



KATSINA STATE GOVERNMENT



2020

**DEBT SUSTAINABILITY ANALYSIS & DEBT MANAGEMENT
STRATEGY (DSA-DMS) REPORT**

Table of Contents

Chapter 1: Introduction	3
Chapter 2: The State Fiscal and Debt Framework	5
Chapter 3: The State Revenue, Expenditure, and Public Debt Trends (2016 - 2019)	8
Chapter 4: Debt Sustainability Analysis	15
Chapter 5: Debt Management Strategy	26
Annex I: Baseline Assumptions.....	31
Annex II: Katsina State Baseline Scenarios, 2019-2029	32
Katsina State - Technical Team	34

Chapter 1: Introduction

Katsina State Debt Sustainability Analysis – Debt Management Strategy (DSA-DMS) covers the period of 5-year historical from 2015 to 2019 and 10-year projection 2020-2029, under various macroeconomic assumptions and Shock scenarios. To ensure that State debt stock remains sustainable in the medium to long-term, by using the State's macroeconomic framework, to assess the current and future debt levels, as well as its ability to meet debt service obligations as and when due, and without compromising growth and development.

The Katsina State DSA-DMS forecast for primary balance that comprises the difference between revenue and expenditure, plus the existing debt service (interest payment and principal repayments). The revenue was based on the harmonized revenue law of the state government, which provided for capital gains tax, and other property tax to expand the tax base to maximally increase the state internally generated revenue that are considered achievable. Also, the state forecasts increased recurrent and capital expenditures with expected growth in the National economy with cascading effects in the State's economy leading to increase in overall economic activities in the private sector, as well as job creation in the public sector.

The economy of the State is basically agrarian with a cultivable 2.4 million hectares of land out of which 1.6million is under cultivation, leaving land area of 800,000 hectares, equivalent to one third of the total cultivable land available for investment. Agriculture is the backbone of Katsina State's economy and 75 percent of the population is involved in subsistent farming and livestock rearing. A vast proportion of the land is suitable for cultivation and a variety of crops can be grown. Current agricultural products include guinea corn, millets, maize, cowpeas, cotton, and groundnut. The State government is currently making effort to promote livestock production by providing variety of services such as pesticide sprays, subsidized chemical fertilizers and veterinary services to counter plant and animal diseases.

Large deposits of metallic and iron-metallic minerals are found in the region. These include: Kaolin, asbestos, gold, uranium, nickel, chromite and silica sand.

The marketing channel for these crops consists mainly of three alternative channels. First is the movement from the producer through the rural wholesaler/assemblers and rural retailers to consumers. The second channel is the movement from the producers through the processors to

either the rural assembler/retailers or to the urban market wholesalers, retailers and even consumers. The third is that arising directly from the producers to the rural or urban consumers/retailers. A substantial cross-border trade exists in grain between the international marketers and Niger Republic.

Usually, these crops are sold as grains at farm gates, local markets or exported to other states in the country. Intermediate processed products such as Flour, cooking oils, tuwo pap/ snack and mills are some of the pathways in the marketing of these crops. Maize and sorghum are used increasingly as partial substitute for wheat in bakery, biscuits and pastry industries as well as raw materials in the beverage and brewing industries. Household consumption of these crops has resulted in their limited availability for industrial use.

Katsina is major source for grains to industries located in other parts of the country. The markets where these products are sold in Katsina State are categorized into: international, large, medium and small markets depending on the size, the demographics of attendees and location. The international markets such as Jibia and Mai'adua cater for traders within the state and cross-border trading activities between the State and Niger Republic.

Chapter 2: The State Fiscal and Debt Framework

The 2020 Budget is government premeditated to lay emphasis on legacy projects, dry season farming, irrigation, and reconstruction of flood-ravaged infrastructure, in order to safeguard and solidify our achievements. Provision of welfare packages to our people especially in this difficult period will remain our major concern, while effective healthcare services and quality education creation of employment opportunities and improved infrastructure will continue to be accorded high premium.

2.1 Medium-Term Budget Forecast

Katsina State Medium Term Expenditure Framework (MTEF) constitute the major components of the Annual Budget Process. These set of principles provides logical starting point for the development of Medium-Term Expenditure Framework (MTEF), which highlight the context of the annual budget. The key objective and targets for the State Government from a fiscal perspective are to:

- a. effectively manage personnel and overhead expenditure to allow greater resource for capital development;
- b. grow IGR by a minimum of 5% every year from 2020 to 2022;
- c. ensure loans will only be used for implementation of capital projects;
- d. achieve long term target of funding all recurrent expenditure with revenue of a recurrent nature (IGR, VAT and Non-mineral component of Statutory Allocation);
- e. target sources of capital receipts and financing outside of loans (e.g. Grants, PPP, etc.);
- f. ensure projected Capital receipts are based on Memoranda of Understanding (MoUs) and other agreements signed with Development partners;
- g. ensure that the State's Debt position is within the ratio set by the Federal Debt Management Office, Abuja;
- h. give priority to the completion of ongoing capital projects before new projects are commenced; and,
- i. grow the economy through targeted spending in areas of comparative advantage such as agriculture, trade, and tourism.

The foundation for any fiscal discipline and the attainment of fiscal realism starts with the Economic and Fiscal Update (EFU). It (the EFU) presents data and analyzed information on all the

strata of the state, national and global economic and fiscal situations. This forms the basis for fiscal and macroeconomic assumptions and projections reflected in the Fiscal Strategy Paper which also goes further to manifest medium-term fiscal projections (revenue and expenditure). The EFU gives a measured reflection of recent budget performance identifying factors that significantly affects the attainment of budgetary outputs and outcomes which transmit into the subsequent fiscal plans.

The EFU provides the context for a prospective Fiscal Strategy Paper (FSP) that feeds into the Medium-Term Expenditure Framework (MTEF) where resources are strategically allocated considering Government policy objectives and priorities as dictated by the budget policy statements.

Thus FSP is an indispensable element in annual budget process as it determine the resources available to fund government prioritized projects and programmes in a sustainable manner and consistent with its development policy objective and priorities as encapsulated in the existing policy document It provides justification and corroborate the estimation for medium-term major Revenue and Expenditure aggregates including important components of the MTEF Process such as fiscal targets, fiscal constraints and an assessment of the fiscal risks. The details of the macroeconomic assumptions are as shown in the table below.

Katsina State Medium Term Expenditure Framework (MTEF), 2020-2022

Items	2020	2021	2022
National Inflation	11.95%	10.94%	11.02%
National Real GDP Growth	3.00%	4.68%	3.86%
Oil Production Benchmark	1.8600	2.2000	2.2000
Oil Price Benchmark	\$40	\$40	\$40
Gross Statutory Allocation	74,888.22	82,377.04	90,614.75
Derivation	0.00	0.00	0.00
Other FAAC transfers	11,072.40	7,779.64	8,557.60
VAT Allocation	30,025.00	33,027.50	36,330.25
IGR	15,612.10	17,173.31	18,890.64
Recurrent Revenue	131,597.72	140,357.49	154,393.24
Grants	43,950.12	48,345.13	53,179.64
Other Non-Debt Creating Capital Receipts	37,591.73	41,360.90	45,485.99
Capital Receipt	81,541.84	89,706.03	98,665.63
Personnel costs	31,679.09	34,846.99	38,331.69
Overhead costs	44,116.96	14,216.47	15,638.11
Other Recurrent Expenditure and Debt Charges	7,924.06	38,638.66	42,491.52
Capital Expenditure	197,917.67	217,709.44	239,480.39
Total Expenditure	281,637.78	305,411.56	335,941.72
New Domestic Borrowing	50,000.00	55,000.00	60,500.00
New External Borrowing	18,498.22	20,348.04	22,382.85
Financing (Borrowing)	68,498.22	75,348.04	82,882.85

Legislative Framework for Public Financial Management in Katsina State

The fundamental law governing Public Financial Management (PFM) in Nigeria and Katsina State in particular is the 1999 Constitution as amended. Section 120 and 121 of the Constitution provides that all revenues accruing to Katsina State Government shall be received into a Consolidated Revenue Fund (CRF) to be maintained by the Government and no revenue shall be paid into any other fund, except as authorized by the State House of Assembly for a specific purpose. The withdrawal of funds from the CRF shall be authorized by the through the annual budget or appropriation process. The Governor of Katsina State shall prepare and lay expenditure proposals for the coming financial year before the, and the shall approve the expenditure proposal by passing an Appropriation Law. The Appropriation Law shall authorize the executive arm of government to withdraw and spend the amounts specified from the CRF.

Institutional Framework for Public Financial Management in Katsina State

The Constitution vests the executive powers of the State in the Governor. The Constitution provides that “the Governor shall cause to be prepared and laid before the House of Assembly on or before the last business day of August of each financial year, containing estimates of the revenues and expenditure of the State for the next three financial years”. The Governor of Katsina State exercises his executive powers directly or through the Deputy Governor, the Commissioners, Special Advisers, Permanent Secretaries, and other officers in the public service of the State.

Chapter 3: The State Revenue, Expenditure, and Public Debt Trends (2015 - 2019)

The Katsina State economy experienced a growth under Internally Generate Revenue (IGR) from N5.546 billion in 2015, N5.303 billion in 2016, N5.931 billion in 2017, N7.956 billion in 2018, and N10.822 billion in 2019, respectively, which represent a grow by N5.276 billion or 95.13 percent from 2015 to 2019. The growth in IGR was due to economic reforms to improve tax and other service sectors, as well as other initiatives by the Government.

3.1 Revenue and Expenditure

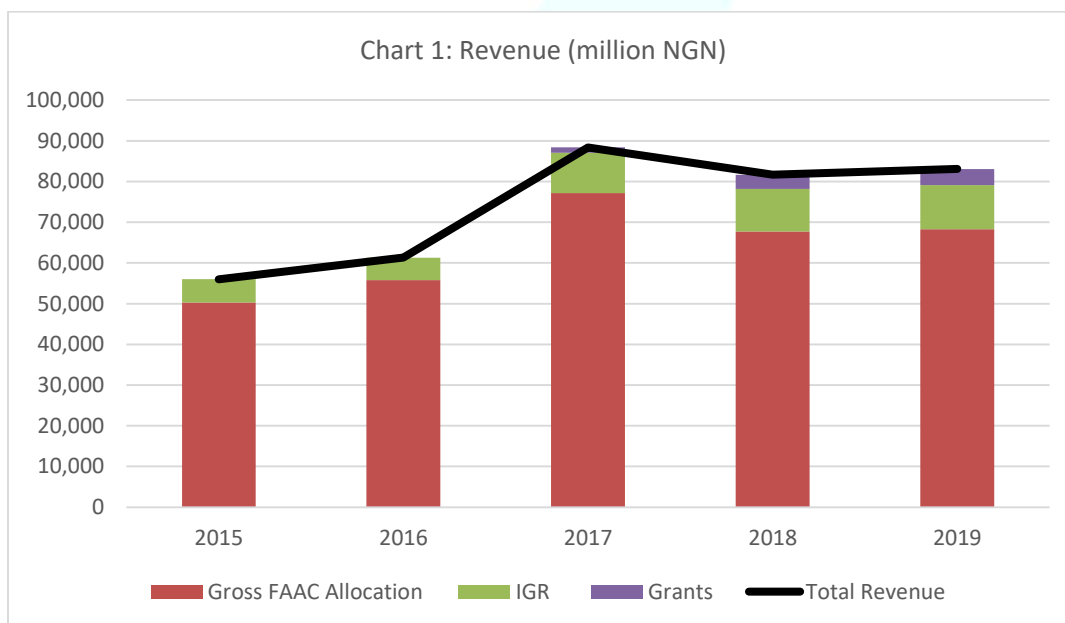
3.1.1 Revenue: The State’s economy comprises Statutory Allocation, VAT Allocation, IGR, and Capital Receipt. the State’s Revenue amounted at N49.781 billion in 2015, N88.095 billion in 2016, N96.372 billion in 2017, N88.983 billion in 2018 and N94.449 billion in 2019, respectively.

3.1.1.1 Gross FAAC Allocation: Katsina recorded a decline in the review period relative to the preceding year, as the FAAC Allocations declined by N3.677 billion or 4.77 percent, compared with N40.234 billion in 2015, N81.451 billion in 2016, N86.958 billion in 2017, N77.096 billion in 2018 and N73.419 billion in 2019, respectively.

3.1.1.2 Internally Generated Revenue: Katsina witnessed modest growth and significant improvement in the State IGR, where the IGR grew from N5.546 billion in 2015, N5.303 billion in 2016, N5.931 billion in 2017, N7.956 billion in 2018, and N10.822 billion in 2019, respectively. The improvement in IGR before pandemic is mainly due to the tax reforms aimed at improving collection efficiency and broadening the tax revenue base in the State.

3.1.1.3 Grants: The actual grant received by Katsina State Government comprises internal grants and external grants. Katsina State Grants received in five years was N4.000 billion in 2016, N1.341 billion in 2017, N3.483 billion in 2018, and N3.930 billion in 2019 from 2016 to 2019, respectively.

Revenue	2016	2017	2018	2019
Total Revenue	49,781	88,095	96,372	88,983
Gross FAAC Allocation	40,234	81,451	86,958	77,096
IGR	5,546	5,303	5,931	7,956
Grants	4,000	1,341	3,483	3,930



3.1.2 Expenditure: The State's Total expenditure covers Capital expenditure, Personnel costs, Overhead costs, other recurrent expenditure, and Debt service (interest payment and principal repayment) recorded at N79.969 billion in 2016, N102.937 billion in 2017, N96.730 billion, and 104.616 billion in 2019.

3.1.2.1 Personnel: Katsina State Personnel costs stood at N22.083 billion in 2016, N24.507 billion in 2017, N25.728 billion in 2018, and N29.185 billion in 2019, respectively. The actual figure for personnel cost represent an increase with the period from 2016 to 2019 by N7.10 billion or 32.16 percent.

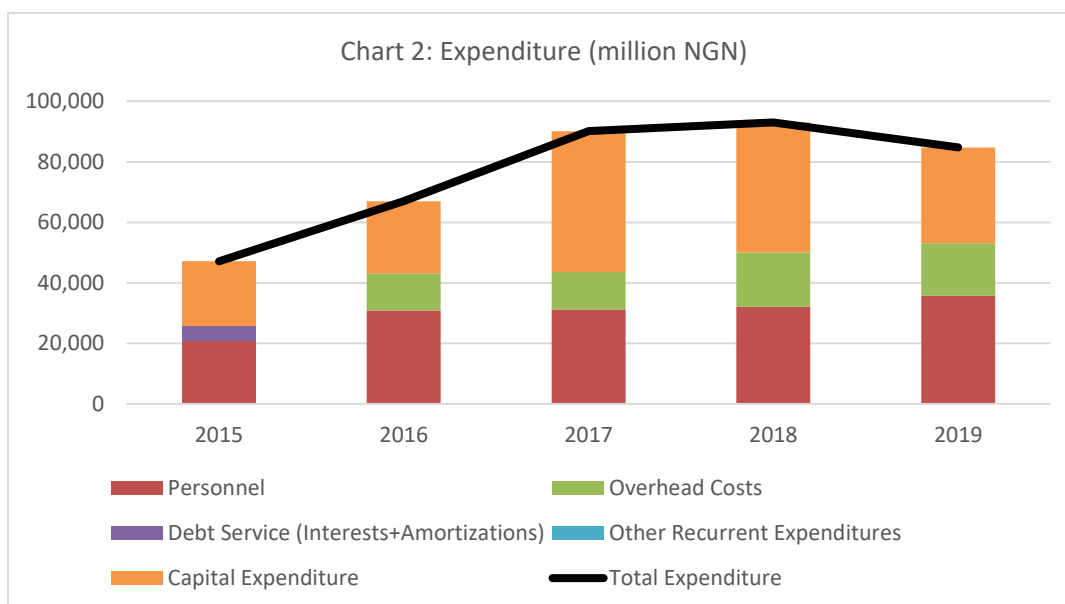
3.1.2.2 Overhead Cost: The actual Overhead costs amounted at N12.251 billion in 2016, N12.359 billion in 2017, N17.928 billion in 2018, and N17.355 billion in 2019, respectively.

3.1.2.3 Debt Service: The actual Total debt service that comprises the interest payment and principal repayment stood at N4.459 billion in 2016, N3.756 billion in 2017, N4.063 billion in 2018, and N3.697 billion in 2019, respectively.

3.1.2.4 Other Recurrent Expenditure: Other Recurrent Expenditure stood at N5.000 billion in 2020 compared to N9.326 billion in 2019, representing a declined of N4.326 billion or 46.39 percent.

3,1,2,5 Capital Expenditure: the actual Capital Expenditure stood at N54.379 billion in 2019, N49.011 billion in 2018, N56.707 billion in 2017, and N31.850 billion in 2016, represent an actual grow of N22.53 billion or 41.43 within the period.

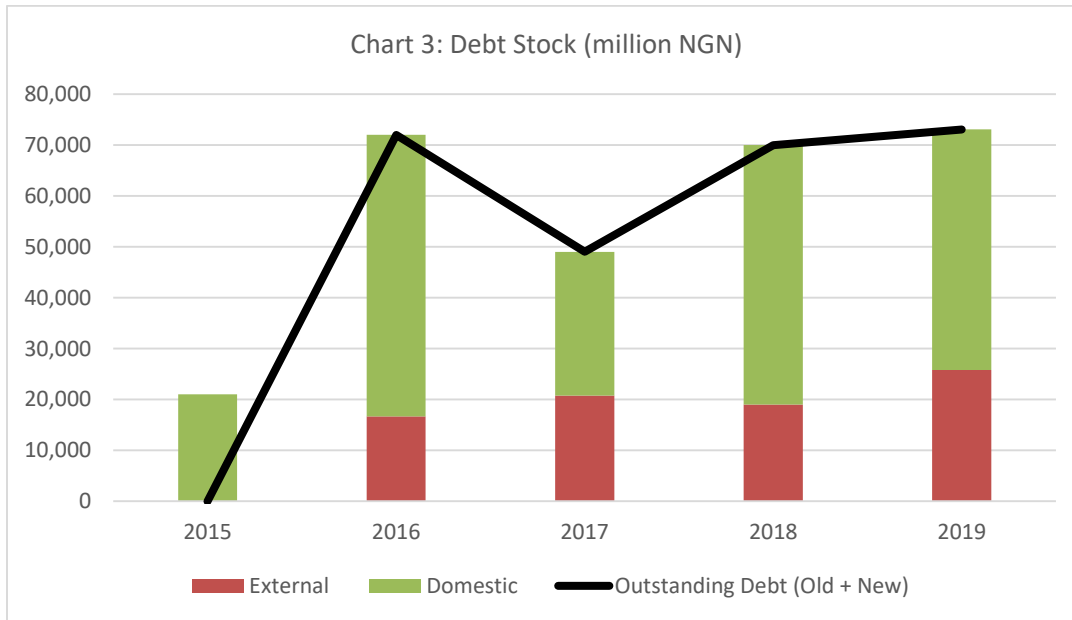
Expenditure Performance	2016	2017	2018	2019
Total Expenditure	79,969	102,937	96,730	104,616
Personnel	22,083	24,507	25,728	29,185
Overhead Costs	12,251	12,359	17,928	17,355
Debt Service (Interests + Amortizations)	4,459	3,756	4,063	3,697
Other Recurrent Expenditures	9,326	5,609	0	0
Capital Expenditure	31,850	56,707	49,011	54,379



3.2 Existing Public Debt Portfolio

3.2.1 Debt Stock – The Katsina State Debt Stock comprised External and Domestic Debts which was stood N38.682 billion in 2016, N51.868 billion in 2017, N49.897 billion in 2018, N91.949 in 2019, reduced to N69.322 billion in 2020, the actual declined in stock was largely due the repayment from Contractors Arrears amounted to N7.772 billion with the period. The External Debt increase from N17.232 billion in 2016 compared to N21.291 billion in 2020, while the Domestic Debt stock amounted at N21.450 billion in 2016, N31.116 billion in 2017, N30.853 billion in 2018, N66.164 billion in 2019, and N48.031 billion in 2020.

	2016	2017	2018	2019
Outstanding Debt (Old + New)	38,682	51,868	49,897	91,949
External	17,232	20,752	19,044	25,785
Domestic	21,450	31,116	30,853	66,164



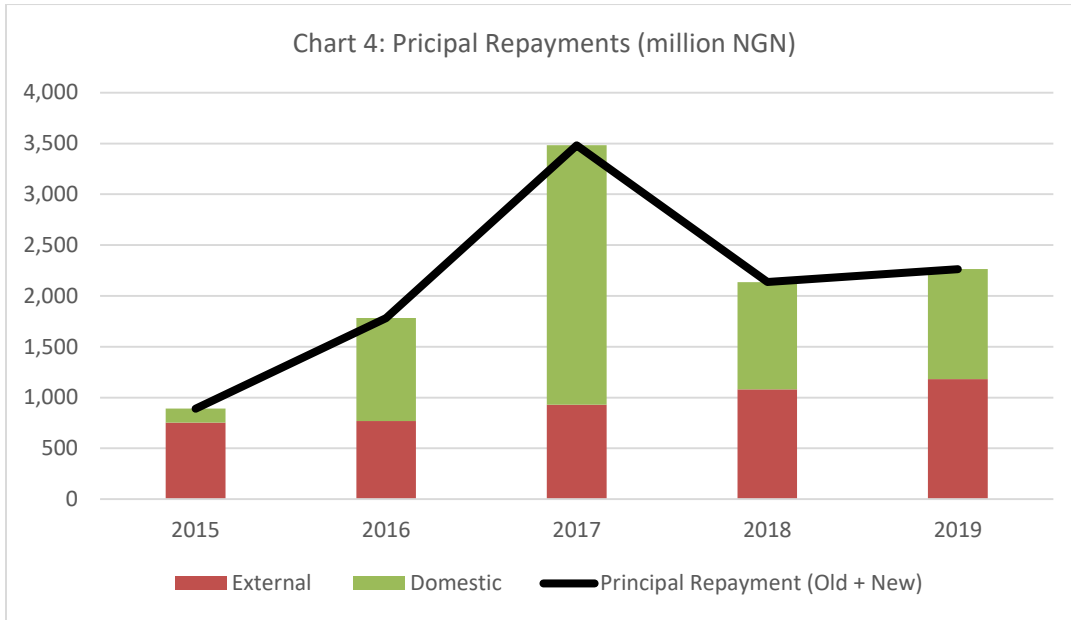
3.2.2 Debt composition: The main domestic debt portfolio consists of Budget Support Facility, Salary Bail out loans, Excess Crude Account Backed Loan, Micro Small & Medium Enterprise Development Fund, Contractor's Arrears and Pensions & Gratuity arrears. While the External Debt from World Bank. In 2019 the composition of external debt (30.71 percent) and domestic debt (69.29 percent), compared to the debt composition of the external debt (28.04 percent) and domestic debt (71.96 percent) in 2018.

3.2.3 Debt Service: Katsina State total debt service that comprises the interest payment and principal repayment stood at N5.493 billion in 2016, N8.742 billion in 2017, N14.592 billion in 2018, and N9.040 billion in 2019, respectively.

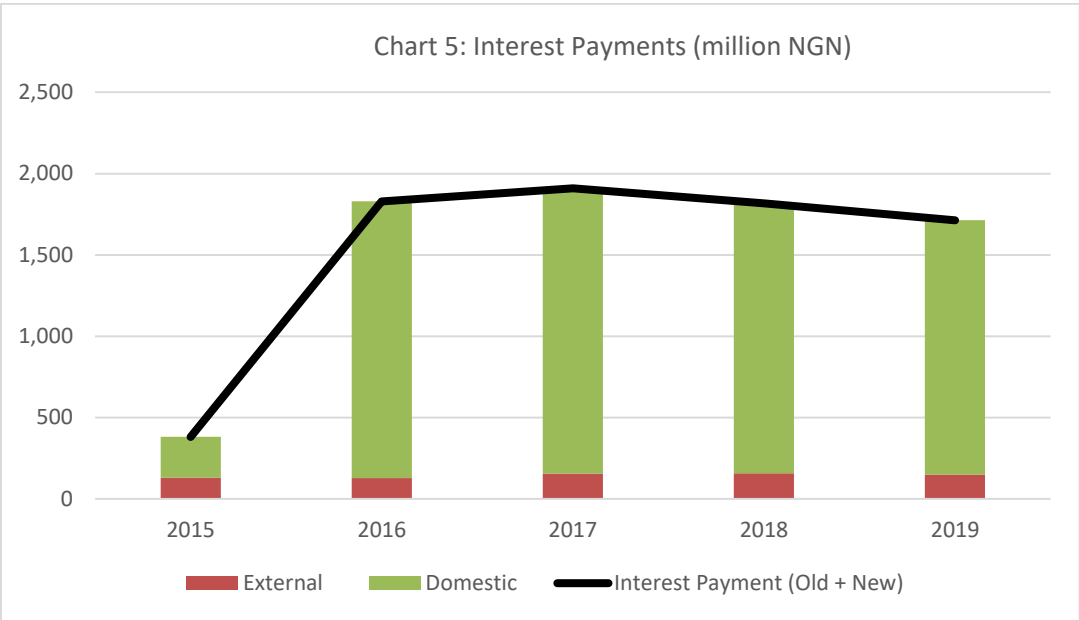
Debt Service increase was largely due to the repayment of Commercial Agricultural Loans of N4.229 billion in 2017 and N8.458 in 2018, settlement of Contractors Arrears of N1.881 in 2018, and N2.562 billion in 2019, respectively.

The actual Principal Repayment stood at N7.135 billion in 2019 compared to N0.891 billion in 2015. Interest Payment amounted to N1.904 billion 2019, N1.840 billion in 2018, N1.399 billion in 2017, N1.829 billion and N0.381 billion, respectively.

Principal Repayment	2015	2016	2017	2018	2019
Principal Repayment	891	3,664	7,343	12,752	7,135
External	753	922	1,093	1,069	1,191
Domestic	139	2,741	6,250	11,683	5,945



Interest Payment	2015	2016	2017	2018	2019
Interest Payment	381	1,829	1,399	1,840	1,904
External	130	128	155	157	149
Domestic	250	1,701	1,245	1,683	1,755



Jigawa

Chapter 4: Debt Sustainability Analysis

"The concept of debt sustainability refers to the ability of the government to honor its future financial obligations. Since policies and institutions governing spending and taxation largely determine such obligations, debt sustainability ultimately refers to the ability of the government to maintain sound fiscal policies over time without having to introduce major budgetary or debt adjustments in the future. Conversely, fiscal policies are deemed unsustainable when they lead to excessive accumulation of public debt, which could eventually cause the government to take action to address the unwanted consequences of a heavy debt burden".

Table 1: Katsina State Debt burden indicators as at end-2019

Indicators	Thresholds	Ratio
Debt as % of GDP	25%	2.49
Debt as % of Revenue	200%	73.40
Debt Service as % of Revenue	40%	12.86
Personnel Costas % of Revenue	60%	33.49
Debt Service as % of FAAC Allocation	Nil	16.54
Interest Payment as % of Revenue	Nil	1.02
External Debt Service as % of Revenue	Nil	1.69

Note: Nil means not available

Source: Katsina State DMD

4.1 Borrowing Options

The borrowing options are considered due to the timing of government's cash flows throughout the fiscal year. Domestic borrowing serves as one of the main sources of borrowing with average ratio of 65.92 percent compared with 34.08 percent over the projection period from 2020 to 2029 and given the limited funding envelopes from the external borrowing with long processing time required, domestic borrowing are mainly through: the commercial banks, Federal Government and other Central Bank of Nigeria (Interventions) loans are main source of financing.

Borrowing Options

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Domestic Financing in NGN' Million										
Commercial Bank Loans - 1 <> 5 years	8,498.2	18,000.0	23,500.0	13,804.2	12,958.8	10,080.5	6,000.0	9,340.1	13,089.6	3,524.2
Commercial Bank Loans - 6 years >	32,500.0	16,500.0	22,000.0	0.0	0.0	0.0	0.0	6,239.9	9,865.6	0.0
State Bonds - 1 <> 5 years)	0.0	0.0	0.0	17,581.8	0.0	0.0	0.0	0.0	0.0	0.0
State Bonds - 6 years >	0.0	20,500.0	15,000.0	0.0	23,500.0	0.0	0.0	0.0	0.0	0.0
Other Domestic Financing	9,001.8	0.0	0.0	0.0	6,500.0	0.0	0.0	0.0	2,386.2	0.0
External Financing in US\$' Million										
External Financing - Concessional Loans (e.g., WB, AfDB)	48.8	53.7	59.1	0.0	53.4	31.9	0.0	22.4	0.0	30.7
External Financing - Bilateral Loans	0.0	0.0	0.0	47.7	0.0	0.0	35.7	0.0	26.5	0.0
Other External Financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Gross Borrowing Requirements in NGN' Million										
Total Gross Borrowing	68,498.2	75,348.0	82,882.8	49,447.0	63,181.6	22,170.8	19,547.2	24,055.5	35,378.6	15,175.7

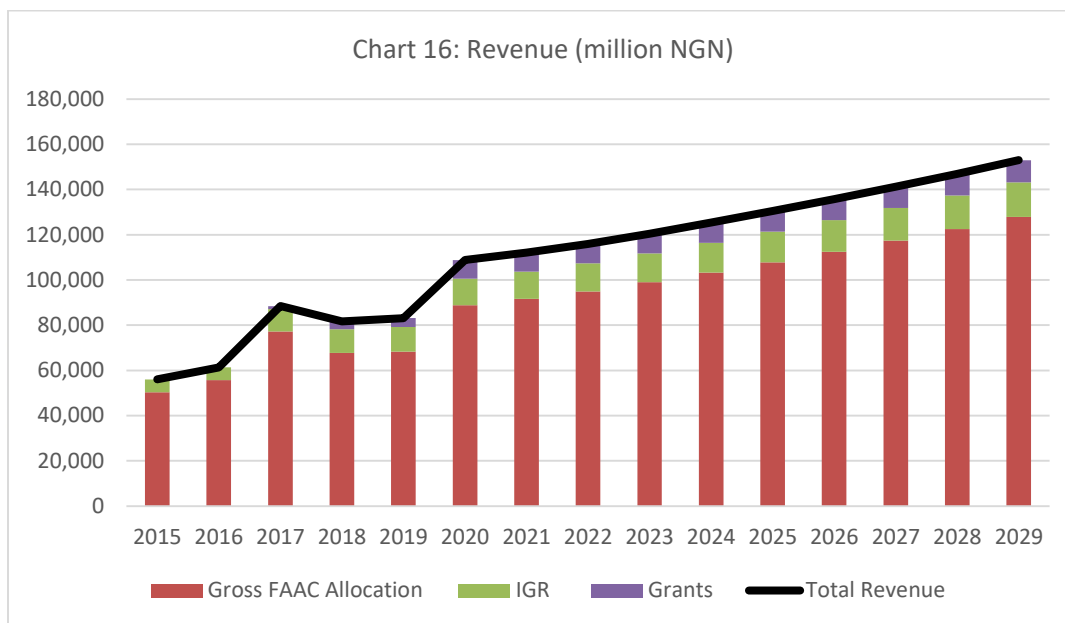
4.2 DSA Simulation Results

Revenue, expenditure, overall and primary balance over the long-term.

The Macroeconomic framework is based on IMF's national real GDP growth and inflation forecasts from April 2020, IMF World Economic Outlook document, and mineral benchmarks (oil price, production and NGN/USD exchange rate) from Federal Government of Nigeria's MTEF/FSP 2020-2022.

4.2.1 Revenue is expected to grow during the projection period, driven largely by expected improvement through FAAC allocation by N31.206 billion or 26.91 percent, IGR by N6.011 billion or 38.50 percent, were the Grants estimated to decline by N38.948 billion or 88.62 percent, during the projection period. The FAAC allocation is estimated to increase in the medium term from N11.986 billion in 2020 to N135.503 billion in 2022 IGR projected at N15.612 billion in 2020,

N17.173 billion in 2021, and N18.891 billion in 2022, respectively. The Grants estimated to increase from N43.950 billion in 2020, N48.345 billion in 2021, N53.180 billion in 2022, respectively.



4.2.2 Expenditure – Expenditure projected to grow by N51.304 billion or 17.99 percent in the medium term of 2020-2022, the Capital expenditure has the largest share over the estimated period. indicating stability in the state growth recovery. The growth in the period is predicated on sustaining effective implementation of the new laws. Government is expected to continue its fiscal strategy of directing resources to the most productive and growth-enhancing sectors, including Agriculture, Infrastructure, Manufacturing, Housing and Construction, Education, Health and Water Resources within the period.

Estimated on Expenditure were sources from the Approved 2020 Budget; Medium Term Expenditure Framework (MTEF), 2020-2022; the projections period from 2023-2029 projections as estimated by the official of Katsina State Ministry of Budget and Economic Planning.

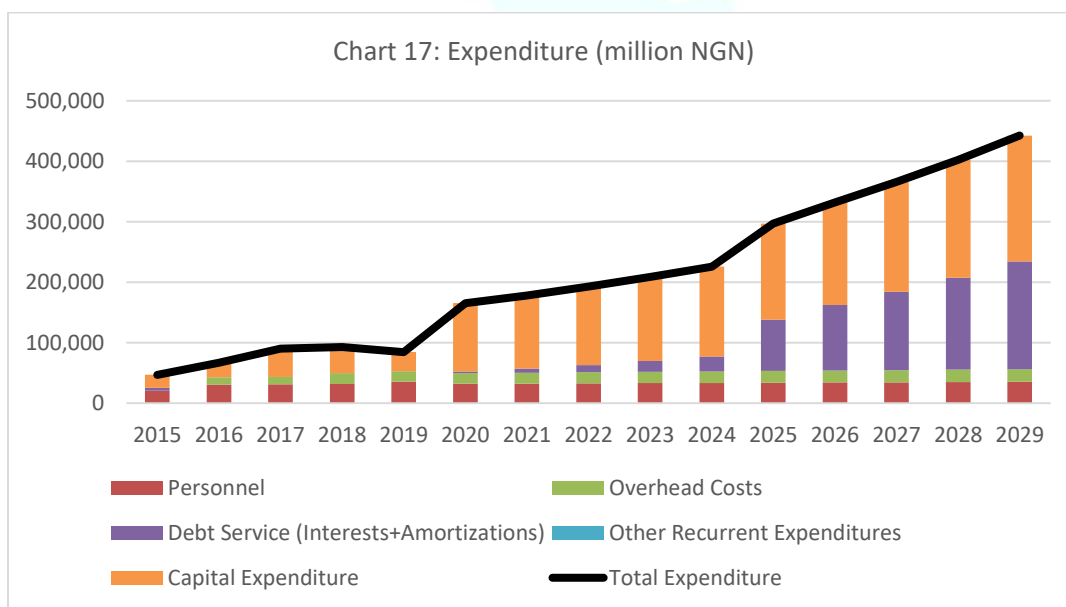
4.2.2.1 Personnel – The on-going staff verification is to check abnormalities in the pay roll. The State is determined to sustain the trend to reduce personnel cost. It is anticipated that the number of political office holders will also be reduced, and the personnel cost is projected to register increase by 21.00 percent 2020 to 2022 respectively.

4.2.2.2 Overheads – Estimated at N44.11 billion in 2020, N14.216 billion in 2021, N15.638 billion in 2022, N15.091 billion in 2023, N15.317 billion in 2024, N15,547 billion in 2025, N15.780 billion in 2026, N16.017 billion in 2027, N16.417 billion in 2028, and N16.828 billion in 2029, respectively.

4.2.2.3 Total Debt Service – is based on the projected principal and interest repayments for 2020 to 2029. Hence, an own value has been used anticipating that public debt charge will remain largely stable with minimal growth over the projection period.

4.2.2.4 Other Recurrent Expenditures – other recurrent expenditure comprises Social Contribution and Social Benefits estimated to increase by N2.728 billion in 2020, N24.088 billion in 2023, N20.341 billion in 2026, N22.074 billion in 2029, respectively.

4.2.2.5 Capital Expenditure - is based on the balance from the recurrent account plus capital receipts, less contingency reserve as outlined above. The percentage of capital as percentage of total expenditure in 2019 stood at 49.51 percent, compared with the 2020 projection which estimated at 69.41 percent, 71.40 percent in 2021, 71.18 percent in 2022, 58.84 percent in 2023, 48.88 percent in 2024, 38.72 percent in 2025, 38.92 percent in 2026, 41.05 percent in 2027, 40.53 percent in 2028 and 44.07 percent in 2029, respectively.



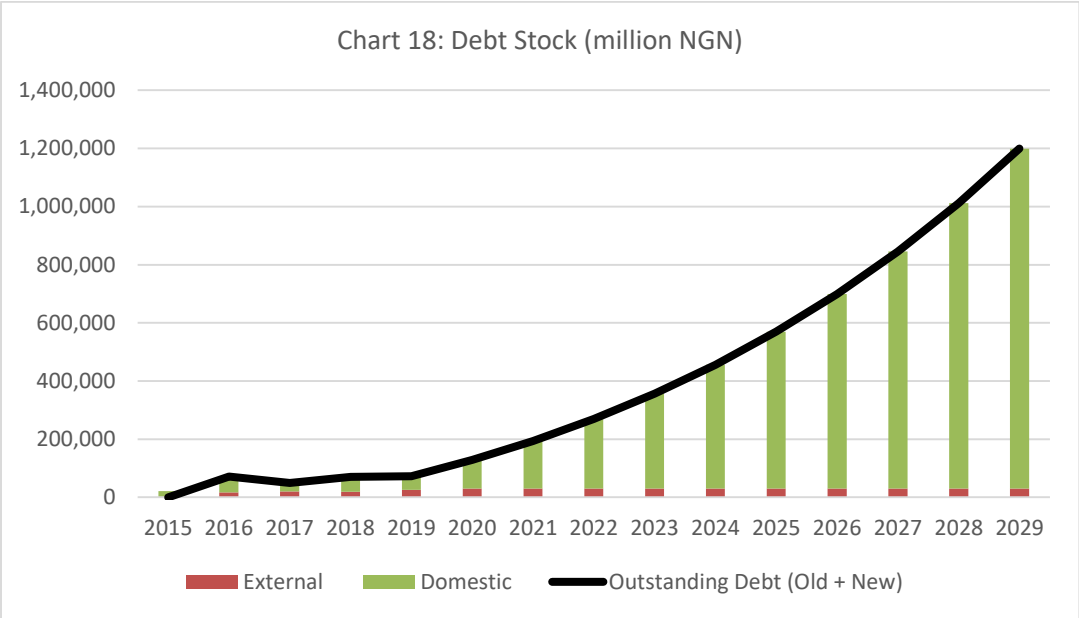
4.3 Primary Balance -The fiscal deficit of Katsina State Medium Term Expenditure Framework (MTEF), 2020-2022, the estimate for 2020 was N68.498 billion, 2021 was N75.349 billion, and 2022 was N82.883 billion, respectively. **Gross Financing Needs is the sum of budget deficits and**

funds required to roll over debt that matures over the year. The fiscal deficit projection beyond the projection period of 2020 – 2022 is estimated to have an average of N32.708 billion from 2023 to 2029. The fiscal deficit projection beyond the MTEF period is hinged on the anticipated improvement on the revenue due to the various initiatives and reforms by Government, as well as efficiency and quality of spending.

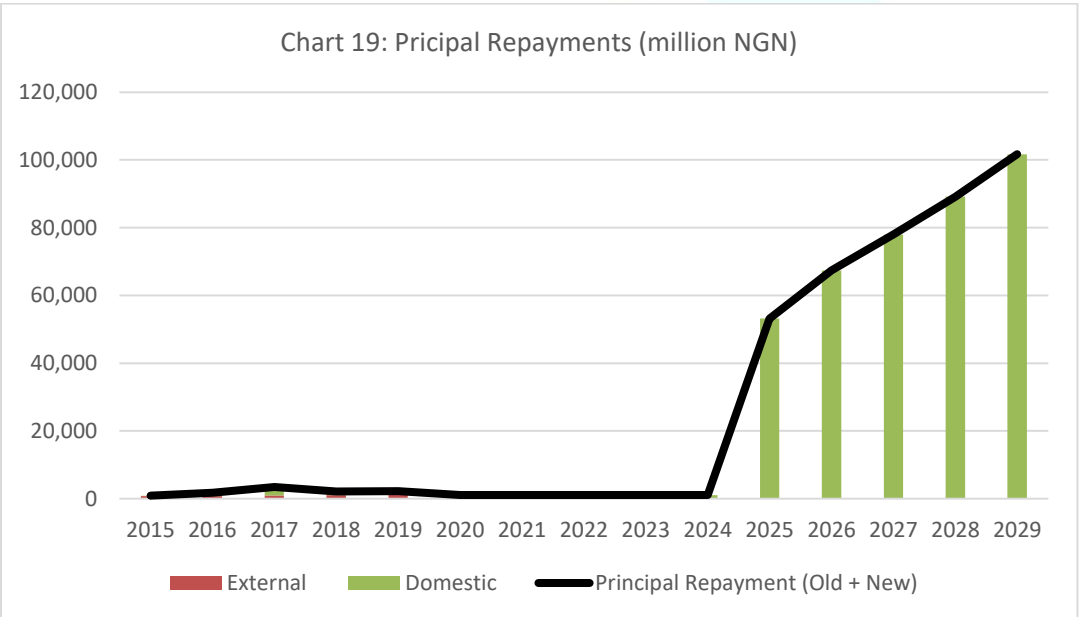
Katsina State should sustain the current Budget reform programme particularly as it relates to the preparation of a realistic budget, ensuring policy-plan-budget linkages using the State MTSSs, and early passage of the budget. Efforts should be made to prepare MTSS for other sectors not yet provided for.

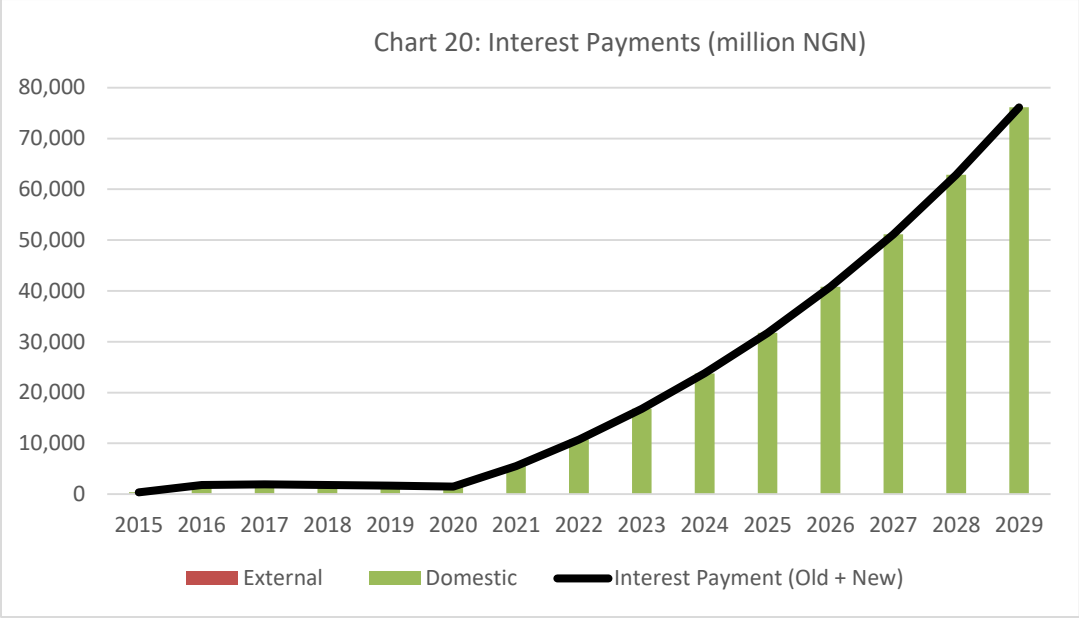
Katsina State must continue to monitor the performance of mineral-based revenues to ensure estimates are consistent with the latest development globally and within the Federal Government's budget process. If the benchmark price of crude in the Federal FSP is lower or higher than \$50 per barrel used herein and IMF, World Bank, OPEC and US Energy Information Administration Reports validates the oil price benchmark provided in Federal FSP, the State should revisit the assumptions and recalculate statutory allocation.

4.4 Debt Stock - Katsina State's Debt Stock estimated to increase from N130.144 billion in 2020, N197.307 billion in 2021, N266.070 billion in 2022, N298.323 billion in 2023, N332.428 billion in 2024, N322.818 billion in 2025, N309.411 billion in 2026, N302.704 billion in 2027, N298.278 billion in 2028, and N291.992 billion in 2029, respectively.



Debt Service projected at N8.696 billion in 2020, N27.450 billion in 2022, N55.512 billion in 2025, N50.305 billion in 2027, and N38.498 billion in 2029 respectively. Principal Repayment estimated at N.676 billion in 2020, N18.185 billion in 2023, N32.954 billion in 2026, and N21.462 billion in 2029 respectively, compared with the Interest Payment of N1.020 billion in 2020, N19.437 billion in 2023, N21.958 billion in 2026 and N17.036 billion in 2029. (Charts 18 to 20)





4.5 Main Key Findings

Under Baseline Scenario, the Debt Sustainability Analysis results shows that the ratio of Debt as % of GDP is projected at 3.92 percent in 2020, 5.35 percent in 2021, 6.53 percent in 2022, 6.71 percent in 2023, 6.89 percent in 2024, 6.13 percent in 2025, 5.38 percent in 2026, 4.82 percent in 2027, 4.35 percent in 2028 and 3.90 percent in 2029, respectively, as against the indicative threshold of 25 percent.

On the Total Debt Sustainability Analysis, the results show that the ratio of Debt to revenue remains below its indicative threshold under the Baseline scenario. However, based on the Most Extreme Shock in Revenue, Expenditure, Exchange rate and Interest rate, and historical remains moderate debt distress over the projection period.

2020 DSA exercise shows that there is substantial Space to Borrow based on the state’s current revenue profile. Meanwhile, the ratios of Debt Service to Revenue and Personnel Cost to Revenue

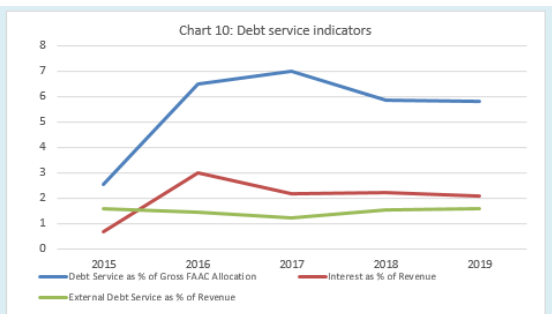
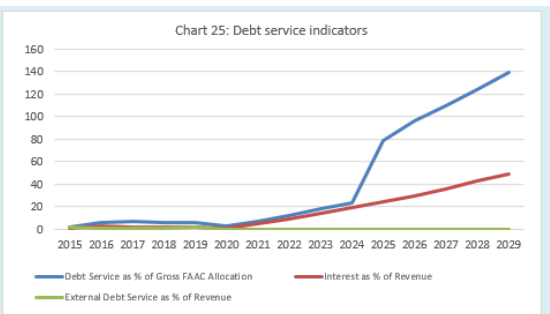
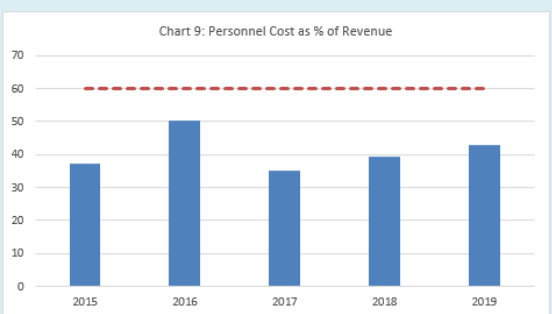
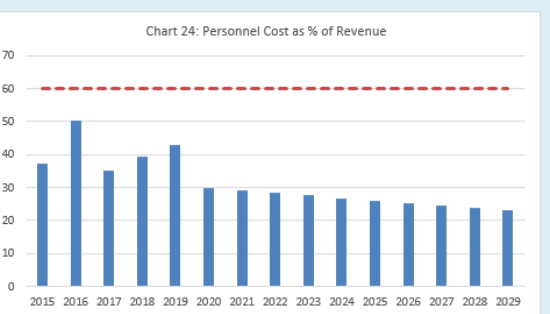
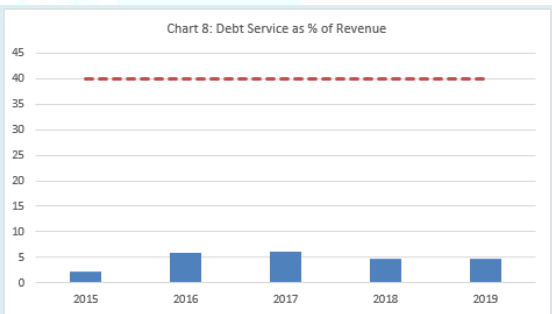
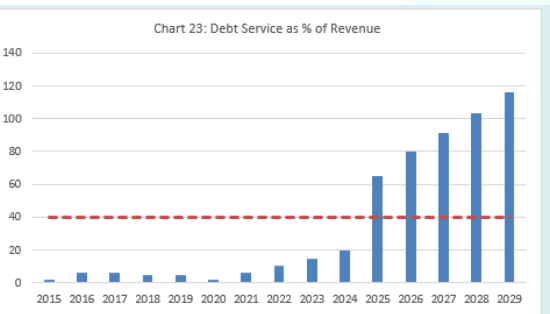
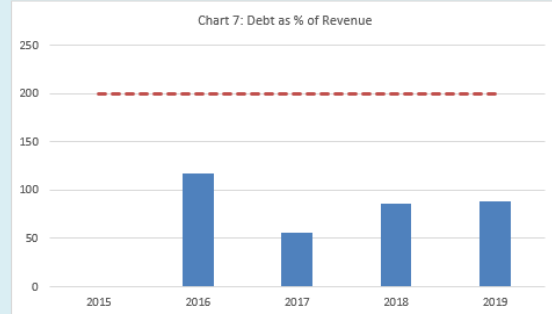
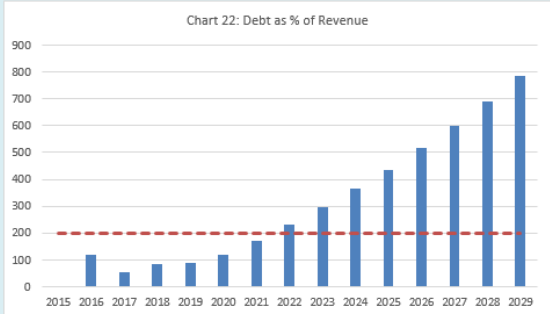
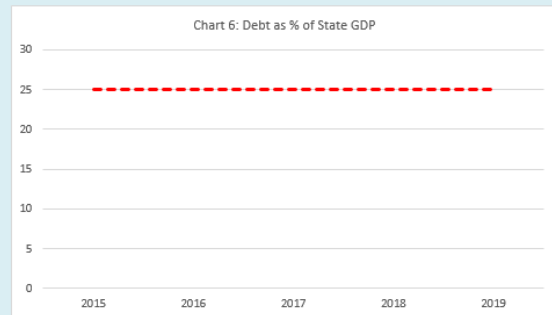
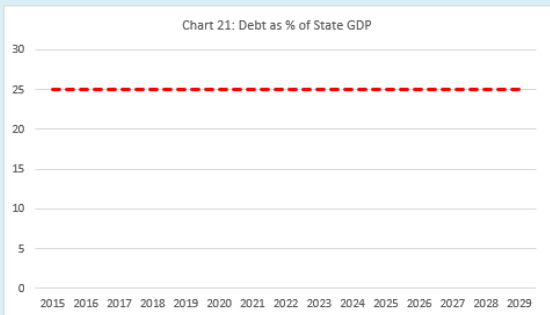
trends remains under the threshold over the projection period from 2019 to 2029, with the strongminded efforts by the State Government through its various initiatives and reforms in the key sectors of the economy.

The revenue-based indicators show that the Debt to Revenue projected at 73.40 percent in 2020, 104.56 percent in 2021, 128.18 percent in 2022, 141.43 percent in 2023, 199.23 percent in 2024, 190.84 percent in 2025, 180.42 percent in 2026, 180.30 percent in 2027, 174.10 percent in 2028, and 167.99 percent in 2029 respectively and were still below the threshold of 200 percent. Katsina State would remain under the threshold for Debt to SGDP ratio for 25 percent over the projection period.

For the Debt Service to Revenue, the outcome estimates the ratios at 4.95 percent in 2020, 8.03 percent in 2021, 13.22 percent in 2022, 17.90 percent 2023, 29.67 percent in 2024, 32.82 percent in 2025, 32.02 percent in 2026, 29.96 percent in 2027, 33.99 percent in 2028 and 22.15 percent in 2029 respectively, as against the threshold of 40 percent to the end of the projection period in the medium to long term.

The Personnel Cost to Revenue remained under state threshold of 60 percent from 18.05 percent in 2020, 18.47 percent in 2022, 23.32 percent in 2024, 23.14 percent in 2026, 23.53 percent in 2029 respectively. Thus, Katsina State Debt remained sustainable on the revenue and debt indicators.

Debt Service to Gross FAAC Allocation estimated at 7.50 percent in 2020, 35.70 percent in 2024 and 26.15 percent in 2029. The projections of Interest to Revenue estimated at 0.58 percent in 2020, 6.42 percent in 2022, 12.84 percent in 2024, 11.64 percent in 2027 and 9.80 percent in 2029 respectively. and External Debt Service to Revenue estimated to increase from 0.63 percent in 2020, 0.84 percent in 2021, 1.06 percent in 2022, 1.23 percent in 2023, 1.91 percent in 2024, 2.03 percent in 2025, 2.25 percent in 2026, 2.23 percent in 2027, 3.07 percent in 2028 and 4.13 percent in 2029 respectively. Thus, Katsina State Debt remained sustainable on the revenue and debt indicators.

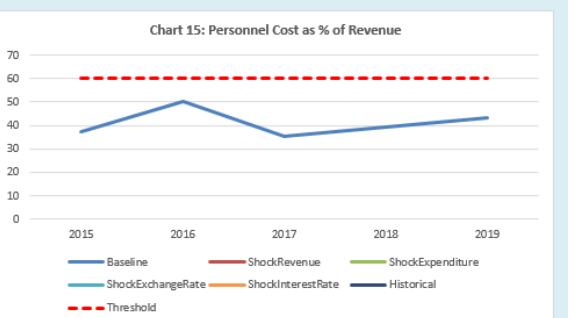
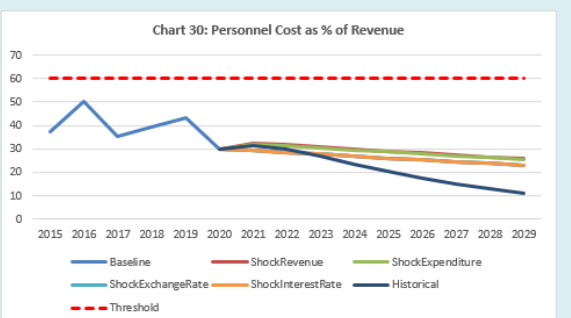
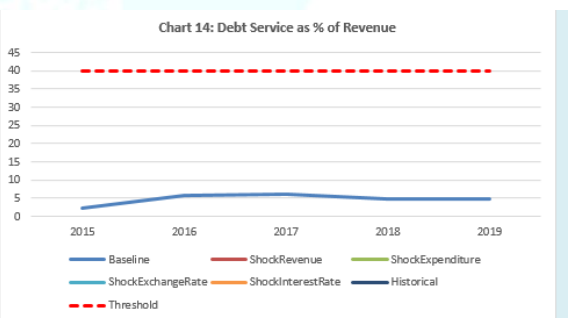
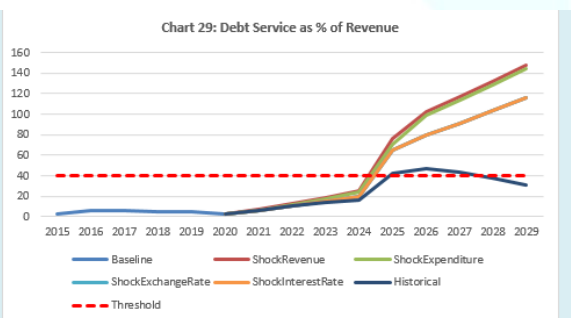
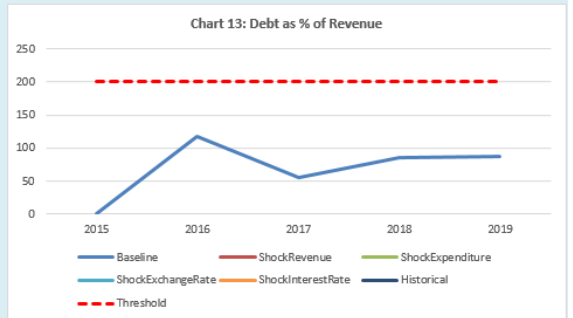
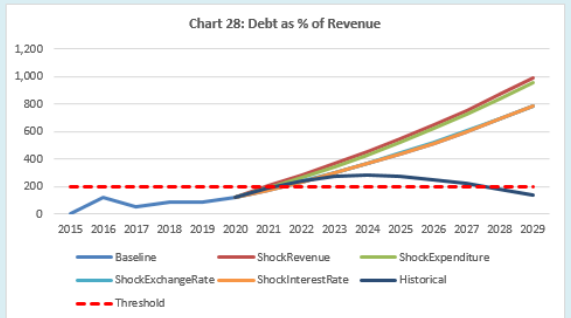
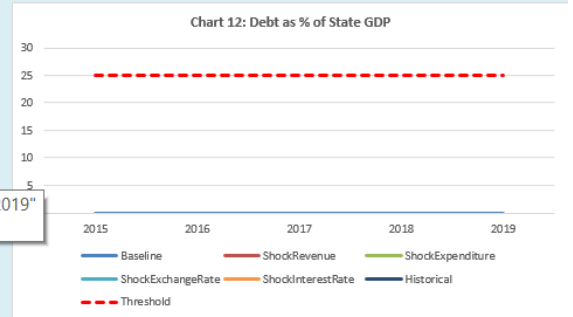
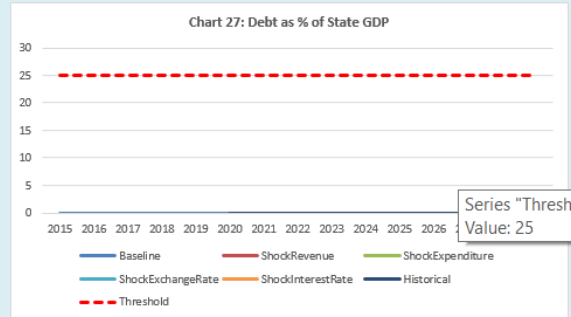


4.5 Conclusion

The outcome of the 2020 DSA revealed that Katsina's Total Debt remains sustainable at a Moderate Risk of Debt distress with substantial space to accommodate shocks. Katsina State Risk Rating remains at a Moderate Risk of debt distress with capacity to accommodate shocks in Revenue, Expenditure, Exchange rate and Interest Rate. The ongoing efforts by the government towards improving revenue generation and diversifying the economy, through various initiatives and reforms in Tax Administration and Collections, as well as the Strategic Revenue Law, would improve the outlook for Total Debt with enhanced revenue performance. Thus, the Revenue indicators and Borrowing Space are expected to improve in the medium to long-term.

4.6 DSA Sensitivity Analysis

Katsina State, 2020 DSA analysis remains at moderate risk of debt distress under sensitivity analysis. The State DSA analysis shows deteriorate related to revenue shocks, expenditure shocks, exchange rate shocks, interest rate shocks and historical shock, that would lead to increase Gross Financing Needs over the projection period. The shocks apply breached the threshold under debt as percent of Revenue from 2023 to 2029 under revenue and expenditure shocks. The debt service as percent of Revenue breached the benchmarks from 2023 to 2029 through revenue and expenditure Shocks. There is, an urgent need for the authorities to fast-track efforts aimed at further diversifying the sources of revenue away from crude oil (FAAC), as well as implement far-reaching policies that will bolster IGR into the state. This has become critical, given the continued volatility in the FAAC allocation.



Chapter 5: Debt Management Strategy

Public debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding at the lowest possible cost over the medium to long run, consistent with a prudent degree of risk. Debt Management Strategy examines the costs and risks inherent in the current debt portfolio, as well as in the debt portfolios that would arise from a range of possible issuance strategies, in light of factors such as the macroeconomic and financial market environment, the availability of financing from different creditors and markets, and vulnerabilities that may have an impact on future borrowing requirements and debt service costs.

The Debt Management Strategy provides alternative strategies to meet the financing requirements for Katsina. The strategies are shown by the breakdown of funding mix (domestic debt and external debt) and within the broad categories of domestic and external, the share of each stylized instrument has also been illustrated. Following four strategies are assessed by the government. The Katsina's Debt Management Strategy, 2020-2024, analyses the debt management strategies outcomes of the three debt management performance indicators namely Debt Stock to Revenue, Debt Services to Revenue and Interest to Revenue. The cost is measured by the expected value of a performance indicator in 2025, as projected in the baseline scenario. Risk is measured by the deviation from the expected value in 2025 caused by an un-expected shock, as projected in the most adverse scenario.

5.1 Alternative Borrowing Options

Strategy 1 (S1) reflects a "status quo" MTEF Financing Mix: It follows the broad parameters of the financing mix in the fiscal year 2020 and MTEF 2020-2022. External gross borrowing under Concessional loans and Bilateral Loans accounts on average 24.00 percent and 5.32 percent over the strategic period (2020-2024). The Domestic gross financing comprises commercial bank loans, State bonds and other domestic financing. The Commercial Bank loans with the maturity of 1-5 years is projected to account on average of 22.62 percent over the strategic period. The Commercial Bank loans (maturing 6 years above), State Bonds (maturing 1-5 years), State Bonds (maturing 6 years above) and Other Domestic Financing estimated with an average of 20.92 percent, 5.18 percent, 17.39 percent and 4.57 percent over the DMS period of 2020-2024.

Strategy 2 (S2) focus more financing through commercial bank loans: In this strategy it has been assumed the distribution between external and domestic borrowing remains the same in 2020 as its in strategy 1. The remaining of borrowing distributions from 2021 to 2024, the state government will focus its financing through commercial bank loans with average 25.55 percent under 1-5 years tenure and 36.66 percent under above 6 years tenure, other gross financing needs through the State bond (maturing 1-5 years) and State bonds (maturing 6 years above) and other Domestic Financing which was estimated to account on average of 7.10 percent, 19.22 percent and 2.56 percent over the strategic period.

Strategy (S3) focus its financing through domestic debt market: In strategy 3, the government decided to focus its financing from 2020 to 2026, through State Bonds (1-5 years), State Bonds (above 6 years), Commercial Bank loans (1-5 years), Commercial Bank loans with the maturity of above 6 years, other Domestic Financing and Concessional Loans with an average of 20.66 percent, 12.64 percent, 29.05 percent, 24.68 percent, 3.78 percent and 9.19 percent, respectively. This strategy considers the scenario where proportions of external and domestic debt instruments in 2020 remains the same with strategy 1.

Strategy (S4) increases the share of external borrowing: In this strategy, External Financing represent an average of 20.97 percent from 2020 to 2024, which comprises Concessional Loans of 26.43 percent and Bilateral loans 15.51 percent. Other gross financing comprises other Domestic financing, through Commercial bank loans (1-5 years), Commercial bank loans (above 6 years), State bond (1-5 years) and other Domestic Financing with average period of 25.51 percent, 22.39 percent, 6.06 percent, and 4.10 percent, respectively.

5.2 DMS Simulation Results

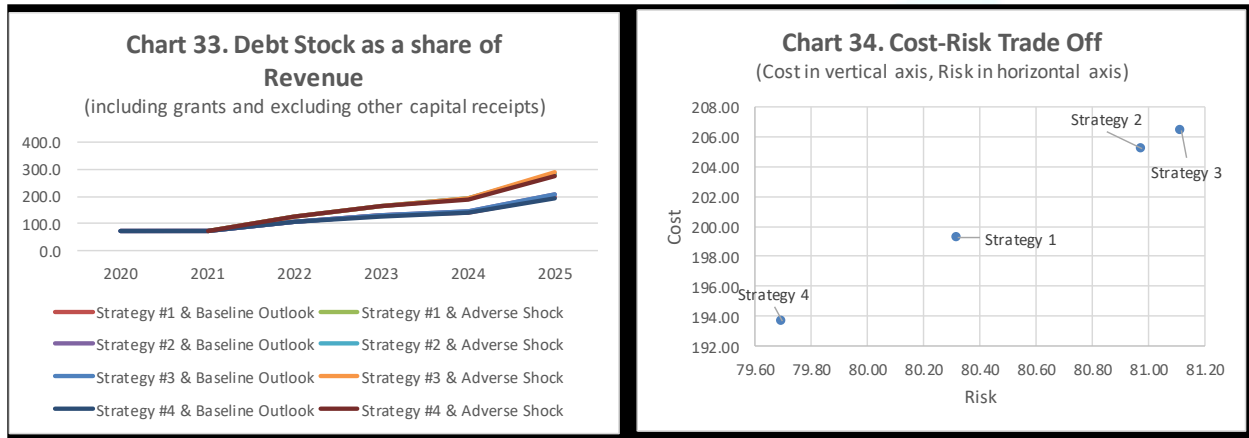
Analysis of strategies & outcomes of the analysis. The cost risk trade off charts illustrates the performance of the alternative strategies with respect to four debt burden indicators.

a. Debt as a share Revenue:

Strategy 4 shows the Cost ratio of Debt to Revenue estimated to increase from 74.14 percent in 2020 to 193.62 percent in 2024, as against Strategy 1 (199.23 percent), Strategy 2 (205.17 percent) and Strategy 3 (206.43 percent), over the DMS period of 2024, compared with the Risks measured

of Strategy 4 (79.70 percent), Strategy 1 (80.32 percent), Strategy 2 (80.98 percent) and Strategy 3 (81.12 percent), respectively.

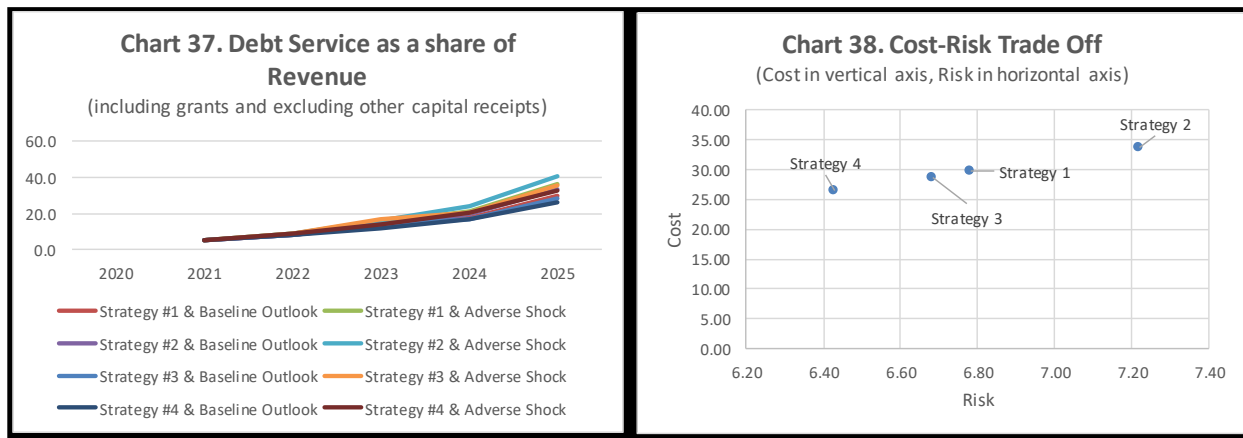
Analysis using this debt indicator of debt to revenue shows that S4 is the least costly and riskiest at 193.62 percent and 79.70 compared to S1 (199.23 percent and 80.32 percent), S2 (205.17 percent and 80.98 percent), and S3 (206.43 percent and 81.12 percent), respectively. On the other hand, S3 is the most costly and risky strategy as this concentrated on more State bonds borrowings with little proportion of external financing over the DMS period of 2020-2024.



b. Debt Service as a share of Revenue:

In terms of Debt Service to Revenue, Strategy 4 has the lowest costs of 26.47 percent and lowest risks of 6.43 percent compared to Strategy 3 (costs at 28.76 percent and risks at 6.68 percent), Strategy 1 (costs at 29.67 percent and risks at 6.78 percent) and Strategy 2 (costs at 28.76 percent and risks at 7.22 percent), respectively, as at end of the strategic period of 2025.

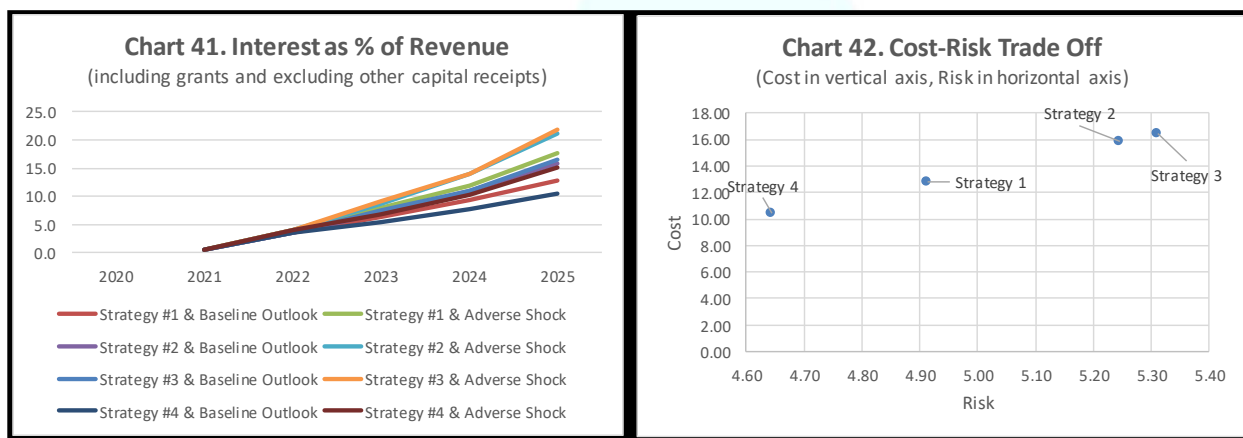
Strategy 4 has the lowest costs and risks at 26.47 percent and 6.43 percent under the Debt Service to Revenue. Strategy 2 is the most costly and riskiest as the domestic debt financing assumed are on more commercial bank and state bonds interest rates, compared with the Strategy 1 and Strategy 3.



c. Interest as a share of Revenue

Strategy 4 is the least costly and riskiest with regards Interest to revenues, which projected at 10.41 percent and 4.64 percent, whilst Strategy 3 is the most costly and risky strategy (16.42 percent and 5.31 percent), compared to Strategy 1 (12.84 percent and 4.91 percent) and Strategy 2 (15.83 percent and 5.25 percent) with moderate costs and risks, as at end of the strategic period of 2023.

The analysis shows that Strategy 4 yield the lowest costs and risks due to high external financing assumed in Strategy, as the external debt service terms requirement has low interest rate, longer maturity, and grace period in concessional external financing. Compared to Strategy 1 and Strategy 2 with the moderate costs and risks. Strategy 3 is the most costly and risky strategy.



5.3 DMS Assessment

An important consideration when comparing alternative debt management strategies is a strategy which would best satisfy government's stated debt management objectives to ensure its financing

at minimum cost and risk while developing domestic debt market. Government needs to follow the strategy which results in lengthening of its maturity profile to reduce the refinancing risk along with providing sufficient external inflows in the medium term to reduce the pressure on domestic resources keeping in view cost-risk tradeoffs.

Based on cost and risk analysis of alternative strategies, a strategy, such as Strategy 3 and Strategy 2 are the highest costs and highest risks, under debt as percentage of Revenue, debt service as percentage of revenue as well as interest as percentage of revenue, compared with Strategy 4 and Strategy 1 that has less costs and risks. **The implementation of Strategy 1 seems feasible than others considering the ability to implement the chosen strategy successfully in the medium-term.** Therefore, although the Analytical Tool's results of cost and risk would suggest that the recommended strategy be S4 these results were just marginally better when compared with Strategy S1.

In comparison to the current debt position, Katsina State debt portfolio stood at N94.449 billion in 2019, which expected an increase to N332,428 billion million under S1 during the strategic period, compared to S2 (N342.348 billion), S3 (N344.437 billion), and S4 (N323.076 billion). In addition to this, the cost/risk trade-offs are considered, using the debt to GDP, debt to revenue, debt service to GDP, debt service to revenue, interest to GDP and interest payment to GDP ratios, S1 is selected as the preferred strategy for the 2020-2024.

The Debt Management Strategy, 2020-2024 represents a robust framework for prudent debt management, as it provides a systematic approach to decision making on the appropriate composition of external and domestic borrowing to finance the 2020 budget. The cost-risk trade-off of alternative borrowing strategies under the DMS has been evaluated within the medium-term context.

Annex II: Katsina State Baseline Scenarios, 2020-2029

	Units	Scale	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
1. Information on State's Gross Domestic Product (See Note 1 in Guidance for Completing Data Request for State DSA)																	
State GDP (at current prices)	Naira	Million	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nation GDP (at current prices)	Naira	Million	93,497,948	101,253,016	114,004,750	127,736,828	144,210,492	139,517,516	142,694,417	146,794,565	151,464,432	151,464,432	151,464,432	151,464,432	151,464,432	151,464,432	151,464,432
Exchange Rate NGN/US\$ (end-Period)			196	253	306	307	326	379	379	379	379	379	379	379	379	379	379
Present Value Factor (PVF)			0.00	0.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
3. Information on Revenues, Expenditure, and Financing Needs and Sources (See Note 3 in Guidance for Completing Data Request for State DSA)																	
Revenue	Naira	Million	57,007.03	62,477.20	88,397.38	81,765.59	83,326.06	160894.76	178401.60	192779.04	208609.62	225982.01	297143.42	332284.34	365859.09	402241.96	442422.36
1. Gross Statutory Allocation ('gross' means with no deductions; do not include of which Net Statutory Allocation ('net' means of deductions)	Naira	Million	34,618.08	25,058.33	34,854.52	52,268.95	50,615.72	35,722.25	36,436.69	37,529.79	39,406.28	41,376.59	43,445.42	45,617.70	47,898.58	50,293.51	52,808.18
of which Deductions	Naira	Million	32,925.04	21,823.04	29,163.24	45,055.72	45,885.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2. Derivation (if applicable to the State)	Naira	Million	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3. Other FAAC transfers (exchange rate gain, augmentation, others)	Naira	Million	5,334.21	20,140.13	29,710.47	1,301.90	2,528.35	30,000.00	30,900.00	31,827.00	32,781.81	33,765.26	34,778.22	35,821.57	36,896.22	38,003.10	39,143.20
4. VAT Allocation	Naira	Million	10,294.28	10,561.69	12,580.68	14,163.86	15,135.67	23,127.61	24,283.99	25,498.19	26,773.10	28,111.76	29,517.34	30,993.21	32,542.87	34,170.02	35,878.52
5. IGR	Naira	Million	5,751.11	5,546.15	9,909.47	10,462.92	10,869.51	11,736.86	12,088.97	12,451.63	12,825.18	13,209.94	13,606.24	14,014.42	14,434.86	14,867.90	15,313.94
6. Capital Receipts	Naira	Million	1,009.36	1,170.90	1,342.25	3,567.97	4,176.82	60308.04	74691.95	85472.42	96823.24	109518.46	175796.19	205837.44	234086.56	264907.43	299278.52
Grants	Naira	Million	0.00	0.00	1,340.98	3,483.07	3,930.31	8,208.00	8,372.16	8,539.60	8,710.40	8,884.60	9,062.30	9,243.54	9,428.41	9,616.98	9,809.32
Sales of Government Assets and Privatization Proceeds	Naira	Million	1,009.36	1,170.90	1.27	84.90	246.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Debt Creating Capital Receipts	Naira	Million	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proceeds from Debt-Creating Borrowings (bond issuance, loan disbursements of which Borrowings from Domestic bonds of which Borrowings from Commercial bank loans of which Borrowings from External loans	Naira	Million	0.00	0.00	0.00	0.00	0.00	0.00	52100.04	66319.79	76932.82	88112.85	100633.86	166733.89	196593.90	224658.15	255290.45
Expenditure	Naira	Million	47,147.32	66,960.88	90,154.75	93,013.14	84,743.48	165728.96	178401.60	192779.04	208609.62	225982.01	297143.42	332284.34	365859.09	402241.96	442422.36
1. Personnel costs (Salaries, Pensions, Civil Servant Social Benefits, other)	Naira	Million	20,896.76	30,839.54	31,187.07	32,067.88	35,776.99	32,364.14	32,687.78	33,014.66	33,344.80	33,678.25	34,015.03	34,355.18	34,698.73	35,045.72	35,396.18
2. Overhead costs	Naira	Million	0.00	12,251.10	12,358.89	17,928.25	17,355.04	17,613.72	17,965.99	18,325.31	18,691.82	19,065.65	19,446.97	19,835.91	20,232.62	20,637.28	21,050.02
3. Interest Payments (Public Debt Charges, including interests deducted from of which Interest Payments (Public Debt Charges, excluding interests deducted from of which Interest deducted from FAAC Allocation	Naira	Million	#REF!	0.00	0.00	0.00	0.00	0.00	1471.81	5542.78	10753.47	16813.21	23768.94	31723.16	40798.98	51126.02	62850.21
4. Other Recurrent Expenditure (Excluding Personnel Costs, Overhead Costs)	Naira	Million	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5. Capital Expenditure	Naira	Million	21,508.36	23,870.25	46,608.79	43,017.00	31,611.46	113,224.97	121,150.72	129,631.27	138,705.46	148,414.84	158,803.88	169,920.15	181,814.56	194,541.58	208,159.49
6. Amortization (principal) payments of which Amortization of Domestic bonds of which Amortization of Commercial bank loans of which Amortization of External loans	Naira	Million	0.00	0.00	0.00	0.00	0.00	1054.33	1054.33	1054.33	1054.33	1054.33	53154.37	67374.12	77987.15	89167.18	101688.19
Budget Balance ('+' means surplus, '-' means deficit)	Naira	Million	0.00	0.00	0.00	0.00	0.00	-4834.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opening Cash and Bank Balance	Naira	Million	22,260.34	0.00	23,269.70	17,584.50	8,438.98	4,834.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Closing Cash and Bank Balance	Naira	Million	18,985.43	0.00	17,584.50	8,438.98	4,834.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Annex II: Katsina State Baseline Scenarios, 2020-2029...Cont'd

Calculation of Financing Needs and Sources															
Financing Needs	Naira	Million													
i. Primary balance	Naira	Million	Sign +/- means source/use of funds												
ii. Debt service	Naira	Million													
Amortizations	Naira	Million													
Interests	Naira	Million													
iii. Financing Needs Other than Amortization Payments (e.g., Variation in C	Naira	Million													
Financing Sources	Naira	Million													
i. Financing Sources Other than Borrowing	Naira	Million													
ii. Gross Borrowings	Naira	Million	Gross Borrowing = Primary Deficit + Debt Service + Financing Needs Other than Amortizatio												
CONTROL: Financing Needs and Sources Must be Identical (i.e., no financing gap)								OK	OK	OK	OK	OK	OK	OK	OK
4. Information on Planned Borrowings Creating New Debt (new bonds, new loans, etc.) (See Note 4 in Guidance for Completing Data Request for State DSA)															
Insert planned Borrowings (new bonds, new loans, etc.) as nominal amounts in million naira or million US dollars. Total Planned Borrowings (row 167) must equal the Gross Borrowing Requirement (row 168, calculated by the Template in the Baseline Scenario)															
New Domestic Financing in Million Naira			Instrument #	Domestic / External	Interest Rate (%)	Maturity (# of years)	Grace (# of years)								
Commercial Bank Loans (maturity 1 to 5 years, including Agric Loans, Infr			Instrument #1	Domestic	0.00%	1	0								
Commercial Bank Loans (maturity 6 years or longer, including Agric Loans, I			Instrument #2	Domestic	0.00%	1	0								
State Bonds (maturity 1 to 5 years)			Instrument #3	Domestic	0.00%	1	0								
State Bonds (maturity 6 years or longer)			Instrument #4	Domestic	0.00%	1	0								
Other Domestic Financing			Instrument #5	Domestic	0.00%	1	0								
New External Financing in Million US Dollars			Instrument #	Domestic / External	Interest Rate (%)	Maturity (# of years)	Grace (# of years)								
External Financing - Concessional Loans (e.g., World Bank, African Develop			Instrument #6	External	0.00%	1	0								
External Financing - Bilateral Loans			Instrument #7	External	0.00%	1	0								
Other External Financing			Instrument #8	External	0.00%	1	0								
Calculation of Debt Stocks, Amortizations, and Interests of Outstanding Debt and New Debt															

Katsina State - Technical Team

1. A
2. A
3. A
4. A
5. A
6. A

