Bhutan: 2007 Article IV Consultation—Staff Report; Staff Supplement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Bhutan.

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2007 Article IV consultation with Bhutan, the following documents have been released and are included in this package:

- The staff report for the 2007 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on July 31, 2007, with the officials of Bhutan on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on September 20, 2007. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.
- A staff supplement on the joint IMF/World Bank debt sustainability analysis.
- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its October 5, 2007 discussion of the staff report that concluded the Article IV consultation.
- A statement by the Executive Director for Bhutan.

The document listed below has been or will be separately released.

Selected Issues Paper

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to <a href="mailto:publicationpolicy@imf.org">publicationpolicy@imf.org</a>.

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### INTERNATIONAL MONETARY FUND

### **BHUTAN**

### Staff Report for the 2007 Article IV Consultation

Prepared by the Staff Representatives for the 2007 Consultation with Bhutan

Approved by Kalpana Kochhar and Matthew Fisher

September 20, 2007

- The 2007 Article IV consultation discussions with Bhutan were held in Thimphu during July 19–31, 2007. The staff team consisted of Mr. Kalra (Head), Ms. Oura, and Ms. Topalova (all APD). Mr. Mohanty, Senior Advisor to Executive Director, attended meetings.
- The mission met with Prime Minister Wangchuk, Finance Minister Norbu, Royal Monetary Authority Managing Director Tenzin, other senior officials, and private sector and donor representatives.
- Bhutan is on a 24—month consultation cycle. In concluding the 2005 consultation discussions on July 11, 2005, Executive Directors noted that political stability and prudent macroeconomic policies have contributed to robust economic growth and improvement in social indicators. Directors considered Bhutan's medium-term growth prospects to be favorable in light of its policy record, further potential for growth in hydropower and related sectors, and strong support of development partners. Directors underscored the need to maintain fiscal sustainability by limiting domestic financing and mobilizing external aid, improve budget planning, and strengthen coordination with donors. Directors noted that challenges remain to develop the private sector, to generate jobs and reduce poverty. Directors encouraged the authorities to streamline the regulatory regime; liberalize trade and FDI; align the education system to market needs; and invest in infrastructure.
- Bhutan continues to avail of transitional arrangements under Article XIV, Section 2. Bhutan also maintains an exchange restriction subject to Fund approval under Article VIII, Section 2(a).

	Contents	Page
Executive	Summary	3
I. Backg	round and Macroeconomic Setting	4
II. Econo	mic Developments in 2005/06–2006/07	5
III. Outlo	ok, Risks, and Challenges	8
IV. Policy	Discussions	9
-	onetary, Reserves, and Exchange Rate Management	
	sks to Financial Sector Soundness	
	scal Sustainability	
	ructural Reforms for Sustained Growth and Poverty Alleviation	
V. Data l	ssues	16
VI. Staff	Appraisal	17
Boxes		
1. Pover	y in Bhutan	8
2. Stress	Tests of Banking Sector Soundness	12
Figure		
1. Mediu	m-Term Prospects	20
Tables		
1. Select	ed Economic and Financial Indicators, 2003/04–2007/08	21
2. Gover	nment Budget Summary, 2003/04–2007/08	22
3. Balan	ce of Payments, 2004/05–2012/13	23
4. Mone	ary Survey, 2002/03–2006/07	24
5. Mediu	m-Term Macroeconomic Framework, 2004/05–2012/13	25
6. Miller	nium Development Goals	26

### **EXECUTIVE SUMMARY**

Political stability and prudent economic management continue to contribute to a significant rise in living standards and development indicators in Bhutan. Significant political changes are in the offing, but the authorities are taking steps to ensure the continuation of sound policies. Bhutan's economic prospects are bright. Construction of two hydropower projects will help sustain real GDP growth over the medium term. With the exchange rate peg to the Indian rupee, inflation is expected to be in line with price developments in India. The overall balance of payments is projected to be in surplus and would help maintain adequate international reserves.

The authorities are aware of the risks and challenges going forward. Near-term risks relate mainly to a (temporary) decline in official rupee reserves to critical levels. In addition, there is a potential for "Dutch disease" type overheating and exchange rate appreciation with full commissioning of Tala. Other risks and challenges relate to continued rapid credit growth and vulnerabilities in the banks' balance sheets and concerns about debt sustainability, as power projects in the pipeline begin. With a rapidly growing labor force and limited public sector absorption capacity, policy measures are required to foster private sector job creation.

### **Key Policy Recommendations**

The Royal Monetary Authority (RMA) needs to remain watchful of excess liquidity, credit growth and financial sector soundness. Mopping up excess liquidity requires stepped up issuance of RMA bills and an increase in the CRR ratio. There is also a need to limit financial institutions' balance sheet exposures to factors that pose a potential risk of higher NPLs, by developing markets in financial instruments to manage liquidity in the short run and provide alternative investment vehicles for financial institutions over the medium term. The RMA needs to enhance its financial sector supervision and build capacity in monetary and foreign exchange reserve management.

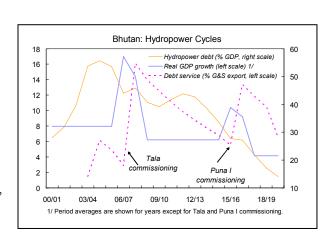
The exchange rate peg to the Indian rupee and the level of the peg remain appropriate. Close trade and other links with India generate significant benefits for the Bhutanese economy and help to anchor inflation expectations. Should they arise, some fiscal tightening would help alleviate real exchange rate appreciation pressures, when Tala comes on stream. Competitiveness can be enhanced by raising private sector efficiency and lowering costs.

**Fiscal sustainability requires limiting domestically financed deficits and mobilizing external aid**. While the public debt-to-GDP ratio moves along the power sector cycles, maintaining the debt ratio on a downward trajectory requires that domestically financed deficits be limited by mobilizing external aid and planning expenditures in a medium-term framework. Broadening the tax base and better administration can increase revenue.

**To foster private sector growth and generate employment opportunities, policy measures are required**. The main areas are aligning the education system to market needs, further streamlining the regulatory regime, liberalizing the trade regime, implementing financial sector reforms, and investing in infrastructure to lower nonlabor costs. In the financial sector, the revised RMA Act, Financial Institutions Act, and Foreign Exchange Regulations should be adopted early in 2008.

### I. BACKGROUND AND MACROECONOMIC SETTING

- 1. **Bhutan is at the cusp of significant political changes again after almost a decade of carefully managed reforms**. In December 2006, King Jigme Singye Wangchuk abdicated in favor of crown prince Jigme Khesar Namgyal Wangchuk. Political parties are now being formed and mock elections have been held. National Assembly elections are scheduled for early 2008. The new parliament will debate and pass Bhutan's first written constitution. These changes follow political reforms started in 1998, when King Jigme Singye Wangchuk devolved executive powers to a cabinet of ministers chosen by the National Assembly.
- 2. To secure a legal basis for the continuation of sound policies, the National Assembly has passed a number of legislative measures. These include a Public Finance Act, Audit Act, Labor Act, and an umbrella Environment Protection Act. Steps have also been taken to firmly establish the rule of law, such as setting up of the Office of the Attorney General and passage of Anti-Corruption legislation. However, other key economic legislation, such as a revised RMA and Financial Institutions Acts and Foreign Exchange Regulations, will have to await the formation of a new government after the 2008 elections.
- 3. **Political stability and prudent economic management have contributed to a significant rise in living standards and development indicators**. Real GDP growth averaged 7 percent during 1997/98–2006/07, raising per capita GDP to around US\$1,400.<sup>1 2</sup> Social indicators have also registered an appreciable improvement and Bhutan appears to be on track to meet several of its Millennium Development Goals.
- 4. Hydropower cycles governed the rhythm of economic activity during the last decade and will likely do so in the next decade as well. Construction on the large Tala hydropower project began in 1997. Since then, construction and project-related activity sustained real GDP growth while the public debt-to-GDP ratio rose. When fully commissioned in 2007/08, Tala will triple generation capacity, raise real GDP, exports and government revenue



significantly, and reduce the public debt-to-GDP ratio. Going forward, the Royal Government of Bhutan (RGB) is planning other hydropower projects, which would

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<sup>&</sup>lt;sup>1</sup> Fiscal year begins on July 1.

<sup>&</sup>lt;sup>2</sup> Eighth Five-Year Plan (1997/98–2001/02) and Ninth Five-Year Plan (Ninth Plan, 2002/03–2006/07). Per capita GDP is higher relative to past estimates as the 2005 census provided a much lower population estimate (0.64 million, compared to existing estimate of 0.92 million in 2005 *World Development Indicators*).

significantly shape the macroeconomic outlook. Work on the proposed power stations is expected to begin in 2007/08, would require almost a decade for construction and commissioning, and yet another decade or more for debt repayment thereafter.<sup>3</sup>

5. Three key features of the Bhutanese economy are embedded in the hydropower cycles. First, the need for an extended horizon to assess fiscal and project sustainability given the long duration of hydropower cycles. Second, India's role as Bhutan's principal trading partner, sole purchaser of electricity exports, and largest donor/lender for hydropower projects. Third, the high ratio of external aid to GDP and domestic revenues (together with the high aid and revenue volatility) require careful, medium-term planning.

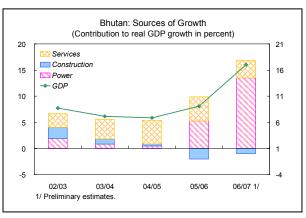
### II. ECONOMIC DEVELOPMENTS IN 2005/06-2006/07

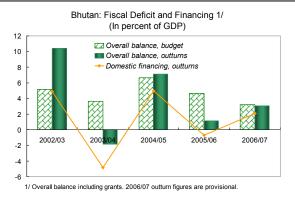
## 6. **Growth remained robust and macroeconomic outcomes were broadly favorable**. Economic growth was fueled by continued work on the Tala hydropower project, public

investment in infrastructure, and private investment in housing. In addition, the services sector performed strongly driven by trade and financial sector. Real GDP growth is estimated to have almost doubled from 9 percent in 2005/06 to 17 percent in 2006/07, with much of Tala coming on stream. With the exchange rate peg to the Indian rupee, inflation has remained in line with price developments in India.

# 7. Large shifts in the fiscal position reflected a combination of revenue, expenditure, and aid volatility.

In 2005/06, a delay in excise duty refunds from India was more than offset by higher grants and lower capital spending. The budget made a net repayment to the banking system of <sup>3</sup>/<sub>4</sub> percent of GDP.





<sup>&</sup>lt;sup>3</sup> Four power sector projects are currently operational (Tala, Chukha, Kurichu, and Basochu). The RGB is planning four new projects. Construction for Punatsangchu I (1095 MW) and Dagachu (114 MW) will start in 2007/08. The projected cost is 165 percent and 15 percent of 2007 GDP, respectively. Punatsangchu I is to be financed by India; Dagachu is to be financed by Austria, AsDB, and RGB. Punatsangchu II (992 MW) and Mangdechu (672 MW) are in preliminary stages of conception. See selected issues, Chapter I, "Managing the Macroeconomic Impact of the Hydropower Sector."

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In 2006/07, the domestically financed deficit (2 percent) was higher-than-budgeted (1½ percent of GDP). The main factors were a revenue shortfall (again from a delay in excise duty refunds from India), higher-than-budgeted spending, and lower-than-budgeted loan inflows.<sup>4</sup> In particular, public infrastructure spending is on the rise to mark a century of the monarchy, coronation of a new king, and the first elected national parliament in 2008.

- 8. Although the public debt-to-GDP ratio rose, debt service obligations remained manageable. Public debt doubled to over 80 percent of GDP at end-2005/06 from mid-2000. The bulk of the increase was rupee borrowings from India for Tala. The purchase of an aircraft at a cost of about US\$39 million (4½ percent of GDP) for state-owned Druk Air also contributed to the increase in the public debt ratio. However, with debt service payments on Tala scheduled to begin only in 2007/08, the debt service ratio remained around 6(10) percent of exports (revenue) during the past five years.
- 9. While the balance of payments remained in surplus and total international reserves rose, the composition of reserves became unbalanced. The trade balance improved in 2005/06, as exports to countries other than India rose significantly. In 2006/07, electricity exports from Tala shifted the trade balance into a small surplus. Together with a projected surplus in the capital and financial account related to continued disbursements for Tala and other external assistance, the total reserve cover (convertible currency and Indian rupees) at end-2006/07 was over nine months of goods and services imports. However, the level of rupee reserves fell to ½ month of (rupee) imports at end-2006/07.
- 10. The decline in rupee reserves to uncomfortable levels was associated with a combination of factors.
- For a number of years, the financial system has witnessed excess liquidity and rapid private sector credit growth. Private sector credit growth has averaged around 30 percent per year during the last seven years. This rapid credit growth has been facilitated by a number of factors: balance of payments surpluses, excess liquidity in the financial system, institutional and policy changes, strong credit demand, and limited alternative investment avenues (real and financial) for the commercial banks. With a large fraction of the imports coming from India, the credit growth has contributed to high import growth. Notwithstanding this expansion, excess liquidity in the banking system persists. Moreover, the distribution of excess

<sup>4</sup> Overall and domestically financed deficits averaged 4 percent and 1½ percent of GDP, respectively, during the Ninth Plan.

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<sup>&</sup>lt;sup>5</sup> Selected issues, Chapter II, "Rapid Private Sector Credit Growth, Macroeconomic Risks, and Financial Sector Soundness."

liquidity is skewed towards one commercial bank, which holds the bulk of RGB and government corporations' deposits.<sup>6</sup>

• In 2006/07, aid inflows from India fell, interest rate spreads with India widened, and public infrastructure spending rose. Large Tala-related aid inflows from India tapered off sharply in late 2006. At the same time, public infrastructure spending is

on a rising path. Moreover, monetary tightening led to higher interest rates in India, but deposit and policy rates in Bhutan remained unchanged. Anecdotal evidence suggests that the resulting interest rate spreads may have generated unrecorded rupee outflows from Bhutan. To tide over the rupee

(In months of goods and services imports)						
	2002/03 Jun.	2003/04 Jun.	2004/05 Jun.	2005/06 Jun.	2006/07 Jun.	
Total gross reserve	14.8	8.9	8.9	9.8	9.2	
Convertible currency 1/	76.5	16.9	23.6	30.1	31.8	
Indian rupee 2/	3.5	3.7	2.7	2.0	0.5	

2/ Vis-a-vis imports from India

reserves shortfall, the RMA secured a rupee line of credit with an Indian commercial bank against its convertible currency deposits.

11. **Rapid private sector credit growth has implications for financial sector soundness indicators**. The bulk of private sector credit (36 percent of total outstanding at end-2006) was extended for housing, although credit to the manufacturing and tourism sectors appears to be picking up. With this, the exposure of the financial institutions to the housing sector further increased, even as the ratio of NPLs to total loans fell, exacerbating potential risks going forward should there be a bust in real estate prices.

Banks Nonbanks						anks			
		2003	2004	2005	2006	2003	2004	2005	2006
	Mandated Ratios	Jun.	Jun.	Dec.	Dec.	Jun.	Jun.	Dec.	Dec
Risk weighted CAR	8 percent			20.8	17.1			32.3	36.5
Core capital ratio	4 percent			19.5	15.7			23.1	26.0
Statutory liquidity ratio	20/10 percent for banks/nonbanks			54.2	47.6			6.4	15.9
Gross NPL	•••	7.8	10.8	6.6	4.9	20.5	27.4	20.9	21.1
Net NPL		3.1	2.2	2.9	2.4	10.7	9.7	12.0	9.0

<sup>6</sup> There are two commercial banks (Bank of Bhutan and Bhutan National Bank) and two nonbank financial institutions (Royal Insurance Corporation of Bhutan and Bhutan Development Finance Corporation). In addition, the Pension and Provident Fund is an important part of the financial sector.

### III. OUTLOOK, RISKS, AND CHALLENGES

- 12. **Bhutan's economic prospects are bright**. Construction of hydropower stations Punatsangchu I and Dagachu will shape the Tenth Five-Year Plan (2008/09–2012/13). Real GDP growth is projected to average about 7 percent, as electricity exports to India from current and prospective projects should provide a fairly stable source of growth. Neighboring Indian states are energy deficient, tariff rates have been negotiated upwards between Bhutanese and Indian governments periodically, and supply side disruptions in the past due to climatic or technical reasons have only been temporary. On the balance of payments, trade and current account deficits are projected starting 2009/10, as debt service payments for Tala begin in 2007/08 and imports for new power projects pick up thereafter. These deficits are offset by adequate aid flows to help maintain the overall balance of payments in surplus, and international reserves are projected at 9–11 months of goods and services imports.
- 13. These favorable prospects mask potential risks, and challenges remain.
- Near-term risks relate mainly to the decline in official rupee reserves to critical levels. In addition, there is a potential for "Dutch disease" type overheating and exchange rate appreciation with the full commissioning of Tala.
- The medium term poses other potential risks and challenges. Spikes in economic activity associated with power sector projects (as in the case of Tala) could spill over to other sectors, including through demonstration effects of government wage increases, and undermine external competitiveness. Continued rapid credit growth concentrated in the housing sector raises concerns over vulnerabilities in the banks' balance sheets. Concerns about debt sustainability are likely to reemerge, as power projects in the pipeline begin. Finally, the poverty rate is still high, especially in the rural areas and in the less developed Eastern region. With limited absorption capacity of the public and power sectors, private sector development is key to job creation to absorb a young, rapidly growing labor force and to generate a durable reduction in poverty.

### **Box 1. Poverty in Bhutan**

Poverty in Bhutan is high despite significant increases in real per capita income. The RGB's 2004 Poverty Analysis Report estimated that 32 percent of the population was poor (national poverty line of Nu. 740 per month or US\$17). Poverty incidence is more severe in rural areas (38 percent), in the less developed Eastern region (50 percent), and in larger households in agriculture with less educated members and fewer assets (land, livestock, and equipment). Other proximate causal factors include remote location and difficult terrain, lack of wage employment, and limited access to social and economic services, including credit. The Poverty Analysis Report estimates that it would take more than 15 years for the severely poor to exit from poverty assuming sustained real per capita income growth of 4 percent and unchanged income distribution.

### IV. POLICY DISCUSSIONS

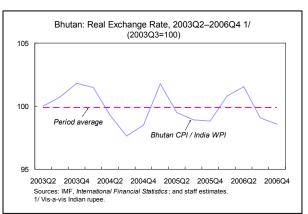
14. **Against this background, the principal policy issues addressed in the consultation discussions were**: (i) monetary, reserves and exchange rate management; (ii) risks to financial sector soundness; (iii) fiscal sustainability; and (iv) structural reforms for job creation and private sector development. On the overall direction over the medium term, the authorities maintained that economic policies are expected to remain broadly unchanged as Bhutan makes its historic transition to constitutional monarchy and parliamentary democracy, balancing growth and poverty alleviation with protection of the country's cultural heritage and environment. The policy and development priorities are broadly shared, both at the central level and at the grassroots, with the civil service providing continuity in implementation.

### A. Monetary, Reserves and Exchange Rate Management

- 15. The authorities agreed that monetary conditions need to be tightened to shore up rupee reserves and manage pressures on the exchange rate peg.
- The authorities viewed the rupee reserves shortfall as temporary. Staff agreed that the shortfall would dissipate when aid inflows from India for the Puna I project resume later in 2007. Should the need arise, the RMA could also sell convertible currency reserves and secure additional rupee credit lines (preferably concessional ones).
- There was broad agreement that the RMA needs to mop up excess liquidity in the banking system through stepped up issuance of RMA bills and an increase in the CRR ratio (which was reduced from 20 percent to 13 percent in 2004). Steps could also be taken to slow down private sector credit creation, especially to the housing sector by raising provisioning requirements for loans to the sector. Along the lines of these discussion, the RMA is in the process of raising the CRR ratio to 15 percent. More generally, monitoring pressures on the exchange rate peg requires that RMA significantly upgrade its capacity to monitor, forecast, and manage rupee flows and reserves, as well as domestic money market liquidity conditions, as suggested by IMF technical assistance missions.
- 16. There was agreement that the exchange rate peg to the Indian rupee remains the appropriate nominal anchor and the level of the peg is also appropriate.
- The peg has served Bhutan well given the close economic links with India and has helped to anchor inflation expectations. These links are reflected in both the current and capital accounts with India, through trade and aid.

• The bilateral real exchange rate (RER) with India, which accounts for over 75 percent of Bhutan's trade, has fluctuated within a narrow band since 2003. The RER may appreciate somewhat if a large part of the expansion in national income from Tala is

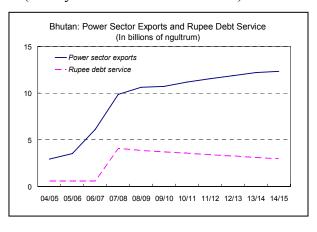
directed to nontradables. The impact on tourism of this, and the recent appreciation of the ngultrum (along with the Indian rupee), would be limited given Bhutan's comparative advantage in this niche market. However, manufacturing would likely be adversely affected through higher wage costs and a possible escalation in real estate prices.



• For the near term, staff suggested that some fiscal tightening, as needed, could also help contain appreciation pressures. Over the medium term, productivity improvements can help offset the impact of a real exchange rate appreciation, and the onus should remain with the private sector to raise efficiency. The government should remain focused on upgrading infrastructure rapidly, raising education and vocational training levels, and creating an enabling environment to help reduce transportation and transaction costs.

• In assessing the appropriateness of the level of the peg, a number of considerations point to broad internal and external stability. Current account deficits have been appropriately financed by capital inflows (mostly concessional external aid) in the

past. Specifically, power sector project related outflows (imports, remittances, and debt service) have had assured financing; this is expected to be the case going forward as well. As these projects come on stream, the debt service payments can be met with earnings from electricity exports. Nonpower sector imports and other current account outflows have been covered



by export earnings and other inflows, permitting a steady maintenance of an international reserves cover at adequate levels (notwithstanding the temporary rupee reserves crunch). Domestically financed deficits have been limited.

<sup>&</sup>lt;sup>7</sup> Bhutan does not produce monthly CPI data; quarterly CPI data has been published only since 2003Q2.

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#### **B.** Risks to Financial Sector Soundness

- 17. The RMA and financial institutions were aware of balance sheet risks that have built up after sustained rapid credit growth. These risks include the existing high levels of nonperforming loans (NPLs) in the two nonbank financial institutions, the potential for an increase in NPLs in the commercial banks following a general downturn or a sectoral shock, and interest rate risks from the maturity mismatch between commercial banks' assets and liabilities. Stress tests on the banking system balance sheets suggest that in the current macroeconomic environment, the banks are subject to credit risk, especially through their exposure to the housing sector, open net foreign asset positions, and the maturity mismatch in their asset-liability positions (Box 2).
- 18. The authorities intend to take steps to manage these risks. The RMA has directed all financial institutions to increase the provisioning rate on substandard and doubtful loans from 20 percent to 30 percent; the provisioning on housing loans in these categories is to be raised from 50 percent to 60 percent, effective December 2007. These measures would also help tighten liquidity and dampen private sector credit growth. In addition, quarterly updating and refinement of the stress testing framework is to be undertaken, both as a supervisory early warning system for the RMA and a risk management tool for the financial institutions. Financial institutions are also committed to building their internal capacity to monitor risk, especially credit risk. Addressing maturity mismatches in the financial institution balance sheets would require creation of avenues for alternative portfolio investments, including government bonds. As a first step, the RMA has drawn up proposals for the introduction of 3-month and 6-month T-bills for budget financing to replace ways and means advances from commercial banks.<sup>8</sup>

### C. Fiscal Sustainability

19. The 2007/08 budget may need to take offsetting measures to meet its financing targets. Tala will induce a significant increase in GDP and increase the revenue-to-GDP ratio. The full-year contribution of Tala to corporate income tax and dividends is estimated at Nu. 2½ billion (4½ percent of GDP). Other nontax revenue and receipts are also set to increase, although these contributions would be earmarked for debt service payments for Tala. On the expenditure side, the budget provided for capital spending for infrastructure in advance of centenary and coronation celebrations and formation of new constitutional bodies in 2008. With the higher expenditure and somewhat lower grant inflows, the overall and domestically financed deficit targets are set at 4 percent and 2¾ percent of GDP, respectively. Although it is early to say how the budget would evolve during the fiscal year,

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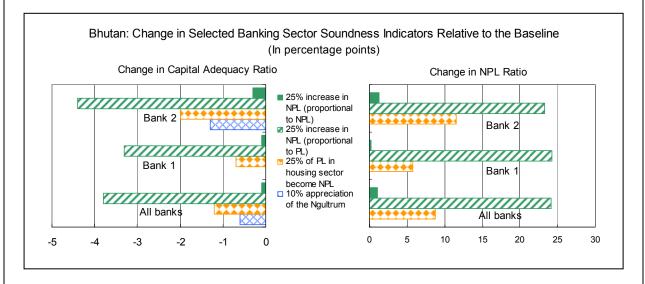
<sup>&</sup>lt;sup>8</sup> Bhutan: Development of Financial Markets—Issues and Options for Enhancing the Existing Framework (June 2006) and Liquidity Management and Money Market Development (May 2007).

### **Box 2. Bhutan: Stress Tests of Banking Sector Soundness**

The impact of various shocks on key banking system soundness indicators was quantified using a stress-testing framework. The shocks considered were: (i) a 25 percent increase in NPLs proportional to existing NPLs; (ii) a 25 percent increase in NPLs proportional to performing loans; (iii) 25 percent of PLs in the housing/construction sector becoming NPLs; and (iv) an appreciation of the ngultrum by 10 percent vis-à-vis the U.S. dollar. The baseline risk-weighted capital adequacy ratio (CAR) for the banking system at end-2006 was 17 percent and the ratio of NPLs to total loans was 5 percent. Both banks met the prudential indicators, but there were sizeable differences between their indicators and balance sheet characteristics.

### The main results of the stress tests, relative to the baseline, are:

- The CAR for the banks declines by varying amounts, but remains above the 8 percent required minimum under all shocks. The range of the declines is 0.1–3¾ percentage points for the banking system as a whole. The largest decline in the CAR comes, expectedly, from a 25 percent increase in the NPLs proportional to performing loans.
- The distribution of risk across the banks is varied. Bank 2 is more susceptible to a larger decline in its CAR due to an exchange rate appreciation given its larger net open position; and to an increase in NPL ratio in the housing/construction loans given its higher exposure to the sector.
- The low existing level of interbank lending limits potential contagion among banks (and in the financial sector more generally). Liquidity risks in the banking system are also currently limited.

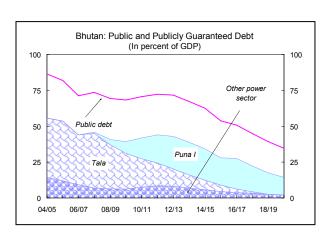


These results are subject to caveats. The estimated decline in the CAR and increase in NPL ratio would be higher if the required provisioning on the additional NPLs is higher. The financial soundness of the banks, as reflected in NPL ratios, would also be worse if actual NPLs are higher than reported, if the initial classification of loans is more optimistic than warranted, and if the down migration of loans is more severe. Additional data on the maturity structure of assets and liabilities of the banks, and for nonbanks, would help complete the picture on risks to financial sector soundness.

the authorities noted that an extended delay in the commissioning of the remaining turbines at Tala could dampen its contribution to revenues. Similarly, overruns in capital spending on the infrastructure projects currently under way could also generate a higher-than-planned domestically financed deficit. Staff recommended that efforts be made to cut low-priority spending to meet the budget financing targets should these events materialize.

Over the medium term, the key fiscal challenge is to limit domestically financed 20. deficits while financing an ambitious public expenditure program. Discussions focused on the Tenth Five-Year Plan (2008/09–2012/13), preparations for which were at an early stage. The authorities noted that the plan would focus on reducing poverty, promoting balanced regional development, enhancing private sector development, and expanding infrastructure. Spending needs to achieve these objectives will be high. Staff recommended that the medium term fiscal framework aim to achieve current surpluses and fiscal sustainability by: (i) achieving an average annual revenue-to-GDP ratio of around 18½ percent (with higher revenue from Tala); (ii) containing average annual expenditure to 31 percent of GDP, roughly equally divided between current and capital spending; 10 and (iii) limiting domestically financed deficits to 1–2 percent of GDP. This is contingent on external grants averaging 9 percent of GDP and (net) loans of  $2\frac{1}{2}$  percent of GDP. Staff also recommended that contingency plans be made should external assistance (especially grants and loans at concessional terms) fall below projected levels, and suggested a careful reexamination of spending priorities to whittle down low priority projects.

21. With this fiscal framework, the public debt-to-GDP ratio follows the power sector cycle. After a dip in 2006/07, the ratio rises in 2007/08 as accumulated interest during construction (IDC) is added to the debt stock. Over the medium term, significant repayments for Tala would be offset by disbursements for new hydropower projects, and the public debt ratio is projected to peak in 2012/13. Thereafter, the public debt ratio



<sup>9</sup> The revenue-to-GDP ratio declines over the medium term as: (i) no new power sector projects are expected to come on stream over this period; (ii) the upward tariff revisions for existing hydropower projects take place every five years, and do not provide sufficient buoyancy to revenues as GDP rises; and (iii) other revenue—the bulk of which are receipts for making interest payments on power sector loans—decline significantly.

<sup>10</sup> Capital expenditure in the budget excludes foreign financed spending on hydropower projects while revenues and interest payments are included. A portion of Dagachu is to be financed by the RGB. Borrowings are included in debt stock figures.

<sup>&</sup>lt;sup>11</sup> Interest payments on Tala debt were deferred during construction. The accumulated interest is to be capitalized in 2007/08 and amortized with principal repayments.

would decline with measurable increases in GDP as the new projects come on stream, adequate external financing, and limited domestic financing. External debt service ratios are projected to remain manageable, as external loans are expected to remain concessional in the foreseeable future.

### 22. Bhutan's debt dynamics are sustainable, subject to a moderate risk of distress.

- An analysis based on conventional indicators and stress tests—including the breaching of some LIC-DSA thresholds—suggest that external debt dynamics should be characterized as subject to a high risk of distress. 12 13
- However, there are strong mitigating factors.
  - ➤ Bhutan's own experience with construction, commissioning, and management of large hydropower projects (which constitute the bulk of external debt) suggests that there are mitigating factors, and the dynamics can be expected to be sustainable. The loan repayments for the Chukha hydropower project will be successfully completed in 2007/08 (almost twenty years after the commissioning of the project in the mid-1980s).
  - The key factor in the successful implementation of Chukha, and in the case of other projects going forward, is Bhutan's relationship with India, which provides financing for these large projects. As part of this relationship, the two countries maintain a close dialogue on the financial and technical aspects of the projects, besides the wider dialogue on support for annual budgets and the five-year plans.
- In light of Bhutan's demonstrated successful management of large power projects in the past and related strong mitigating factors going forward, characterization of debt dynamics as subject to a moderate risk of distress is appropriate.

<sup>12</sup> The overall NPV-to-GDP ratio is estimated at around 76 percent in 2006/07 (compared to the LIC-DSA threshold of 50 percent for strong policy performers). The NPV of convertible currency external debt was 17½ percent of GDP. The NPV of rupee debt (with 9 percent interest rate on Tala loans, and assuming a standard discount rate of 5 percent) was about 60 percent of GDP, about 20 percentage points of GDP higher than the face value, which does not include Tala IDC. Going forward, in the baseline scenario, the NPV-to-GDP ratio falls as Tala comes fully on stream in 2007/08, rises as additional power sector projects commence, and falls below the threshold as the additional projects come on stream. The NPV-to-revenue ratio follows a similar path. The NPV-to-exports and debt service-to-exports ratios remain below the relevant thresholds over the entire projection period until 2027/28.

<sup>&</sup>lt;sup>13</sup> Using an 11½ percent discount rate, as in 2005 Article IV consultation staff report, the NPV of rupee debt is estimated at 44 percent at end-2006/07, about 5 percentage points of GDP higher than the face value which does not include Tala IDC. Adjusting for IDC and grant disbursements for Tala, the implied grant element for the rupee debt is over 50 percent.

15

### D. Structural Reforms for Sustained Growth and Poverty Alleviation

- 23. The authorities are aware that the employment effects of the power sector projects are limited, and that job creation requires implementation of the government's strategies in other sectors. The challenge is to overcome the constraints imposed by Bhutan's landlocked location, small size, and limited potential for diversification of production and exports by exploiting tourism potential, strengthening infrastructure, developing flexible labor and efficient credit markets, upgrading skills, and improving the investment climate. To this end, the authorities are making efforts to implement structural reforms, which foster private sector development and employment generation including improvements in the regulatory environment, promotion of vocational training, and to eliminate inconsistencies among legislation to improve prospects for tourism. In 2005, rules and regulations for the revised FDI policy of 2002 were issued. In 2006, the Labor and Employment Act was enacted, which contains provisions for occupational safety, formalization of contractual employment arrangements, and a minimum wage. In addition, the Bhutan Micro Trade Regulations were approved to streamline procedures for starting retail and wholesale businesses.
- 24. While acknowledging the high poverty rate, the authorities pointed to mitigating and explanatory factors. They underlined that, in part due to formal state welfare policies and informal social safety nets, abject poverty is virtually nonexistent. The poverty rate also reflects the difficult terrain and sparse population, making provision of government services more difficult and costly. The Tenth Plan would address these issues in a concerted manner. The authorities agreed that while continued strong growth would help alleviate poverty, active intervention is also needed. A key element of faster poverty alleviation is private sector development. Targeted programs for the rural poor to increase land and labor productivity are also required. Investments in social sectors—health and education—to improve human capital and infrastructure to make market opportunities accessible to rural and remote areas can make a significant dent on poverty.
- 25. **The authorities informed staff of their plans for trade liberalization**. Bhutan aims to join the WTO in 2008. <sup>14</sup> The accession commitments to the WTO will provide a blueprint for further trade liberalization. On the tariff structure, staff urged the authorities to reduce the number of rates on imports from third countries and reduce dispersion by lowering exceptional rates (of 50 percent and 100 percent). <sup>15</sup>

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<sup>&</sup>lt;sup>14</sup> Bhutan joined the IFC in December 2003, and BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) in February 2004.

<sup>&</sup>lt;sup>15</sup> All imports from India are duty free.

16

26. The authorities remain concerned about potential unsustainable net outflows of hard currency reserves should they accept the obligations of Article VIII, Sections 2, 3, and 4. They argued that sources of hard currency reserves are essentially limited to unpredictable aid flows, and that easing the restrictions could lead to a significant shift in imports from India to third countries and rapidly erode hard currency reserves to unsustainable levels. Hence the need to limit demand from importers through a system of case-by-case quantity restrictions. Staff noted that the current level of convertible currency afforded room to experiment with eliminating the restrictions and considerably ease the administrative burden. The authorities were open to cautiously experimenting with market based instruments to manage the demand for convertible currencies, with Fund technical assistance.

#### V. DATA ISSUES

27. While data provision is adequate for surveillance purposes and efforts are being made to improve the statistics, data shortcomings continue to hamper policy formulation and implementation in some key areas. Fiscal data are not consolidated, and large errors and omissions in the balance of payments preclude a more accurate assessment of external flows. The data between the fiscal account and the monetary survey need to be reconciled, in particular involving clear identification and classification of government accounts in the banking system. The first modern population census was conducted in 2005.

### VI. STAFF APPRAISAL

- 28. Political stability and prudent economic policies have contributed to a steady rise in per capita income in Bhutan. Prudent economic management and the successful commissioning of a second large hydropower project in 2006/07 have contributed to robust growth and a steady improvement in living standards for over a decade. Social indicators have also registered an appreciable improvement. The political changes currently underway in Bhutan would further broaden participatory democracy under a constitutional monarchy. The prospect for a continuation of these policies, including the introduction of new legislation, bodes well for Bhutan's future as it stands poised for an historic transformation.
- 29. Macroeconomic outcomes have remained favorable and Bhutan's growth prospects are bright. Real GDP and per capita income growth has been rapid over the last

<sup>16</sup> Bhutan maintains exchange restrictions in connection with: (i) the availability of foreign exchange for travel, invisibles, and private transfers; (ii) foreign exchange balancing requirements on remittances of income from foreign direct investment; and (iii) the availability of foreign exchange for importers who have not provided evidence that goods for which payments have been made were actually imported. Changes to Bhutan's import licensing rules in 2005, which introduced new foreign exchange balancing requirements for certain imports gave rise to exchange restrictions subject to Fund approval under Article VIII, Section 2(a). Bhutan also maintains restrictions notified to the Fund pursuant to Decision 144–(52/51).

decade, powered by Tala. The new projects in the pipeline would maintain the growth momentum. With the exchange rate peg to the Indian rupee, inflation should continue to remain in line with price developments in India. International reserves are projected to remain in a comfortable margin.

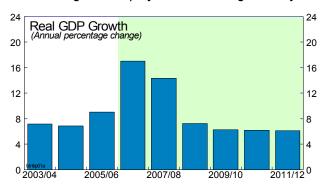
- 30. **Bhutan's achievements have been significant, but risks and challenges remain**. Tala has contributed to strong growth in per capita income, but its capacity for job creation has been limited. This is likely to remain true for the other power sector projects as well. Sustaining balanced growth requires expansion of nonpower sectors, through structural reforms which create an enabling environment for the private sector. In particular, the full potential of the tourism sector can be further exploited within the imperatives of preserving Bhutan's cultural identity and environment. Moreover, while the absolute number is small, the poverty ratio is high. Job creation and poverty reduction require significant infrastructure spending, especially to improve road access, while maintaining a sound fiscal position. The high ratio of external aid to GDP and domestic revenues, and aid and revenue volatility underline the need for careful, medium-term planning.
- 31. The RMA needs to remain watchful of excess liquidity, credit growth and financial sector soundness. Further steps can be taken to mop up excess liquidity and curb private sector credit growth. From a prudential standpoint, there is also a need to limit financial institutions' balance sheet exposures to sectoral and macroeconomic risk factors which pose a potential risk of rising NPLs. A key element of limiting these risks is to develop markets in financial instruments, including T-bills and government bonds, to manage liquidity in the short run and provide alternative investment vehicles for financial institutions. The RMA also needs to further enhance financial sector supervision, and build capacity across a range of areas (especially monetary and foreign exchange reserve management). Financial institutions also need to build capacity to monitor and manage balance sheet risks.
- 32. The exchange rate peg to the Indian rupee and the level of the peg remain appropriate. Close trade and other links with India generate significant benefits for the Bhutanese economy and help to anchor inflation expectations. To tide over the temporary shortfall in rupee reserves and manage pressures on the exchange rate, monetary and fiscal tightening would be appropriate in the near term. Monetary tightening would also help curb private sector credit growth. Should there be an appreciation of the real exchange rate in the aftermath of Tala coming on stream, the appropriate policy response would include some fiscal tightening to moderate a rise in nontradable goods' prices. More generally, competitiveness can be enhanced by raising private sector efficiency and lowering costs.
- 33. **Fiscal sustainability requires limiting domestically financed deficits and mobilizing external aid**. While the public debt-to-GDP ratio moves along the power sector cycles, maintaining the debt ratio on a downward trajectory requires that domestically financed deficits be limited. This requires mobilizing external aid (grants and concessional

loans) on a timely basis and planning expenditures in a medium-term framework. In addition, the buoyancy of revenues can be enhanced by broadening the tax base and better tax administration, including through a rationalization of the sales tax and import duty rates. External debt service obligations are sustainable. Together with the presence of mitigating factors, even as some LIC-DSA thresholds are breached in NPV terms, this suggests a moderate risk of debt distress. The Public Finance Act provides a welcome disciplining framework for budget preparation, management, and execution.

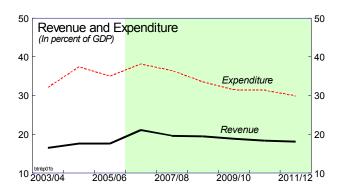
- 34. To foster private sector growth and generate employment opportunities, policy measures are required. The main areas are aligning the education system to market needs, further streamlining the regulatory regime, liberalizing the trade regime, implementing financial sector reforms and investing in infrastructure to lower nonlabor costs. Even as the new Labor Act seeks to balance contractual obligations and social protection, introducing a private sector minimum wage at too high a level could contribute to unemployment, especially among young labor force participants. In the financial sector, the revised RMA Act, Financial Institutions Act and Foreign Exchange Regulations should be adopted early in 2008.
- 35. Staff urges the authorities to eliminate the restrictions subject to approval under Article VIII as soon as possible, and to eliminate the restrictions maintained under Article XIV as soon as Bhutan's balance of payments position permits. Staff does not recommend approval of the restrictions subject to Fund approval under Article VIII as the authorities have not provided a timeframe for the elimination of these restrictions. The convertible currency reserve position allows room to progressively do away these quantitative restrictions. However, given the limited and unpredictable sources of convertible currency inflows and justifiable concerns over the outflows, these steps would need to be taken cautiously. The IMF stands ready to provide assistance in this area, including development of a foreign exchange market and market-based instruments to manage hard currency flows.
- 36. While data provision for surveillance is adequate overall, policy analysis is affected by shortcomings in certain key areas. Further improvements in upgrading fiscal and external sector statistics should remain high on the authorities' agenda.
- 37. It is recommended that Bhutan remain on the 24–month consultation cycle.

Figure 1. Bhutan: Medium-Term Prospects

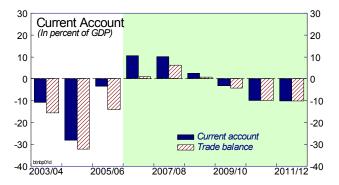
Real GDP growth is projected to rise significantly...



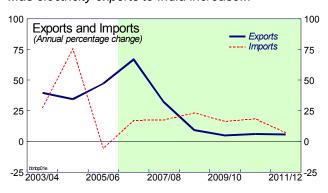
...which will also boost the revenue-to-GDP ratio.



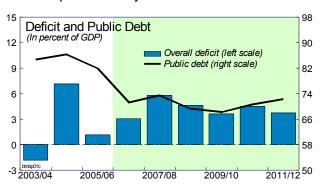
Current account deficits will increase, as imports for new hydropower projects pick up.



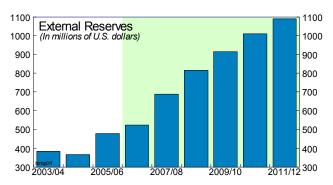
...as electricity exports to India increase...



Financing new hydropower projects will initiate a renewed public debt cycle.



External assistance helps raise international reserves.



Sources: Data provided by the Bhutanese authorities; and Fund staff projections.

Table 1. Bhutan: Selected Economic and Financial Indicators, 2003/04–2007/08 1/

Nominal GDP (2005): US\$819 million Population (2005): 0.64 million GDP per capita (2005): US\$1,287

Quota: SDR 6.3 million

	2003/04	2004/05	2005/06 Est.	2006/07 Est.	2007/08 Proj.		
Real sector							
Real GDP at market prices (percent change)	7.2	6.9	9.1	17.0	14.4		
Consumer prices (percent change, period average)	4.3	4.8	4.9	5.0	4.8		
Nominal GDP (at market prices; billions of ngultrum)	30.7	34.5	39.3	48.0	57.7		
General government		(In p	ercent of GDP	')			
Total revenue and grants	33.9	30.3	33.9	35.1	30.7		
Of which: foreign grants	17.5	12.7	16.3	14.0	11.1		
Total expenditure and net lending	32.1	37.4	35.0	38.2	36.5		
Of which: capital expenditure	17.1	19.8	17.3	21.0	18.4		
Current balance (excluding grants)	-0.3	-0.3	0.6	4.0	0.9		
Overall balance (excluding grants)	-15.7	-19.8	-17.5	-17.1	-16.8		
Overall balance (including grants)	1.8	-7.1	-1.1	-3.1	-5.8		
Public sector debt 2/	84.7	86.3	81.9	71.3	73.5		
Monetary sector 3/	(Pe	(Percent change, unless otherwise indicated)					
Broad money	4.0	10.7	24.8	7.6			
Credit to private sector	35.9	29.3	33.3	31.8			
Interest rates (end of period, in percent)							
Deposits (less than 1 year)	6.0	4.5	4.5	4.5			
Lending	10–16	10–16	10-16	10-15			
External sector	(In millio	ns of U.S. dol	lars, unless ot	herwise indica	ited)		
Current account balance	-73	-217	-29	116	141		
(In percent of GDP) 4/	-10.8	-28.2	-3.3	10.6	10.1		
Trade balance	-105	-249	-123	12	88		
Exports (goods)	158	212	312	521	687		
(percent change)	39.7	34.5	47.2	66.9	31.8		
Imports (goods)	263	461	435	509	598		
(percent change)	27.3	75.5	-5.6	17.0	17.6		
Grants ( current transfer)	94	120	176	158	188		
Loans (net)	103	78	78	16	-13		
Overall balance	8	-21	111	45	165		
(In percent of GDP)	1.2	-2.7	12.6	4.2	11.8		
Gross official reserves	383	367	479	524	689		
(In months of goods and services imports)	8.9	8.9	9.8	9.2	9.8		
External debt (in percent of GDP)	78.2	78.7	77.5	64.8	64.0		
Of which: power sector debt	53.8	55.7	53.6	44.0	45.8		
Debt service ratio (in percent of G&S exports)	4.2	7.2	5.8	4.0	14.2		
Ngultrum per US\$ (period average)	45.4	44.6	44.7	44.2			
Memorandum items:							
Electricity export (in percent of total goods exports)	40.3	31.0	25.1	26.6	34.7		
Unemployment rate (in percent) 5/	1.8	2.5	3.1				

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates and projections.

<sup>1/</sup> Fiscal year begins July 1.

<sup>2/</sup> Public and publicly-guaranteed debt, including loans for hydropower projects and the purchases of one aircraft. Including interest during construction for Tala from 2007/08 onwards.

<sup>3/ 12-</sup>month percent change in June. 2006/07 monetary data are IMF projection, and interest rate data are actual as of April 2007.

 $<sup>4/\</sup> ln\ 2004/05,$  includes the import of two aircraft amounting to US\$78 million.

<sup>5/</sup> On a calendar year basis, e.g., the entry for 2005/06 is for 2005.

21

Table 2. Bhutan: Government Budget Summary, 2003/04-2007/08 1/

	2003/04	2004		2005		2006		2007	
	Actual	Budget	Actual	Budget	Actual	Budget	Est.	Budget	Staff Proj. 9/
				(In millio	ons of ngul	trum)			
Revenue and grants	10,421	10,945	10,439	12,866	13,328	16,357	16,840	19,514	17,714
Domestic revenue	5,055	6,570	6,066	7,388	6,903	10,122	10,122	13,131	11,331
Tax revenue	2,467	3,326	3,069	4,094	3,717	5,139	3,776	5,292	4,943
Income taxes	1,533	1,609	1,530	1,686	1,833	2,476	2,121	3,346	2,997
Taxes on domestic goods 2/	625	1,374	1,134	2,132	1,542	2,297	1,293	1,615	1,615
Taxes in international trade	154	142	232	153	158	224	157	130	130
Other	155	201	174	123	184	142	205	201	201
Nontax revenue	2,589	3,244	2,997	3,294	3,186	4,983	6,346	7,840	6,388
Profit transfers 3/	198	219	384	296	503	272	2,797	550	550
Royalties	243	250	332	352	407	448	448	471	471
Dividends	1,753	2,271	1,551	1,997	1,542	3,461	2,162	3,742	3,091
Administrative fees and charges	129	163	169	202	197	215	226	217	217
Sale of government property	74	61	233	102	168	218	200	85	85
Revenue from government departments	41	42	79	53	102	87	111	113	113
Other 4/	151	238	250	293	266	283	402	2,662	1,862
Foreign grants	5,366	4,375	4,373	5,478	6,425	6,235	6,718	6,383	6,383
From India	3,533	2,725	2,625	3,730	3,417	4,175	3,791	4,118	4,118
Other	1,833	1,650	1,748	1,748	3,007	2,060	2,927	2,265	2,265
Expenditure and net lending	9,865	13,232	12,893	14,701	13,771	17,902	18,317	21,842	21,052
Current expenditure	5,149	5,969	6,171	6,888	6,672	7,962	8,186	11,621	10,831
Wages and salaries	1,980	2,125	2,398	2,797	2,817	3,403	3,217	3,803	3,803
Goods and services	2,416	2,822	2,872	3,157	3,021	3,640	4,029	4,177	4,177
Subsidies and transfers	533	645	496	404	453	471	492	903	903
Interest 5/	220	377	405	530	382	448	448	2,738	1,947
Capital expenditure 6/	5,265	7,158	6,810	7,764	6,809	9,814	10,102	10,618	10,618
Net lending 7/	-549	105	-88	49	289	126	29	-398	-398
Current balance (excluding grants)	-94	601	-105	500	231	2,160	1,936	1,510	501
Overall balance (including grants)	556	-2,287	-2,454	-1,834	-443	-1,545	-1,476	-2,328	-3,337
Foreign financing	932	988	739	833	715	811	475	788	788
Disbursement	1,149	1,378	1,137	1,244	1,114	1,287	971	1,365	1,365
Amortization 8/	217	390	398	411	398	477	496	577	577
Domestic financing	-1,488	1,299	1,714	1,001	-272	734	1,001	1,539	2,549
			(In perc	ent of GDP,	unless oth	erwise indic	cated)		
Revenue and grants	33.9	31.8	30.3	32.7	33.9	34.1	35.1	33.8	30.7
Domestic revenue	16.5	19.1	17.6	18.8	17.6	21.1	21.1	22.8	19.6
Tax revenue	8.0	9.7	8.9	10.4	9.5	10.7	7.9	9.2	8.6
Nontax revenue	8.4	9.4	8.7	8.4	8.1	10.4	13.2	13.6	11.1
Foreign grants	17.5	12.7	12.7	13.9	16.3	13.0	14.0	11.1	11.1
Expenditure and net lending	32.1	38.4	37.4	37.4	35.0	37.3	38.2	37.8	36.5
Current expenditure	16.8	17.3	17.9	17.5	17.0	16.6	17.1	20.1	18.8
Capital expenditure	17.1	20.8	19.8	19.7	17.3	20.4	21.0	18.4	18.4
Net lending	-1.8	0.3	-0.3	0.1	0.7	0.3	0.1	-0.7	-0.7
Current balance (excluding grants)	-0.3	1.7	-0.3	1.3	0.6	4.5	4.0	2.6	0.9
Overall balance (including grants)	1.8	-6.6	-7.1	-4.7	-1.1	-3.2	-3.1	-4.0	-5.8
Foreign financing Domestic financing	3.0 -4.8	2.9 3.8	2.1 5.0	2.1 2.5	1.8 -0.7	1.7 1.5	1.0 2.1	1.4 2.7	1.4 4.4
· ·	0	5.0	3.0	2.3	-0.1	1.5	۷. ۱	2.1	7.4
Nominal GDP at market prices (In millions of ngultrum)	30,724	34,458	34,458	39,317	39,317	47,996	47,996	57,720	57,720

Sources: Data provided by the Royal Government of Bhutan; and Fund staff estimates and projections.

<sup>1/</sup> Debt service related to Tala starts in 2007/08. Tala debt disbursement is off budget, but debt service is channeled through budget.

 $<sup>2/\,</sup> The shortfalls in taxes on domestic goods in 2005/06 and 2006/07 \, reflect delays in the refund of excises from India.$ 

<sup>3/</sup> Including Nu. 1.75 billion revenue from Tala in 2006/07 (delays in the commissioning of Tala reduced its contribution in 2006/07 by one-third from full-year revenue expected at Nu. 2.4 billion). From 2007/08 on, when Tala becomes a corporation, its contribution appears in corporate income tax and dividends.

<sup>4/</sup> Including receipts from Tala for its interest payments.

<sup>5/</sup> Including Tala's interest payment.

<sup>6/</sup> The outturn for 2004/05 includes the purchase of one aircraft for Druk Air at a cost of 5 percent of GDP.

<sup>7/</sup> In 2007/08 budget, the item does not subtract Tala amortization of Nu. 1,256 million. Subtracting this, net lending would be Nu. -1,654 million.

<sup>8/</sup> Excluding Tala amortization payment of Nu. 1,256 million for 2007/08 budget.

<sup>9/</sup> Incorporating Nu. 1 billion revenue shortfall from Tala owing to temporary technical problems, and lower debt service projection.

Table 3. Bhutan: Balance of Payments, 2004/05-2012/13

	2004/05	2005/06 Prov.	2006/07 Est.	2007/08	2008/09	2009/10 Staff pr		2011/12	2012/13
			(	In millions	of U.S. do	ollars)			
Current account	-217	-29	116	141	38	-54	-185	-206	-137
Trade balance	-249	-123	12	88	11	-73	-183	-207	-161
Exports, f.o.b.	212	312	521	687	749	785	833	882	933
Of which: electricity	66	78	138	238	256	254	259	262	265
Imports, c.i.f. 1/	-461	-435	-509	-598	-738	-858	-1,016	-1,088	-1,094
Of which: excluding hydropower-related	-346	-405	-502	-582	-670	-732	-797	-865	-938
Services	-11	-1	-6	-3	-11	-16	-25	-20	-3
Credit	46	61	69	85	97	110	124	140	158
Debit	-57	-62	-75	-88	-108	-126	-149	-160	-160
Income	-17	-11	1	-38	-35	-34	-40	-37	-24
Credit	12	18	22	24	31	37	41	45	49
Debit	-29	-29	-21	-62	-66	-71	-82	-82	-73
Of which: interest payments 2/	-8	-9	-9	-45	-42	-39	-36	-35	-35
Current transfers	59	106	108	94	73	69	64	57	50
Credit	133	188	172	205	199	206	213	219	225
Of which: grants 3/	120	176	158	188	182	189	195	201	207
Debit	-74	-82	-64	-111	-125	-137	-149	-162	-175
Capital and financial account	215	144	39	24	88	154	281	284	182
Capital transfer 4/	93	60	13	23	40	76	112	114	72
Foreign direct investment	9	6	11	13	13	14	14	15	15
Portfolio investment	0	0	0	0	0	0	0	0	0
Loans (net)	78	78	16	-13	32	61	151	152	91
Other flows	35	-1	-1	2	3	3	3	3	4
Errors and omissions	-18	-4	-109	0	0	0	0	0	0
Overall balance	-21	111	45	165	126	99	96	79	45
Memorandum items:		(	In percent	of GDP, u	nless othe	rwise indi	cated)		
Current account balance	-28.2	-3.3	10.6	10.1	2.4	-3.2	-9.9	-10.2	-6.2
Trade balance	-32.2	-14.0	1.1	6.3	0.7	-4.3	-9.8	-10.2	-7.3
Merchandise exports (percent change)	34.5	47.2	66.9	31.8	9.0	4.9	6.1	5.9	5.9
Merchandise imports (percent change)	75.5	-5.6	17.0	17.6	23.3	16.3	18.4	7.1	0.5
External debt	78.7	77.5	64.8	64.0	59.0	57.1	60.1	62.4	61.2
(In millions of U.S. dollars)	608	681	703	891	924	977	1,119	1,261	1.341
(In percent of exports of goods and services)	235.2	182.5	119.2	115.5	109.2	109.1	117.0	123.5	122.9
Debt service (in percent of exports of goods and services)	7.2	5.8	4.0	14.2	12.5	11.6	10.5	9.6	8.9
(In millions of U.S. dollars)	19	21	24	109	106	104	101	98	97
Gross official reserves (in millions of U.S. dollars)	367	479	524	689	816	915	1,010	1,089	1,134
(In months of imports of goods and services)	8.9	9.8	9.2	9.8	9.9	9.4	9.7	10.4	10.9
Ngultrum per U.S. dollars (fiscal year average)	44.6	44.7	44.2						
Nominal GDP (in millions of U.S. dollars)	772	879	1,086	1,393	1,565	1,710	1,862	2,021	2.192

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates and projections.

<sup>1/</sup> Includes the import of two aircrafts for \$78 million in 2004/05. 2/ Debt service for Tala starts in 2007/08.

<sup>3/</sup> Including budgetary and off-budgetary grants.
4/ Including grants for Tala and Puna I.

Table 4. Bhutan: Monetary Survey, 2002/03-2006/07

	2002/03 Jun.	2003/04 Jun.	<u>2004/05</u> Jun.	2005/06 Jun.	2006/07 Dec.	2006/07 Apr.	2006/07 Jun.
Monetary survey			(In mill	ions of ngu	ltrum)		Est.
	47 500	40.457	•	_	•	04 540	10.200
Net foreign assets	17,520	16,457	16,397	22,505	24,425	21,549	19,360
Indian rupee	3,352	3,314	3,595	3,156	3,786	1,143	792
Other Net domestic assets	14,168 -3,265	13,142 -1,625	12,802 18	19,349 -2,019	20,639 -3,442	20,406 106	18,568 2,680
	-3,205 -465	-1,818	-691	-2,019	-5,442 -5,184	-5,201	-5,201
Net claims on government 1/ Claims on nongovernment	4,173	5,987	7,245	9,300	10,608	11,623	12,097
Public enterprises	4,173	1,203	1,245	1,278	1,269	1,236	1,236
Joint enterprises	232	211	1,276	1,276	1,269	453	453
Non bank financial institutions	391	314	323	559	538	734	734
Private sector	3,135	4,260	5,506	7,342	8,658	9,199	9,674
Other items (net) 2/	-6,972	-5,794	-6,535	-7,949	-8,866	-6,316	-4,217
* ,	14,255	14,832	16,416	20,486	20,984	21,655	22,040
Broad money	6,794	7,737	8,445	9,073	10,338	10,673	10,859
Narrow money	,	,	,		,	,	,
Currency Demand deposits	1,699 5,095	2,015 5,722	2,303 6,141	2,615 6,458	2,763 7,576	2,770 7,903	2,774 8,085
Quasi-money 3/	7,461	7,095	7,971	11,413	10,646	10,983	11,181
Royal Monetary Authority	7,401	7,095	7,971	11,413	10,040	10,963	11,101
	40.000	40.450	40.407	40.050	40.050	47.450	40.000
Net foreign assets	12,292	13,156	13,467	18,656	18,359	17,450	16,389
Indian rupee	864	1,822	2,070	1,507	201	343	237
Other	11,428	11,334	11,398	17,148	18,159	17,108	16,151
Net domestic assets	-4,284	-3,786	-4,128	-5,181	-6,075	-5,292	-4,346
Net claims on government	-226	-378	-679	-648	-1,496	-1,872	-1,427
Claims	56	37	100	0	0	0	0
Minus: deposits	282	415	779	648	1,496	1,872	1,427
Claims on deposit money banks	147	249	710	591	103	21	20
Claims on private sector	700	1	1	3	10	11	11
Minus: RMA bills	700	200	200	200	100	200	200
Other items (net)	-3,507	-3,457	-3,959	-4,927	-4,592	-3,252	-2,750
Reserve money	8,008	9,370	9,340	13,475	12,284	12,158	12,043
Memorandum items:	(C	hanges in p	ercent of in	itial stock o	of broad/res	erve money	<b>/</b> )
Broad money	29.7	4.0	10.7	24.8	2.4	5.7	7.6
Net foreign assets	28.9	-7.5	-0.4	37.2	9.4	-4.7	-15.4
Net domestic assets	8.0	11.5	11.1	-12.4	-6.9	10.4	22.9
Net claims on government	3.4	-9.5	7.6	-16.3	-8.9	-8.9	-8.9
Claims on private sector	4.8	7.9	8.4	11.2	6.4	9.1	11.4
Other items (net)	-13.0	8.3	-5.0	-8.6	-4.5	8.0	18.2
Reserve money	34.9	17.0	-0.3	44.3	-8.8	-9.8	-10.6
Net foreign assets	29.1	10.8	3.3	55.6	-2.2	-8.9	-16.8
Net domestic assets	5.7	6.2	-3.6	-11.3	-6.6	-0.8	6.2
Money multiplier 4/	1.8	1.6	1.8	1.5	1.7	1.8	1.8
Velocity of money	1.9	2.1	2.1	1.9	2.3	2.2	2.2
Broad money/GDP	0.51	0.48	0.48	0.52	0.44	0.45	0.46
Broad money growth (12-month percent change)	29.7	4.0	10.7	24.8	13.0	-0.2	7.6
Reserve money growth (12-month percent change)	34.9	17.0	-0.3	44.3	-3.5	-7.7	-10.6
Credit to private sector (12-month percent change)	20.2	35.9	29.3	33.3	34.0	26.7	31.8
Nominal GDP (In millions of ngultrum)	27,762	30,724	34,458	39,317	47,996	47,996	47,996

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates.

<sup>1/</sup> Includes deposits of some public enterprises and off-budgetary entities; as such, data differ from bank financing data reported in the fiscal accounts.

<sup>2/</sup> Includes foreign exchange valuation adjustments and capital accounts.

<sup>3/</sup> Includes time and foreign currency deposits.

<sup>4/</sup> Ratio of broad money to reserve money.

Table 5. Bhutan: Medium-Term Macroeconomic Framework, 2004/05–2012/13

						Ten	th Plan Pe	riod	
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
		Prov.	Est.	Proj.		Sta	aff projecti	on	
Real sector (percent change)									
Real GDP at market prices	6.9	9.1	17.0	14.4	7.2	6.3	6.2	6.1	6.4
Consumer prices (period average)	4.8	4.9	5.0	4.8	4.5	4.1	4.0	4.0	3.9
Fiscal sector (in percent of GDP)									
Revenue and grants	30.3	33.9	35.1	30.7	28.9	27.9	26.9	26.2	25.3
Domestic revenue 1/	17.6	17.6	21.1	19.6	19.4	18.8	18.3	18.0	17.6
Of which: tax revenue	8.9	9.5	7.9	8.6	8.5	8.7	8.7	8.8	8.8
Grants	12.7	16.3	14.0	11.1	9.5	9.0	8.6	8.1	7.7
Expenditure and net lending	37.4	35.0	38.2	36.5	33.5	31.5	31.4	29.9	28.5
Current expenditure	17.9	17.0	17.1	18.8	17.4	16.3	15.3	14.5	15.2
Of which: interest 2/	1.2	1.0	0.9	3.4	3.0	2.6	2.2	2.0	1.9
Capital expenditure	19.8	17.3	21.0	18.4	17.0	16.1	16.9	16.1	14.0
Net lending 3/	-0.3	0.7	0.1	-0.7	-0.8	-0.9	-0.8	-0.7	-0.6
Current balance (excluding grants)	-0.3	0.6	4.0	0.9	2.0	2.6	3.1	3.6	2.4
Overall balance (including grants)	-7.1	-1.1	-3.1	-5.8	-4.6	-3.6	-4.5	-3.7	-3.2
External financing 3/	2.1	1.8	1.0	1.4	2.6	1.5	3.7	3.3	1.4
Domestic financing 4/	5.0	-0.7	2.1	4.4	2.0	2.1	0.8	0.5	1.9
Public sector debt (in percent of GDP)	86.3	81.9	71.3	73.5	69.2	68.2	70.6	72.2	71.7
External sector (in millions of U.S. dollars)									
Current account balance (including grants)	-217	-29	116	141	38	-54	-185	-206	-137
(In percent of GDP)	-28.2	-3.3	10.6	10.1	2.4	-3.2	-9.9	-10.2	-6.2
Trade balance	-249	-123	12	88	11	-73	-183	-207	-161
Exports	212	312	521	687	749	785	833	882	933
Imports	461	435	509	598	738	858	1016	1088	1094
Services, income, and transfers (net)	31	94	104	53	27	19	-2	1	24
Of which: grants	120	176	158	188	182	189	195	201	207
Capital and financial account balance 5/	215	144	39	24	88	154	281	284	182
Of which: foreign direct investment	9	6	11	13	13	14	14	15	15
Of which: loans (net)	78	78	16	-13	32	61	151	152	91
Overall balance	-21	111	45	165	126	99	96	79	45
(In percent of GDP)	-2.7	12.6	4.2	11.8	8.1	5.8	5.1	3.9	2.0
Gross foreign reserves (in millions of U.S. dollars)	367	479	524	689	816	915	1,010.4	1,089.0	1,133.6
(In months of goods and services imports)	8.9	9.8	9.2	9.8	9.9	9.4	9.7	10.4	10.9
External debt (public and private, in percent of GDP)	78.7	77.5	64.8	64.0	59.0	57.1	60.1	62.4	61.2
External debt service									
(In percent of exports of goods and services)	7.2	5.8	4.0	14.2	12.5	11.6	10.5	9.6	8.9
Nominal GDP (in millions of ngultum)	34,458	39,317	47,996	57,720	64,992	72,355	80,283	88,781	98,147

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates and projections.

<sup>1/</sup> Including payment receipts from Tala for its interest payment to the government of India.

<sup>//</sup> Including Tala interest payment.
3/ Excluding Tala's amortization payment.
4/ Including Dagachu.

<sup>5/</sup> Including grant inflows for hydropower projects.

Table 6. Bhutan: Millennium Development Goals 1/

	1990	1995	2000	2005
Eradicate extreme poverty and hunger 2/	(2015 targ	et = halve 1990 \$1 a da	y poverty and malnutrit	ion rates)
Population below \$1 per day (in percent)				
Poverty gap at \$1 per day (in percent)				
Percentage share of income or consumption held by poorest 20 percent				
Prevalence of child malnutrition (in percent of children under 5)	37.9	***	18.7	***
Population below minimum level of dietary energy consumption (in percent)				
Achieve universal primary education 3/		(2015 target = net e	enrollment to 100)	
Net primary enrollment ratio (in percent of relevant age group)				
Percentage of cohort reaching grade 5 (in percent)  Youth literacy rate (in percent of ages 15–24)	•••		91.0	
	•••			
Promote gender equality 4/		(2005 target = educ	cation rate to 100)	
Ratio of girls to boys in primary and secondary education (in percent)				
Ratio of young literate females to males (in percent of ages 15–24)	12.0	***	•••	***
Share of women employed in the nonagricultural sector (in percent)  Proportion of seats held by women in national parliament (in percent)	2.0	2.0	2.0	9.0
Reduce child mortality 5/	,	target = reduce 1990 ur		,
Under 5 mortality rate (per 1,000)	166.0	133.0	100.0	75.0
Infant mortality rate (per 1,000 live births) Immunization, measles (in percent of children under 12 months)	107.0 93.0	93.0 85.0	77.0 76.0	65.0 93.0
Improved maternal health 6/	•	get = reduce 1990 mate		fourths)
Maternal mortality ratio (modeled estimate, per 100,000 live births)		 15.0	420.0 24.0	 51.0
Births attended by skilled health staff (in percent of total)		15.0	24.0	51.0
Combat HIV/AIDS, malaria, and other diseases 7/	(20	15 target = halt, and beq	gin to reverse, AIDS, et	c.)
Prevalence of HIV, female (in percent of ages 15–24)				
Contraceptive prevalence rate (in percent of women ages 15–49)	***	***	•••	0.1
Number of children orphaned by HIV/AIDS Incidence of tuberculosis (per 100,000 people)	203.0	 162.0	129.0	103.0
Tuberculosis cases detected under DOTS (in percent)	203.0	29.0	31.0	31.0
	•••			01.0
Ensure environmental sustainability 8/	05.0	(2015 target = var		20.0
Forest area (in percent of total land area)  Nationally protected areas (in percent of total land area)	65.0		67.0	68.0 25.6
GDP per unit of energy use (PPP\$ per kg. oil equivalent)				25.0
CO2 emissions (metric tons per capita)	0.2	0.4	0.7	0.6
Access to an improved water source (in percent of population)				62.0
Access to improved sanitation (in percent of population)				70.0
Access to secure tenure (in percent of population)				
Develop a global partnership for development 9/		(2015 target = var	ious see notes)	
Youth unemployment rate (in percent of total labor force ages 15–24)		(2013 target – var	ious, see notes,	
Fixed line and mobile telephones (per 1,000 people)	3.0	9.0	23.0	111.0
Personal computers (per 1,000 people)			8.0	20.0
General indicators				
Population (millions)	0.6	0.6	0.6	0.6
Gross national income (in million U.S. dollars)	292.3	265.1	460.3	512.1
GNI per capita (in U.S. dollars)	500.0	500.0	720.0	1,250.0
Adult literacy rate (in percent of people ages 15 and over)	***		***	60.0
Total fertility rate (births per woman)	5.6	5.2	4.6	2.5
Life expectancy at birth (in years)	54.0	58.0	61.0	64.0
Aid (in percent of GNI)	17.6	26.6	12.9	13.7
External debt (in percent of GNI)	31.4	39.2	56.3	70.4
Investment (in percent of GDP)	36.1	48.7	48.1	
Trade (in percent of GDP)	57.6	81.0	76.4	82.0

Source: World Development Indicators database, April 2007.

<sup>1/</sup> In some cases the data are for earlier or later years than those stated.

<sup>2/</sup> Goal 1 targets: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day. Halve, between 1990 and 2015, the proportion of people who suffer from hunger.

<sup>3/</sup> Goal 2 targets: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

<sup>4/</sup> Goal 3 targets: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015.

<sup>5/</sup> Goal 4 targets: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate.

<sup>6/</sup> Goal 5 targets: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.

<sup>7/</sup> Goal 6 targets: Halt by 2015, and begin to reverse, the spread of HIV/AIDS. Halt by 2015, and begin to reverse, the incidence of malaria and other major 8/ Goal 7 targets: Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources. Halve, by 2015, the proportion of people without sustainable access to safe drinking water. By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers.

<sup>9/</sup> Goal 8 targets: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system. Address the Special Needs of the Least Developed Countries. Address the Special Needs of landlocked countries and small island developing states. Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term. In cooperation with developing countries, develop and implement strategies for decent and productive work for youth. In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.

### INTERNATIONAL MONETARY FUND

### **BHUTAN**

### **Staff Report for the 2007 Article IV Consultation—Informational Annex**

### Prepared by the Asia and Pacific Department

### September 20, 2007

	Contents	Page
I.	Fund Relations	2
II.	Relations with the World Bank Group	4
III.	Relations with the Asian Development Bank	9
IV	Statistical Issues	10

### ANNEX I: BHUTAN—FUND RELATIONS

(As of July 31, 2007)

I. Membership Status: Joined 9/28/1981; Article XIV

II.	General Resources Account:	<b>SDR Million</b>	% Quota
	Quota	6.30	100.00
	Fund holdings of currency	5.28	83.81
	Reserve position in Fund	1.02	16.20
III.	SDR Department:	SDR Million	% Allocation
	Holdings	0.36	N/A
IV.	Outstanding Purchases and Loans:	None	

**Outstanding Purchases and Loans:** 

V. **Financial Arrangements**: None

VI. **Projected Obligations to Fund:** None

VII. **Implementation of HIPC Initiative**: Not applicable.

VIII. Implementation of Multilateral Debt Relief Initiative (MDRI): Not applicable.

#### IX. **Exchange System**

Since its introduction in 1974, the ngultrum has been pegged to the Indian rupee at par. Bhutan continues to avail of transitional arrangements under provisions of Article XIV, Section 2. Bhutan also maintains an exchange restriction subject to Fund approval under Article VIII, Section 2(a).

#### X. **Article IV Consultation**

Bhutan is on a 24-month consultation cycle. The 2005 Article IV consultation was concluded by the Executive Board on July 11, 2005.

#### XI. **Technical Assistance**

### Fiscal (FAD):

1982, 1983 Tax policy, budgeting, and accounting

1984 Tax legislation

1984–86, 1988–89 Technical experts assigned as General Fiscal Advisor to the

Ministry of Finance

1987, 1989 - Tax system and public enterprises

1992, 2003 - Income taxation

2003 - Workshop on tax auditing and revenue forecast

2004 - Accounting (with MFD)

### Legal (LEG):

1982–84 - Tax legislation

2004, 2005 - Central banking and financial services legislation and

foreign exchange regulations (with MFD)

### Monetary and Financial (CBD/MAE/MFD/MCM):

- Set-up the Royal Monetary Authority (RMA)

1980–92 - Technical experts assigned as General Advisors to RMA

1989 - Financial system review

1991 - Financial sector legislation/development of supervisory

capabilities

Technical experts assigned as Advisor for Bank Supervision

1992 - Issuance of government securities

1993–96 - Implementation of issuance of government securities 2003 - Monetary and exchange operations / financial systems

2004 - Accounting

2004, 2005 - Central banking and financial services legislation and

foreign exchange regulations

2005, 2007 - Risk based internal audit policies and practices

2006, 2007 - Implementation of accounting reforms

- Debt management and financial markets development

2007 - Follow-up on excess liquidity issues

Follow-up on reserve management

### **Statistics (STA)**:

1988 - Trade statistics 1990 - Statistics database

2004 - Multisector statistics/GDDS mission

2005 - Balance of payments statistics

### XII. Resident Representative/Advisor: None.

### ANNEX II: BHUTAN—RELATIONS WITH THE WORLD BANK GROUP<sup>1</sup>

(As of June 19, 2007)

### **International Development Association (IDA)**

Project	Commitments (Original)	Disbursed (In percent)	Board Approval/Effectiveness
Active projects:			
Second Rural Access Project	10.0	0	4/10/07
Decentralized Rural Development Project	7.0	25.5	3/01/07
HIV/AIDS and STI Prevention and Control Project	5.8	49.5	6/17/04
Education Development Project	31.0	43.3	8/21/03
Sub-total	53.8		
Pipeline:			
Avian Influenza Control Project	1.0		
Private Sector Development	8.0		6/20/07
Second Development Policy Grant	12.0		6/20/07
Urban Development-II	10.0		TBD
Nonlending:			
Trust Fund for Statistical Capacity Building	0.25		2/20/07
Public Financial Management IDF Grant	0.29		4/12/07
Multi-Year Rolling budget IDF grant	0.33		4/13/07

Bhutan is an IDA-only country and qualifies for 100 percent grants in FY07 because (i) the ratio of the present value of external debt to GDP exceeds the threshold value of 50 percent, and (ii) the ratio of the present value of external debt to exports is more than the threshold value of 200 percent. Bhutan's IDA allocation in FY07 and FY08 is about US\$15.7 million in each year, but as small state with a population of less than 1.5 million, Bhutan can cumulatively frontload up to 80 percent of its overall IDA14 indicative allocation. The actual allocation for FY08 and whether Bhutan will again qualify for grants will depend on a number of factors, including country performance and the findings of a more complete debt sustainability analysis.

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<sup>&</sup>lt;sup>1</sup> Prepared by World Bank staff.

### World Bank's Country Assistance Strategy

The 2005 Country Assistance Strategy (CAS) for the FY06/09 period aligns with Bhutan's distinctive vision of *Gross National Happiness* and the priorities and goals of the 9<sup>th</sup> Five-Year Plan (9FYP)/PRSP. The CAS emphasizes selectivity, and supports development based on three pillars: (i) expanding access to better infrastructure and quality social services, as well as connecting communities to markets; (ii) promoting private sector development and employment; and (iii) strengthening the management of public resources, as well as the monitoring and evaluation of development outcomes. In addition, the Bank will support the Royal Government of Bhutan's (RGoB) crosscutting efforts related to decentralization, good governance and environmental management.

### **Lending Program**

Building on a deepening engagement in several areas, there has been heightened activity in the final six months of 2006/07, including over US\$30 million in IDA grants committed or about to be approved by the Board, and involving substantial frontloading of Bhutan's IDA14 allocation.

- The US\$10 million **Second Rural Access Roads Project** was approved by the Board on April 10, 2007. The objective for the Second Rural Access Project is to improve access for about 12,000 rural residents in several geogs (blocks of villages) of Wangdue, Dagana, and Pemagtsel Dzongkhags, which have the highest demand for access in Bhutan. The dzongkhags and geogs were selected taking into account: (i) the development objectives set out in the Ninth Five-Year Development Plan; (ii) the demand for access in the area and the road prioritization; (iii) the exclusion of the selected geogs from projects supported by other donors; (iv) the cost-effectiveness of the individual road; and (v) the detailed geotechnical survey of the individual roads. The project includes two components: 1) a road access component, and 2) a capacity development and implementation support component.
- The proposed US\$12 million **Second Development Policy Grant** was submitted for Board consideration on June 20. It aims to carry forward the objectives of the first operation, helping the RGoB: (a) enhance the delivery of public services by strengthening fiscal management, (b) improve the effectiveness of public spending by bettering financial management and procurement processes, (c) create better income earning opportunities by improving the investment climate, facilitating greater labor market flexibility, and increasing foreign direct investment, (d) raise educational attainment, particularly in previously under served areas, by expanding access to high quality education services, and (e) reduce maternal mortality by increasing the number of births delivered in health facilities.

- The proposed US\$8 million **Private Sector Development Project** has also been submitted for Board consideration on June 20, 2007. The project has three components:
  - 1) Development of IT/ITES Sector (US\$5.0 million), focusing on the development of the IT/ITES sector in Bhutan, using an integrated approach that includes: (i) the establishment of an IT Park and related infrastructure, and (ii) the provision of IT promotion services.
  - 2) Development of IT/ITES Skills Program (US\$2.0 million), focusing on the development of skills through collaboration with international institutions at the following three levels: (i) Generic Skills for the IT/ITES Sector; (ii) Distance learning facilities/CMS for IT Skills development; and (iii) IT Entrepreneurship Development Program.
  - 3) Strengthening Financial Sector through IT Use (USD1.0 million), aiming at improving efficiency in the financial sector through IT use, comprising the following three activities: (i) IT system up gradation in the Bank of Bhutan; and (ii) developing a 'Financial sector IT development strategic plan'; and (iii) establishing the Inter-bank Electronic Fund Transfer Clearing System at the RMA.
- A US\$2.5 million National Influenza Preparedness and Response Project (Avian Flu) is under preparation and is scheduled to be approved by the end of June 2007. As it is funded from a global trust fund, it does not draw upon Bhutan's IDA14 allocation. The overall objectives of the Project are to minimize the threat posed to human beings in Bhutan by Highly Pathogenic Avian Influenza (HPAI) infection by preventing and controlling such infections among birds, especially domestic poultry, and to prepare for, control, and respond to possible human infections, especially an influenza epidemic and related emergencies.

Projects under preparation for FY2008 include the second Urban Development Project, and the Government continues to implement projects with IDA financing to expand the rural access road network and improve education outcomes.

### Nonlending Program

The Bank continues to provide analytical and advisory services, aiming to help the Government build capacity in the areas of: macroeconomic and fiscal analysis, public expenditure management, financial management, procurement, private sector development (through SEDF), statistics, and education quality. Several of these efforts are also supported by grants:

- A US\$250,000 **Trust Fund for Statistical Capacity Building** grant became effective on February 20, 2007. The objectives of the grant are to build statistical capacity at the National Statistical Bureau in order to coordinate, consolidate and harmonize data generation, and to facilitate poverty monitoring to produce concrete, timely and useful information and analysis for decision makers. The project will promote generation of user-friendly data which will underpin impact assessments and monitoring and evaluation.
- A US\$287,000 **Public Financial Management IDF Grant** was approved in April 12, 2007. The objective of the grant is to assist the Ministry of Finance and the Royal Audit Authority of the Royal Government of Bhutan to strengthen the technical and professional competence of the accounting and auditing staff and to improve its operational capacity to produce and disseminate quality financial and audit reports that meet international standards and serve the needs of the stakeholders.
- A US\$330,000 Multi-Year Rolling Budget IDF Grant was approved on April 13, 2007. The development objective is to help the Royal Government of Bhutan (RGoB) introduce Multi-Year Rolling Budgets (MYRB) (as called for in the revised Financial Rules and Regulations of 2001), and move towards performance budgeting. The MYRB initiative is a central part of the RGoB's efforts to ensure the effective use of public resources.

### **International Finance Corporation (IFC)**

Bhutan became a member of the IFC in 2003. The private sector in Bhutan is hampered by the small size of the market, the lack of supportive infrastructure and the comparatively high costs of doing business.

**IFC Investment Services**: IFC currently has US\$9.4 million of senior debt outstanding in one tourism project in Bhutan. IFC is close to exposure limits for Bhutan, so a maximum of US\$10–15 million of additional investment is envisaged over the next three years.

**IFC Advisory Services**: IFC-SEDF's entry strategy has been to mark its presence in Bhutan by replicating best practices to meet Bhutan's growing and evolving needs; financial training, gender development, and Knowledge Center initiatives are examples of these. In keeping with the Bhutanese focus on maintaining cultural identity and environmental protection, the principles of Corporate Social Responsibility (CSR) are integrated into all IFC-SEDF programs.

Access to Finance (ATF) Program: IFC-SEDF's ATF training programs have targeted senior officials of the Royal Monetary Authority (RMA) and other senior bankers from leading financial institutions such as Bank of Bhutan (BOB), Bhutan National Bank (BNB),

Bhutan Development Finance Corporation Ltd. (BDFC), and Royal Insurance Corporation of Bhutan (RICB).

Business Enabling Environment (BEE) Program: IFC-SEDF's BEE program is committed to promoting a macro-conducive environment for SMEs in Bhutan. IFC-SEDF is currently exploring specific interventions to simplify and improve business registration regulation (e.g., reducing number of days required to register a business from 62 days to 47 days), identify opportunities in regional and international markets for the exports of manufactured and agro processed products (e.g., a "Supply Chain Study of Timber and Wood Products" has been recently completed and gender empowerment through women BMOs, e.g., a pilot project in partnership with National Women's Association of Bhutan (NWAB) is presently underway).

Investment Climate Assessments/Foreign Investment Advisory Service: Since 2000, FIAS has undertaken a series of five small projects in Bhutan, each of which has been designed to help RGoB take the next step in developing an operational framework for the introduction of FDI into the economy for the first time. The first FIAS involvement was a desk review of an early version of RGoB's proposed "Foreign Investment Law". Subsequently, a second project helped with the drafting of an investment policy statement (IPS), the third project was the preparation of drafting guidelines for FDI legislation to be issued as an Executive Order (Foreign Direct Investment Policy) to provide a legal environment within which the country could promote FDI. This led to the fourth FIAS project, comprising assistance to draw up procedures to operationalize the Executive Order. A report was finalized in August 2004 which provided recommendations for an institutional structure within which the administration of the FDI regime can be managed.

**Future Vision**: IFC-SEDF plans to extend its activities in Bhutan and replicate some of the successful projects from the rest of the region. The projects would be designed in a manner ensuring meaningful partnerships with Bhutanese counterparts and also keeping in mind the socio-economic and cultural uniqueness of the country in mind.

### ANNEX III: BHUTAN—RELATIONS WITH THE ASIAN DEVELOPMENT BANK

Bhutan became a member in 1982 and ADB began its lending operations to the country in 1983. Bhutan is classified under group "A" with full access to ADF and 80 percent cost-sharing limit for project financing.

Consistent with the highest priorities identified in Bhutan's National Poverty Reduction and ADB's Country Strategy and Program (CSP) approved in September 2005, the CSP has two (2) strategic thrusts: (i) lending assistance focused on transport, power (including rural electrification), urban development, and financial and private sector development; and (ii) nonlending assistance for capacity building for sustainable development.

The CSP will be implemented in coordination with other development partners to avoid duplication. Examples include ADB's rural electrification loans following the Rural Electrification Master Plan developed with assistance from the Government of Japan. Similarly, development partners are using the Road Sector Master Plan developed with ADB assistance. ADB has maintained close cooperation with other multilateral and bilateral funding agencies in capacity building.

The indicative cumulative value for the period 2007–2008 is \$37.6 million. One loan, for the development of small and medium-sized enterprises, has been programmed for 2007, and another, for rural electrification and renewable energy, is programmed for 2008. A nonlending program with a cumulative value of \$3.8 million has been programmed for 2007–2008.

Bhutan: Ongoing Projects (As of December 31, 2006)

Project	Year of Approval	Project Amount (\$ million)	Disbursements (\$ million)
Basic skills development	2001	7.0	5.5
Rural electrification	2003	9.4	9.7
Road network project	2005	6.8	0.2
Financial sector development program	2006	13.0	0.0
Urban infrastructure development	2006	24.6	0.0

### ANNEX IV: BHUTAN—STATISTICAL ISSUES

While data provision is adequate, data shortcomings continue to hamper surveillance in some key areas. For example, fiscal data suffer from lack of consolidation of government accounts and lags in availability. In the balance of payments, large errors and omissions preclude a more accurate assessment of external flows. The national income accounts, price and fiscal statistics have significant limitations. Also, there are inconsistencies between monetary, fiscal and balance of payments statistics. Moreover, the data are subject to frequent, and at times substantial, revisions. The key factors contributing to the data deficiency are the shortage of qualified personnel and facilities. The National Statistical Bureau (NSB) is also constrained by the absence of a Statistics Act. The authorities recognize these shortcomings and are working to remedy them with technical assistance from the ADB, IMF and others. The March 2004 Multisector Statistics Mission assisted the authorities in preparing metadata and plans for improving the macroeconomic statistics and sociodemographic indicators. An official notification regarding Bhutan's decision to participate in the GDDS is required in order to formalize its participation in the system.

### **Real Sector**

The national accounts compilation relies heavily on production data collected by line ministries. These volume data often lack quality control. Estimates for manufacturing are based mainly on annual data obtained directly by the national accounts section. Construction data are estimated using both government accounts and the commodity flow method which utilizes data on the supply of cement and logs. Expenditure components are derived from the same data sources that are used in production estimates, with private consumption calculated as a residual. In 2005, NSB started to report GDP at market prices, replacing the existing estimate at factor cost. New estimates are available with significant lags and estimation procedures are sometimes ad hoc. The base year was shifted from 1980 to 2000 on the basis of Household Income Expenditure Survey in 2000. While new set of available data are added for the estimation, there are still a number of potentially useful data sources that are not used in the calculations. Some deflators, including the one for government services, are inappropriate, causing bias in measures of output based on constant prices. Gross domestic savings are defined as gross investment minus net capital inflow, but the latter concept does not appear to correspond to either the balance on the trade account or on the current account.

Starting in 2004, the consumer price index (CPI) is compiled on a quarterly basis, the number of commodity priced has been greatly expanded, and the geographical scope broadened.

A major constraint to compilations is the lack of reliable population data, both in terms of an overall count and its age-gender distribution. Consequently, indicators of progress towards the MDGs are not calculated on a systematic basis. The population census in 2005 revised population estimates from over 2 million reported in *International Financial Statistics (IFS)* to below 0.7 million.

### **Monetary Statistics**

The balance sheets of the Royal Monetary Authority (RMA) and the two commercial banks (the Bank of Bhutan and the Bhutan National Bank) are consolidated into a monetary survey. The statistics are based on end month balance sheets prepared by these institutions and are generally consistent with the Fund's guidelines for the classification of monetary statistics. There is, nevertheless, room for improvement in a number of areas, specifically: (i) the valuation of financial assets is based on purchase price while market or market-price equivalents would be preferable; (ii) to avoid misclassifications, a list of government units and nonfinancial public enterprises should be prepared and shared with the reporting financial institutions; (iii) the monetary accounts for the RMA and other deposits money banks should be published in the *Monthly Statistical Bulletin*.

The timeliness and coverage data reporting to STA have improved. In addition to the regular submission of monetary data published in the *IFS*, the RMA has also submitted monetary data to STA using the *Standardized Report Forms* (SRFs).

The RMA website and *Monthly Statistical Bulletin* publish monetary and financial statistics with one-month lag. The data include monetary survey, deposit liabilities of commercial banks, sectoral credit by financial institutions, gross international reserves, exchange rates, and selected interest rates. As of June 2007, the RMA reported monetary data to STA with a two-month lag. The authorities and STA are working to improve the timeliness of data reporting to STA to be in line with national publications.

### **Public Finance**

Despite recent improvements in the quality of government finance statistics (GFS), the fiscal data are subject to frequent and substantial revisions, particularly in the expenditure area. The compilation and dissemination of budget execution data and GFS are very limited. Only annual budget execution data are compiled and disseminated, but with a long lag. No GFS are disseminated nationally. Sub-annual data on budget execution are not available. More accurate revenue data could be compiled if there were closer coordination between the various departments in the Ministry of Finance. There are inconsistencies between the fiscal and monetary data with regard to bank financing, stemming from differences in the definition of government.

### **External Sector**

In recent years, particularly since 2002, efforts have been made to follow the classifications recommended by the *BPM5*, to improve estimates of travel, other services, and transfers, and to enhance consistency with other macroeconomic statistics, such as the GFS. But weaknesses still remain. The balance of payments statistics cover a limited range of transactions and many of the key data are estimated. The problem is partly associated with the country's unique exchange and trade system with India, as well as the large porous border

between the two countries, which gives rise to substantial unrecorded trade. No attempt has been made so far to estimate the size of unrecorded trade between India and Bhutan, and travel receipts and payments vis-à-vis India are based on assumption rather than on entry and exit surveys of tourists. There are also a number of other limitations. Most importantly, trade data are compiled on a calendar year basis, while other external transactions are compiled on a fiscal year basis. Consequently, errors and omissions in the balance of payments presentations are large and fluctuate widely.

A technical assistance mission in January-February 2005, in conjunction with RMA, developed a plan for improvement in balance of payments statistics. It includes a quarterly business survey, improved estimation methods, and increased timeliness. The RMA advised that they plan to compile quarterly balance of payments data in the future. Following recent improvements, Bhutan began supplying balance of payments data for publication in *IFS* in June 2007.

### Bhutan—Table of Common Indicators Required for Surveillance

### As of September 7, 2007

	Date of Latest Observation	Date Received	Frequency of Data <sup>6</sup>	Frequency of Reporting <sup>6</sup>	Frequency of Publication <sup>6</sup>
Exchange rates	09/2007	09/2007	D	D	D
International reserve assets and reserve liabilities of the Monetary Authorities <sup>1</sup>	05/2007	09/2007	М	М	М
Reserve/base money	05/2007	09/2007	M	М	М
Broad money	05/2007	09/2007	M	М	М
Central bank balance sheet	05/2007	09/2007	M	М	М
Consolidated balance sheet of the banking system	03/2007	09/2007	Q	Q	Q
Interest rates <sup>2</sup>	03/2007	07/2007	M	М	М
Consumer price index	03/2007	09/2007	Q	Q	Q
Revenue, expenditure, balance and composition of financing <sup>3</sup> – general government <sup>4</sup>	2005/06	06/2007	А	А	А
Revenue, expenditure, balance and composition of financing <sup>3</sup> – central government	2005/06	06/2007	А	А	А
Stocks of central government and central government-guaranteed debt <sup>5</sup>	2005/06	01/2007	А	А	А
External current account balance	2005/06	07/2007	Α	Α	Α
Exports and imports of goods and services	2005/06	07/2007	А	А	А
GDP/GNP	2005	11/2006	Α	Α	Α
Gross external debt	03/2007	07/2007	Q	Q	Q

<sup>&</sup>lt;sup>1</sup>Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.

and local governments.

<sup>&</sup>lt;sup>2</sup> Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

<sup>&</sup>lt;sup>3</sup> Foreign, domestic bank, and domestic nonbank financing.

<sup>&</sup>lt;sup>4</sup> The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state

<sup>&</sup>lt;sup>5</sup> Including currency and maturity composition.

<sup>&</sup>lt;sup>6</sup> Daily (D), Weekly (W), Monthly (M), Quarterly (Q), Annually (A), Irregular (I); Not Available (NA).

# INTERNATIONAL MONETARY FUND INTERNATIONAL DEVELOPMENT ASSOCIATION

### **BHUTAN**

### Joint IMF/World Bank Debt Sustainability Analysis 2007<sup>1</sup>

Prepared by the staffs of the International Monetary Fund and the International Development Association

Approved by Matthew Fisher and Kalpana Kochhar (IMF) and Vikram Nehru and Sadiq Ahmed (IDA)

September 20, 2007

External and public debt dynamics are assessed using the Low-Income Country Debt Sustainability Analysis (LIC-DSA) framework. Debt ratios remain elevated in the coming years due to additional hydropower projects. Notwithstanding the breach of some LIC-DSA indicative thresholds, staffs' assessment is that external debt dynamics are subject to a moderate risk of distress. This assessment is made on the basis of the near absence of commercial risk from Bhutan's major energy projects and the high level of its foreign exchange reserves in relation to external indebtedness.

### I. BACKGROUND

1. At end 2005/06, total public and publicly guaranteed (PPG) debt was about 82 percent of GDP, half of which was related to the Tala hydropower project financed by India. Public debt increased by about 20 percentage points of GDP

(II	n percent o	of GDP)			
	2001/02	2002/03	2003/04	2004/05	2005/06
Total debt	59.6	77.5	84.7	86.3	81.9
Domestic debt	2.3	7.5	6.5	7.6	4.5
Exernal debt	57.3	70.0	78.2	78.7	77.5
Of which: hydropower projects	36.1	45.5	53.8	55.7	53.6
Tala	21.5	29.8	37.9	41.5	41.6

since 2001/02, with Tala debt accounting for most of the increase.<sup>2</sup> Domestic debt, all denominated in local currency and held by domestic financial institutions, remains moderate.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> This is the first debt sustainability analysis prepared for Bhutan using the debt sustainability framework for low-income countries developed jointly by the IMF and the World Bank. The DSA, produced jointly by Fund and Bank staffs (Guidance Note available via the Internet: <a href="http://www.imf.org/external/np/pp/2007/eng/041607.pdf">http://www.imf.org/external/np/pp/2007/eng/041607.pdf</a>), is based on external and public debt data from the Bhutanese authorities, and on IMF and World Bank staff estimates.

As for external debt, Indian rupee debt for the power sector amounted to 46¾ percent of GDP, and convertible currency debt was about 30 percent of GDP.<sup>4</sup>

### II. UNDERLYING DEBT SUSTAINABILITY ANALYSIS ASSUMPTIONS

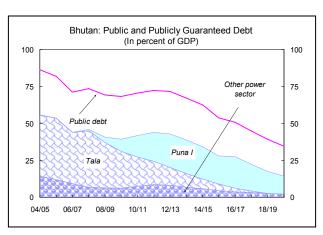
2. The baseline incorporates the impact of two additional hydropower projects relative to the analysis in the 2005 Article IV consultation report. The DSA in 2005 Article IV staff report incorporated only the ongoing Tala project (1020 MW, financed 60 percent in grants, and 40 percent in loans with a 12-year maturity at 9 percent interest in Indian rupees). The following analysis incorporates the Punatsangchu I and Dagachu projects. The agreement for Puna I was signed in July 2007 with the Government of India (GOI). The Government of Austria and the Asian Development Bank are to finance Dagachu, with equity participation by the Royal Government of Bhutan (RGB). In addition, relative to the previous analysis, the debt ratios have turned out to be more favorable due to better-than-expected fiscal balances and upward revisions in the GDP series.

### 3. Underlining baseline macroeconomic assumptions are as follows.

• Real sector: Real GDP spikes as Tala comes on stream in 2006/07, and Punatsangchu I

is commissioned in 2016. The hydropower construction activities and the commissioning of Dagachu are projected to support growth in the interim. Inflation is projected to remain in line with price developments in India, with the ngultrum pegged to the Indian rupee.

• *Fiscal sector*: Higher revenues from hydropower corporations and a broadening of the tax base will help



<sup>&</sup>lt;sup>2</sup> Fiscal year starting July 1.

<sup>&</sup>lt;sup>3</sup> Domestic debt data compiled by the Royal Government of Bhutan include fixed rate debt relating to the purchase of one airplane for state-owned Druk Air in 2004/05, amounting to about half of total domestic debt. Debt related to the second airplane purchase and other state owned enterprises are not included in the data.

<sup>&</sup>lt;sup>4</sup> Convertible currency debt includes US\$9½ million commercial debt extended by the IFC, making all external debt public or publicly guaranteed.

<sup>&</sup>lt;sup>5</sup> Punatsangchu II and Mangdechu are at early stages of conception and are not included in the projections.

<sup>&</sup>lt;sup>6</sup> Puna I's project capacity will be 1095 MW. The financing terms are: 40 percent grant, 60 percent loan, 10 percent interest rate. The entire financing will be in Indian rupees. Dagachu will be 114 MW. The external financing will be 75 percent in loans, at 7 percent. There is to be a 25 percent equity participation by the RGB.

3

- raise the domestic revenue-to-GDP ratio. However, budgetary grants are expected to moderate in absolute terms as national income rises.
- External sector: Electricity exports jump when new power projects come on stream. Strong import growth for hydropower construction and increased debt service associated with Tala are projected. The current account deteriorates over the medium term. In the long run, the power sector contributes to balance of payment surpluses. New non-hydropower financing is assumed to have similar concessional terms as past loans.
- 4. The net present value (NPV) calculation assumes a standard five percent discount rate for all loans. Debt service for Tala includes repayment of interest during construction (IDC, which was deferred) but not interest on IDC.

### III. EXTERNAL DEBT SUSTAINABILITY ANALYSIS

### A. Baseline

5. **Power sector debt in Indian rupees shapes external PPG debt and debt service dynamics**. In NPV terms, the total and external public debt-to-GDP ratios are projected to dip in 2006/07 and 2007/08, when Tala comes on stream and boosts GDP.<sup>7</sup> Over the medium term, disbursements for new projects are projected to offset repayments for Tala. When Puna I comes on stream in 2016/17, the NPV-to-GDP dips and remains below the LIC-DSA indicative thresholds for strong policy performance countries. Even though the debt service ratios rise when repayments for large power projects begin, they moderate in the long run and remain below the thresholds over most of the projection period. A further mitigating factor is the level of reserves, at about 50 percent of GDP and ten months of import cover and projected to rise further, which implies that repayment difficulties are in fact unlikely over the period when indicative debt burden thresholds are breached.

### **B.** Sensitivity Analysis

6. The debt ratios decline over time under most alternative scenarios, and eventually fall below the thresholds. For Bhutan, the two most extreme stress tests involve (i) new borrowing on less favorable terms; and (ii) applying a one standard deviation shock to export growth. The indicators deteriorate over the medium term if the current account excluding

<sup>7</sup> The addition of accumulated IDC (12 percent of GDP) in 2007/08 to the nominal debt stocks does not affect the public debt-to-GDP ratios in NPV terms (as it is already included), but does explain why the nominal debt-to-GDP ratio remains roughly unchanged in 2007/08, despite rapid GDP growth.

<sup>&</sup>lt;sup>8</sup> Since hydropower cycles have shaped Bhutanese exports over the past 10 years, the variation of export growth is very high. Applying a one standard deviation shock to export growth actually leads to a reduction in exports.

interest payments is set at its historical average. This is because Tala-related imports in the past 10 years and the purchase of two airplanes in 2004/05 strongly bias the historical average upward. The recently observed pickup in electricity exports from Tala renders this scenario highly unlikely.

### IV. PUBLIC DEBT SUSTAINABILITY ANALYSIS

### A. Baseline

7. The baseline public debt dynamics is driven by the external debt of the power sector. Over the medium term, grant inflows of about 8–9 percent of GDP are expected to limit the overall fiscal deficit to 3–6 percent of GDP. With foreign financing of about 3½ percent of GDP, domestic financing should be limited to 1–2 percent of GDP, keeping domestic debt to below 11 percent of GDP over the medium term. In the long run, moderate broadening of the tax base and improvements in tax administration, combined with revenues from additional hydropower projects, will sustain the domestic revenue ratio at about 18 percent of GDP. This will help achieve a small overall fiscal surplus and enable a reduction in domestic debt

### **B.** Sensitivity Analysis

8. The public debt ratios remain on a declining path over the long term under various stress tests. However, the debt ratios would not improve drastically under the noreform scenario which assumes a primary deficit of 3.6 percent of GDP. The difference from the baseline scenario stems from the projected path of the primary balance which averages to a small surplus over the next 20 years. Containing capital expenditure as well as broadening domestic tax base will be the key to ensure public debt sustainability.

### V. STAFF ASSESSMENT

- 9. Staffs view Bhutan's debt dynamics as sustainable but subject to a moderate risk of distress.
- The analysis based on the LIC-DSA indicators and stress tests—showing the breaching of some LIC-DSA thresholds—suggests that external debt dynamics should be characterized as subject to a high risk of distress.
- However, there are strong mitigating factors:
  - ➤ Bhutan's own experience with construction, commissioning and management of large hydropower projects (which constitute the bulk of external debt) suggests that the projects are subject to low implementation risk. Hydropower projects have yielded expected growth dividends in the past. When Chukha, the first major hydropower project came on stream in 1986, the electricity sector grew by

800 percent in 1985/86, 370 percent in 1986/87, and 60 percent in 1987/88, boosting overall GDP growth rate to 10 percent, 23 percent, and 17 percent, respectively. While the Tala commissioning was delayed by a year to mid-2006, in 2006/07 it increased total electricity sales by 80 percent and exports by over 90 percent compared to a year earlier, and was the main source of the 17 percent increase in real GDP over the same period. The loan repayments for the Chukha hydropower project are expected to be completed in 2007/08, twenty years after the commissioning of the project in the mid-1980s.

- ➤ Puna I is currently expected to have smaller real costs of construction than Tala for a larger generation capacity. As a result, Puna I's internal rate of return is estimated to be about 2 percentage points higher than Tala.
- The relationship with India suggests that commercial risk is essentially absent from these projects. A key factor in the successful implementation of Chukha, and in the case of other projects going forward, is Bhutan's relationship with India, which is both provider of financing for these large projects and the main consumer of their output. The two countries therefore maintain a close dialogue on the financial and technical aspects of the projects, besides the wider dialogue on support for annual budgets and the five-year plans. For instance, in the case of Tala cost overruns were financed by India on the same concessional terms as the original loan agreement.
- In light of these factors, characterization of debt dynamics as subject to moderate risk of distress is appropriate.

Table 1. Bhutan: Public Sector Debt Sustainability Framework, Baseline Scenario, 2004/05-2027/28

# (In percent of GDP, unless otherwise indicated)

	Actual 04/05 05/06	Est. /06 06/07	t. Historical	Standard Deviation 5/	07/08	60/80	08/09 09/10 10/11 11/12	0/11		Projection 12/13 07/08–12/13 average	/13 17/18 e		27/28 13/14–27/28 average
Public sector debt 1/1  Of which: external debt  Of which: external debt  Of which: convertible-currency denominated  Of which: convertible-currency denominated  Of which: domestic  Change in public sector debt  Frimary deficit  Revenue and grants  Of which: grants  Primary (noninterest) expenditure  Automatic debt dynamics  Contribution from interest rate/growth differential  Of which: contribution from real GDP growth  Contribution from real exchange rate depreciation  Of which: contribution from average real interest rate  Of which: contribution from real exchange rate depreciation  Other identified debt-creating flows  Other (power sector debt)  Residual, including asset changes  NPV of public sector debt)  Gravs financing need 2/1  NPV of contingent liabilities (not included in public sector debt)  Gross financing need 2/1  NPV of public sector debt-to-revenue ratio (in percent)  Of which: external 3/1  Debt service-to-revenue and grants ratio (in percent)  Of which: external 3/1  Debt service-to-revenue ratio (in percent) 4/1  Debt service-to-revenue rate fiscal assumntions	86.3 20.87 20.5	81.9 71.3 93.7 26.2 4.8 64.8 30.7 26.2 4.3 -10.7 -3.4 -13.2 0.2 21.3 33.9 35.1 34.0 34.1 37.2 6.8 -12.9 -12.0 -1.0 2.6 5.9 -12.9 2.6 5.9 -12.8 5.0 -12.8 5.0 -12.8 5.0 -12.8 5.0 -12.8 5.0 -12.8 5.0 -12.8 5.0	883777712888 887187888888888888888888888888	ę. 6.	73.5 64.0 64.0 64.0 64.0 65.2 64.1 7.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0	690.2 590.0 590.0 102.7 105.2 106.0	68.2 57.1 11.0 11.0 1.1 62.1 62.1 62.1 62.1 62.1 62.1 62.1	70.6 60.1 24.6 10.5 24.6 10.5 28.9 28.1 -3.8 64.1 65.7 65.7 18.8 10.5 10.5 10.5 22.1 32.4 32.4	72.2 7 62.4 6 62.4 6 6.2 2 9.8 1 1.6 - 3.5 - 26.2 2 2.6.2 2 2.6.2 2 2.7.9 2 2.7.9 2 - 3.90.2 - 6.10.2 - 6.1 - 2.0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	71.7 61.2 25.7 10.5 -0.5 -0.1 1.4 25.3 7.7 7.7 4.6 -0.2 -0.2 -0.2 -0.2 3.1 3.1 3.1 0.4 59.8 59.8 59.8 59.8 59.8 59.8 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	44.8 38.1.191 6.7.6.0 6.0.6.0 7.1.7 7.1.2 19.8 10.1.3	7.17 1.17 1.17 1.17 1.17 1.17 1.17 1.17	-12
Key macroeconomic and fiscal assumptions Real GDP growth (in percent) Average nominal interest rate on forex debt (in percent) Average real interest rate on domestic currency debt (in percent) 6/ Real exchange rate depreciation (in percent, + indicates depreciation) Inflation rate (GDP deflator, in percent) Growth of real primary spending (deflated by GDP deflator, in percent)	6.9 1.4 -3.1 -7.2 5.0 23.4	9.1 17.0 1.7 1.4 -3.4 -2.8 2.0 -10.0 4.6 4.3 2.5 27.9	8.6 8.7 1.4 1.4 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	3.1 0.2 1.7 5.5 2.1 18.7	14.4 1.3 3.0 -2.2 5.2 1.7	7.2 1.4 0.8  5.0	6.3 1.6 0.6  4.7	6.2 1.7 0.1 	6.1 -0.4 :. 1.5	6.4 7.8 2.5 1.8 -0.9 0.5 3.9 4.6 1.7 1.9		4.0 4.2 2.2 1.5 2.7 5.9  3.9 3.9 2.3 2.9	5.2 2.0 2.2 3.9 2.0

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates and projections.

<sup>1/</sup> Gross public and publicly guaranteed debt. In 2007/08, cumulative interest during construction for Tala (12 percent of GDP) is added to debt stock. 2/ Gross financing need is defined as the primary deficit plus debt service plus the stock of short-term debt at the end of the last period. 3/ Revenue excluding grants. The decline over the medium term mostly owes to declining receipts for Tala interest payments.

<sup>4/</sup> Debt service is defined as the sum of interest and amortization of medium and long-term debt.

<sup>5/</sup> Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability. 6/ Including rupee debt.

Table 2. Bhutan: Sensitivity Analysis for Key Indicators of Public Debt 2007/08–2027/28 1/

				taff pro				
	07/08	08/09	09/10	10/11	11/12	12/13	17/18	27/28
			NPV of	f debt-t	o-GDP	ratio		
Baseline	67	62	62	66	69	70	41	9
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	67	63	64	66	69	71	55	39
A2. Primary balance is unchanged from 2007/08 A3. Permanently lower GDP growth 2/	67 67	63 63	64 63	67 67	71 72	73 74	56 51	42 40
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	67	64	65	69	73	75	48	19
B2. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	67	72	82	86	89	89	55	17
B3. Combination of B1-B2 using one half standard deviation shocks	67	69	75	79	82	83	50	14
B4. One-time 30 percent real depreciation in 2008/09 B5. 10 percent of GDP increase in other debt-creating flows in 2008/09	67 67	78 76	77 77	81 80	85 83	86 83	54 50	18 14
		١	IPV of o	debt-to-	revenue	e ratio		
Baseline	218	215	223	245	264	278	191	52
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	218	219	231	252	272	288	260	224
A2. Primary balance is unchanged from 2007/08	218	218	229	250	272	289	258	242
A3. Permanently lower GDP growth 2/	218	217	225	249	272	290	233	228
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	218	219	230	255	277	295	220	107
B2. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	218	248	296	321	339	352	253	97
B3. Combination of B1-B2 using one half standard deviation shocks	218	237	270	294	313	327	232	83
34. One-time 30 percent real depreciation in 2008/09 35. 10 percent of GDP increase in other debt-creating flows in 2008/09	218 218	269 264	276 276	302 298	325 316	341 329	249 233	101 83
					-revenu			
Baseline	27	25	24	22	20	19	29	11
A. Alternative scenarios								
A1. Real GDP growth and primary balance are at historical averages	27	25	24	22	20	19	28	17
A2. Primary balance is unchanged from 2007/08 A3. Permanently lower GDP growth 2/	27 27	25 25	24 24	22 22	21 21	19 20	31 31	23 17
B. Bound tests								
B1. Real GDP growth is at historical average minus one standard deviations in 2008/09–2009/10	27	26	24	23	21	20	30	13
32. Primary balance is at historical average minus one standard deviations in 2008/09–2009/10	27	25	25	24	22	20	31	14
33. Combination of B1-B2 using one half standard deviation shocks	27	25	24	23	21	20	30	13
B4. One-time 30 percent real depreciation in 2008/09	27	26	24	23	21	20	30	12
B5. 10 percent of GDP increase in other debt-creating flows in 2008/09	27	25	25	23	21	20	31	13

Sources: Data provided by the Bhutanese authorities; and Fund staff estimates and projections.

<sup>1/</sup> Share of Indian rupee loans for additional borrowing is assumed to be 0.
2/ Assumes that real GDP growth is at baseline minus one standard deviation divided by the square root of 20 (i.e., the length of the projection period).

Table 3. Bhutan: External Debt Sustainability Framework, Baseline Scenario, 2004/05–2027/28 1/

(In percent of GDP, unless otherwise indicated)

		,													
	Actual		Est.	Historical	Standard			Staff Projection	ction		200	2007/08–12/13	Staff Projection		2013/14-27/28
	04/05	90/90	20/90	Average 5/	Deviation 5/	80/20	60/80	09/10	10/11	11/12	12/13	Average _	17/18	82	Average
External debt (nominal) 1/	78.7	77.5	64.8			64.0	59.0	57.1	60.1	62.4	61.2		38.1	11.7	
Convertible currency debt	30.5	30.7	26.2			22.3	22.7	22.5	24.6	26.2	25.7		19.1	11.7	
Rupee debt	48.2	46.8	38.6			41.7	36.3	34.6	35.5	36.2	35.5		19.1	0.0	
Power sector debt	22.7	53.6	4.0			45.8	40.7	39.1	41.7	43.9	42.9		22.2	0.0	
Change in external debt	0.5	-1.2	-12.7			9.0	4 6	-1.9	3.0	2.3	-1.3		-5.6	-1.3	
Identified net debt-creating flows	17.4	9.9	-26.4			-18.2	-7.4	-1.0	5.9	0.9	1.9		9.0	-7.3	
Non-interest current account deficit	27.8	2.3	-11.4	7.9	11.1	-13.3	-5.1	6.0	8.0	8.4	4.7		8.0	-6.7	-1.3
Deficit in balance of goods and services	33.6	14.1	9.0-			-6.1	0.0	5.2	11.2	11.2	7.4		-2.9	-14.6	
Exports	33.5	42.4	54.3			55.4	54.0	52.3	51.4	9.09	49.8		50.9	60.3	
Imports	67.1	56.5	53.7			49.3	54.0	57.5	62.6	61.8	57.2		47.9	45.6	
Net current transfers (negative = inflow)	-7.6	-12.0	6.6-	-10.4	3.2	-6.7	4.7	4.0	-3.4	-2.8	-2.3		4.2	7.9	5.0
Of which: official	-15.5	-20.0	-14.5			-13.5	-11.6	-11.0	-10.5	6.6-	-9.4		-3.5	-0.1	
Other current account flows (negative = net inflow)	1.8	0.2	6.0			-0.5	-0.4 4:0	-0.3	0.3	0.1	-0.5		-0.5	0.1	
Net FDI (negative = inflow)	-1.2	-0.7	-1.0	-0.5	0.4	6.0-	6.0	-0.8	9.0	-0.7	-0.7		-0.5	-0.3	-0.5
Endogenous debt dynamics 2/	-9.2	-8.4	-13.9			-3.9	4.1-	-1.1	-1.3	-1.7	-2.1		0.3	-0.3	
Contribution from nominal interest rate	0.5	1.2	6.0			3.3	2.7	2.3	1.9	1.7	1.6		2.0	0.2	
Contribution from real GDP growth	-4.7	6.3	-10.7			-7.2	4.1	-3.4	-3.2	-3.4	-3.7		-1.7	-0.5	
Contribution from price and exchange rate changes	-5.0	-3.3	4.			:	:	:	:	:	:		:	:	
Residual (3-4) 3/	-16.9	9.9	13.7			17.4	2.5	-0.9	-2.9	-3.7	-3.2		-6.2	0.9	
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	
NPV of external debt	:	:	76.2			57.5	52.2	51.1	55.2	59.3	29.8		34.5	9.1	
Convertible currency debt			17.2			14.9	15.7	16.1	18.8	20.8	20.7		15.3	6	
Rupee debt	: :	: :	29.0			42.5	36.4	34.9	36.5	38.4	39.1		19.3	0.0	
Power sector debt	: :	:	63.1			45.8	40.1	39.1	42.8	46.4	46.9		22.5	0.0	
In percent of exports		:	140.3			103.8	99.96	97.6	107.5	117.2	120.2		62.9	15.1	
In percent of government revenues	: :	: :	361.3			292.7	268.8	271.2	301.6	328.7	340.7		184.4	52.6	
Debt service-to-exports ratio (in percent)	7.2	2.8	4.0			14.2	12.5	11.6	10.5	9.6	6.8		11.5	3.2	
Debt service-to-revenue ratio (in percent)	13.8	13.9	10.3			39.9	34.8	32.3	29.5	26.9	25.1		31.3	11.0	
Total gross financing need (billions of U.S. dollars)	213.4	35.4	-111.9			-89.0	12.4	105.7	235.7	253.7	183.6		207.4	-317.6	
Non-interest current account deficit that stabilizes debt ratio	27.3	3.5	1.3			-12.5	-0.2	2.8	2.0	6.1	5.9		6.4	-5.4	
Key macroeconomic assumptions															
Real GDP growth (in percent)	6.9	9.1	17.0	8.6	3.1	14.4	7.2	6.3	6.2	6.1	6.4	7.8	4.0	4.2	5.2
GDP deflator in U.S. dollar terms (change in percent)	6.8	4.3	5.6	3.6	3.4	12.2	4.8	2.8	2.5	2.2	2.0	4.4	1.9	1.9	1.9
Effective interest rate (percent) 4/	0.8	1.7	4.1	1.6	1.2	9.9	4.7	4.2	3.7	3.1	2.8	4.2	8.4	1.9	3.4
Growth of exports of goods and services (U.S. dollar terms, in percent)	36.8	44.3	58.2	19.5	22.3	30.8	9.7	5.8	6.9	8.9	8.9	11.1	7.2	8.5	9.8
Growth of imports of goods and services (U.S. dollar terms, in percent)	71.6	4.1	17.5	16.5	20.9	17.6	23.3	16.3	18.4	7.1	0.5	13.9	0.9	6.2	5.6
Grant element of new public sector borrowing (in percent)	:	:	:	:	:	3.6	-9.1	-27.8	-27.1	-28.6	-29.4	-19.7	33.3	33.3	27.5
Government revenues (excluding grants, in percent of GDP)	17.6	17.6	21.1			19.6	19.4	18.8	18.3	18.0	17.6		18.7	17.3	18.1
Aid flows (in billions of U.S. dollars) 6/	297.7	323.9	203.6			264.0	320.4	392.7	524.6	529.7	431.0		157.2	76.4	
Of which : concessional loans	213.2	233.9	22.7			210.8	0.727 0.78	108.4	300.9	0.4F.0	270.Z		1.0.7	0 0. 7 0 0.	
Grant equivalent financing (in percent of CDD) 7/	ř		.40			- 6	2 7	1.07	2. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	10.4 10.5	10.0		ب ن م	- 4	3.3
Grant-equivalent financing (in percent of external financing) 7/	: :	: :	: :			81.2	67.2	58.7	47.5	47.7	54.1		82.8	40.4	68.4
Memorandum items:															
Nominal GDP (in billions of U.S. dollars)	772.4	878.8	1,086.1			1,393.1			1,862.1	,020.6	2,191.9		3,372.9 6	6,195.0	
Nominal dollar GDP growth	14.2	13.8	23.6			28.3			6.8	8.5	8.5	12.6	0.0	6.2	7.2
NPV of PPG external debt (in billions of U.S. dollars) (NPVt-NPVt-1)/GDPt-1 (in percent)			827.6			800.6	816.8	3.6	1,028.6 9.1	9.1	1,311.2 5.6	4.3	1,164.9 -3.4	562.9 -0.7	-1.2
E. C.															

Source: Fund staff projections and simulations.

<sup>1/</sup>All external debt is public or publicly guaranteed. In 2007/08, cumulative interest during construction for Tala (12 percent of GDP) is added to debt stock.

2/ Derived as [r - g - r(1+g)]/(1+g+r+gr) times previous period debt ratio, with r = nominal interest rate; g = real GDP growth rate, and r = growth rate of GDP deflator in U.S. dollar terms.

3/ Includes exceptional financing (i.e., changes in arrears and debt relief); changes in gross foreign assets; and valuation adjustments. For projections also includes contribution from price and exchange rate changes.

 <sup>4/</sup> Current-year interest payments divided by previous period debt stock.
 5/ Historical averages and standard deviations are generally derived over the past 10 years, subject to data availability.
 6/ Defined as grants, concessional loans, and debt relief.
 7/ Grant-equivalent financing includes grants provided directly to the government and through new borrowing (difference between the face value and the NPV of new debt).

Table 4. Bhutan: Sensitivity Analyses for Key Indicators of Public and Publicly Guaranteed External Debt, 2007/08–27/28 (In percent)

			s	Staff Proj	jection			
	07/08	08/09	09/10	10/11	11/12	12/13	17/18	27/28
			NPV o	f debt-to	-GDP r	atio		
Baseline	57	52	51	55	59	60	35	9
	31	32	31	33	33	00	33	9
A. Alternative scenarios  A1. Key variables at their historical averages in 2008/09–27/28 1/	57	62	63	63	63	62	52	58
A2. New public sector loans on less favorable terms in 2008/09–27/28 2/	57	55	57	67	77	81	56	28
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008/09–09/10 B2. Export value growth at historical average minus one standard deviation in 2008/09–09/10 3/	57 57	53 57	52 64	57 68	61 72	61 72	35 43	9 11
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008/09–09/10	57	55	55	59	64	64	37	10
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/	57	51	48	52	56	57	32	9
B5. Combination of B1-B4 using one-half standard deviation shocks	57	51	45	50	54	55	31	8
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008/09 5/	57	73	72	77	83	84	48	13
			NPV of	debt-to-	exports	ratio		
Baseline	104	97	98	108	117	120	68	15
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008/09–27/28 1/	104	115	121	123	124	125	101	97
A2. New public sector loans on less favorable terms in 2008/09–27/28 2/	104	101	110	131	152	163	111	47
B. Bound tests  B1. Real GDP growth at historical average minus one standard deviation in 2008/09–09/10	104	97	98	108	117	120	68	15
B2. Export value growth at historical average minus one standard deviation in 2008/09–09/10 3/	104	120	151	162	174	177	104	23
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008/09–09/10	104	97	98	108	117	120	68	15
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/	104	94	91	101	111	114	64	14
B5. Combination of B1-B4 using one-half standard deviation shocks	104	93	83	93	103	106	58	13
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008/09 5/	104	97	98	108	117	120	68	15
			NPV of	debt-to-	revenue	ratio		
Baseline	293	269	271	302	329	341	184	53
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008/09–27/28 1/	293	319	336	346	349	355	275	338
A2. New public sector loans on less favorable terms in 2008/09–27/28 2/ B. Bound tests	293	282	305	367	425	463	301	165
B1. Real GDP growth at historical average minus one standard deviation in 2008/09–09/10	293	273	278	309	337	349	189	54
B2. Export value growth at historical average minus one standard deviation in 2008/09–09/10 3/	293	296	342	371	397	408	230	64
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008/09–09/10	293	281	291	324	353	366	198	56
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/	293	261	253	284	311	323	173	50
B5. Combination of B1-B4 using one-half standard deviation shocks B6. One-time 30 percent nominal depreciation relative to the baseline in 2008/09 5/	293 293	262 377	241 380	273 423	302 460	315 477	165 258	48 74
Be. One time of percent normal appropriation relative to the baconine in 2000/00 or	200	011					200	, ,
Danella.	4.4	40		rvice-to-	•		40	•
Baseline	14	13	12	11	10	9	12	3
A. Alternative scenarios  A1. Key variables at their historical averages in 2008/09–27/28 1/	14	12	12	11	9	8	11	6
A2. New public sector loans on less favorable terms in 2008/09–27/28 2/	14	13	12	12	13	14	11	6
B. Bound tests								
B1. Real GDP growth at historical average minus one standard deviation in 2008/09–09/10  B2. Export value growth at historical average minus one standard deviation in 2008/09–09/10 3/	14 14	13 14	12 15	11 14	10 13	9 12	12 17	3 5
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008/09–09/10	14	13	12	14	10	9	17	3
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/	14	13	12	10	9	9	11	3
B5. Combination of B1-B4 using one-half standard deviation shocks	14	13	11	10	9	8	10	3
B6. One-time 30 percent nominal depreciation relative to the baseline in 2008/09 5/	14	13	12	11	10	9	12	3
			Debt se	rvice-to-	revenue	ratio		
Baseline	40	35	32	30	27	25	31	11
A. Alternative scenarios								
A1. Key variables at their historical averages in 2008/09–27/28 1/	40	35	33	30	27	24	31	21
A2. New public sector loans on less favorable terms in 2008/09–27/28 2/	40	35	34	34	37	40	29	21
B. Bound tests  B1. Real GDP growth at historical average minus one standard deviation in 2008/09–09/10	40	35	33	30	28	26	32	11
B2. Export value growth at historical average minus one standard deviation in 2008/09–09/10 3/	40	35	33	32	30	28	37	14
B3. U.S. dollar GDP deflator at historical average minus one standard deviation in 2008/09–09/10	40	36	35	32	29	27	34	12
	40	35	32	29	26	24	30	10
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/								10
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/ B5. Combination of B1-B4 using one-half standard deviation shocks	40	36	33	29	26	25	29	
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/	40 40	36 49	33 45	29 41	26 38	25 35	29 44	15
B4. Net nondebt creating flows at historical average minus one standard deviation in 2008/09–09/10 4/ B5. Combination of B1-B4 using one-half standard deviation shocks								

<sup>1/</sup> Variables include real GDP growth, growth of GDP deflator (in U.S. dollar terms), non-interest current account in percent of GDP, and nondebt creating flows.

2/ Assumes that the interest rate on new borrowing is by 2 percentage points higher than in the baseline, while grace and maturity periods are the same as in the baseline.

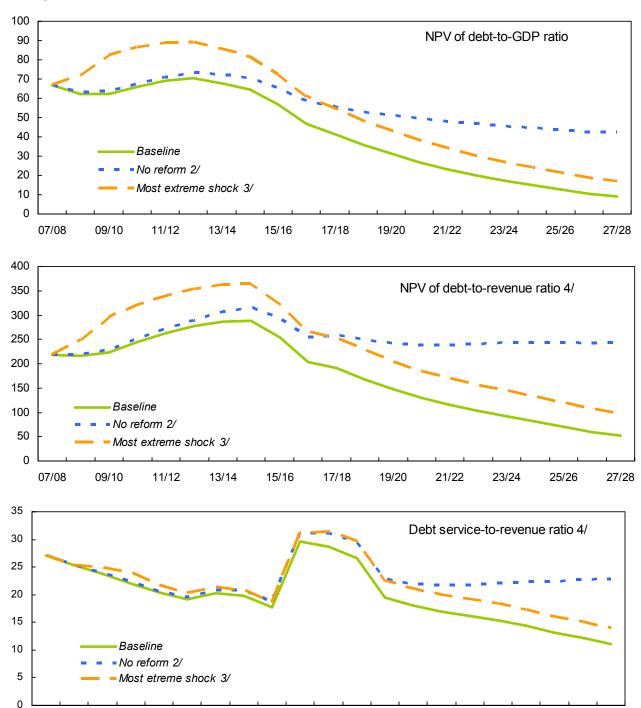
<sup>3/</sup> Exports values are assumed to remain permanently at the lower level, but the current account as a share of GDP is assumed to return to its baseline level after the shock (implicitly assuming an offsetting adjustment in import levels).

<sup>4/</sup> Includes official and private transfers and FDI.

<sup>5/</sup> Depreciation is defined as percentage decline in dollar/local currency rate, such that it never exceeds 100 percent.

<sup>6/</sup> Applies to all stress scenarios except for A2 (less favorable financing) in which the terms on all new financing are as specified in footnote 2.

Figure 1. Bhutan: Indicators of Public Debt Under Alternative Scenarios, 2007/08–2027/28 1/



Source: Fund staff projections and simulations.

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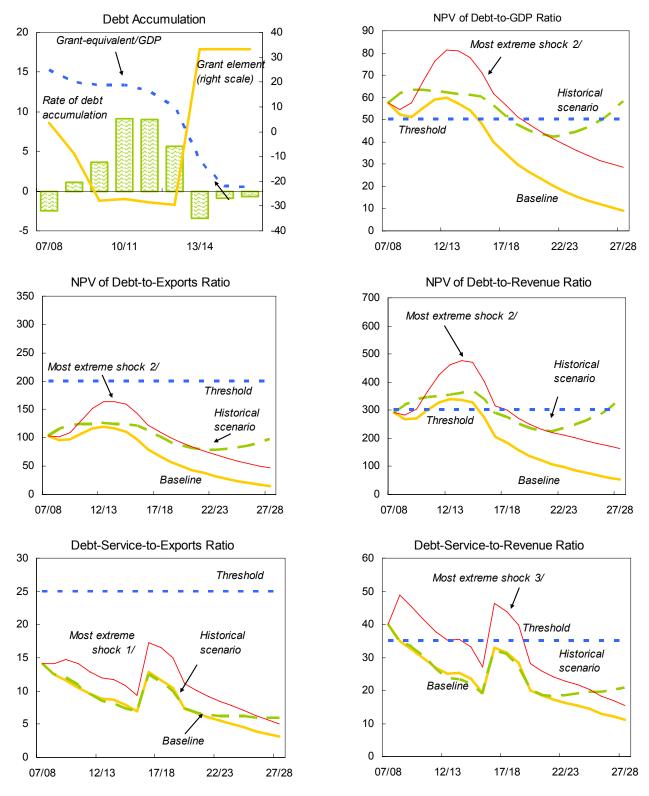
<sup>1/</sup> Share of Indian rupee loans for additional borrowing is assumed to be zero.

<sup>2/</sup> Primary balance is unchanged from 2007/08.

<sup>3/</sup> Most extreme stress test is test that yields highest ratio in 2017/18, which is one standard deviation lower primary balance in 2008/09 and 2009/10 for all three cases.

<sup>4/</sup> Revenue including grants.

Figure 2. Bhutan: Indicators of Public and Publicly Guaranteed External Debt Under Alternative Scenarios, 2007/08–2027/28



Sources: Fund staff projections and simulations.

<sup>1/</sup> Export value growth at historical average minus one standard deviation in 2008/09–09/10.

<sup>2/</sup> New public sector loans on less favorable terms in 2008/09-27/28.

<sup>3/</sup> One-time 30 percent nominal depreciation relative to the baseline in 2008/09.

### INTERNATIONAL MONETARY FUND

## Public Information Notice

EXTERNAL RELATIONS DEPARTMENT

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International Monetary Fund 700 19<sup>th</sup> Street, NW Washington, D. C. 20431 USA

### IMF Executive Board Concludes 2007 Article IV Consultation with Bhutan

On October 5, 2007, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Bhutan.<sup>1</sup>

### **Background**

Political stability and prudent economic management continue to contribute to a significant rise in living standards and development indicators in Bhutan. Significant political changes are in the offing, but the authorities are taking steps to ensure the continuation of sound policies.

Growth remained robust and macroeconomic outcomes were broadly favorable during 2005/06 (July 2005 –June 2006) and 2006/07. Economic growth was fueled by continued work on the Tala hydropower project, public investment in infrastructure, and private investment in housing. In addition, the services sector performed strongly driven by trade and financial sector. Real GDP growth is estimated to have almost doubled from 9 percent in 2005/06 to 17 percent in 2006/07, with much of Tala coming on stream. Inflation remained in line with price developments in India.

Large shifts in the fiscal position reflected a combination of revenue, expenditure, and aid volatility. In 2005/06, a shortfall in excise duty refunds from India was more than offset by higher grants and lower capital spending. The budget made a net repayment to the banking system of  $\frac{3}{4}$  percent of GDP. In 2006/07, the domestically financed deficit (2 percent) was higher-than-budgeted

<sup>&</sup>lt;sup>1</sup> Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities.

(1½ percent of GDP). The main factors were a revenue shortfall (from continued shortfall in excise duty refunds from India), higher-than-budgeted spending, and lower-than-budgeted loan inflows.

Although the public debt-to-GDP ratio rose, debt service obligations remained manageable. Public debt doubled to over 80 percent of GDP at end-2005/06 from mid-2000. The bulk of the increase was rupee borrowings from India for Tala. Domestic financing of budget deficits—in particular, purchase of an aircraft at a cost of about US\$39 million (4½ percent of GDP) for state-owned Druk Air—also contributed to the increase in the public debt ratio. However, with debt service payments on Tala scheduled to begin only in 2007/08, the debt service ratio remained around 6(10) percent of exports (revenue) during the past five years.

The balance of payments remained in surplus and total international reserves rose. The trade balance improved in 2005/06, as exports to countries other than India rose significantly. In 2006/07, electricity exports from Tala shifted the trade balance into a small surplus. Together with a projected surplus in the capital and financial account related to continued disbursements for Tala and other external assistance, the total reserve cover (convertible currency and Indian rupees) at end-2006/07 was over nine months of goods and services imports.

Bhutan's economic prospects are bright. Construction of two hydropower projects will help sustain real GDP growth over the medium term. With the exchange rate peg to the Indian rupee, inflation is expected to be in line with price developments in India. The overall balance of payments is projected to be in surplus and would help maintain adequate international reserves.

### **Executive Board Assessment**

Executive Directors commended Bhutan's prudent macroeconomic policies and political stability, which have yielded robust growth, an appreciable improvement in social indicators, and progress toward meeting the Millennium Development Goals, contributing to a solid foundation for the transition to a constitutional monarchy in 2008.

Directors welcomed the favorable macroeconomic outcomes and good medium-term growth prospects. Rapid real GDP and per capita income growth over the last decade was led by the Tala hydroelectric power project. The additional power projects in the pipeline, with strong donor support, would maintain the growth momentum. Inflation has remained in line with price developments in India and overall international reserves have remained adequate.

On monetary management, Directors called on the Royal Monetary Authority (RMA) to remain watchful of excess liquidity and rapid credit growth. They welcomed the steps being taken to tighten monetary conditions to deal with the temporary shortfall in rupee reserves and rein in private sector credit growth. They recommended enhancing the RMA's capacity in monetary and foreign exchange reserve management, and supported the authorities' request for Fund technical assistance in this area.

Directors highlighted the need to limit the balance sheet exposures of financial institutions to sectoral and macroeconomic risks, and to improve the ability of these institutions to monitor and

manage such risks. The development of government securities markets over the medium term should help manage liquidity and provide alternative investment vehicles for financial institutions. Directors encouraged the RMA to further enhance its capacity for financial sector supervision.

Directors agreed that the exchange rate peg of the ngultrum to the Indian rupee and the level of the peg remain appropriate. The peg has anchored inflation expectations and facilitated trade with India. Should the revenues from the Tala project lead to upward pressures on the real exchange rate, fiscal tightening to moderate a rise in the prices of nontradable goods could mitigate such pressures. Over the medium term, competitiveness could be enhanced by raising private sector productivity.

Directors underscored the importance of ensuring fiscal sustainability by limiting domestically financed deficits and mobilizing external aid on a timely basis. This would help to maintain the public debt-to-GDP ratio on a downward trajectory. Directors supported efforts to raise domestic revenues by broadening the tax base and strengthening tax administration, including through a rationalization of the sales tax and import duty rates. They encouraged the authorities to plan expenditure in a medium-term framework. Directors concluded that Bhutan's risk of external debt distress is moderate, reflecting the authorities' good record of implementation of externally financed hydroelectric projects, high level of overall foreign exchange reserves, and strong external donor support for the power sector projects.

Directors advised the authorities to accord high priority to private sector development and economic diversification to ensure job creation. This would help overcome the constraints of Bhutan's landlocked location and small size. Key reforms include aligning Bhutan's education system to market needs, strengthening infrastructure, and further streamlining the regulatory regime. Directors welcomed Bhutan's plans to join the World Trade Organization.

Directors considered that Bhutan's strong external position provides scope for further gradual liberalization of exchange restrictions. The authorities were encouraged to eliminate restrictions subject to approval under Article VIII as soon as possible, and to eliminate the restrictions maintained under Article XIV as soon as Bhutan's balance of payments position permits. Fund technical assistance to help develop a foreign exchange market and market-based instruments to manage hard currency flows would facilitate the elimination of these restrictions and allay concerns about their removal.

Directors welcomed the authorities' efforts to strengthen Bhutan's statistical data. In particular, data in the fiscal and external sectors need to be upgraded.

**Public Information Notices (PINs)** form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

Bhutan: Selected Economic and Financial Indicators, 2003/04–2007/08 1/

Bhutan: Selected Economic and F					
	2003/04	2004/05	2005/06	2006/07	2007/08
			Est.	Est.	Proj.
Real sector					
Real GDP at market prices (percent change)	7.2	6.9	9.1	17.0	14.4
Consumer prices (percent change, period average)	4.3	4.8	4.9	5.0	4.8
Nominal GDP (at market prices; billions of ngultrum)	30.7	34.5	39.3	48.0	57.7
(at market prices, billions of rigulatin)	30.7	34.3	39.3	40.0	51.1
General government		(In	percent of G	SDP)	
Total revenue and grants	33.9	30.3	33.9	35.1	30.7
Of which: foreign grants	17.5	12.7	16.3	14.0	11.1
Total expenditure and net lending	32.1	37.4	35.0	38.2	36.5
Of which: capital expenditure	17.1	19.8	17.3	21.0	18.4
Current balance (excluding grants)	-0.3	-0.3	0.6	4.0	0.9
Overall balance (excluding grants)	-15.7	-19.8	-17.5	-17.1	-16.8
Overall balance (including grants)	1.8	-7.1	-1.1	-3.1	-5.8
Public sector debt 2/	84.7	86.3	81.9	71.3	73.5
Monetary sector 3/				erwise indica	ted)
Broad money	4.0	10.7	24.8	7.6	
Credit to private sector	35.9	29.3	33.3	31.8	
Interest rates (end of period, in percent)					
Deposits (less than 1 year)	6.0	4.5	4.5	4.5	
Lending	10–16	10–16	10-16	10-15	
External sector	(In milli	one of IIS o	lollare unloc	s otherwise in	dicated)
Current account balance	-73	-217	-29	116	141
(In percent of GDP) 4/	-73 -10.8	-217 -28.2	-3.3	10.6	10.1
Trade balance	-10.6	-20.2 -249	-3.3 -123	10.0	88
Exports (goods)	158	212	312	521	687
(percent change)	39.7	34.5	47.2	66.9	31.8
Imports (goods)	263	461	435	509	598
(percent change)	27.3	75.5	-5.6	17.0	17.6
Grants (current transfer)	94	120	176	158	188
Loans (net)	103	78	78	16	-13
Overall balance	8	-21	111	45	165
(In percent of GDP)	1.2	-2.7	12.6	4.2	11.8
Gross official reserves	383	367	479	524	689
(In months of goods and services imports)	8.9	8.9	9.8	9.2	9.8
External debt (in percent of GDP)	78.2	78.7	77.5	64.8	64.0
Of which: power sector debt	53.8	55.7	53.6	44.0	45.8
Debt service ratio (in percent of G&S exports)	4.2	7.2	5.8	4.0	14.2
Ngultrum per US\$ (period average)	45.4	44.6	44.7	44.2	
Memorandum items:					
Electricity exports (in percent of total goods exports)	40.3	31.0	25.1	26.6	34.7
Unemployment rate (in percent) 5/	1.8	2.5	3.1	20.0	01.7
Onemployment rate (in percent) 3/	1.0				

Sources: Data provided by the Bhutanese authorities; and IMF staff estimates and projections.

<sup>1/</sup> Fiscal year begins July 1.

<sup>2/</sup> Public and publicly-guaranteed debt, including loans for hydropower projects and the purchases of one aircraft. Including interest during construction for Tala from 2007/08 onwards.

<sup>3/ 12-</sup>month percent change in June. 2006/07 monetary data are IMF projection, and interest rate data are actual as of April 2007.

<sup>4/</sup> In 2004/05, includes the import of two aircraft amounting to US\$78 million.

<sup>5/</sup> On a calendar year basis, e.g., the entry for 2005/06 is for 2005.

# Statement by Adarsh Kishore, Executive Director for Bhutan and Saranyan Krishnan, Advisor to Executive Director October 5, 2007

- 1. On behalf of my authorities, I thank staff for the constructive policy discussions and the comprehensive and analytical set of reports. My authorities agree with the thrust of the staff appraisal and welcome the policy recommendations. Bhutan's macroeconomic performance in the period since the last Article IV consultation has strengthened even further. Aided by prudent policy making and strong support from donors, GDP growth targets have been exceeded. Our authorities have achieved this performance with no dilution in their commitment to preserving the environment and the local culture and in a manner that enhances the pursuit of individual all round happiness. Remarkable progress has been made in improving social indicators and Bhutan is set to meet many of its Millennium Development Goals. The ambitious growth targets of the 9th Plan have been by and large achieved, with external assistance flowing in as anticipated.
- 2. Bhutan is at the cusp of a historic transformation that will accompany the adoption of the Constitution and the introduction of parliamentary democracy in 2008. This transition is progressing in a completely peaceful and orderly manner. Bhutan's international integration is growing and accession to the WTO is planned to take place during 2008. Bhutan has already joined the BIMSTEC, the IFC, SAFTA and the World Customs Organization. The direction of Bhutan's trade is also gradually diversifying and the share of newer trade partners like Hong Kong grew since the last review. Bhutan's geographical location and close links with India continue to offer immense opportunities. At the same time, it is recognized that strong economic links with one country could pose some risks.
- 3. Bhutan's real GDP growth during 2006-07 is projected to almost double to 17 percent from 9 percent in the year before. Growth is driven by the Tala Hydropower Project going on-stream and government spending on infrastructure and private investment in housing. Annual inflation in 2006-07 at 5 percent remains in line with price developments in India, with the one to one exchange rate peg to the Indian rupee. The Ngultrum has appreciated marginally against the US dollar. This, however, has not had any significant bearing on the country's competitiveness. With electricity exports from Tala commencing in 2006-07, the current account balance has shifted to a sizeable surplus of 10.6 percent of GDP. Bhutan's foreign reserves presently cover 9 months of goods and services imports. However, the rupee reserve ratio has declined to under one month, although this appears to be a cyclical issue.
- 4. My authorities recognize that despite an improvement in the overall budgetary position of the country and developmental activities progressing without major problems, challenges remain. Given the dependency on external aid, there is little room for fiscal complacency.

### **Fiscal Policy**

- 5. The overarching challenge of fiscal policy is to strengthen fiscal prudence and to limit domestically financed deficits while continuing to finance ambitious infrastructure projects beyond the current plan period into the 10th Plan period. With generous grant assistance from development partners and rigorous expenditure control the government has managed to keep overall deficits on an average at 4 percent of GDP, below the policy ceiling of 5 percent. While the Royal Government would like to finance all capital expenditures of the Plans through grant financing, the overall grants available are likely to be somewhat below the requirement and would be partially compensated by external and domestic borrowing. My authorities agree with staff assessment for the medium term fiscal framework that revenue receipts to GDP ratio should be maintained at about 18.5 percent, expenditure contained to about 31 percent, divided equally between capital and current expenditure, and that domestically financed deficits should be moderated to 1 - 2 percent of GDP. This would involve ensuring that the Tala project is fully commissioned by 2008 and commences yielding the expected revenues, negotiating grant financing from India and preparing contingency plans to meet any shortfalls.
- 6. Reviewing the 2006 07 budget, the domestically financed fiscal deficit target of 1.5 percent is expected to be exceeded somewhat leaving a deficit of about 2 percent of GDP. This is mainly on account of the higher spending associated with the celebration on the centenary of the establishment of the monarchy in Bhutan and for the new constitutional bodies to be set up in 2008.
- 7. The Tenth Plan is being prepared in the context of momentous socio-political change, but the governing development philosophy of maximizing Gross National Happiness will continue to hold true. The four pillars of GNH promotion of equitable and sustainable socioeconomic development; preservation and promotion of cultural values; conservation of the national environment; and good governance will form the core values of the Tenth Plan. Poverty reduction will be the main development goal of the Tenth Plan and programmes in all sectors will be prepared to target the poor and vulnerable.
- 8. The budget for 2007-08 was endorsed by the National Assembly in 11 June 2007. As a result of a combination of slightly higher levels of projected expenditure and the expectation that slightly higher revenues being offset by a projected decline in grants, my Bhutanese authorities anticipate the fiscal deficit to be 4 percent of GDP in the budget estimates for the year 2007 08, with 2.75 percent being the domestically financed deficit. In keeping with the longstanding government priority for the social infrastructure, 22 percent of the budget has been allocated to the education and health sectors, with emphasis on construction of outreach clinics, basic health units and expansion of educational infrastructure. Domestic revenues are expected to increase, due to higher contributions from the Tala project. While my authorities are committed to seeking external financing, should such aid not materialize the Royal Government may have to rely on domestic finances to meet the expenditure plans.

9. My Bhutanese authorities are aware that there are risks and vulnerabilities on the debt sustainability front. However, there are also strong mitigating factors. Most the contracted debt is intended for implementation of hydro-electric projects. The record of such implementation starting with Chukha (336 MW), Kurichhu (60 MW) and now Tala (1020 MW) has been very encouraging. The Punatsangchhu and Dagchhu projects are being undertaken in this back-drop. A further element contributing to sustainability of the debt is Bhutan's relationship with India which has found new meaning and been further strengthened with the signing of the new India-Bhutan Friendship Treaty in February 2007. Since India has also committed to purchase at least 5000 MW of power from Bhutan by 2020, no difficulty is expected on sustainability of debt for the hydro-electric sector. Regular plan assistance is received as a grant and the Indian and Bhutanese authorities are in regular touch on this issue.

### **Monetary Policy and Financial Sector**

- 10. The exchange rate peg of the Ngultrum to the Indian rupee has served Bhutan well and the exchange rate peg and its level remain appropriate. However, the immediate challenge is to tighten monetary conditions to support the exchange rate peg. The RMA is maintaining a close watch on the liquidity conditions and is prepared to take appropriate measures to absorb excess liquidity. My RMA authorities concur with staff advice on this issue and are contemplating a stepped up issuance of RMA Bills and an increase of the Cash Reserve Ratio.
- 11. In 2007-08, with the commissioning of the Tala project, the current account is likely to remain in a surplus of about 10 percent of GDP. Reserves are expected to grow even further beyond the present level of about 9 months of goods and services imports.
- 12. An immediate issue is the temporary shortage in rupee liquidity, with rupee reserves having dropped to less than one month's imports in July 2007. This is a temporary and cyclical phenomenon which can be overcome by appropriate measures to monitor, manage and forecast rupee liquidity. In case the situation persists, the Royal authorities are contemplating negotiating a concessional rupee credit line with India.
- 13. My RMA authorities find it difficult to eliminate the remaining restrictions under Article XIV and to accept the obligations under Article VIII given the currency composition of the balance of payments and their concerns over hard currency outflows. Given the limited and unpredictable sources of convertible currency inflows liberalization of the remaining restrictions would need to be taken cautiously with further diversification of export earnings and the developments in greater convertibility of the Indian rupee. I would seek support of my colleagues for an extension to the arrangement.

### **Financial Sector Issues:**

14. The financial sector has performed well and private sector growth has been robust, exceeding 30 percent. The RMA is conscious of the risks of the rapid private sector credit growth, specifically the vulnerability of banks' balance sheets to concentration

- of credit growth in the housing sector. The RMA is closely monitoring the situation and is prepared to take further prudential measures.
- 15. My authorities are aware of the need to provide more investment opportunities for the commercial banks. Maturity mismatches in the financial institution balance sheets are sought to be addressed through developing the government bonds market. The development of financial markets will require a further strengthening of the institutional capacity in the RMA, given the lack of adequate technical expertise. The RMA authorities are keen on a long-term technical assistance on central banking from the Fund. Since the central banking functions of the RMA are modeled on the Reserve Bank of India, their preference is for an expert familiar with RBI operations.

### **Structural Issues**

- 16. Hydropower is the engine of economic growth and it is planned that this sector will account for an even larger proportion of the economy at the conclusion of the Tenth Plan period. Tala project is expected to generate electricity up to its installed capacity of 1020 MW by 2008. In July 2007 an agreement was signed for the implementation of the 1095 MW Punatsangchhu -I hydro-electric power project which is expected to be completed by 2014. The Dagachu power project is being implemented with Austrian assistance. India has committed to import a minimum of 5000 MW of electricity from Bhutan by 2020, assuring evacuation of the electricity generated.
- 17. My Bhutanese authorities recognize the significant potential of Bhutan's tourism sector with the main focus on promoting and maintaining Bhutan as a high quality destination. The goal is to increase annual tourist arrivals from about 13,000 in 2005 to about 30,000 by the end of the Tenth Plan period. The sector has attracted the largest FDI in recent years and some hotel chains have also started investing.
- 18. Bhutan faces the challenge of providing employment to rapidly growing labor force. The authorities are making efforts to match supply by generating demand and by improving employability. Promotion of small scale industries, horticulture, floriculture and handicrafts will increase avenues for self employment. The Royal Bhutan Vocational and Qualifications Authority is expected to bring a greater focus to improved vocational training facilities including job-oriented skill upgradation to reduce the skill mismatch and conduct of job fairs to promote employment in private sector companies.
- 19. Bhutan's close trade links with India means that further trade liberalization would broadly follow developments in India. The regional trade agreements and accession commitments to WTO will help streamline the regulatory environment to international standards. My Bhutanese authorities are seeking technical assistance from the IMF to enable them to meet the commitments of accession to WTO by 2008.

### **Statistical Issues**

20. My authorities are continuing their efforts to improve the statistical data base through a variety of interventions. The periodicity of CPI has increased from half yearly to

quarterly and the national income accounts have shifted to SNA 1993. Trade statistics are compiled on fiscal year basis for Balance of Payments statistics. Only composition and direction of trade are still being done on calendar year basis. Efforts are on to improve the frequency of preparation of the RMA balance sheet from monthly to a weekly basis and reconcile domestic financing of budget between the fiscal accounts and the monetary survey.

21. Finally my authorities and I would like to thank the Executive Board and staff for their continued support and helpful advice.