9	64.6	55.6	11.7				
Gross external financing need (Million of U.S. dollars)	571.1	360.4	374.0	613.7	476.5	418.8	271.5	164.4	70.6	112.4	-236.6				
Key macroeconomic assumptions															
Real GDP growth (in percent)	4.4	-2.4	-3.6	3.6	6.1	6.2	5.4	5.5	3.9	4.3	5.1	3.6	4.6		
GDP deflator in US dollar terms (change in percent)	-6.4	0.9	2.7	1.8	2.9	3.2	3.3	2.4	2.2	2.7	3.6	0.0	2.6		
Effective interest rate (percent) 4/	1.3	1.0	1.2	2.7	2.6	2.8	3.4	3.4	4.3	5.1	2.1	2.6	3.9		
Growth of exports of G&S (US dollar terms, in percent)	-1.9	0.8	-5.2	9.0	13.9	16.6	21.0	15.8	12.9	2.1	3.5	0.2	9.1		
Growth of imports of G&S (US dollar terms, in percent)	-1.2	-10.9	-6.4	29.3	-7.2	1.9	10.9	3.1	2.4	3.3	3.4	-2.2	5.0		
Grant element of new public sector borrowing (in percent)				27.7	26.9	19.6	29.2	28.0	45.4	45.4	49.4		36.7		
Government revenues (excluding grants, in percent of GDP)	18.4	22.1	25.7	18.5	17.5	20.3	18.3	24.4	20.0	17.8	13.0	21.5	19.5		
Aid flows (in Million of US dollars) 5/	144.9	220.2	195.6	290.5	325.0	169.7	244.9	249.0	259.2	231.4	124.1		7.0		
Grant-equivalent financing (in percent of GDP) 6/				10.5	10.9	5.0	14.0	0.0	0.4	4.1	0.9		7.0		
Grant-equivalent financing (in percent of external financing) 6/				66. I	44.3	39.4	39.5	58.1	77.9	/5./	/0.2		60.9		
Nominal GDP (Million of US dollars)	2,452	2,416	2,393	2,523	2,755	3,020	3,287	3,551	3,768	5,177	11,680				
Nominal dollar GDP growth	-2.3	-1.5	-0.9	5.4	9.2	9.6	8.9	8.0	6.1	7.0	8.9	3.0	7.3		
Memorandum items:															
PV of external debt 7/			139.8	138 3	146 9	137.8	144.8	134 1	121 7	68.0	96				
In percent of exports			450.6	431.2	439.2	387.5	366.3	316.3	269.8	186.9	43.0				
Total external debt service-to-exports ratio	 14 6	 10 9	15.1	19.8	217	29.1	23.2	26.7	28.9	27 5	6.9				
PV of PPG external debt (in Million of US dollars)	0.71	10.5	3318.8	3464.0	4024.0	4141.6	4742.9	47467	4574 5	3521.8	1121 3				
(PVt-PVt-1)/GDPt-1 (in percent)				61	22.2	43	19.9	01	-4.8	-49	-0.5				
Non-interest current account deficit that stabilizes debt ratio	22.0	03	04	19.1	-4 5	12.9	-15.6	4.0	0.9	1.2	-17				
		0.0							0.5						

### Table 2. Bhutan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2018-2041

(In percent of GDP, unless otherwise indicated)

	A	ctual		Projections									
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2031	2041		
Public sector debt 1/	104.3	112.7	134.5	141.0	160.9	155.6	171.7	159.7	150.4	107.2	33.7		
of which: external debt	101.3	111.6	124.2	123.2	138.0	128.7	143.5	133.0	121.0	70.6	14.8		
Change in public sector debt	-5.0	8.4	21.8	6.5	19.9	-5.3	16.0	-11.9	-9.3	-8.8	-5.6		
Identified debt-creating flows	-3.4	11.1	2.8	4.2	-2.1	-5.8	-4.5	-9.2	-2.8	-4.0	-5.3		
Primary deficit	0.7	1.5	5.3	8.0	5.7	3.0	2.2	-2.4	-0.2	-2.0	-3.6		
Revenue and grants	24.3	31.2	33.8	26.9	26.6	23.4	23.5	29.3	24.9	20.9	13.5		
of which: grants	5.9	9.1	8.2	8.4	9.1	3.1	5.2	4.9	4.9	3.0	0.5		
Primary (noninterest) expenditure	25.0	32.6	39.1	34.9	32.4	26.5	25.7	27.0	24.7	18.8	9.9		
Automatic debt dynamics	-4.1	9.6	-2.4	-3.7	-7.8	-8.9	-6.7	-6.8	-2.6	-2.0	-1.7		
Contribution from interest rate/growth differential	-5.6	1.6	4.4	-3.7	-7.8	-8.9	-6.7	-6.8	-2.6	-2.0	-1.7		
of which: contribution from average real interest rate	-1.0	-1.0	0.2	0.9	0.2	0.5	1.3	2.1	3.3	2.7	0.2		
of which: contribution from real GDP growth	-4.6	2.5	4.2	-4.6	-8.0	-9.4	-8.0	-8.9	-6.0	-4.7	-1.9		
Contribution from real exchange rate depreciation	1.5	8.0	-6.8										
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Recognition of contingent liabilities (e.g., bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Debt relief (HIPC and other)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Other debt creating or reducing flow (please specify)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Residual	-1.6	-2.6	19.0	2.2	22.0	0.6	20.5	-2.7	-6.4	-4.8	-0.3		
Sustainability indicators													
PV of public debt-to-GDP ratio 2/			148.7	155.9	170.0	164.9	173.4	161.3	151.6	105.2	28.6		
PV of public debt-to-revenue and grants ratio			439.3	578.8	638.2	704.3	737.4	549.8	609.6	504.0	212.2		
Debt service-to-revenue and grants ratio 3/	12.8	6.2	11.0	49.2	64.5	102.0	99.7	86.8	103.7	134.2	60.6		
Gross financing need 4/	3.8	3.4	9.0	21.3	22.9	26.9	25.6	23.1	25.6	26.0	4.6		
Key macroeconomic and fiscal assumptions													
Real GDP growth (in percent)	4.4	-2.4	-3.6	3.6	6.1	6.2	5.4	5.5	3.9	4.3	5.1		
Average nominal interest rate on external debt (in percent)	1.3	0.8	1.3	2.7	2.6	2.8	3.3	3.4	4.3	5.1	2.2		
Average real interest rate on domestic debt (in percent)	1.9	2.1	10.6	-1.5	-0.8	-0.6	-0.7	0.8	1.2	1.1	0.8		
Real exchange rate depreciation (in percent, + indicates depreciation)	1.6	7.8	-5.9										
Inflation rate (GDP deflator, in percent)	1.3	3.7	4.5	2.9	4.0	4.1	4.1	3.3	3.1	3.6	4.6		
Growth of real primary spending (deflated by GDP deflator, in percent)	-19.0	27.7	15.5	-7.5	-1.8	-13.2	2.4	10.8	-5.1	-5.0	-0.9		
Primary deficit that stabilizes the debt-to-GDP ratio 5/	5.7	-7.0	-16.5	1.5	-14.2	8.3	-13.9	9.6	9.1	6.8	2.0		
PV of contingent liabilities (not included in public sector debt)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

#### Table 3. Bhutan: Sensitivity Analysis for Key Indicators of Public and Publicly Guaranteed External Debt, 2021-2031

(In percent)

					Proj	ections	1/						
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
	PV of debt-to	GDP rat	io										
Baseline	137	146	137	144	134	121	110	99	88	78	68		
A. Alternative Scenarios													
A1. Key variables at their historical averages in 2021-2031 2/	137	160	171	199	213	225	237	249	261	272	283		
B. Bound Tests													
B1. Real GDP growth	137	161	167	175	162	147	134	120	107	94	83		
B2. Primary balance	137	147	138	146	135	123	112	101	90	80	70		
B3. Exports	137	153	155	162	151	138	126	114	102	91	80		
B4. Other flows 3/	137	146	138	145	134	122	111	100	88	78	68		
B5. Depreciation	137	184	169	178	165	150	136	122	108	95	83		
B6. Combination of B1-B5	137	167	166	175	162	147	134	121	107	95	83		
C. Tailored Tests													
C1. Combined contingent liabilities	137	148	140	147	136	125	114	103	92	81	72		
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
C3. Commodity price	137	149	143	152	142	131	119	108	96	85	75		
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Threshold	40	40	40	40	40	40	40	40	40	40	40		
PV of debt-to-exports ratio													
Baseline	428	437	386	365	315	269	253	238	221	204	187		
	-720		500	505	5.5	200	200	230		204	107		
A. Alternative Scenarios	100	470	470	503	500	400		500		740	770		
A1. Key variables at their historical averages in 2021-2031 2/	428	4/8	479	503	502	499	540	299	655	/15	//6		
B. Bound Tests					_								
B1. Real GDP growth	428	437	386	365	315	269	253	238	221	204	187		
B2. Primary balance	428	438	389	369	319	273	258	243	226	209	193		
B3. Exports	428	552	650	610	529	455	431	409	382	354	326		
B4. Other flows 3/	428	438	387	300	310	2/0	254	239	222	205	100		
B5. Depreciation B6. Combination of B1-B5	428	529	301	527	456	204	240	235	320	296	271		
	420	525	391	521	450	309	307	545	520	290	2/1		
C. Tailored Tests													
C1. Combined contingent liabilities	428	442	393	372	322	276	261	247	230	213	197		
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
C3. Commodity price	428	454	408	389	339	291	2/5	259	242	224	206		
C4. Market Financing	II.d.	n.d.	n.d.	II.d.	n.d.	II.d.	II.d.	II.d.	II.d.	n.d.	n.d.		
Threshold	180	180	180	180	180	180	180	180	180	180	180		
	Debt service-to-	exports	ratio										
Baseline	19	21	29	23	26	29	28	28	28	28	27		
A. Alternative Scenarios													
A1. Key variables at their historical averages in 2021-2031 2/	19	22	32	28	34	39	41	43	47	52	57		
B. Bound Tests													
B1. Real GDP growth	19	21	29	23	26	29	28	28	28	28	27		
B2. Primary balance	19	21	29	23	27	29	28	28	28	28	28		
B3. Exports	19	26	45	37	42	45	45	45	45	46	46		
B4. Other flows 3/	19	21	29	23	27	29	28	28	28	28	27		
B5. Depreciation	19	21	29	23	26	28	28	28	28	27	27		
B6. Combination of B1-B5	19	25	41	33	38	41	40	40	41	40	39		
C. Tailored Tests													
C1. Combined contingent liabilities	19	21	29	23	27	29	28	28	28	28	27		
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
C3. Commodity price	19	22	30	24	28	31	30	30	30	30	29		
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		
Threshold	15	15	15	15	15	15	15	15	15	15	15		
Intestion	15	15	15	15	15	15	15	15	15	15	15		
	Debt service-to-ı	revenue	ratio										
Baseline	33	41	50	49	46	65	62	60	58	56	56		
A Alternative Connector													
A. Alternative Scenarios	22	43	57	60	60	00	00	07	07	106	116		
AT. Key variables at their historical averages in 2021-2031 2/	33	45	57	00	00	00	09	92	97	100	110		
B. Bound Tests													
B1. Real GDP growth	33	45	61	60	56	78	75	73	70	69	68		
pz. minary balance B3 Exports	33	41	50	49	46	65 69	62	60	58	57	50		
B4 Other flows 3/	33	41	50	25 /0	49	65	60	64 60	50	57	55		
B5. Depreciation	33	51	63	49	40	81 81	77	75	50 72	70	60		
B6. Combination of B1-B5	33	45	61	59	55	77	74	75	71	68	67		
C Tailand Tasta	55									50			
c. ranored rests				50		~	~~	~~					
C1. Combined contingent liabilities C2. Natural disaster	33	41	51	50	46	65	62	60	58	57	56		
C3. Commodity price	11.8.	n.a. A6	n.a. 58	1.d. 58	1.d. 52	11.d. 72	11.d. 69	64	62	61	60		
C4. Market Financing	<b>55</b> - 1	40 na	na.	De Da	<b>52</b>	1 <u>4</u>	na	<b>04</b> na	<b>32</b>	na	na		
Threshold	11.d.	1.a.	1.a.	1.a.	10	1.a.	1.a.	1.0.	1.a.	1.4.	11.0.		
Tiresholu	18	18	18	18	18	18	18	18	18	18	18		

#### Table 4. Bhutan: Sensitivity Analysis for Key Indicators of Public Debt , 2021-2031

	Projections 1/										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
	P\	/ of Debt-	to-GDP Ra	atio							
Baseline	156	170	165	173	161	152	143	133	123	115	105
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	156	169	165	175	165	153	143	133	123	115	107
B. Bound Tests											
B1. Real GDP growth	156	189	206	219	209	200	192	184	174	167	157
B2. Primary balance	156	172	170	178	165	156	146	137	126	118	108
B3. Exports	156	174	178	186	173	164	154	145	134	125	114
B4. Other flows 3/	156	170	165	174	162	152	143	134	123	115	106
B5. Depreciation	156	203	195	196	182	171	161	151	139	130	120
B6. Combination of B1-B5	156	171	173	182	170	161	151	142	131	123	113
C. Tailored Tests											
C1. Combined contingent liabilities	156	178	172	180	168	158	149	139	128	120	110
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	156	177	181	198	193	188	183	175	166	160	152
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
TOTAL public debt benchmark	55	55	55	55	55	55	55	55	55	55	55
	PV o	of Debt-to	-Revenue	Ratio							
Baseline	579	638	704	737	550	610	645	630	570	566	504
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	579	631	702	736	559	614	645	628	573	568	514
B. Bound Tests											
B1. Real GDP growth	579	685	854	890	687	773	853	857	790	809	730
B2. Primary balance	579	647	724	756	564	625	663	647	586	583	519
B3. Exports	579	655	760	791	591	657	699	685	621	616	548
B4. Other flows 3/	579	639	707	740	551	612	648	633	572	569	506
B5. Depreciation	579	785	840	849	629	700	736	718	652	646	579
B6. Combination of B1-B5	579	643	735	768	576	640	683	670	607	605	539
C. Tailored Tests											
C1. Combined contingent liabilities	579	669	736	767	573	635	673	658	596	593	529
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	579	716	842	912	686	779	841	825	767	785	719
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Debt	Service-te	o-Revenue	Ratio							
Baseline	49	65	102	100	87	104	121	125	126	134	134
A. Alternative Scenarios											
A1. Key variables at their historical averages in 2021-2031 2/	49	65	104	102	89	106	121	124	124	131	130
B. Bound Tests											
B1. Real GDP growth	49	69	124	125	112	137	166	177	181	195	194
B2. Primary balance	49	65	107	107	90	108	126	130	130	138	138
B3. Exports	49	65	102	101	88	105	122	127	129	139	138
B4. Other flows 3/	49	65	102	100	87	104	121	125	126	134	134
B5. Depreciation	49	66	112	113	101	125	147	155	156	167	167
B6. Combination of B1-B5	49	64	106	105	92	110	130	135	137	146	146
C. Tailored Tests											
C1. Combined contingent liabilities	49	65	119	108	91	113	129	132	131	139	139
C2. Natural disaster	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
C3. Commodity price	49	70	125	134	116	144	170	176	178	190	190
C4. Market Financing	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.