

# BHUTAN RISING

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# POLICY NOTES



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# Bhutan Policy Notes

## Preface

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These Policy Notes seek to distill key findings from a broad range of World Bank Group engagements in Bhutan, including policy dialogue, analytical work, strategic documents, project lending and trust funded activities. They build on discussions with government counterparts, development partners, non-governmental organizations, representatives of the private sector, and other stakeholders. These Policy Notes are selective in their coverage, and include synopses on each topic, highlighting key issues and challenges, and concluding with actionable policy recommendations. They cover a broad range of policy issues but are not intended to be comprehensive or exhaustive. This effort seeks to make these findings readily available to the incoming government of Bhutan and support them in achieving their objective of ‘Narrowing the Gap’. The Policy Notes start with an overview section which brings together the key issues and is followed by sector-specific notes which have been compiled under four broad thematic groupings.

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# Bhutan Policy Notes

## 1. Overview

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**Bhutan, the land of happiness, is a unique country.** It measures its performance and evaluates its policies on a metric called the Gross National Happiness (GNH) which includes sustainable and equitable socio-economic development, preservation and promotion of culture, good governance and environmental conservation. With its special development philosophy focused on the environment and good governance, it holds the unique distinction of being the only carbon negative country in the world and one of the few resource-dependent developing countries with a strong track record on governance. Bhutan is richly endowed with hydro resources which have played a significant role in its development journey. The country peacefully transitioned from an absolute monarchy to a constitutional democratic monarchy in 2008.

**Hydroelectricity has served Bhutan well.** The state-led hydropower development has yielded an annual average growth rate of 7.5 percent since the early 1980s, one of the highest in the world. The sector currently accounts for 25 percent of Gross Domestic Product (GDP), 39 percent of fiscal revenues and 37 percent of exports. Fiscal revenues from hydropower have helped finance investments in physical and human capital with significant improvements in education and health outcomes and service delivery. In addition, access to electricity is almost universal while access to functional piped water was 95 percent in 2015. The national poverty rate fell from 12 percent in 2012 to 8.2 percent in 2017. Extreme poverty has almost been eliminated with an estimated 2 percent of the population living on less than US\$1.90 a day.

**However, large-scale hydro development created macroeconomic vulnerabilities that need to be managed.** The massive scale of hydropower projects, relative to the size of the economy, generates large fluctuations in aggregate demand, both during the construction and commissioning phase. The high import content of hydropower construction has resulted in a large external imbalance and high foreign currency debt, at over 100 percent of GDP. Hydro-related contributions to the budget have expanded the public sector and led to pro-cyclical fiscal policies. A proliferation of tax expenditures and the nascent non-hydro private sector have resulted in a stagnant tax-to-GDP ratio. The delays in commissioning of the on-going hydro projects and the withdrawal of excise duty rebate from India are likely to create fiscal pressures.

**State dominance along with other factors have inhibited the growth of a vibrant job-creating private sector.** Bhutan's small domestic market, sparse population, landlocked geography and mountainous topography have inhibited the incorporation of local producers into global value chains and resulted in minimal flows of foreign investment outside hydro. It also led the government to create commercially oriented state-owned enterprises (SOEs) that currently operate in the manufacturing, energy, financial, and other sectors. The strong linkages that exist between policy makers and the management of SOEs inhibit a level playing field and may discourage private investment. The private sector is also constrained by skills shortages, the small size of the domestic market, limited access to foreign markets, challenges of connectivity (both physical and ICT), and limited access to finance.

**Bhutan has invested heavily in human capital but there is room to do more.** Public provision of education and health services free of charge has improved human development outcomes significantly. However, there is room to improve quality, equity and access across the districts. In education, access to early childhood care is limited, the quality of teachers needs strengthening and tertiary education institutions face pressures from increasing demand, limited resources, and changing skills requirement. As a result, there is limited absorption by the private sector of educated youth. Although health and nutrition outcomes in Bhutan are among the best in South Asia, there remain socio-economic and geographic disparities. The prevalence of stunting is still high while non-communicable diseases (NCDs) now account for more than 70 percent of the reported disease burden.

**In resource-dependent countries, a good way to lay the foundations for sustained private sector driven growth is the diversification of the country's asset base, and Bhutan has made some**

**progress in this direction.** A country's asset base includes (i) 'physical capital' like infrastructure, (ii) 'human capital' embodied in its labor force, and (iii) 'institutional capital', especially, those which govern macroeconomic management, provision of public services and the environment for doing business. In Bhutan, efforts have been aimed at improving road infrastructure but connectivity, including ICT, remains a challenge. To bolster human capital, the government is focusing on expanding access to early childhood care, strengthening educational institutions and better handling emerging health issues. The focus on human development is also evident by the fact that Bhutan is an early adopter of the World Bank led Human Capital Project. To improve the business environment, some of the government's efforts are aimed at increasing access to finance, simplifying business registration, and revising FDI rules. Public service delivery continues to improve despite the challenges posed by geography. There is room to further improve macroeconomic and public sector management, particularly through fiscal rules which will enable counter-cyclical fiscal policies.

**Along with the need to diversify its asset base, being small and landlocked amplifies the importance of a greater export orientation in Bhutan, particularly in high-end services.** Bhutan's small domestic market limits growth potential and makes it imperative for the country to tap the global market. The landlocked geography, hilly terrain, and highly competitive neighbors impose limits on large-scale production (and export) of physical goods but niche products do have some potential. Indeed, Bhutan has the potential to export high-end services (in addition to tourism) with its pool of English-speaking population, an increasingly educated youth and emphasis on human capital. This would also help with the problem of educated unemployed youth who seek good quality jobs in cities.

**With more service jobs in urban centers, livable and competitive cities will provide further impetus to growth.** Around 38 percent of the population resided in urban areas in 2017, compared with 30 percent in 2005. However, Bhutan's urban centers are not fully equipped to seize the benefits of agglomeration economies because of gaps in infrastructure, inability of the government's spatial policies to differentiate between the growth demands of larger urban centers and the service delivery needs of smaller towns, and limited authority, resources and capacity in urban municipal governments.

**High-end service professions in cities are, however, unlikely to create large-scale jobs and will not be able to absorb the relatively lesser skilled Bhutanese, who are in the majority.** Nearly 60 percent of the Bhutanese are currently employed in agriculture, primarily at the subsistence level, while half of the adults in rural areas are without any level of education. In addition, there are significant gender disparities in the labor market. With this structure of the labor force, improving living standards will also require more and better jobs for the relatively unskilled. Investments and policy changes in the agricultural/agro-processing and tourism sector could help in this regard.

**The primary growth driver (hydro) and other sectors are dependent on natural resources, which make their preservation as well as better utilization critical.** Bhutan is vulnerable to seismic and hydro-meteorological hazards and the government is committed to addressing these risks. The Disaster Management Act, 2013, provides the legal framework for mainstreaming of disaster risk reduction, but a lack of data and disaster risk financing tools has been an impediment. That said, there is also room to better exploit the country's natural resources to boost growth, while continuing with environmental conservation.

**While the country will remain dependent on the hydro sector in the foreseeable future, Bhutan's demographic transition will require a more balanced growth model.** With a dependency ratio that is projected to decline until 2040, the next two decades offer an opportune window for Bhutan. Capitalizing on this opportunity will require consistent investments in diversifying the country's asset base. In addition, creating jobs will require addressing market and coordination failures, particularly, in high-end service exports, and the agricultural/agro-processing and tourism sectors, among others. This will help create jobs with varied skill requirements. These investments and reforms will require more resources, necessitating increased domestic revenue mobilization and strengthening of the financial system. This is all the more crucial now, as the availability of concessional financing declines. In addition, policy reforms will require access to better and more timely data to underpin evidence based and robust decision making.

## 2. *Ensuring Sound Macroeconomic and Public Sector Management*



*Maintaining macroeconomic stability requires sustained efforts to increase tax revenues, improve public financial management, strengthen fiscal rules and expenditure management, and manage the current account deficit and debt. Reforms in these areas will help bring in additional revenues in the face of declining concessional financing, manage existing revenues better, reduce volatility in aggregate demand, and mitigate macroeconomic vulnerabilities. These are critical for boosting sustainable and inclusive growth which are in turn needed for continuing poverty reduction and shared prosperity. The following policy notes outline the key issues related to poverty reduction, tax policy and administration, public financial management, public expenditure management and debt management and suggest some policy recommendations.*

# Bhutan Policy Notes

## 2.1 Ensuring Sound Public Expenditure Management

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### Key issues and challenges

**The dominant role of the government in Bhutan's economy emphasizes the need for strong public expenditure management (PEM).** Government spending as a share of GDP in FY2016/17 was 30.6 percent, including 15.4 percent for recurrent and 16.5 percent for capital. This is high compared to other countries in the region and does not include hydropower investment (which add an estimated 30-40 percent of GDP), or expenditures by State-Owned Enterprises (SOEs). Spending on health and education is relatively high at about 25 percent of the total expenditures.

**Existing institutional arrangements in Bhutan have served the goal of sound PEM well.** The 2008 Constitution mandates that all recurrent spending should be met out of domestic revenues. The 2007 Public Finance Act stipulates that the current operating deficit should be kept near zero, and the government generally targets a deficit of under 3 percent of GDP. Transparency and accountability are supported by the requirement that the Minister of Finance presents a Budget Policy and Fiscal Framework Statement in the National Assembly with the budget. This is based on a Medium-Term Fiscal Framework (MTFF) including projections on growth (disaggregated for key sectors like hydropower and tourism), revenue projections from all sources, fiscal balance, debt targets deemed consistent with overall macroeconomic goals and a prudent policy stance, and expenditure allocations that are consistent with those targets.

**However, managing expenditures in the face of periodic surges in hydropower revenues remains challenging.** The operationalization of each mega-hydropower project leads to a jump in revenues, challenging sound PEM. For example, the commissioning of Tala hydropower in 2007 led to a surge in revenue by about 30 percent of GDP, leading to calls for sharply higher spending. However, repayments also begin one year after commissioning, and sound PEM calls for leaning against the pro-cyclical effects of hydropower related revenues. Historically, the commissioning of hydropower has enabled a fiscal surplus for one or two years, before deficits re-emerge, highlighting the need to ensure the sustainability of spending trajectories. After commissioning of the Tala hydropower project in 2007, the government ran a fiscal surplus in FY2008/09 (1.9 percent of GDP) and FY2009/10 (1.6 percent of GDP) followed by a deficit in FY2010/11 (-2.1 percent of GDP). In addition, the provision of subsidized electricity also needs to be factored in. Punatsangchhu 1 and 2 (expected to be commissioned in FY2023/24) will double hydroelectricity production in Bhutan. Given the arrangements for royalty electricity in kind of 15 percent for domestic energy consumption, there is likely to be a surge in subsidized electricity that will be made available domestically. This needs to be factored in the MTFF analysis.

**Fiscal transfers from the national level to the Dzongkhags and Gewogs comprise a substantial share of public expenditure and need to be included in a bottom-up Medium-Term Expenditure Framework.** In recent years, the amount of public expenditure at the Dzongkhag and Gewog levels has risen significantly, and further increases are envisaged. For example, the outlay for Dzongkhags and Gewogs during the last three years (FY2014/15 to FY2017/18) has increased from BTN 10,640 million to BTN 17,405 million, which is 30 percent of the total outlay for FY2017/18. Further, as per the Budget Report for FY2017/18 aimed at deepening the decentralization process and providing financial autonomy, BTN 140 million was provided as Dzongkhag Development Grants and BTN 410 million as Gewog Development Grants. With increased allocations at the local government levels, there is an imminent need for evaluation and strengthening of capacity, controls and accountability.

**Fiscal rules need to be strengthened.** The current fiscal rule of meeting recurrent spending out of domestic revenue needs to be revisited, given the large expected increase in hydropower revenues from Punatsangchhu 1 and 2. This rule could potentially lead to an unsustainable increase in spending. In addition, there are growing pressures to implement a substantial civil service pay increase, the first in over a decade. Fiscal prudence calls for seeking a smooth path of public expenditures. The government sought to pursue this objective with the establishment of the stabilization fund. Along with this fund, it

will be important to have strengthened fiscal rules which will encompass both the budget and the stabilization fund to achieve smoothing of expenditures. Otherwise, with no fiscal surpluses envisaged over the next 5 years, parking funds in such a fund would effectively mean borrowing in order to save, losing on the interest rate spread.

## **Policy Recommendations**

### **To address these issues, the government needs to:**

- Revise the Public Finance Act to include strengthened fiscal rules.
- Enhance the MTFF to sharpen the medium-term perspective in expenditure budgeting, reflect strengthened fiscal rules, and integrate hydropower into the budget.
- Engage in continued capacity building across the government on macroeconomic forecasting (including growth, balance of payments, revenue, inflation, and monetary aggregates), public expenditure management, and debt management.

# Bhutan Policy Notes

## 2.2 Enhancing Tax Revenues

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### Key issues and challenges

**Bhutan's Domestic Revenue Mobilization (DRM) was about 20 percent of GDP in FY2017-18.** Income tax, indirect taxes and duties constituted 72 percent of the total revenues (14.3 percent of GDP) during the year and the rest came from non-tax revenues including dividend, interest on loans from corporations, and others. Domestic revenue finances the entire current expenditure and around 25 percent of capital expenditure of the government. The remaining capital spending (the resource gap) is financed mostly through grants and external debt.

**Bhutan does fairly well in tax composition.** Bhutan's main direct taxes are Business Income Tax (BIT), Corporate Income tax (CIT) levied at 30 percent of profits and Personal Income tax (PIT) ranging from zero to 25 percent. The main indirect taxes are sales tax, customs duty and excise levies based on the Bhutan Trade Classification, Sales Tax and Duty Schedule. Excise comprises a levy on alcohol produced by only one entity (0.4 percent of GDP) and reimbursement of excise duty paid on Indian exports to Bhutan by the Government of India (1.7 percent of GDP) which will soon be discontinued. Other minor taxes include: (i) royalties on forest products, mines and minerals, tourism, and hydro power; (ii) motor vehicle tax; (iii) municipal tax on real estate, (iv) business professional license fees; (v) revenue stamps; and (vi) green tax on vehicles, petrol, and diesel. Direct taxes comprise about 60 percent of total tax revenue.

**The Department of Revenue and Customs (DRC), the main tax agency, was created by merging the Revenue Division and Department of Customs in 1987.** The DRC is organized along the type of tax structure rather than along functional lines as is more typical in modern tax agencies. Tax administration is supported by the Revenue Administration Management Information System (RAMIS). For enforcement, the Revenue Accounts and Audit division is in charge of tax audits of select taxpayers and transactions. Nevertheless, the DRC has not implemented a risk-based approach to enforcement by only targeting suspicious taxpayers and transactions. As a first step towards risk-based audits, the DRC has recently established a new division for Revenue Intelligence.

**The country's DRM faces various challenges.** The most immediate one is the scheduled ending of Government of India's (GOI) reimbursement of excise on imported Indian goods equivalent to nearly 2 percent of GDP. The delays in the completion of the large hydropower projects could potentially lead to foregone revenues of another 2 percent of GDP. In addition, tax expenditures through fiscal incentives such as tax holidays and zero rates for goods and services accounts for another 2.6 percent of GDP. The enhancement and consolidation of the tax base in terms of revenue collection, beyond the hydro power sector, has also been challenging.

**There is scope for improving tax policy and administration.** The tax legislation could include uniform provisions for treating taxable income under Corporate and Personal Income Taxes. For instance, while capital gains are taxed under Corporate Income Tax, they are not so under Personal Income Tax. There is no tax withholding for individuals. Tax administration does not include risk-based approaches for enforcement and audit. There is also a need to improve the use of third party and tax intelligence to identify missing taxpayers and under reporting of income. The use of annual tax audit plans will help bring strategic focus to audit and efficient use of scarce audit resources as compared to the 100 percent tax audit pursued currently. Tax collection at Points of Entry is seen by the private sector as taking more time than deserved. Customs manages both trade facilitation and border control, stretching their capacity. The DRC is yet to introduce self-assessment of taxes by tax payers and yet to move to a risk-based audit approach. Taxpayers informally complain about the additional penalties imposed by DRC officials during field assessments. The provisions of the tax law need better communication under taxpayer outreach activities.

**Indirect taxation also faces challenges to enhance and consolidate the tax base.** The sales tax structure has evolved into tax collection at point of entry into the country rather than at point of sale.

Although it is easier to collect taxes at the border as goods are released, it disincentivizes tax administration from enhancing the domestic tax base in a more systematic manner and makes domestically produced goods hard to tax. Indirect taxation needs to improve through the introduction of a Goods and Services Tax (GST) in Bhutan. The GST is expected to: (i) enhance the tax base as the tax credit mechanism starts working; (ii) remove economic distortions through the introduction of a single rate; and (iii) ease tax compliance by introducing electronic tax return submission and payment based on self-assessment.

**An improved property tax system can go some way in addressing wealth inequality.** In addition, property taxes will also strengthen the finances of Thromdes and will be useful to finance the cost of urban services. The property tax system needs to move to a market value-based system of taxation of land and buildings. The government had in its study in 2016 taken a similar view. To make this reform successful, Thromdes will need to update the Land and Property Registries.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Review and modernize the tax legislation, rules and regulations to (i) remove distortionary provisions (like treatment of capital gains and withholding provisions); (ii) limit discretionary powers of DRC officials; (iii) introduce the use of risk management techniques; (iv) institute administrative appeals and (v) rationalize the excise regime per good practices.
- Review the rates and slabs on income taxes to ensure that they are progressive and tax capital gains in entirety.
- Improve information and intelligence about self-employed such as consultants and professionals in general, as there is no tax withholding for individuals.
- Submit to parliament the proposal for the modernization of property taxes.
- Improve tax administration by (i) producing a strategy to improve DRC's enforcement capabilities; (ii) carrying out a business process review to identify bottlenecks and gaps; (iii) introducing taxpayer segmentation using risk profiles; (iv) preparing a risk based annual audit plan and customizing auditor workload; and (v) implementing training in enforcement and audit.

**To address these issues, in the medium to long term, the government needs to:**

- Introduce monitoring and evaluation to collect systematic feedback from stakeholders about the quality of the tax legislation and rules and regulations.
- Implement a risk-based approach for audits and assess the outcomes.
- Enhance the human resource capacity of the DRC.
- Update the values of land and properties in accordance with the economic and market conditions to ensure adequate collection of property taxes.
- Implement fully the GST from 2020 with preferably a single rate and minimum exemptions along with compensatory measures to mitigate regressive effects on poorer segments of the population.
- Introduce the new Customs Act consistent with the World Customs Organization Kyoto Convention.
- Enhance tax administration by (i) implementing a functional structure in DRC; (ii) simplifying business processes to reduce cost of compliance and promote voluntary compliance; (iii) implementing the enforcement enhancement strategy; (iv) consolidating taxpayer data over different taxes to build an integrated tax profile of the taxpayer; (v) integrating different IT systems for different taxes to exchange information; (vi) implementing new fines and penalties rules and improving the use of administrative appeals mechanism.

# Bhutan Policy Notes

## 2.3 Strengthening Debt Management

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### Key issues and challenges

**External debt in Bhutan has increased significantly.** The external debt to GDP ratio increased from 30 percent in 1990 to over 110 percent in 2016.<sup>1</sup> As of December 2017, borrowings by state-owned enterprises for hydropower accounted for about 75 percent of external debt. Nearly 90 percent of hydro external debt is from India with interest rates at 9-10 percent for Punatsangchhu I and II, and Mangdechhu projects<sup>2</sup>. Also, hydro construction costs are swelling, further increasing indebtedness.

**However, the risk of debt related difficulties from hydropower development is manageable.** The delays and cost escalations raise concerns on growth prospects and revenue collections over the short-to medium-term. However, there is a contract between the Indian and the Bhutanese government whereby India would cover both the financial and construction risks related to the hydro projects and buy the surplus electricity at cost plus 15 percent net return. Nearly 70 percent of the hydropower generated in Bhutan is sold to India. Therefore, as long as the 15 percent net return is secured, hydropower external debt will remain sustainable.

**The risk of external debt distress remains moderate.** The 2018 Debt Sustainability Analysis (DSA) concluded that Bhutan's risk of external debt distress is moderate, the same as in 2014 and 2016. The DSA observes that Bhutan's rapid hydropower development has led to a substantial buildup of external debt, with external debt ratios breaching all indicative thresholds and projected to continue doing so for several more years. At the same time, the DSA recognizes key factors mitigating the risk, particularly that the large share of external debt is linked to hydropower project loans from the Government of India and that these loans are backed up by the inter-governmental contract between the two countries which guarantees returns.

**The 2016 Debt Policy is an important step towards underpinning debt sustainability.**<sup>3</sup> The Debt policy builds on the well-defined legal framework for public borrowing included in the Constitution (2008) and the Public Finance Act (2007). The policy imposed ceiling on debt indicators include the following: (a) on total external debt, annual debt service obligations should be lower than 25 percent of exports of goods and services; and (b) on non-hydropower debt, (i) debt stock should be lower than 35 percent of GDP, (ii) government debt service should be lower than 22 percent of domestic revenues, (iii) short-term external debt (by original maturity) should be lower than 30 percent of surplus reserves (i.e., gross international reserves minus those that covers 12 months of essential imports), (iv) sovereign guarantees should be lower than 5 percent of GDP. Annual external debt service obligations are below the threshold at 10 percent of exports. The non-hydro debt indicators are all below the threshold, too. For example, as of June 2018, non-hydro debt stock was 22 percent of GDP while government debt service as a share of domestic revenues were 13 percent.

**Despite the favorable assessment on debt sustainability and progress on policy reforms, there are other challenges that need to be addressed.** The hydropower projects are affected by weather conditions and natural disasters which have resulted in significant annual fluctuations in hydro production. In addition, the governance / institutional framework can be improved. The 2016 Debt Policy requires the government to establish a Public Debt Advisory Committee and formulate a Medium-Term Debt Management Strategy. However, these have not yet materialized. Also, despite the provisions in the 2016 Debt Policy, availability of debt related information is still limited.

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<sup>1</sup> World Development Indicators (2018).

<sup>2</sup> Interest rates differ depending on projects. For example, interest rate for the Chhukha project was 5 percent and the Kurichhu project was 10.75 percent.

<sup>3</sup> <http://www.mof.gov.bt/wp-content/uploads/2014/07/PublicDebtPolicy2016.pdf>

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Implement the 2016 Debt Policy which mandates the formulation of a Medium-Term Debt Management Strategy and regular debt sustainability analysis.
- Improve access to hydro and non-hydro related debt information as mentioned in the Debt Policy.

**To address these issues, in the medium to long term, the government needs to:**

- Ensure continuation of the 15 percent net return on hydropower sales to India as this is critical for debt sustainability.
- Maximize concessional financing for non-hydro external debt.

# Bhutan Policy Notes

## 2.4 Bolstering Public Financial Management

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### Key issues and challenges

**Bhutan undertook the Public Expenditure and Financial Accountability (PEFA) assessments in 2010 and in 2016.**<sup>4</sup> Bhutan was the 5th country in the World to receive the PEFA CHECK<sup>5</sup> under the latest PEFA framework. The 2016 PEFA Report identified various areas for improvement, based on which, the government updated its PFM Reform Strategy. The aggregate performance against each of the seven pillars of the PEFA Framework indicated that two pillars, *Pillar III: Management of Assets and Liabilities* and *Pillar VII: External Scrutiny and Audit*, were relatively stronger. The three pillars showing relatively weaker performance and where further reforms could be pursued are *Pillar II: Transparency of Government*, *Pillar V: Predictability and Control in Budget Administration* and *Pillar VI: Accounting and Reporting*.

**Availability of reliable and timely data on fiscal performance is crucial to enhance transparency and accountability.** External scrutiny can play an important role in budget management, both by participation in the budget preparation process and by monitoring actual performance. The introduction of Annual Performance Agreements (APA) by the government is a very important measure towards instituting a government-wide performance management system. The APA proposals and actual results and utilization of resources by service delivery units is now available to the public. This area could be further strengthened by undertaking performance evaluation of the efficiency and effectiveness of service delivery units. The in-year budget reports are not published, and the Annual Budget Report is not available to the public within 6 months of the end of the financial year. The Budget Report should also include administrative classification in addition to economic and functional classification. There is scope for improving timeliness (as of now, it is done annually) of financial reporting by extra-budgetary units including the trusts<sup>6</sup> and the provident fund.

**Predictability and control in budget execution is an important element of the PFM cycle.** The performance on this pillar is impacted by non-availability of information on expenditure arrears, issues on adequacy of payroll controls and the need for continuity in reforms in the internal audit function. Payroll and personnel records are not integrated and no reconciliation between the two records has been undertaken. There are also internal control weaknesses and several audit observations on payroll controls. On internal audits, the key weaknesses include lack of management response on audit observations, focus of the audit primarily on financial compliance and no mention of the evaluations of the adequacy and effectiveness of internal controls. In addition, the quality assurance process is not in place.

**Reliable accounting and reporting provides pertinent information on the use of public funds and assets/liabilities for the decision makers in the government and other stakeholders.** There is a need for annual financial statements to be strengthened through enhanced disclosure of financial assets and liabilities and developing national accounting standards aligned with the International Public-Sector Accounting Standards (IPSAS).

**Enhanced use of Information and Communication Technology (ICT) is a cross cutting theme that can further help the government to bring efficiency and improvement in PFM.** The government

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<sup>4</sup> PEFA has been used in over 500 assessments across the globe and evaluates how effectively the PFM system achieves the desirable budget outcomes of aggregate fiscal discipline, strategic allocation of resources, and efficient service delivery. The PEFA tool, as updated in 2016, assesses performance across 7 pillars covering the full PFM cycle across 31 indicators each comprising of one or more dimensions totaling 94.

<sup>5</sup> The Public Expenditure and Financial Accountability (PEFA) CHECK is a mechanism instituted by PEFA Secretariat for confirming the adequacy of the quality assurance processes used in planning and implementing a PEFA assessment. The objective is to increase users' confidence in the findings of a given PEFA assessment and confirm that the assessment contributes to a pool of reliable information on public financial management (PFM) system performance.

<sup>6</sup> There are five Trust Funds (i). Bhutan Trust fund for Environment Conservation, (ii) Cultural Heritage Fund, (iii) Universal Service Fund, (iv) Bhutan Health Trust Fund and (v) Bhutan Education Endowment Fund.

currently uses many stand-alone systems to cover various aspects of PFM. These include the Public Expenditure Management System (PEMS), the Multi-Year Rolling Budget System (MYRB), Planning and Monitoring System (PlaMS), Revenue Administration Management Information System (RAMIS), Commonwealth Secretariat – Debt Recording and Management System (CS-DRMS) and Electronic Government Procurement (eGP). These stand-alone and mostly web-based systems were developed at different points in time using different software development approaches (in-house developed solutions, except the debt management system), without preparation of functional or system design requirements or other reference documents (in some cases). The Royal Audit Authority, the supreme audit institution in the country, has also raised serious operational and security related issues on these ICT systems. Given the limitations in some of these systems and that they are not integrated, the government has not been able to achieve an integrated financial management system. Amongst others, a good ICT system can help address concerns on payroll controls, expenditure arrears and reconciliations.

## **Policy Recommendations**

### **To address these issues, in the short term, the government needs to:**

- Undertake increased performance evaluations of the efficiency and effectiveness of service delivery units.
- Issue in-year budget reports at least quarterly and make them public.
- Initiate the integration of the existing PFM systems using Application Program Interface (API), with pilots such as PEMS and RAMIS and expand further.

### **To address these issues, in the medium to long term, the government needs to:**

- Submit the detailed financial reports of extra-budgetary units to the government annually within 6 months of the end of the fiscal year, as against 9 months presently.
- Make public the Annual Budget Report within 6 months of the end of the financial year.
- Enhance the disclosure of financial assets and liabilities and implement IPSAS.
- Complete the integration of PFM systems using APIs and further integrate these systems with Civil Service Information System and Government Performance Management System.
- Implement initiatives to strengthen or replace the PEMS and MYRB.
- Strengthen the internal audit function through enhanced performance audits, use of ICT applications, improved executive responsiveness to audit findings and institutionalized quality control mechanisms.

# Bhutan Policy Notes

## 2.5 Accelerating Poverty Reduction and Shared Prosperity

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### Key issues and challenges

**Bhutan has made significant progress in poverty reduction and in non-monetary dimensions of welfare.** The official national poverty rate fell from 12 percent in 2012 to 8.2 percent in 2017. Investment in human capital, financed through hydropower revenues, led to significant improvements in education and health outcomes. Infant mortality fell steeply and is now below the regional average, while, in a single decade, the net primary education enrollment rate (adjusted for repetition) increased by more than 20 percentage points to 83 percent in 2016. Improvements were also observed in asset ownership and a range of indicators on service delivery, such as access to electricity and water and sanitation.

**However, welfare outcomes remain highly heterogenous across the country.** Disparities in poverty rates are high as 4 out of 20 dzongkhags account for nearly half of the poor population. Only 20 percent of 15-29-year olds in Zhemgang have obtained higher secondary education, which is three times less than the same figure for Thimphu (59 percent). Access to water has improved but almost 90 percent of the population treats the water before drinking it. Access to electricity is almost universal but the share of households that experienced a power outage in the last 7 days ranges from an average of 11 percent to 95 percent across dzongkhags.

**Bhutan faces key service provision trade-offs.** Nearly 60 percent of the people live dispersed across the country side, oftentimes in very small and remote villages and hamlets. This raises the unit cost of service provision. Given the need to continue to invest in human capital, it means making important trade-offs between the quality of services and access to services for all. Technological innovations can help reduce the unit cost of delivering certain services, but difficult policy decisions about which services can be made available to whom and where remain.

**Many households remain vulnerable to falling back into poverty.** Improvements in incomes helped people escape poverty but a significant number of households are clustered around the poverty line. If the official poverty line in 2017 had been just 11 percent or 250 Ngultrums per month higher, poverty would not have declined between 2012 and 2017. This implies that a large share of the population remains a small shock away from falling back into poverty. Rural households are exposed to a variety of risks including climate shocks, price shocks and wildlife predation. But insurance mechanisms that allow households to mitigate the risk or cope with the impact of such shocks are scarce.

**While non-agricultural jobs are critical for long-term poverty reduction, 57 percent of Bhutan's work force remains primarily engaged in subsistence agriculture.** Over the past two decades the fraction of people engaged in agriculture has declined rapidly, by about 1 percentage point per year. Despite this rapid transformation, most jobs continue to be found in agriculture, a fact that will remain in the foreseeable future. As productivity in agriculture is low (only 12 percent of GDP is earned in agriculture) poverty is heavily concentrated in this sector. 80 percent of the poor are engaged in agricultural production mainly or solely for the purpose of family consumption. Less than a quarter of the poor have someone in the household working outside of the agricultural sector, which suggests that there are few opportunities for income diversification. 63 percent of the poor grow mainly rice and cereal.

**Accelerating poverty reduction and shared prosperity requires structural transformation in jobs, increased agricultural productivity and bigger investments in human capital.** Small improvements in the incomes of poor agricultural households appear to have contributed to the recent poverty reduction. As most of the current generation can be expected to remain engaged in agriculture, reducing poverty in the short to medium run requires increasing agricultural productivity as well as strengthening the safety net to protect vulnerable households from shocks. At the same time, investments in human capital could prepare the next generation for job opportunities outside the agricultural sector and facilitate entrance into higher value-added markets—including high-end tourism.

**Bhutan's business environment has improved but a preference for public-sector jobs (including in SOEs) and a small domestic market reduce the development potential of the private sector.** Bhutan's private sector development remains sluggish. A public sector-led growth model, driven by hydropower explains part of the story. Hydropower related revenues have enabled an expansion of the public sector which currently provides 20 percent of total employment and offers generous compensation packages and benefits. This leads to high reservation wages and makes the public sector the preferred sector of employment to the detriment of the private sector. Moreover, private sector development is hindered by a small domestic market, infrastructure bottlenecks, restricted access to finance, constraining labor and foreign currency regulations and logistical challenges. To enhance private sector competitiveness, hydro-revenues need to be channeled into human and physical capital formation as opposed to further expansion of the public sector. Further, Bhutan needs to reduce the cost of doing business by investing in reducing transaction costs (ICT; transport; energy) and further strengthening its business environment and competitiveness.

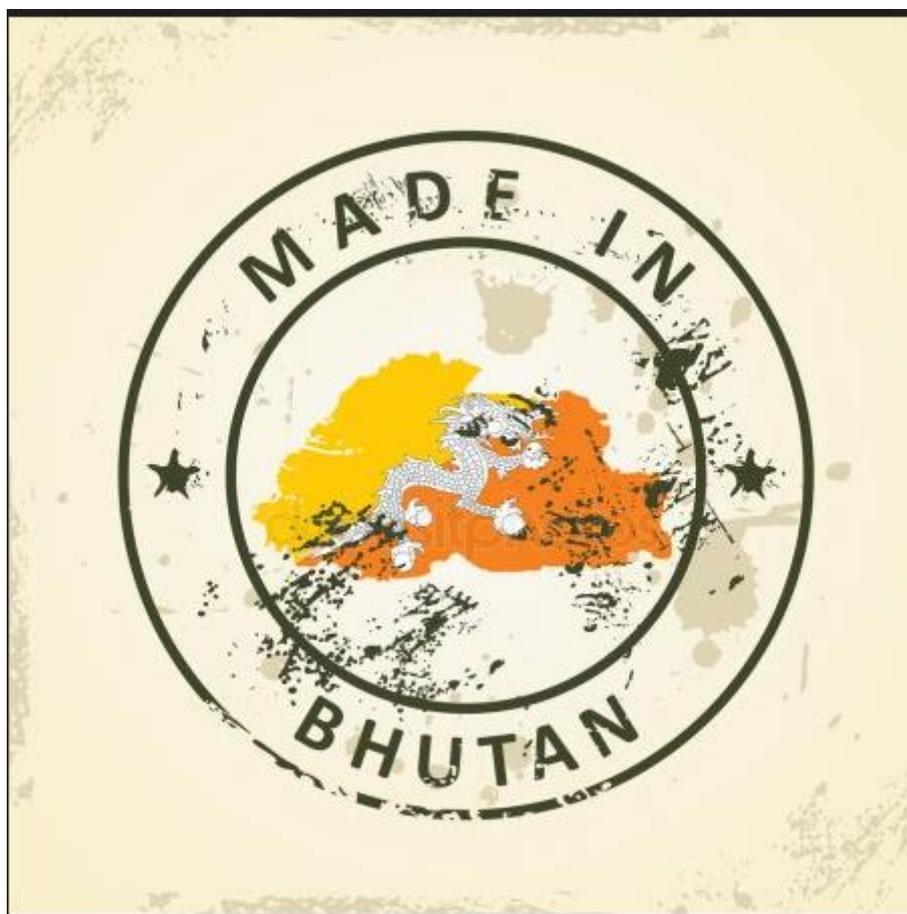
**Over the next two decades, Bhutan has a great window of opportunity to catalyze private sector-led growth that can help create more productive jobs.** Hydropower revenues are likely to remain an important source of government financing over the medium term. With a dependency ratio that is projected to decline until 2040, the next two decades offer an opportune window for Bhutan to reap its demographic dividend if the expanding workforce can be absorbed by more productive jobs. The labor force is increasingly educated, and urbanization is likely to continue as a result of steady rural to urban migration. This will generate a growing pressure to create jobs outside the agricultural sector. At the same time, it is important to address the low and declining female labor force participation.

## **Policy Recommendations**

**To address these issues, the government needs to:**

- Target investments spatially to address pockets of poverty.
- Accelerate investment in human capital.
- Explore options to reduce the cost of service provision in remote areas.
- Consider a balance in policies aimed at spatial development and those that promote and reap the benefits from urban agglomeration.
- Use hydropower revenues to continue to invest in human and physical capital, social protection and a reduction in transaction costs for the private sector.

### 3. *Creating a Vibrant Private Sector*



*Growth in Bhutan has primarily been driven by the hydropower sector. Being capital intensive in nature, hydropower projects have not created large scale jobs for Bhutan's increasingly educated youth. As a result, the agricultural sector still accounts for 60 percent of the jobs while the next biggest employer is the public sector. As the hydro sector matures and in the context of an evolving sectoral and geo-political situation in the region, Bhutan will need to expand its private sector base. The commercially oriented State-Owned Enterprises in Bhutan inhibit a level playing field and may discourage private investment. While high-end services could help with the problem of educated youth unemployment, improvements in the agricultural sector and tourism policy will go a long way in providing jobs for the relatively lesser skilled. Better utilization of Bhutan's large natural endowments, especially forests and minerals, will also help boost growth. In addition to limitations imposed by the country's geography and topography, Bhutan also faces a shortage of skills and limited access to finance. The following policy notes present the key constraints to the investment climate and suggest some options for policy reforms to boost the private sector.*

# Bhutan Policy Notes

## 3.1 Improving the Investment Climate

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### Key issues and challenges

**Bhutan's investment climate is primarily constrained by imperfections in factor markets, limited access to product markets, and state dominance.** Driven by the capital-intensive hydropower sector, the country achieved impressive growth rates, but created few jobs. The public sector stepped in, but has the capacity to absorb only about 2,000 graduates per year. The 2017 Investment Climate Assessment (ICA) survey revealed that employment remains concentrated in agriculture and the public sector, and that many firms are struggling to grow due to obstacles that hinder investment, productivity, and international trade.<sup>7</sup> While some improvements in the investment climate have been made, many challenges persist.

**Limited access to finance — caused by both supply- and demand-side factors — constrains the growth of firms, especially small firms.** In 2015, the World Bank's Enterprise Survey (WBES) conducted detailed interviews with managers of 367 nonagricultural firms in Bhutan. Managers — particularly of micro- and small enterprises — most frequently cited access to finance as the constraint that most inhibited firm growth. Lenders, on the one hand, are discouraged by a lack of credit information and by a complex, unpredictable, and ineffective restructuring and insolvency regime. Borrowers, on the other hand, are discouraged by high prices, poor quality, and limited availability of financial services. Collateral requirements hinder firm expansion, while the lack of a clear insolvency framework remains a barrier.

**A limited supply of skilled labor impedes the development of high value-added products.** Labor was the second most frequently cited constraint in the 2015 WBES, a complaint likely triggered by the limited access of firms to skilled labor. Due to Bhutan's historically low levels of education, the domestic supply of skills — such as auditing, accounting, and information technology — is limited. Moreover, generous public-sector compensation packages discourage recent graduates from seeking private-sector jobs. Also, current caps on foreign workers and the inconsistent application of labor regulations causes skilled migrants to be crowded out.

**Access of firms to international markets is costly and impaired by deficiencies in transport and logistics.** While relatively few firms rank access to external markets as a primary obstacle, data from Doing Business and the Logistics Performance Index suggest that exports are constrained by the high costs of accessing external markets. While Bhutan's road network and custom procedures have recently improved, transportation costs are exacerbated by insufficient capacity at Phuentsholing port, poor domestic connectivity, cumbersome logistics and a landlocked geography. Also, internet connectivity remains low.

**Foreign Direct Investment (FDI) inflows are suppressed by regulatory barriers, skill shortages, and insufficient investment promotion, which in turn restricts the access of domestic firms to foreign markets and technologies.** Despite gradual liberalization since 2010, entry barriers remain high for foreign investors. Inflows remain small and the lowest in South Asia, averaging less than \$20 million a year. The new 2010 FDI policy (amended in 2012) is an ambitious policy based on national development objectives of green economy, culturally sensitive industries, services investments and brand Bhutan, and knowledge economies. It was further liberalized in 2015 in relation to pharmaceuticals and land leasing. The policy governs general conditions, guarantees, operating environment, and the FDI approval process. However, some key aspects of the existing legal framework may not be conducive to FDI (such as discretion on screening and approval cancellations, equity restrictions in priority sectors; minimum investment levels; limits on visas of skilled workers). The government is in the process of reviewing the FDI policy.

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<sup>7</sup> The survey included 130 firms.

**The state's dominant role in the economy has narrowed the space for the private sector to mature.** The large size of some state-owned enterprises (SOEs) and the extent to which affiliates of such enterprises enjoy access to policy makers, potentially discourages private investments. Druk Holding and Investments (DHI), the largest and only government-owned holding company in Bhutan, has shares in 20 different companies operating in the manufacturing, energy, natural resources, financial, communication, aviation, trading and real estate sectors, and all SOEs have been corporatized since 2000. While there is a heterogeneity of state enterprises with varying degrees of performance and commercial viability, more than one-fourth are loss making. As a result, the space for the private sector is precluded by a lack of competition and high barriers to entry. In addition, there is no systematic channel for dialog between the government the private sector.

**Given the landlocked geography and a small domestic market, the export of services and marketing of specialized products can play a significant role in Bhutan.** Bhutan's fledgling ICT industry is one example of a sector that is starting to attract investors and has potential to create high-value exports and high-wage employment. Agribusiness is another sector with untapped potential where producers could benefit from Bhutan's unique reputation and favorable agro-climactic conditions to command a premium in high-value export markets, although logistical challenges are significant due to Bhutan's geography. The tourism sector has significant potential too, but there are three key challenges: regionalism with more tourism in the West than the East, seasonality, and lack of infrastructure. Private sector operators prefer a tourism policy with more focus on marketing and promotion and need greater skills training.

**In the recent past, the country has undertaken some reforms to improve its investment climate but more needs to be done.** The government has taken measures to increase access to finance by establishing a credit information bureau, three new commercial banks, and a minimum reference rate for lending. Corporate governance and administrative efficiency have been improved via (a) enacting legislation that requires companies to nominate independent board members and set up an audit committee; (b) introducing dedicated benches for commercial cases; and (c) simplifying business registration. However, challenges remain in the provision of finance, the ease of hiring labor, and access to markets.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Adopt policies to expand the scope of collateralizable assets and deepen and broaden credit information.
- Implement the new insolvency bill that provides clear rules and regulations on bankruptcy.
- Deepen skills development by introducing a dedicated channel for skilled migration, creating linkages with industry, and providing vocational training to the adult labor force.
- Promote broader use of e-commerce platforms by the private sector and customers.
- Create a formal public-private platform to ensure greater consultation on policies and reforms.
- Develop a set of regulations, oversight roles, and a communication strategy for Brand Bhutan, while simultaneously increasing awareness on and the use of quality standards by domestic producers.
- Increase access to finance by developing a credit scoring system for enterprises.
- Harmonize public sector compensation packages with the private sector.
- Improve market access by introducing risk-based border inspections and simplifying border processes.
- Amend FDI policy to streamline the approval process, lower equity restrictions, and reduce minimum capital investment amounts in order to accelerate FDI inflows.

**To address these issues, in the medium to long term, the government needs to:**

- Strengthen competition law and policy and monitor anticompetitive practices of SOEs.
- Liberalize, incrementally, the minimum daily package policy for tourists.
- Upgrade internet infrastructure through investments, especially in cable and fiber optics.
- Develop the agribusiness sector through the promotion of storage and logistics infrastructure to facilitate exports of high-value products.

# Bhutan Policy Notes

## 3.2 Accelerating Financial Sector Reforms

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### Key issues and challenges

**Bhutan's financial sector is young and its financial infrastructure is still in need of support as it evolves.** It only began its formal existence in 1968, when the Bank of Bhutan was established as the sole commercial bank. The insurance industry began in 1975 with the establishment of the Royal Insurance Corporation of Bhutan, and the only pension fund, the National Pension and Provident Fund (NPPF) commenced operations in 2002. The Royal Monetary Authority (RMA) was established with limited powers in 1982 and is still in need of significant institutional capacity building (as the sole supervisor of bank and non-bank financial institutions). The foundation for Bhutan's financial sector and its enabling infrastructure, to the extent that it has now evolved, was essentially created with the enactment of the RMA Act 2010 and the Financial Services Act of 2011. Key legislation and rules and regulations are yet to be established, including those on insurance, pensions, and payments system. A Finance Intelligence Unit, credit bureau, central registry and a stock exchange have been established, albeit they are in early stages of development. Therefore, there is limited availability of collateral and credit information. Bank lending is primarily collateral based, but collateral realization is also constrained resulting in limited Micro Small and Medium Enterprises (MSME) lending.

**The primarily state-owned financial sector is dominated by banks and needs to evolve over time in a more diversified and private sector led financial system.** Financial system assets have grown to over 100 percent of GDP, and banks have four fifths market share as of end 2017. Over the past decade, the number of banks has expanded to five, and two new insurance companies and three small Micro Finance Institutions (MFIs) have been established. Nevertheless, the three largest banks and the largest insurance company are state owned, with public sector control of total assets standing at about ninety percent in both the banking and insurance sectors. Asset liability management is challenging, with few opportunities for long-term funding. Notably, the authorities allow nonbanks to engage in retail lending as alternative assets are lacking (government bond issuance is limited). A significant credit portfolio deterioration has been observed in the last few years, with the non-performing loan ratio reaching 13 and 21 percent in Q1 2018 for the bank and non-bank sectors, respectively. The banking sector has adequate cushion to absorb potential losses, but the risk weighted capital adequacy ratio has also experienced a marked deterioration (from 18 to 14.5 percent y-o-y in Q1 2018). Loan provisioning expenses have increased, and profitability has dropped. Price competition in lending is limited, to a significant extent due to an interest rate regime set by RMA regulations. The authorities have introduced a Priority Sector Lending framework and a new class of banks in 2018 in order to expand access to finance for underserved market segments (primarily micro and rural enterprises).<sup>8</sup>

**Bhutan's firms (especially MSMEs), as well as individuals, cite limited access to financial services as a key issue.** There are several different definitions of MSMEs (or 'Cottage and Small Industries'), and a uniform definition is under development by the Department of Cottage and Small Scale Industry. The 2009 and 2015 Enterprise Surveys show that the top constraint that firms face is access to finance, a result that is consistent with the Enterprise Census 2016 conducted by the Ministry of Labor and Human Resources. The share of firms that indicate access to finance as the biggest obstacle stood at almost a quarter in the 2015 survey. The constraint is not, however, uniform across firms. Whereas access to finance for larger firms is similar to that encountered elsewhere in South Asia, microenterprises are – after accounting for sector and region – 40 percent more likely than larger firms to cite access to finance as their biggest obstacle. Notably, the value of collateral needed for a loan is on average 179 percent of the loan amount, and the prevailing practice in valuing collateral only allows

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<sup>8</sup> Overall, incentives rather than lending targets on financial intermediaries may serve the CSI segment best, alongside a harmonized MSME definition, strong financial infrastructure, and market friendly state intervention instruments (e.g. risk sharing facility). In that regard, interest rate caps and the PSL guidelines should be frequently evaluated to avoid negative effects. It is also good practice to fully compensate financial institutions for any deviations from market conditions for the pursuit of social objectives. Finally, the introduction of CSI banks will necessitate strong oversight on entry and supervision given the potentially high-risk underlying portfolio.

for fixed assets. Finally, the percentage of individuals (adults), using banking services is also very low. Although there are indications of more improvement in recent years, the Global Findex database on financial inclusion shows that only 34 percent of adults had a bank account in 2014.

**Rural areas and the agricultural sector are particularly constrained.** The difficult mountain terrain and the scattered population makes it commercially unviable for banks to open branches in many rural areas. Mobile penetration is high, but mobile banking is non-existent. The agricultural sector accounts for 12 percent of GDP and employs 60 percent of the population but access to credit for agricultural activities remains a serious constraint. Less than 20 percent of farmers have access to credit from financial institutions, and as of Q1 2018, the agricultural sector's share in total loans amounted to just over five percent. A recently created commodity exchange has yet to develop by-laws, rules and regulations.

**A coherent vision for an integrated and sound financial sector has been approved and needs to be updated and implemented.** The Financial Sector Strategy and Action Plan for Implementation (also known as Financial Sector Development Action Plan or FSDAP) provides the vision and concrete actions to be undertaken to deepen the financial sector and improve its soundness, efficiency, and inclusiveness. The strategy was led by the Ministry of Finance (MoF) and the RMA, with technical support from the WBG. The RMA Board of Directors approved the FSDAP in June 2016, and the Cabinet approved the document on September 26, 2016.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Take stock of the FSDAP to identify deviations from the original action plan and update it to ensure timely adjustments or corrections in achieving the authorities' goals.
- Integrate MFIs with Credit Information Bureau, and introduce new tools and services, such as Application Viability Score.
- Adopt the 'National Payments System Strategy and Policy' and enact the 'Payment Systems Act', followed by necessary amendments, issuances and implementation actions related to e-payments.
- Strengthen regulation/supervision and market practice of the insurance industry, revise the legal framework (stand-alone insurance law or amendments to the Financial Services Act (FSA), rules and regulations), and equip RMA with appropriate tools and manuals. Strengthen the regulatory framework for NPPF through the adoption of revised Pension and Provident Fund Policy, corporate governance structure, development of roadmap and establishment of operating policy and capacity building of NPPF.
- Develop a strategy on agricultural finance, including potential policy and instrument solutions such as warehouse receipt financing, agricultural insurance and risk sharing facilities.

**To address these issues, in the medium to long term, the government needs to:**

- Re-calibrate the role of the state in the provision of finance to CSIs, evaluate interest rate caps and PSL guidelines to avoid negative effects, modernize the state-owned financial institutions, and consider full compensation for deviations from market conditions in policies pursuing social objectives.
- Approve the 'Movable and Immoveable Property Act' (MIPA), revise the rules and regulations, develop the Credit Registry and Secured Transaction (CRST) Business Plan, enhance the central registry systems and introduce new tools and services.
- Implement the revised Bankruptcy Act, adopt supporting secondary legislation, build capacity, and issue regulations specific to MSMEs.
- Approve Financial Literacy Policy and Financial Literacy Strategy, and train micro-entrepreneurs.
- Adopt IFRS accounting standards (by FIs), and train accounting professionals by FTI.

# Bhutan Policy Notes

## 3.3 Enhancing the Performance of State-Owned Enterprises

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### Key issues and challenges

**State-Owned Enterprises (SOEs) are a dominant feature of Bhutan's economy.** Their contributions, through dividends and taxes, accounted for more than 40 percent of the government's revenues in 2016. There are 33 SOEs which are concentrated in the financial and energy sectors (especially hydropower), but also operate in areas such as manufacturing and telecommunications. Bhutan has a centralized SOE ownership arrangement whereby the Ministry of Finance (MOF) is the sole shareholder of all SOEs. SOEs are categorized as commercially oriented and socially oriented. The MOF directly monitors the 14 socially oriented SOEs which lean towards achieving social objectives. The 19 commercially-oriented SOEs are overseen by Druk Holding and Investments (DHI), a state-owned holding company under MOF, with the mandate to maximize returns of the commercially-oriented SOEs.

**Most SOEs in Bhutan are profitable, but this performance is largely driven by the energy and financial sectors and the lack of competition.** Hydropower is a key strategic resource for the government. Approximately 43.5 percent of combined SOE gross revenues (Nu. 60,667 million) in 2016 came from two companies: Druk Green Power Corporation (Nu. 14,624 million) and Bhutan Power Corporation (Nu. 11,757 million). These two large-scale SOEs also recorded the highest profits during the year, followed by the Bank of Bhutan and Bhutan Telecom. The financial sector contributed to 21.2 percent of total SOE revenues. In contrast, there were some loss-making commercial SOEs during the same period like Dungsam Cement Corporation, Construction Development Corporation, and Bhutan Broadcasting Limited. Due to the small domestic market and nascent private sector, SOEs are significantly relied on to provide essential goods and services.

**SOE debt is around 72 percent of total external public debt.** Of the total SOE debt of BTN 132 billion in December 2017, the energy sector (Bhutan Power Corporation and Druk Green Power Corporation) accounted for almost 96 percent (BTN 126 billion) SOE debt is a part of the external public debt stock of Bhutan and accounted for 78 percent of the total.

**There is scope to improve corporate governance of SOEs under the MOF.** Through the Corporate Governance Code, DHI requires its SOEs to have a rigorous performance evaluation mechanism (which contains financial targets), a transparent nomination and selection process for the Board of Directors, and sound practices like publishing annual audited financial statements to strengthen accountability and transparency. DHI also has an adequate number of staff (31) to oversee and monitor the SOEs. SOEs under MOF, on the other hand, are guided by a 2004 guideline that primarily focuses on the procedures for the appointment and removal of SOE Board of Directors. In addition, annual financial statements for SOEs under the MOF are not published regularly. Furthermore, the division responsible within MOF to oversee the SOEs is highly understaffed (only 3 people). Recently, the MOF developed a Corporate Governance Guideline for SOEs under the MOF but it has yet to be finalized and published.

**To improve performance monitoring, DHI annually signs performance agreements with its SOEs, but such agreements do not exist between the MOF and its SOEs.** Performance agreements are important vehicles to align the objectives between the government and the SOEs, and to communicate expectations and performance requirements. In developing the performance agreements, called Annual Compact Agreements (ACA), MOF and DHI first negotiate on performance benchmarks for SOEs under DHI. Then, DHI signs ACAs with its SOEs based on key performance indicators. Performance measurement indicators include financial and nonfinancial indicators, although the primary focus is on measuring financial performance. DHI has developed a performance-based incentive system to link bonus payments to the achievement of targets. However, ACAs are not conducted between the MOF and SOEs under MOF. Total subsidies allocated to SOEs in 2016-17 was estimated at BTN 568 million

of which 68 percent (BTN 389 million) was allocated to the SOEs under MOF<sup>9</sup>. Furthermore, given that the SOEs under MOF are more socially oriented, it would be critical to establish performance agreements not only to improve financial performance, but also service delivery performance. Performance agreements would allow for transparency and better prioritizing and planning of sustainable services from the SOEs to the citizens.

## Policy Recommendations

### **To address these issues, in the short term, the government needs to:**

- Finalize and publish the Corporate Governance Guidelines for SOEs under the MOF.
- Publish annual audited financial statements for all SOEs regularly.
- Build staff capacity within the MOF to oversee the large number of SOEs and review staffing requirements.
- Arrange peer-to-peer workshops and trainings to improve SOE performance management of the socially-oriented SOEs.
- Assess and recommend which SOEs could potentially be transferred to DHI with the aim to transfer most (if not all) SOEs under the MOF to DHI in the medium to long term.

### **To address these issues, in the medium to long term, the government needs to:**

- Establish performance agreements between the MOF and the SOEs under the MOF.
- Transfer selected SOEs under MOF to DHI.
- Adopt performance evaluation guidelines for SOEs under MOF.
- Privatize SOEs in the non-strategic commercial sector to ensure a level playing field with the private sector.

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<sup>9</sup> During this period, 9 out of 13 SOEs under MOF made positive net profit.

# Bhutan Policy Notes

## 3.4 Sustaining Hydropower Development

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### Key issues and challenges

**Bhutan has a significant untapped hydropower potential.** Drained by the watershed of the Brahmaputra river basin, Bhutan has considerable hydropower generation potential. The Power System Master Plan, last updated in 2004, estimates the overall hydropower potential at 30,000 MW. To date, the government has identified individual projects with a total projected installed capacity of more than 25,000 MW, of which 1,606 MW has already been constructed and another 3,658 MW is under construction and scheduled to be completed by 2023/24. The favorable conditions, steep mountains and plenty of water resources, make the average cost of hydropower about US\$1 million per MW, which is lower than in most other countries.

**Investments in hydropower have led to significant economic growth as well as macroeconomic challenges.** The hydropower sector contributes greatly to the economy. The average economic growth of 6 percent a year during the last decade and significant poverty reduction was largely driven by the sector. The revenues from hydropower through taxes, dividends and royalties will reach Nu 26 billion, or 36 percent of the total government revenues by the end of the 12<sup>th</sup> Five-Year-Plan (FYP). Gross value added to the economy will be Nu 65 billion, or 35 percent of GDP.

**Hydropower construction in Bhutan has faced significant technical and other constraints.** The hydropower projects so far developed in Bhutan have suffered complications due to unexpected complex geology and other technical challenges, which have resulted in significant cost overruns and delays in commissioning. In recent years, this has particularly impacted the commissioning of the Punatsangchhu I and II projects. While hydropower projects during construction requires thousands of workers and this presents an opportunity to employ local people and develop their skills, the civil contractors in Bhutan have had difficulties in finding interested Bhutanese workers for the low-paid unskilled positions.

**As more hydropower projects are commissioned, operational issues need increasing attention.** In the short term, variation in rainfall and snowmelt from year to year leads to fluctuations in hydro electricity production. Although the hydropower plants are technically designed to be sustainable and to withstand major floods, glacial outburst, and earthquakes, extreme events may temporarily disrupt operations for one or two of these projects (some of the hydropower plants are located in a cascade in the same river). If this occurs for major schemes, such as Tala Hydropower Project which today contributes to 60 percent of the power production, government revenues may be impacted for the period of disruption. This emphasizes the need for development and implementation of a regulatory framework for appropriate maintenance, dam safety regulations and inspections of hydropower plants to ensure resilience to extreme events.

**The electricity export market in South Asia is rapidly changing.** High economic growth in the region and suppressed demand will likely result in a steep increase in power demand in the coming decades. Together with political preference for low carbon growth, this will create opportunities for hydropower development that is a reliable renewable power source. India alone is estimating the need to install more than 300,000 MW of new renewable energy capacity over the next decades. On the other hand, solar Photo Voltaic (PV) is driving down the cost for both small- and large-scale power generation to levels reaching close to Nu.3/kWh<sup>10</sup>. Even if reliability and provision of peak power and ancillary services are essential benefits of hydropower compared to solar PV, hydropower in South Asia will face challenges to stay competitive because of increasing costs and environmental and social requirements. Furthermore, a new framework (which didn't exist earlier) for cross-border trade of electricity has recently been put in place in India, key aspects of which have raised concerns (which India is understood

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<sup>10</sup> Current export tariffs for existing plants under long-term PPAs are: Chukha – 2.55 Nu/kWh, Tala and Kurichhu – 2.12 Nu/kWh. Power from Dagachhu, which is traded on the open market through Tata Power, has currently a tariff of 2.96 Nu/kWh.

to be working to address) in other South Asian countries as to how the framework will apply. This has added to the uncertainty on access to markets and conditions for hydropower export from Bhutan.

**Financing new hydropower projects faces additional challenges.** Raising finance from India (which has mainly funded the large hydropower projects through a combination of grants and loans) for the new hydropower projects has increasingly become difficult. In the recent years, India has encouraged Bhutan to form Joint Ventures (JVs) with Indian Central Public-Sector Undertakings (CPSUs) for financing and constructing the new hydropower projects. Kholongchhu Hydro, a JV with SJVN Ltd., is one such example but the model has been facing challenges with the concession agreement for Kholongchhu still to be signed. In addition, the large size and scale of the hydro projects and the contracts make it difficult for local Bhutanese companies to meet the requirements and participate.

**The government has set up a high-level committee to review future hydropower development plans.** The challenges of hydropower development prompted the government in June 2017 to assign a high-level Hydropower Committee to review Bhutan's future hydropower development plans. While the recommendations from the committee have been finalized, the same have not been made public and it has been decided that the new government (post elections) should review the recommendations and take a call on the way forward/ next steps. Informally it is understood that the committee has recommended to focus on completing the construction of the on-going projects and putting other new developments on hold for the time being. This may have significant implications for Bhutan, particularly if adoption of battery storage technologies accelerates over the next decade or so, any future development of hydro will increasingly face irrelevance. At the same time, any new developments should be preceded with detailed technical studies (including updating the Power Sector Master Plan 2004) and basin level studies (e.g. potential cumulative impact assessment study for Kuri-Gongri basin has been recently completed but needs to be expanded to other basins) to define an informed roadmap for hydropower development.

## Policy Recommendations

**To address these issues, the government needs to:**

- Conduct/ complete detailed studies (updating Power Sector Master Plan and basin level studies) to take an informed decision on which hydropower projects should be developed and at what pace, for power exports. This decision must take into consideration the competitiveness of these hydropower projects in the export market, the capacity of the Bhutanese economy and private sector to contribute to and absorb these projects and the high environmental and cultural values of Bhutan.
- Adopt the new Hydropower Policy (under development) with the objective of providing clear mandates on dam safety and technical design to ensure Bhutanese hydropower is secure, sustainable and competitive.
- Identify projects that can be targeted for export to multiple markets and prepare those to international standards so that financing from multilateral and international Banks can be accessed.
- Develop small/ medium hydropower projects where the preparatory work can be undertaken by the government and the projects can then be bid out for construction by local Bhutanese companies. This will encourage local participation and develop local capacity for larger projects.

# Bhutan Policy Notes

## 3.5 Boosting Agricultural Production

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### Key issues and challenges

**Bhutan is predominantly an agriculture-based society.** Agriculture accounts for 12 percent of GDP, provides the country with food security, employs 58 percent of the labor force, and produces raw material for Bhutan's agribusiness industry. About 60 percent of Bhutan's population lives in rural areas and is engaged in subsistence and commercial farming.<sup>11</sup> Most of Bhutan's population engaged in agricultural value chains is in rural areas and is mostly women (65.7 percent).

**However agricultural production in Bhutan faces several challenges.** Bhutan has sought to be globally competitive while moving towards a growth-driven agricultural sector. However, the sector faces various constraints, including:

- Low productivity which results from a shortage of farm labor driven by outbound rural-urban migration, loss of arable land to urbanization, difficult terrain, fragmented land holdings, loss of crops to wildlife, lack of access to markets and agricultural credit, climate change and natural disasters, post-harvest management constraints and the subsistence nature of farming.
- Low land availability which limits the use of innovative technologies in agricultural production. The conservation of forest land (70 percent of the total) and a difficult terrain creates a challenging environment for agricultural production. About 6 percent of the geographical area has a slope of 100 percent, making the areas prone to very severe soil erosion<sup>12</sup>.
- Crop damage by wild animals and insects and diseases are the most widely reported on-farm constraints. Cultural and Buddhism-informed beliefs and perceptions also limit how farmers in Bhutan can deal with wild animals that have threatened the production of cash crops.
- Poor road access, especially, in the country's remote locations increases the cost of international transportation, reducing Bhutan's competitiveness in external markets.
- Agricultural subsidies are focused on selected commodities and are not targeted at value chain interventions such as aggregation, distribution, export and marketing<sup>13</sup>. Moreover, state supported enterprises established to address market failures are limiting the growth of private agribusiness firms.
- Low access to credit to farmers also impedes agricultural production. Only 20 percent of farmers have access to credit and rural banking is scarce due to the mountainous terrain and scattered population.
- Poor research-extension linkages have also limited transfer of available technologies that could improve innovation and productivity.
- Loss of labor in the rural areas resulting in increased feminization of agriculture and poor rural-urban linkages.

**In recognition of the above challenges, the government has prioritized agriculture as one of the five jewels<sup>14</sup> of the economy.** It has developed a 5-year strategic plan to set the overarching direction, objectives, and thematic focus for the Ministry of Agriculture and Forests (MoAF).

### Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Adopt productivity increasing technology including mechanization and disease tolerant crop varieties. This would replace shortage of labor, manage crop damage and improve yields and productivity.

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<sup>11</sup> Bhutan Labor Force Survey 2015

<sup>12</sup> Bhutan the RNR 2015 statistics

<sup>13</sup> *ibid*, p.17

<sup>14</sup> The five jewels of Bhutan's economy are hydropower, agriculture, tourism, mining, and cottage and small industries. <http://www.bbs.bt/news/?p=60329>

- Build rural and secondary roads to increase access to rural areas and markets.
- Enhance access to credit (including through mobile banking) and technology which can enable farm mechanization.
- Diversify crop farming and livestock production to reduce risks associated with income generation from subsistence farming.
- Incentivize the participation of the private sector in agribusiness by providing improved trade logistics, access to finance, market access, and agribusiness innovation centers and incubators.
- Build capacity of the private sector in effective branding, packaging, and marketing.
- Develop cooperative associations under the Department of Agricultural Marketing and Cooperatives (DAMC) to strengthen market linkages and support the private sector.
- Conduct a study to ascertain the drivers of rural-urban linkages and identify segments within high potential value chains for investments to strengthen backward linkages to rural areas and enhance job creation.

**To address these issues, in the medium to long term, the government needs to:**

- Invest in irrigation and agricultural research to increase crop yields.
- De-risk agricultural sector lending through institutionalization of an incentive-based risk sharing lending framework for the sector.
- Promote the use of ICT in agriculture to improve productivity, marketability and profitability through increased access to information on weather, water and climatic changes, pests and diseases, and extreme weather events.
- Develop ecotourism to improve the local economy and promote biodiversity.

# Bhutan Policy Notes

## 3.6 Reinvigorating Tourism

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### Key issues and challenges

**Since Bhutan opened to international tourists in 1974, the country has seen a significant increase in the number of tourist arrivals.** While Bhutan's topography, low population density, customary socioeconomic practices, and land-locked location have posed major challenges to traditional economic sectors, they have been a boon for tourism. The number of international tourists has increased from 23,500 in 2009 to over 254,700 in 2017. As a result, tourism is today the second largest economic sector in Bhutan, generating more than US\$150 million annually in visitor spending, and accounting for about 20 percent of non-hydro export income. It holds great potential for a country with Bhutan's endowments and constraints since, globally, tourism employment consists of 70 percent women and 50 percent youth.<sup>15</sup>

**The existing tourism model is constraining further growth of the sector.** Bhutan's tourism model requires all foreign tourists to travel on fully-guided, all-inclusive, packaged tours designed and purchased from local tour operators. This model was adopted in 1974 with the objective of constraining unregulated price competition and preventing social and environmental disruption resulting from large foreign tourist inflows. However, it is not well aligned with global travel trends and demand for more customized and immersive vacations.

**There has been a high level of concentration of visitation, both seasonally and geographically, with major implications for Bhutan.** Most international tourists continue to travel to Bhutan primarily in the spring and fall and visit the same Dzongs and festivals in the "Western Circuit" around Paro-Thimphu-Punakha. This has led to the following:

- Sub-optimal visitation levels not only by international standards, but also considering the country's untapped carrying capacity. Visitation to Bhutan is significantly lower in summer and winter because most tour operators shut down their business during these months and very little promotion takes place. While climate is the primary driver of seasonal travel demand globally, there are no significant climate-related obstacles to summer or winter travel to Bhutan. The result of this high seasonality is significant excess capacity in the form of low hotel occupancies, unreliable employment and low profitability and, consequently, investments.
- Benefits from tourism have been unevenly spread out. More than 70 percent of occupied room nights are concentrated in Paro, Thimphu, and Punakha, with Bumthang accounting for a third of the remaining 30 percent. This concentration of visitation is starting to negatively impact these areas in terms of overcrowding of tourist sites, shortage of services, and fatal road accidents, to mention few, while other areas have not benefited from tourism. The limited tourism related offerings have resulted in Bhutan having a low rate of repeat visitation at less than 10 percent.
- Revenue per visitor has decreased with the decline of arrivals from North America, traditionally Bhutan's largest and highest spending international source market, and the exponential growth of the regional market. Classified as visitors from India, Bangladesh, and the Maldives (with visitors from India accounting for about 95 percent of the total), the regional market together with Chinese visitors, accounts for more than half of all foreign visitor arrivals today. Western long-haul visitors tend to stay much longer in Bhutan (approximately double the length of stay of Asian source markets) and spend more per day. Such inflows have seen a decline because of the aging baby boomers for whom long haul flights is becoming less feasible and the changing preferences exhibited by younger tourists who want more adventure and immersive experiences.
- The most visited religious and cultural sites as well as festivals are overcrowded, not only impacting communities' daily life and value systems, but also threatening the long term sustainability of the assets upon which tourism and communities depend upon.
- The quality of accommodation and food at three-star locations in the Western Circuit show that actual experiences do not correspond with the exclusive, high-end image sold to visitors. Food

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<sup>15</sup> Youth unemployment and falling female labor force participation are critical issues in Bhutan.

served in most 3-star hotels tend to bear little or no resemblance to traditional Bhutanese cuisine, and is the third most frequent complaint from visitors after road conditions and solid waste management.

**The mystique of Bhutan, though still powerful, is also facing increased competition from other destinations which are in better sync with global travel trends.** Bhutan faces competition from other destinations such as Myanmar which is capturing part of its market. Other destinations provide a better value proposition than Bhutan because they are more aligned to the globally changing demand patterns in tourism. Globally, there is an emergence of a younger demographic segment that is looking for more authentic experiences and taking part in more active pursuits with less “sightseeing” and more “site doing”. There is also a growing interest in adventure-related travel which is now one of the world’s fastest growing travel segments. At the same time, there is a decline in the demand for pre-packaged sightseeing holidays, the mainstay of vacations in Bhutan.

**Acknowledging the changing trend in global travel patterns and market preferences, the government initiated a comprehensive review of Bhutan’s current tourism policy and pricing system.** The Tourism Council of Bhutan is working on these issues but has been constrained by a lack of human and financial resources, intra governmental cooperation, and lack of industry support. Tourism private associations have the potential to become more effective tourism development partners, but work is required to expand their institutional mandate and enhance their capacity, accountability and effectiveness.

## **Policy Recommendations**

**To address these issues, in the short term, the government needs to:**

- Experiment with new packages in off seasons, starting for instance with a promotional package for families in the summer or adventure travelers in the winter.
- Conduct, in collaboration with communities, an assessment of summer and winter cultural festivals and other special events that have the potential to attract international visitors in lean seasons, and present recommendations for enhancing existing events and creating new ones.
- Review the hotel star rating and improve access to affordable financing for renovations of three-star hotels seeking to maintain or increase their star rating.
- Improve services and diversify tourism products to enhance visitor satisfaction and encourage repeat visitation.

**To address these issues, in the medium to long term, the government needs to:**

- Enhance marketing efforts to strengthen Bhutan’s positioning as a year-around tourist destination.
- Continue efforts at establishing and enforcing regulations tailored to the regional market.
- Conduct market research and later promotion particularly in India focused on high-end younger demographic segments interested in immersive and adventure travels and the potential for overland travel from India to Southern and Eastern Bhutan.
- Establish a culinary school in Bhutan, to improve food quality and choice.
- Convene a Task Force comprising national and local government agencies, private sector and community members, to increase the geographic spread of tourism and the economic benefits in rural communities.
- Encourage private sector participation and co-investment in tourism promotion and development.

# Bhutan Policy Notes

## 3.7 Managing Forests for Sustainable Economic Development

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### Key issues and challenges

**Conservation of forests, natural resources and the environment is an integral part of Bhutan's development objectives and features in the country's constitution, Vision 2020 as well as other national policies and plans.** The economic development policy continues to be guided by the overarching philosophy of Gross National Happiness based on the four pillars of sustainable economic development; preservation and promotion of culture and tradition; conservation of environment; and good governance. The emerging 12<sup>th</sup> five-year plan supports a green growth path consistent with the forest agenda which can be directly linked to three National Key Result Areas: (i) Healthy ecosystem services maintained; (ii) Carbon neutral climate and disaster resilient development enhanced and (iii) Management of natural resources for sustainable utilization of goods and ecosystem services enhanced.

**The National Forest Policy (2011) ensures that forest resources, watersheds and biodiversity are managed for sustainable production of economic and environmental goods and services to meet the long term needs of society.** Emphasis lies on more decentralized and people-centered approach to implementation, with a strong agenda directed at poverty reduction. A key feature of the policy is the application of an integrated landscape level approach to sustainable forest management which entails a balanced approach to managing the dynamics between forest and other land uses.

**Although Bhutan is richly endowed with forest resources, the sector does not contribute much to economic growth.** While Bhutan's forest cover is 71 percent (2017), the forest sector contributed only 2.2 percent to Bhutan's GDP in 2017. Of Bhutan's forest area, 33 percent is suitable for sustainable management<sup>16</sup> (2016) but currently only 6 percent is under commercial management (2017). In 2012, only 0.5 percent of Bhutan's labor force (1500 workers) worked in forestry. Trade data suggest that Bhutan has a substantial trade deficit in terms of wood and wood products with imports that are six times higher than export volumes. The type of imported and exported wood and non-wood products is an indicator that related industries are under developed in Bhutan. A 2017 study demonstrates that increasing the forest management unit area to 15 percent of the total forest area would offset almost two-thirds of the charcoal imports. A more export-oriented forest production and domestic value-addition industry could capitalize on Bhutan's trademark as an environmentally pristine location and the availability of cheap and clean power.

**Whilst the current policy and regulatory framework is supportive of forest conservation, exploring sustainable management options is hampered by overregulation and lack of implementation.** The current regulatory framework is characterized by overregulation leading to inefficiencies within the wood industry and no incentives for small and medium enterprises. In 2013, the Gross National Happiness Commission (GNHC) set the policy objective of increasing the forest management unit area to more than 12 percent by 2018, a goal which is still to be achieved. Timber used for urban purposes needs to be bought through the government owned Natural Resources Development Corporation Limited. Further, timber production is supply driven and not adjusted to demand levels, leading to shortages and over supply depending on business cycles and other macro-economic conditions. Harvesting firewood is regulated by the 2006 Forest and Nature Conservation Rules of Bhutan. Households are allowed 16 m<sup>3</sup> of fuelwood per year if they lack electricity or 8 m<sup>3</sup>/year if they have electricity, irrespective of household size, need, forest type, and availability.

**There is limited public and private investment in the forest sector and wood-based industries.** Apart from the conservation-oriented policy and regular framework, other factors affecting Bhutan's forest and wood-based industry include the lack of available quality raw materials, access to modern technology, processing and value addition facilities; high transportation costs; and restrictions on

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<sup>16</sup> Based on slope less than or equal to 35 degrees

employment of foreign workers. Similar factors affect the development of the non-wood forest product industry. Most Bhutanese products cannot compete with Indian or Chinese markets because of the low number of small and medium sized community-based enterprises involved in value addition such as furniture and charcoal production.

**There is a need and potential to further develop forest-based enterprises and promote a business model that increases Bhutan's competitiveness without compromising its conservation agenda.**

Forests are a renewable resource and with proper management, both conservation and sustainable use can be achieved as sustainable forest management does not necessarily come at the cost of conservation. In terms of sustainable production potential of Bhutan's forests, an annual increase of wood harvest from 0.39 million m<sup>3</sup> to 1 million m<sup>3</sup> could generate revenue of Nu 10 billion (USD149 million) almost half of the revenue the hydropower sector produced in 2016. This volume would still be below the Annual Allowable Cut established by MoAF in 1991 which is 1.2 million m<sup>3</sup>. With limited business capacity, the participation of medium and small enterprises in the market is compromised. Capacity development on sustainable business practices is not available, which includes the ability to develop plans for sustainable business management and produce commercially viable products.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Review and assess the compatibility of legal and regulatory frameworks relevant to forests by examining the various rules, regulations and procedures that constitute barriers for increasing the forest area under sustainable management.
- Review the policy of providing subsidized fuelwood allocation to households to better target the poorest segments of the population.
- Assess and build capacity of existing public and private institutional structures to effectively and efficiently plan and manage forest assets.
- Conduct needs assessment for the development of forest-based private enterprises and for improvement of harvest technologies and capacity development

**To address these issues, in the medium to long term, the government needs to:**

- Continue the transfer of publicly-administered forests to community-based forest user groups to ensure sustainable forest management, increased forest productivity and improved livelihoods.
- Gradually increase export of sustainably harvested timber and high quality, branded wood products.
- Improve access to finance for forest-based enterprises.
- Enable the establishment of timber treatment facilities to lengthen life span of construction timber thereby reducing domestic timber demand in the long run.
- Encourage investments in high value non-timber forest products (e.g. medicinal plants, essential oils) for their value addition and processing.
- Promote and scale up forest-based livelihood activities for rural, poor communities such as mushroom farming, bamboo cultivation, and furniture enterprises through building cooperatives and SMEs.
- Increase participation in regional integration measures like knowledge exchanges e.g. on community-based forest management, analytics of regional drivers of deforestation and forest degradation, and monitoring the trade of non-wood forest products.

# Bhutan Policy Notes

## 3.8 Boosting Minerals Development

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### Key issues and challenges

**Mineral and mineral products are among the top ten exports from Bhutan and account for about 3 percent of GDP.** Approximately 1,500 people worked directly in mining companies in 2015. To increase its contribution to the economy, the mining sector needs to strengthen its linkages with the construction and hydropower sectors. There are also concerns that the benefits from the mining sector have not been shared widely due to poor governance, insufficient investments and corruption. In response, in 2014, the government-initiated reforms aimed at improving and modernizing the sector by strengthening transparency, sustainability and contribution to the economy.

**The lack of geological information in Bhutan is the major constraint for the sustainable planning and management of minerals.** Only 35 percent of the country is geologically mapped despite the significant endowment of mineral resources. Without the requisite information, formulation of appropriate policies and strategies to translate the government's goal of tapping mineral resources optimally and sustainably and achieving intergenerational equity is impeded.

**The separation of permitting and leasing functions in mining creates inefficiencies.** The Mineral Development Policy (MDP) in Bhutan requires that the Department of Geology and Mines (DGM) issue prospecting and exploration permits and the Mining Regulatory Authority (MRA) issue mineral leases and surface collection permits. This separation results in two record keeping systems (mining cadaster) and the need to develop similar capacity in two institutions. At times, it also results in delays and overlapping in the process of granting permits and leases for mineral development.

**There is also a lack of accountability and good governance in the sector.** The Mineral Development Policy requires the DGM and MRA to maintain proper records on government decision making and build and strengthen human and technical capacity in the mining and mineral sector. However, DGM currently maintains all records on paper which are not readily accessible to the public and interested parties, and more vulnerable to loss and damage. Some of the mines explored by the DGM were also not publicly auctioned as required by law but instead leased out through "first come, first serve" basis. The cases of non-collection of restoration bond, tax evasion, high salaries for directors and CEOs, and lack of competitive bidding in the mining sector have been reported by the Royal Audit Authority (RAA) in 2015. Currently, all restoration bonds are collected and are up to date.

**Poor implementation of the existing policies has negatively impacted the environment.** It has resulted in the deterioration in air quality, increase in water turbidity and pollution, and has had a negative impact on local vegetation surrounding the existing mines and quarries. The Mineral Development Policy has proposed streamlining the environment and related permitting process and the maintenance of good roads. This would require a new environmental chapter with clear provisions regarding institutional responsibilities and authorities for environmental risk management and mitigation in the Mines and Minerals Management Act. The Mining Closure and Reclamation Plan needs to include not only environmental reclamation but also social risk mitigation and the post mining adaptation of the community with emphasis on socio-economic aspects. Provisions requiring leaseholders to prepare an acceptable Social Impact Assessment (SIA) and Social Risk Management and Mitigation Plan (SRMMP) need to be necessary pre-conditions for issuing a mining lease.

**Local private sector companies involved in mineral development in Bhutan lack resources and technical know-how to carry out exploration and mapping.** This leads to inefficiency and high costs. Optimal exploration requires major capital investment which could be better provided through Foreign Direct Investment (FDI). In addition, to facilitate effective and optimal exploration and management of mineral resources, high-end technology and human capability is required.

**There is also a need to promote local community development near mining areas.** The MDP has enabling provisions that requires the mining companies to share mineral benefits with the local

communities. This could be done through the provision of employment opportunities (direct and indirect), better infrastructure, education and health services and local business development. Local communities need to be given preference in terms of owning businesses, getting employed (in suitable jobs) and providing goods and services to mining companies and contractors.

**The MDP encourages value addition to minerals before exports.** Mineral exports in primary form are restricted. The government could instead subject raw minerals to higher royalties to disincentivize exports. This would provide companies with the option to export minerals if warranted. Given the limited potential for value addition to minerals and the availability of the large Indian market, a cost benefit analysis on each mineral may help take a more informed decision.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Digitize and make publicly available the mineral lease information and company report records (by DGM) to increase transparency and accountability.
- Enhance capacity of DGM/MRA to effectively enforce lease and permit conditions and to minimize social and environmental impacts.
- Lift restrictions imposed on mineral exports (in primary form) and instead disincentivize it through higher royalty.
- Develop Standard Operating Procedures (SOPs) and guidelines to promote private sector participation in mineral exploration.
- Develop and enhance technical and human skills related to mineral resources by supporting and investing in the sector.

**To address these issues, in the medium to long term, the government needs to:**

- Prioritize and complete the mapping of the underground resources of the country.
- Encourage private sector investment by improving basic geological knowledge and making information available to exploration investors.
- Promote internal demand for minerals through the development of domestic mineral based industries.
- Promote FDI and PPP in the exploration and exploitation of high value minerals.

## 4. Investing in Human Capital



*Skills shortage is another key constraint that the private sector in Bhutan faces. With free public provision of education and health services, human development outcomes in Bhutan have improved significantly. However, critical gaps remain. Concerns on the quality and relevance of the education system have limited school to work transitions while access to early childhood care as well as tertiary education institutions is limited. Although health and nutrition outcomes in Bhutan are comparatively good in the region, the prevalence of stunting and high incidence of non-communicable diseases pose challenges. The following policy notes outline the key constraints to developing human capital in Bhutan and suggest some policy recommendations.*

# Bhutan Policy Notes

## 4.1 Sustaining Education Policy Reforms

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### Key issues and challenges

**Free public education at the primary and secondary level and substantial investment in the sector have helped achieve high enrolment rates, although quality varies across different regions.** The quality of education is especially challenging in remote mountainous schools with limited access to inputs, qualified teachers, school feeding programs and road access. To address this issue, the government introduced measures like expanding Extended Classrooms<sup>17</sup>, Central Schools<sup>18</sup>, teacher professional development in school clusters<sup>19</sup>, improvement in adult literacy and skills through community learning centers and Non-Formal Education (NFE). The focus of the government is on improving quality, expanding access to early childhood care and strengthening tertiary and NFE institutions. The latest draft of the national education strategy (2018) is consistent with these priorities. Bhutan is also an early adopter of the Human Capital Project (HCP) and this presents opportunities and necessitates some policy adjustments.

**Enrollment rates in primary and secondary levels remain high and stable.** As of 2017, there was almost universal enrolment in primary education. Schools are running at full capacity but the difference between gross and net enrollment rates suggest efficiency issues, including aging, repetition, and dropouts<sup>20</sup>. Girls have higher survival and transition rates and lower dropout and repetition rates than boys. Access to tertiary education is high at nearly 40 percent for men and 32 percent for women, showing relatively high gender parity. However, in rural areas, about half of the adult population is still without any level of education.

**Access to Early Childhood Care and Development (ECCD) is limited.** ECCD programs are provided to about 19 percent of the 3-5-year-olds in about 290 government ECD centers. The government plans to increase access to half the population by 2030. The ECCD and school feeding programs are receiving external support. However, the sustainability of these programs as well as sustaining quality services will remain a challenge, especially in remote locations.

**Learning outcomes are considered low both by international standards and by national expectations.** In a recent pilot for PISA for Development (PISA-D), 41 percent of the grade IX and X students could not reach proficiency level 1 out of six levels of reading proficiency. To improve learning outcomes, the government is focusing on teacher quality and performance. Teacher standards need to be established to make them accountable for performance while regular coaching needs to be provided to upgrade their skills. In addition, incentives need to be provided to highly skilled youth to choose the teaching profession and to trained teachers to teach in remote locations.

**Tertiary education faces pressures from increasing demand, limited resources, and changing skills requirement.** The biggest challenges for higher education include the (i) increasing demand from higher number of secondary education graduates, (ii) growing competition for subsidized places, and (iii) meeting the skills demand of the private sector. Many university graduates do not find quality jobs and remain unemployed in the hope of getting public sector jobs. Some of these challenges were partially addressed in a higher education reform program in 2010 and the financing reform in 2013. The

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<sup>17</sup> Extended classrooms are small satellite schools established in community centers in remote rural locations through early childhood education until grade 3.

<sup>18</sup> The central school concept (has been) a strategic intervention to fast track improvement in the overall quality of education through restructuring school system, by establishing large centers with boarding and adequate educational resources. Most of the central schools are in rural areas with major and permanent catchment areas.

<sup>19</sup> The teacher professional development program is in policy design stage with some elements, such as the teacher standards policy in draft, others, such as verification, certification and in-service training in early planning phase.

<sup>20</sup> The statistical figures of enrollment rates show some discrepancies stemming either from population figures or from the definitions used.

government may now need to review the implementation and effectiveness of these reforms and make adjustments as needed.

**There is limited absorption by the private sector of skilled manpower.** Along with youth unemployment in Bhutan, there exists a shortage of skilled labor, indicating a mismatch between the skills imparted by the education system and those desired by the private sector. The government plans to improve skills through improved school education, vocational training, higher education and NFE. These efforts require better interagency coordination, equivalency, harmonized certification and incentives to the private sector to invest in skills development.

**Bhutan needs to further strengthen the ongoing effort to measure learning outcomes which is not comparable with international assessments.** Traditional indicators like teacher availability, training, and classroom size show high quality inputs and examinations demonstrate good results (10th grade pass rate at 95.7 percent, 12th grade pass rate at 84.8 percent). However, the measurement of learning results through the National Education Assessments are not comparable to international assessment results which is needed for adapting to formulate the Human Capital Index. The recent effort to undertake PISA-D in and around Thimphu should be scaled up to measure learning outcomes at the national level.

**The institutional set up for education is complex and requires effective inter-governmental coordination.** The agencies involved with the education sector include the Ministry of Education (MOE), the Ministry of Labor and Human Resources (MOLHR), the Royal Education Council (REC)<sup>21</sup>, and the Bhutan Council of School Examination and Assessment (BCSEA) as well as the Universities and Monastic education agencies<sup>22</sup>. Improving vocational training involves all these agencies. Improving quality requires stronger coordination between the MOE, REC, BCSEA and the decentralized levels. Making NFE better linked with the education system and the job market requires cooperation between the two ministries. Expanding access to ECCD requires stronger coordination with the decentralized levels and also with partner agencies responsible for health and feeding/nutrition.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Adopt the new National Education Strategy 2018.
- Improve access to quality education in remote and mountainous regions.
- Adopt the new Teacher Professional Development Program and develop an implementation and monitoring plan, including standards, certification and clustered professional development.
- Develop an implementation plan for the sustainable expansion of the ECCD system.
- Review the national education assessment system with the aim for harmonization with international learning assessment programs and consider scaling up the PISA-D pilot.
- Adopt the Non-Formal Education Equivalency Framework and harmonize qualifications and equivalencies of TVET programs across government agencies and non-government TVET providers.
- Review the implementation of the tertiary education reform of 2010 and financing reform of 2013.

**To address these issues, in the medium to long term, the government needs to:**

- Improve learning outcomes through improved teacher quality, expansion of central schools and through strengthened system of learning assessment.
- Implement a harmonized vocational training system, better coordination across agencies and institutions in curriculum, equivalency and qualification.
- Implement the tertiary education policy and finance reform so that the system meets the expanded and changing demand of youth, employers and the labor market.

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<sup>21</sup> The REC is an independent government agency responsible for curriculum and teacher training.

<sup>22</sup> Both University of Bhutan and the Monastic education agencies are independent from the Ministry of education

# Bhutan Policy Notes

## 4.2 Promoting Better Health Outcomes

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### Key issues and challenges

**During the last two decades, Bhutan has achieved noteworthy improvements in health outcomes, but critical challenges remain.** Although health and nutrition outcomes are among the best in South Asia (other than Sri Lanka), there remain socio-economic and geographic disparities. Infant and under-five mortality is higher in the eastern region than in the western and central regions and under-five mortality in rural areas is twice that in urban areas. The prevalence of stunting is still high, with every 5<sup>th</sup> child under age 5 being stunted.<sup>23</sup> Household poverty seems to be a key determinant of poor outcomes, being correlated with poor access to reproductive health services and poor infant feeding and caring practices.<sup>24</sup>

**Non-communicable disease is emerging as a major health challenge accounting for more than 70 percent of the disease burden.** As the country develops, significant changes in lifestyle are occurring, leading to the emergence of new health challenges. Non-communicable diseases (NCDs) including ischemic heart disease, cerebrovascular disease, hypertension, diabetes, chronic back and neck pain, and cancer are increasing and account for more than 70 percent of the reported disease burden. This poses a significant risk to people's health in their productive years. Mental health problems including alcoholism and suicides are on the rise, owing to sociocultural changes, growing urbanization, migration and unemployment.<sup>25</sup>

**Bhutan's existing health system is not fully geared to meet new emerging challenges.** While it has developed strategy documents such as the Multi-sectoral National Action Plan for the Prevention and Control of NCDs (2015-2020), Mental Health Strategy and Action Plan (2015-2023) and the National Health Promotion Action Plan, their operationalization is at an early stage and action plans are only partially financed. Limitations in terms of availability of specialized health manpower, lack of targeted interventions for nutrition for low income and marginalized population sub-groups and limited geographic access to secondary care services are critical barriers holding back Bhutan's health system.<sup>26</sup>

**The quality of public spending in health can be improved.** Although Bhutan does better than other South Asian countries in terms of public health expenditure which is in the range of 3-5 percent of GDP and 8 percent of total government spending<sup>27</sup>, its performance on health outcomes relative to the level of its health spending is lower compared with other countries in the region. Therefore, reviewing allocative efficiencies within the health sector is critical from a sustainability perspective.

**The sustainability of the current healthcare financing needs careful review.** Rising health care costs in Bhutan, where health care is publicly funded and free to all, is a substantial financial liability. Today, people have higher longevity along with increasing burden of chronic NCDs which requires additional resources. It is projected, for example, that the total expenditures for treating cancer patients will double in this decade (2010-2020). The financing for and the provision of these services need to be reviewed regularly with the equity and efficiency of the system in mind. Learning from other country experiences, coverage may be carefully reviewed and private provision of services explored under some pre-defined equity and efficiency criteria. It is critical that the government proactively engage the

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<sup>23</sup> National Nutrition Survey 2015.

<sup>24</sup> Nutrition in Bhutan: Situational Analysis and Policy Recommendations. Report No: 94029. December, 2014; Bhutan Multiple Indicator Survey 2010.

<sup>25</sup> Royal Government of Bhutan 2015, The Multi-sectoral Action Plan for the Prevention and Control of Non-communicable Diseases in Bhutan (2015-2020).

<sup>26</sup> Nutrition in Bhutan (2010); Royal Government of Bhutan (2015); Yangchen et. al. (2016) Bhutanese Health and the Health Care System: Past, Present, and Future. The Druk Journal.

<sup>27</sup> The Kingdom of Bhutan. Health Systems Review. Health Systems in Transition Vol. 7 No. 2 2017. Asia Pacific Observatory.

emerging private sector to harness its potential. The government needs to provide the regulatory environment for private sector health providers to thrive and augment the health system's capacity.<sup>28</sup>

**The government also needs a robust mechanism to respond to health needs in the aftermath of natural disasters.** Bhutan is prone to several natural hazards (earthquake, windstorm, glacial outbursts, floods) due to its fragile geological conditions and variable climatic conditions. The government therefore needs good preparedness and a response plan, both in terms of financing and institutional arrangements, to deal with post disaster health needs. A recently conducted Joint External Evaluation (2017) for compliance to International Health Regulations (IHR) core capacities, identified that the emergency preparedness and response plans and institutional arrangements are not adequate and need to be revisited.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Conduct an evidence-informed budgeting process to improve allocative efficiency of health and nutrition budgets by providing resources to the most needed geographical areas and services.
- Build technical capacity of health officials to reflect the shifting burden of disease and improve and consolidate/strengthen existing health facility infrastructure accordingly (including seismic vulnerability assessment of all facilities).
- Expand the coverage for prevention and control of NCDs which would likely require a multisectoral response, a higher level of coordination and additional resources.
- Improve IHR core capacities by conducting an all hazard, multisectoral risk assessment, including resource mapping, ranking and prioritization of risk; reviewing and updating the National Public Health Emergency Response Plan; identifying locations and building national and subnational permanent Public Health Emergency Operations Centers; developing and distributing emergency case management guidelines; and developing and implementing emergency communication plans.

**To address these issues, in the medium to long term, the government needs to:**

- Develop a health financing strategy to improve the quality of spending and contain the rising health care cost.
- Roll out the measures/programs for expansion of coverage for prevention and control of NCDs.
- Develop and implement a multi-sectoral action plan to effectively respond to natural disasters/disease outbreaks.
- Develop the required regulatory framework for private sector participation in health.

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<sup>28</sup> Human Development Public Expenditure Review. Report No: ACS2873. March, 2013.

# Bhutan Policy Notes

## 4.3 Bolstering Nutrition

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### Key issues and challenges

**Investment in human capital especially nutrition is key for the growth and competitiveness of nations.** Investment in nutrition not only helps children survive and thrive, but also lays the foundation to prepare workforces for the more highly skilled jobs of the future and enhances both prosperity and resilience. World Bank research shows that if child stunting—a red flag indicator for losses in cognitive ability and future earning capacity—had been eliminated when today’s workers were children, the average country would have 7 percent higher GDP per capita.<sup>29</sup>

**Although Bhutan has significantly reduced undernutrition, it remains a public health problem.** The prevalence of stunting among children under five years of age has decreased from 33.5 percent in 2010 to 21.2 percent in 2015,<sup>30</sup> but it is still a moderate public health concern. Anemia in children 6-59 months is high at 43.8 percent, and that in women and adolescent girls ranges between 30 percent and 40 percent, indicating a lingering public health problem.

**Reducing stunting and other forms of malnutrition is a national agenda in Bhutan.** Recognizing the nutrition issues, the government has shown commitment to reducing malnutrition in the country. Following the National Nutrition Survey 2015, a multi sector National Nutrition Task Force team drafted a National Food and Nutrition Security Strategy to accelerate actions to reduce under nutrition and micronutrient deficiencies among women and children. The plan has analyzed current situations of both nutrition specific and nutrition sensitive interventions and identified gaps and strategic actions to reduce malnutrition.

**Malnutrition parameters show regional disparities and inequities by wealth quintiles.** Based on World Health Organization (WHO) criteria<sup>31</sup>, the eastern region has a moderate public health problem of stunting (East 29.1 percent, Central 18.5 percent and West 16.2 percent) and rural areas have moderate public health problems by all three indicators (stunting 26.1 percent, underweight 12.4 percent and wasting 5.4 percent). Stunting rates are higher in the lowest three quintiles (21.2 to 35.1 percent) than in the upper two quintiles (5.7 to 18.5 percent).

**While Bhutan has introduced specific interventions in the past decade, the coverage and, especially, quality of these programs could be improved.** The government has implemented various nutrition specific interventions with a focus on optimizing infant and young child feeding practices, supplementation for children, adolescents and pregnant and lactating women with essential micronutrients and the establishment of treatment and rehabilitation centers in health facilities for severely malnourished children. However, only 51 percent of children aged 0-6 months are exclusively breastfed. Also, lack of dietary diversity in the household diet is a key concern. While most families feed their children complementary food, only 15 percent of children 6-23 months old receive four food groups and only 12 percent of breastfed children aged 6-23 months have a minimal acceptable diet. In addition, only a third of the caregivers could treat their children with diarrhea following the guidelines on administration of oral rehydration solution, continued feeding and provision of liquids to children. Although 85 percent of pregnant women had at least four antenatal care (ANC) visits (the number recommended by WHO), only 26 percent had the required Bhutan standard of eight or more ANC visits. An in-depth analysis of determinants of child stunting in Bhutan found that, after controlling for many other variables, children whose mothers received three or fewer ANC visits during the last pregnancy

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<sup>29</sup> World Bank Report 2018.

<sup>30</sup> Multiple Indicator Cluster Survey 2010; National Nutrition Survey 2015: Bhutan.

<sup>31</sup> WHO classification cut-off for a moderate public health problem is 20 percent for stunting, 10 percent for underweight, and 5 percent for wasting.

had 31 percent higher odds of being stunted, while children whose mother did not receive any ANC visits had 51 percent higher odds of being stunted.<sup>32</sup>

**It is essential that Bhutan focuses its resources towards the key determinants of malnutrition.** Studies done in the past point towards the existence of diarrheal diseases, high parasite loads in parts of the country and high prevalence of helicobacter pylori infections as key factors responsible for stunting. Diseases related to environmental and personal hygiene and the poor nutrition and care of women before and during pregnancy were also identified as risk factors for stunting.<sup>33</sup> Lack of nutritious food in the diet of households are contributing towards malnutrition. Over two third of adults (67 percent) consume less than the recommended five servings (400g) of fruits and /or vegetables per day (NNS 2015). Also, the vegetables consumed are mostly potatoes and chilies which do not provide enough nutrients.<sup>34</sup> Sanitation and hygiene which contributes to childhood diarrhea is also a concern. Although nationally 71 percent of households have access to improved sanitation, disparities in access exist between the richest (95 percent) and the poorest (32 percent) households and between rural (61 percent) and urban areas (87 percent). There are concerns about river and ground water quality and their public health effects.

## Policy Recommendations

**To address these issues, the government needs to:**

- Allocate its scarce resources efficiently for nutrition services by:
  - Scaling up essential interventions with a focus on the underserved and the poor.
  - Using the Public Expenditure Review of Nutrition to further finetune the spending.
- Provide communication interventions on nutrition specific and sensitive social behavior change so that the population is able to make the right nutrition choices.

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<sup>32</sup> Aguayo V.M., Badgaiyan N. & Paintal K. (2015) Determinants of child stunting in the Royal Kingdom of Bhutan: an in-depth analysis of nationally representative data. *Maternal & Child Nutrition* 11 (3), 333–45.

<sup>33</sup> Atwood S., Nagpal S., Mbuya N. & Laviolette L. (2014) *Nutrition in Bhutan: Situational Analysis and Policy Recommendations*. The International Bank for Reconstruction and Development / The World Bank: Washington, DC, USA.

<sup>34</sup> Leao, Izabela and Tenzin Lhaden (2018). Promoting Better Nutrition in Bhutan. End Poverty in South Asia Blog.

<http://blogs.worldbank.org/endpovertyinsouthasia/promoting-better-nutrition-bhutan>

# Bhutan Policy Notes

## 4.4 Achieving Full and Gainful Employment

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### Key issues and challenges

**Bhutan's unemployment rate of 2 percent is relatively low by international standards, but it masks challenges associated with the prevalence of low productivity employment.** In 2014, nearly 60 percent of the Bhutanese were employed in agriculture, which was predominantly informal, and offered low wages, almost no fringe benefits and limited access to social insurance or skill development programs.<sup>35</sup> This was particularly true for the most vulnerable workers that have no formal education. Similarly, Bhutan Living Standards Survey (BLSS) showed that more than 60 percent of Bhutanese workers were own-account workers in 2017.<sup>36</sup> Yet microenterprises contributed little to job creation and employment growth, which is indicative of the low productivity of this type of employment.<sup>37</sup>

**These challenges are further exacerbated by underdevelopment of the non-farm private sector and dominance of public sector employment outside of agriculture.** In 2014, the public sector accounted for close to half of all the non-agricultural jobs and employed 75 percent of those with tertiary education. The underdevelopment of non-farm private sector leads to high levels of unemployment for certain population sub groups. While overall unemployment rate has declined from 2.9 percent in 2013 to 2.0 percent in 2017, the youth unemployment rate has increased by 1.1 percentage points to 11 percent in the same period. The unemployment rate is the highest for those with more than secondary education, because of queuing for public sector jobs.<sup>38</sup> Close to 50 percent of unemployed youth in Bhutan in 2014 aspired for public sector jobs, while another 30 percent were seeking employment in the state-owned enterprises.<sup>39</sup>

**For educated youth, the preference for public sector jobs is likely driven more by difference in compensation packages for comparable jobs rather than by a wage differential.** Analysis of labor force data from 2014 shows that there is almost no wage differential between public and private sector jobs for workers with the same characteristics (e.g. education level), and preference for public sector jobs may be attributable to differences in access to pensions, job security and other benefits. Pensions coverage exceeds 95 percent in the public sector while it is only 30 percent in the formal private sector.

**The government needs to strengthen its capacity to supervise the pension funds as it proceeds with reforms to level the playing field between the public and the private sector.** The government is about to pass the National Pension and Provident Fund (NPPF) reform that will expand pension coverage to the formal private sector workers (through defined contribution schemes). Yet NPPF needs to strengthen its IT functions, investment policy, and fund management practices to be able to seamlessly absorb and manage additional pension contributions and clients. Additionally, the Royal Monetary Authority (RMA) needs to strengthen its ability to supervise NPPF and other pension funds as pension coverage expands. In addition, given the prevalence of temporary workers who might not be covered by formal sector contributory schemes and informal workers, introduction of coverage options for temporary or informal workers as well as of social pension for uncovered and poor elderly can strengthen the effects of the reform.

**Furthermore, low productivity of self-employment, dominance of public sector and other labor related constraints inhibit non-farm private sector growth and its ability to provide employment to Bhutanese youth.** The latest enterprise survey data indicates that the private sector struggles to find workers with relevant experience and skills. In addition to the lack of interest among Bhutanese workers

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<sup>35</sup> Ministry of Labor and Human Resources (MoLHR) and the World Bank Group (WBG). 2016. Bhutan's Labor Market: Towards Gainful and Quality Employment for All. Thimphu: MoLHR; Washington, DC: WBG.

<sup>36</sup> <http://www.nsb.gov.bt/publication/files/pub2yo10667rb.pdf>

<sup>37</sup> Santini, Massimiliano; Tran, Trang Thu; Beath, Andrew. 2017. Investment Climate Assessment of Bhutan: Removing Constraints to Private Sector Development to Enable the Creation of More and Better Jobs. World Bank, Washington, DC. © World Bank.

<sup>38</sup> The 2014 unemployment rate for youth with tertiary education was 12.3 percent and was higher than in any other education category. In comparison unemployment rate for those with no formal education was just 0.2 percent.

<sup>39</sup> MOLHR and United Nations Development Programme (UNDP). 2014. Unemployed Youth Perception Survey. Thimphu: MOLHR; New York: UNDP.

in private sector employment opportunities, there is also a mismatch between skills needed by the private sector and skills taught in formal education or training and available in the market.<sup>40</sup> Challenges faced by employers regarding access to skilled workers are further exacerbated by their inability to quickly secure needed capacity from abroad or to provide on the job training.

**To address some of these challenges through evidence-based policy, the Ministry of Labor and Human Resources is interested in developing a comprehensive and regularly updated labor market information system (LMIS).** An LMIS that incorporates statistics from labor supply and demand can enable the government to: (i) improve the design of its skilling and formal education programs (through more systematic skill need identification), (ii) evaluate the efficiency of existing employment support programs, (iii) provide a more comprehensive package of employment support tailored to jobseeker's specific needs, and (iv) identify additional policies or programs needed for increasing youth employment and job creation. Furthermore, it can help youth and jobseekers to make more informed decisions regarding schooling, career choices or employment support programs.

**There are also significant gender disparities in the labor market.** While male labor force participation (LFP) rose between 2013 and 2017, female LFP declined during the same period to 49.6 percent.<sup>41</sup> Female LFP was particularly low at only 39.9 percent in urban areas. A decline in LFP is not necessarily a reason for alarm as it often can be explained by increased levels of enrollment in school or training. On the other hand, a high proportion of individuals not in employment, education or training (NEET) can be concerning. In Bhutan, higher shares of females in the NEET category indicates that women might be more likely to face constraints to labor market participation or might not perceive the labor market as offering adequate employment opportunities. Gender disparities also seem to persist in terms of sectors of employment. For example, among those employed, men were twice as likely to be in formal wage employment than women.<sup>42</sup> This can in part be explained by disparities in educational attainment between males and females. Close to half (47 percent) of women have no education, compared to only about a third of men (36 percent). Similarly, tertiary education completion among men is three percentage points higher than that for women (8 percent compared to 5 percent).

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Ensure that that NPPF has sufficient IT, fund management, collection and processing capacity for expansion of coverage of the NPPF under the new NPPF policy.
- Revise guidelines and regulations and strengthen capacity of RMA to ensure effective oversight of NPPF operations under the new NPPF policy.
- Conduct an in-depth assessment of (i) impediments to female employment and (ii) the existing entrepreneurship and microenterprise support programs to identify ways to improve their ability to increase productivity of micro and small enterprises.

**To address these issues, in the medium to long term, the government needs to:**

- Establish a functional LMIS to improve the functioning of public employment services and linkages between formal education, TVET programs and the needs of the private sector.
- Create a framework for private sector provision of on-the-job training.
- Identify policies to improve productivity of agricultural employment.
- Consider policies for increased access to social insurance and skill support for agricultural workers.
- Identify and implement policy interventions based on results of the in-depth assessment of the impediments to female labor force participation and the microenterprise support programs.
- Consider options for the roll out of the NPPF to the informal sector and for social pensions.

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<sup>40</sup> Even though most of the training programs rely on rapid market appraisals and performance-based contracts.

<sup>41</sup> Male LFP in 2017 was 73.6 percent.

<sup>42</sup> National Statistics Bureau (NSB) of Bhutan and the World Bank Group (WBG). 2017. Bhutan Living Standards Survey Report., Bhutan.

## 5. Addressing Environmental and Spatial Priorities



*The primary growth driver, the hydropower sector, along with other sectors like tourism and agriculture are dependent on natural resources, which makes their preservation as well as better utilization critical. Bhutan is vulnerable to seismic and hydro-meteorological hazards and the government is committed to addressing these risks. Much of Bhutan's economy and comparative advantage is shaped by its vast natural endowment of water but the country scores low on measures of economic water security. In addition, with a fast urbanizing population, changes in the spatial and investment policies of the government could help address the problems in urban centers. The following policy notes outline the key concerns on the environment and on water security and issues related to urbanization. They also suggest some policy recommendations for the government's consideration.*

# Bhutan Policy Notes

## 5.1 Underpinning Safe, Sustainable and Climate Resilient Development

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### Key issues and challenges

**Bhutan is highly vulnerable to seismic and hydro-meteorological hazards.** Located in the eastern edge of the Himalayas, the country is susceptible to climate and disaster risk. Recent adverse natural events include the 1994 Glacier Lake Outburst Flood, the 2009 and 2011 earthquakes (M6.1 and M6.9 respectively), the 2009 cyclone Aila, the 2016 monsoon flooding and the severe flooding and landslides during every monsoon. In 2009, Cyclone Aila and the earthquake resulted in total damages of approximately 5.7 percent of GDP and the subsequent earthquake in 2011 resulted in damages of about 1.4 percent of GDP.

**The government of Bhutan is committed to addressing climate and disaster risks.** One of the 16 National Key Result Areas in the 12<sup>th</sup> Five Year Plan is “Climate and Disaster Resilient Development Enhanced”. Bhutan's Nationally Determined Contribution was ratified by its Parliament in 2016 and integrated in its 12<sup>th</sup> FYP. A Socio-Economic study on Improved Hydro-Meteorological Services in the country<sup>43</sup> states that the cost-benefit ratio of investing in strengthened hydromet services is 1:5.5, indicating greater than five-fold benefits for such investments.

**The Disaster Management Act 2013 of Bhutan provides the legal framework for mainstreaming of disaster risk reduction, but a lack of data has been an impediment.** Bhutan is ahead of many countries as it places high priority in enhancing its resilience to disasters and climate change. Nevertheless, it is stymied by the lack of adequate data to enable informed decision making and planning in a variety of weather and water dependent sectors. These constraints impede the development of resilient infrastructure in important sectors.

**There is room to improve coordination among relevant agencies for implementation of DRM and climate resilient activities.** Institutionalizing the coordination mechanism for sharing of information and coordinating actions to manage and reduce climate and disaster related risks is critical. The government recognizes the close linkage between climate change adaptation and disaster risk reduction, but there is a need for an information platform. Such a platform will link relevant agencies working on hazards, exposure and vulnerability assessments by allowing them to systematically share available information for improved and efficient decision making. The platform would also help enhance technical backstopping amongst agencies, build the capacity of all relevant stakeholders to enable them to understand how resilience can be integrated into their own sectors, and also improve the accessibility and quality of disaster risk assessments. In the road sector for instance, national highways and other roads often built along very steep mountains or rivers with high landslide and flood risks remain blocked for hours or days every monsoon. To address this challenge, it will be important to integrate watershed and landscape properties into road sector investments.

**Improved hydromet-based information services can make important contributions to the performance of key economic sectors in Bhutan and their preparedness for disasters.** Agriculture, hydropower, tourism, water resources, and infrastructure are heavily dependent on weather-, water-, and climate-related information. However, information products tailored to these sectors are highly limited. Farmers, for instance, do not get access to systematic agro-weather advisories or bulletins or seasonal forecasts to support them in making decisions at the farm level. Flood-affected communities or infrastructure operators do not get flood forecasts sufficiently ahead of time. Flood mitigation is typically responsive, leading to inefficiencies and waste as chronic flooding causes recurrent damages. Planners have limited information on the extent of flood-prone areas at present as well as the likelihood of their increase with future climate risks.

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<sup>43</sup>[https://www.researchgate.net/publication/301286763 Socio-Economic Study on Improved Hydro Meteorological Services in the Kingdom of Bhutan.](https://www.researchgate.net/publication/301286763_Socio-Economic_Study_on_Improved_Hydro_Meteorological_Services_in_the_Kingdom_of_Bhutan)

**Bhutan's preparedness and recovery capacity after disasters faces challenges related to lack of appropriate disaster risk financing tools.** Key issues include: (i) fragmented funding mechanisms for Disaster Risk Reduction (DRR) activities since the majority of investments in improving disaster and climate resilience and enhancing the information base for hydro-met services are dependent on grants. This poses a challenge to investing strategically in DRR activities; and (ii) lack of sustainable disaster risk financing tools which leads to confusion and delays in responding to critical needs in the aftermath of a disaster.

**There is a need to strengthen the role and capacity of private sector engagement in the resilience agenda.** In many cases, infrastructure projects, including important public buildings, are constructed by the private sector. They have the option to use different kinds of construction materials and methodologies and their choice could have a significant bearing on the resilience of the infrastructure to various hazards. Therefore, it is important to create awareness among the private sector on the need to adhere to climate resilient construction requirements.

## **Policy Recommendations**

**To address these issues, in the short term, the government needs to:**

- Integrate resilience and risk information in infrastructure development, primarily, in the construction of buildings, roads, telecommunications, health facilities, and schools.
- Strengthen the hazard and risk information base through investments in service delivery of weather, water and climate information services to provide timely information to populations at risk.
- Improve regional collaboration for greater access to global and regional information.
- Develop a comprehensive disaster risk financial strategy and put in place disaster risk retention tools to contain high frequency low impact events.

**To address these issues, in the medium to long term, the government needs to:**

- Review (and amend) the Rules and Regulations of the Disaster Management Act 2013 to identify key issues and gaps in fulfilling its purpose and prepare a Roadmap to strengthen DRM and Climate Resilience.
- Adopt guidelines to integrate climate and disaster resilience in infrastructure development for key sectors.
- Strengthen partnerships between colleges under the Royal University of Bhutan and central government technical agencies on research works to enhance the information base for disaster and climate resilience.
- Undertake research works in collaboration with colleges to develop Bhutan specific building codes.
- Strengthen institutional capacity in the areas of Hydromet, Disaster Management and Climate Resilience.
- Build partnerships with neighboring countries to keep up with technology developments and avail of regional and global data and information for enhancing hydromet services and countering transboundary disaster risks.
- Establish disaster risk transfer mechanisms for high impact low frequency events to cover both government and private owned properties.
- Improve participation of private sector in the resilience agenda.

# Bhutan Policy Notes

## 5.2 Improving Water Security and Sanitation

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### Key issues and challenges

**Although water resources are abundant in Bhutan, the management of this vital resource faces significant challenges.** Bhutan has among the highest per capita water availability in the world at 94,500 m<sup>3</sup> per person per year.<sup>44</sup> Despite this large amount, the country faces difficult water sector challenges, including the uneven distribution of water resources, climate change risks, poor quality of water and sanitation services in urban areas, water and sanitation related health concerns, lack of financial data and analysis on the sector, missed opportunities in irrigated agriculture and a lack of human capacity.

**Due to a rugged topography and settlement patterns, seasonal and local water scarcity is a common occurrence.** Since water is mainly stored in lakes and rivers flowing at the valley bottoms, the population living in remote mountain settlements depend on the smaller streams, springs and tributaries for domestic and agricultural use that are subject to seasonal variation. It is estimated that more than 13,700 rural households have faced seasonal drinking water shortages due to decreasing quantities and drying up of water sources.<sup>45</sup>

**Climate change poses risks.** Climate change models indicate that Bhutan will experience future rapid changes in weather patterns, with a temperature increase of over 2.5°C and a precipitation increase of over 6 percent by 2050.<sup>46</sup> There is a projected 20 to 30 percent decrease in winter precipitation over the north-east and south-east parts of Bhutan for the 2050s.<sup>47</sup> With the influence of climate change, local water stresses will be exacerbated. In addition, the geographic features make Bhutan highly exposed to hydro-meteorological hazards such as floods, landslides, forest fires and windstorms.

**Bhutan's rapid urbanization has made access to clean water and sanitation challenging in urban areas, and the situation is similar in rural areas.** Officially, about 99.5 percent of the population had access to improved water sources in 2017.<sup>48</sup> However, when considering the access to safely managed water supplies, the rate is much lower (34 percent urban and 27 percent rural).<sup>49</sup> More than 50 percent of the urban population has intermittent water supply, ranging from only 6 - 12 hours per day, allowing contamination to enter the piped network when the water pressure is reduced. In rural areas, only about 69 percent of water supply schemes are functional.<sup>50</sup> The poor service is mainly due to a lack of resources (human and financial), inadequate investments and the low priority of ensuring water supply quality in community and regional planning. Nationally, about 71 percent of the population has access to improved sanitation facilities, but only about 20 percent of population (in 2010, latest available figures) has access to piped sewerage collection.<sup>51,52</sup> Bhutan still experiences an 11 percent open defecation rate.

**Poor water and wastewater service underlies important health concerns.** Waterborne diseases (e.g. diarrhea and dysentery) are among the top five diseases in Bhutan. According to recent data, 2,368 per

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<sup>44</sup> ADB, 2016. Water: Securing Bhutan's Future.

<https://www.adb.org/sites/default/files/publication/190540/water-bhutan-future.pdf>

<sup>45</sup> The Ministry of Health Rural Households Inventory, 2014

<sup>46</sup> CGIAR, 2017. Climate change impacts in Bhutan: challenges and opportunities for the agricultural sector.

Working Paper No.191. <https://www.ccafs.cgiar.org>

<sup>47</sup> Royal Government of Bhutan, 2016. State of Climate Change Report for the RNR Sector.

<sup>48</sup> World Bank, 2017. Bhutan Living Standards Survey Report

<sup>49</sup> Safely Managed Water Supplies - the percentage of people using drinking water from an improved source that is accessible on premises, available when needed and free from fecal and priority chemical contamination. Improved water sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water.

<sup>50</sup> GLAAS, 2015. Bhutan: Sanitation, drinking-water and hygiene status overview.

<sup>51</sup> Royal Government of Bhutan, 2017. National Sanitation and Hygiene Policy.

<sup>52</sup> ADB, 2010. Sector Assessment (Summary): Water Supply and other Municipal Infrastructure and Services.

10,000 of children (below the age of five) were infected by diarrhea. In addition, around 47 percent of children under the age of five are stunted, 11 percent are underweight, 5 percent are wasted, and 9 percent of infants are born with a low birth weight.<sup>53</sup> Although it is not known what proportion of these impacts a direct consequence of poor water quality and sanitation services represents, global evidence suggests that there is a strong correlation.

**There is lack of data on the financial performance of the water and wastewater sectors.** Wastewater services are currently completely (or almost completely) subsidized. There is no current water sector public expenditure analysis—leading to a lack of reliable and up-to-date financial data for the sector. There is also a lack of data indicating the efficiency and financial sustainability of the water supply and wastewater treatment, as the utilities are not regularly audited.

**The modernization of irrigated agriculture represents an important opportunity.** Only about 8 percent of the land in Bhutan is arable, and only 21 percent of that land is irrigated. The expansion in irrigation and a shift to higher value crops could be an important factor in diversifying the country's export economy.

**There is a lack of institutional and technical capacity.** There is a need to establish and implement integrated water management policies and practices, a national water policy, the accompanying regulations, and a skilled workforce that can operate and maintain the required infrastructure. The lack of a developed institutional and legal framework, combined with a dearth of skilled professionals, are major constraints to the sector advancing.

## Policy Recommendations

**To address these issues, in the short term, the government needs to:**

- Develop an integrated water resources management approach for the country that will address water security in the context of the existing spatial settlement patterns and seasonal shortages.
- Mitigate expected climate change effects by strengthening the: (i) national hydro-meteorological system, (ii) village level data collection, (iii) disaster risk monitoring procedures; (iv) weather forecasting systems; (v) flood management; and (vi) monitoring water sources.<sup>53</sup>
- Increase investments in the water and sanitation sector, to ensure safe, and reliable water and sanitation services which will improve health outcomes.
- Improve data availability in the water and wastewater sectors and adopt policies which will increase the sector's financial sustainability. These would include policies that encourage the private sector and ensure that water is priced equitably.

**To address these issues, in the medium to long term, the government needs to:**

- Adopt irrigation sector policies that will enhance investments and support the production of high value crops.
- Implement a national plan to build the sector's human capacity by establishing a formal educational stream and career incentives for water professionals and starting a certification program for operators.

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<sup>53</sup> Some of these issues are already being addressed under the Bank's Hydro-met Services and Disaster Resilience Regional Project.

# Bhutan Policy Notes

## 5.3 Ensuring Resilient and Sustainable Urban Development

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### Key issues and challenges

**Bhutan’s population is moving towards its cities and towns.** Around 37.8 percent of the population resided in urban areas in 2017, compared with 30 percent in 2005. The growth in urban population is primarily driven by rural to urban migration. Based on the 2017 census data, the intercensal average annual urban population growth rate was 2.5 percent, four times the overall population growth rate. Net urban migrants accounted for 47 percent of urban residents in 2017. More than half of the population in Bhutan’s four Thromdes were born in rural areas and have moved out since birth. Out migration has been largely from the rural eastern part of the country to the western districts and cities, especially to Thimphu and Phuntsholing. Thimphu Dzongkhag is home to 15 percent of the total population and Thimphu Thromde has around 40 percent of the total urban population.

**Bhutan’s economic shift away from agriculture is partly driven by the opportunities that cities offer.** Bhutan’s urbanization is driven more by the “pull” factors of urban areas, such as employment and education opportunities than by “push” factors such as infrastructure scarcity, landlessness or conflict. The most cited reasons for migration in 2017 were ‘family move’, followed by ‘employment’, and ‘education.’ Although differences exist, especially in quality, basic services and infrastructure coverage between urban and rural areas are converging, which suggests urban migration may be driven largely by the comparatively higher wages. Although agriculture employs the largest share of the workforce, about 60 percent, its contribution to GDP has diminished, from 21 percent in 2005 to 12 percent in 2017. The public sector is the second largest employer after agriculture. It attracts high-skilled workers, as wages tend to be higher and benefits more generous than the private sector. Economic growth and investment are concentrated in only a few cities. Thimphu and Phuntsholing are the main destinations for new migrants because of their concentration of jobs and services. Regional hubs like Samtse, Punakha and Samdrup Jhonkar have more specialized endowments but attract lesser number of people.

**Gaps in infrastructure within cities and connective infrastructure across cities and regions are limiting the growth and diversification of the economy.** Bhutan’s larger urban centers are not fully equipped to seize the benefits of agglomeration economies, in terms of both, specialization and market access. This affects the livability and competitiveness of cities. The four Thromdes have infrastructure and service delivery backlogs, shortage of serviced land and affordable housing, and rising environmental pollution. In the absence of systemic risk assessments and preparedness plans, they are also vulnerable to natural disasters. Thimphu and Chhukha have the highest number of households without reliable water. Traffic congestion is a rising issue in these two cities. Only 20 percent of households in Thimphu have sewer connections. Housing affordability is also a key concern. In Thimphu, a 3-bedroom apartment can cost about 14 times the median annual urban household income. Other smaller urban centers face issues of access to markets and gaps in supply chains around specific economic clusters.

**A change in the spatial and investment policies of the government could help address the problems in urban centers.** The government rightly emphasizes balanced development, but its spatial policies do not differentiate between the growth demands of larger urban centers and the service delivery needs of smaller towns and rural areas. Investments do not sufficiently prioritize connective infrastructure to improve access to markets and information, both domestically and internationally. They also do not identify distinct types of planning and infrastructure needs for urban settlements based on their economic activity and endowments. Further, government policies do not adequately address demand side constraints related to labor markets, investment climate, and investment promotion. Policies could also help improve trade linkages by increasing the number of ports of entry and expanding visa and migration service points.

**National and local governments play a key role in enabling spatially-driven growth and development.** Decentralization is a priority for the government, but urban centers have limited authority, resources and capacity in land use planning and management, investment and maintenance of urban infrastructure and services, and policies to enable affordable housing and local economic development. Decentralization policy does not distinguish between the potential of devolving greater authority and more predictable resources to the four thromdes versus more effective deconcentration to other regional towns. Thromdes still depend on ad hoc capital grants and have limited incentives to strengthen their own source revenues. All urban areas are constrained by limited human and system capabilities. Finally, there is also a need for the decentralization policy to link with and complement other economic, demographic and spatial policies and strategies.

## Policy Recommendations

**To address these issues, the government needs to:**

- Prepare a Regional Development Policy that is sensitive to region-specific characteristics, including existing endowments and advantages, as well as challenges or deprivations. Specifically:
    - In major cities, address emerging congestion forces, such as land and housing shortages, traffic and environmental pollution and reduce exposure to disaster and climate change hazards.
    - In regional hubs, leverage place-based endowments and economic clusters to improve conditions for private investment. Link to potential markets and scale up SMEs and cottage industries. Strengthen local government capacity for urban planning, management and service delivery.
    - In rural, sparsely populated districts, emphasize “balanced development” by improving quality of and equitable access to basic infrastructure, especially health and education services.
  - Advance the decentralization strategy with coordination across different tiers of government. Specifically:
    - Link decentralization policies and programs with regional, spatial and other key economic (tourism, skill development, infrastructure, etc.) and demographic policies and strategies.
    - Adopt a differentiated approach to decentralization by imparting greater powers, responsibilities and resources to the four thromdes, to set them on a path of increasing fiscal and administrative self-reliance and direct citizen accountability and enabling them to better utilize their local social and economic endowments. For smaller urban centers, ensure appropriate forms and adequate levels of fiscal and administrative support while enhancing their capacity incrementally.
    - Strengthen the intergovernmental fiscal system with more predictable transfers that take into account both vertical fiscal gaps and incentivize own source revenue collection by cities and towns.
    - Ensure more strategic deployment of Bhutan’s limited human and physical resources to subnational levels and develop a clear roadmap to strengthen local capacities.
  - Adopt a medium-term investment program that targets critical within-cities infrastructure and service delivery gaps to improve their competitiveness and livability, and catalytic connective infrastructure, both hard and soft, that links key growth centers with natural resources and markets.
  - Improve housing affordability and update the 2002 national housing policy.
  - Reduce vulnerability of cities and towns to disasters by investing in prevention and improving preparedness by establishing data platforms and coordination systems across agencies involved in urban resilience, undertaking comprehensive risk assessment of major cities and towns, incorporating vulnerability mapping and resilience into urban planning and management, investing in urban infrastructure, adopting risk transfer mechanisms and financing arrangements for catastrophes, and enhancing awareness and capacities at all levels, from policymakers to citizens.
  - Ensure robust policy making through strengthened systems and observatories to collect, track and share data on key indicators, such as (i) local economic conditions and trends, (ii) land use, infrastructure and utility networks, (iii) hazard and vulnerability assessments, and (iv) land and housing markets.
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