National Institute of Public Finance and Policy, New Delhi

STATE FORUM 2023

A COMPENDIUM

2-3 NOVEMBER 2023

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Introduction

India is the fifth largest economy in the world and expects to become the third largest economy in the near future. There are aspirations to become a developed country by the time India completes 100 years of its existence and alongside there is an articulated need for improving the quality of life for the citizens. States in India play an important role in translating aspirations and ambitions into actions and achievements. They account for around 60 percent of the combined expenditure of centre and states put together, even if their share in tax revenues collected is only about 37 percent.

A number of states expressed intentions of expanding their economies to a trillion dollars and have been spelling out policy initiatives for reaching this goal. In terms of the average growth in GSDP during 2011-12 to 2019-20, there is considerable variation in growth performance across states. Among the fast growing states with average growth higher than 8 percent are Gujarat, Haryana and Karnataka among the general category states and Mizoram and Tripura among the special category states. With the average growth varying from over 8 percent to less than 5 percent, perhaps there are some lessons to be shared across states in the likely interventions which could support higher growth.

Sustainable development goals are another important focus theme for the Union government as well as state governments. Prior to the impact of COVID-19 pandemic, there is a systematic increase in the SDG index for all states. On average the SDG India Index developed by the NITI shows an improvement from 60 to 66 between 2019 and 2020. However there are significant differences in the performance of states – Kerala tops the charts with the Index at 75 for 2020 closely followed by Himachal Pradesh and Tamil Nadu at 74. Bihar, Jharkhand and Assam show lower levels of less than 60. On the other hand, if one considers the extent of improvement in the index between 2019 and 2020, Mizoram and Haryana top the charts with an improvement of 12 and 10 in the index respectively.

These differences in performance across states in terms of economic growth and SGD performance are illustrations of the differences in focus of different state governments. Improvements in resource allocation and in resource utilisation can contribute to improved performance. States are working hard to ideate and execute improvements in the mechanisms adopted for supporting growth and for improving the quality of life of citizens.

There are some emerging concerns as well. Fiscal sustainability a concern at the turn of the century, with debt to GDP for general government exceeding 80 percent was systematically brought down through the enactment of fiscal responsibility legislations at both levels of government. In the pre-pandemic era, debt to GDP dropped to about 70 percent. The shock to the economy as a result of the lockdown imposed to contain the spread of the COVID-19 pandemic however changed the scenario considerably. Fiscal sustainability has been undermined with the debt levels climbing to 88 percent in 2020-21. Subsequent recovery in the economy and careful management of the fisc resulted in improvements with the debt to GDP levels dropping to 81 percent by 2022-23. There is however, considerable variation in the performance of states, with some states reporting high levels of debt and deficits. On the revenue front, with the introduction of goods and services tax (GST), it is recognised that there is a change in the profile of revenues for states with a sharp reduction in autonomy in raising revenues. There is evidence of efforts by states to experiment and innovate to raise revenues as well as to improve delivery of public goods and services. On the expenditure side, while there is an effort evident to improve the quality of expenditure with an increased emphasis on capital expenditure, the performance varies considerably across states. Some states have been able to increase their commitment to capital outlay by committing over 15 percent of total expenditure to capital outlay, others have struggled to raise these levels beyond 5 percent.

Given the varied experiences of states and the emerging challenges in terms of climate change, need to support increase in capital outlays both by private and public sector to support employment generation for a young country and the aspiration to evolve into a developed economy, there is merit in sharing knowledge. In partnership with World Bank, the National Institute of Public Finance and Policy proposes to institute an annual “STATE FORUM” - a space for sharing analysis on emerging issues with states as well as for states to share their innovations and experiments. The State Forum will be an annual event to bring together stakeholders interested in improving understanding about the performance of states and identifying emerging challenges. It is meant to be a space to share ideas and experiences in managing state finances in India.

The first edition of STATE FORUM was organized during November 02-03, 2023. The Compendium brings together a summary of the discussions during these two days along with the papers prepared by various experts and state officials. Notably, 15 states actively participated in the forum, including Assam, Bihar, Chhattisgarh, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Puducherry, Punjab, Rajasthan, Sikkim, Uttar Pradesh, and West Bengal.

1ST STATE FORUM ON INNOVATIONS IN STATE FINANCES
NIPFP AUDITORIUM
18/2 SATSANG VIHAR MARG, SPECIAL INSTITUTIONAL AREA, NEW DELHI – 110067
AGENDA

NOVEMBER 2ND 2023, THURSDAY

Day 1 Theme: Emerging Issues in State Finances

09:30 – 09:45 Registration

Welcome: R. Kavita Rao, Director, NIPFP

SESSION 1 (09:45 – 11:15) State of State Finances

Chair: Sanjay Malhotra, Revenue Secretary, Ministry of Finance, Govt. of India

- ***Opening Remarks***
  Hoon Sahib Soh, Practice Manager, Equitable Growth Finance & Institutions, South Asia Region, The World Bank
- ***Inaugural address***
  Sanjay Kumar Malhotra, Revenue Secretary, Ministry of Finance, Govt. of India
- ***Presentation by NIPFP*** *- Overview of State Finances- R. Kavita Rao & Sacchidananda Mukherjee*
- ***Q&A***

Tea break

SESSION 2 (11:30 – 01:30) Debt and Fiscal Sustainability

Chair: Rajiv Mishra, Senior Economic Adviser, Department of Economic Affairs, Ministry of Finance, Govt. of India

- ***Opening Remarks***
  Auguste Tano Kouame, Country Director, India, The World Bank
- ***Presentation on Fiscal Sustainability Assessment and State Experience***
  Dhruv Sharma, Senior Economist, Macroeconomics, Trade and Investment Unit, South Asia Region, The World Bank &
  Rangeet Ghosh, Senior Economist, Macroeconomics, Trade and Investment Unit, South Asia Region, The World Bank
- ***Presentation by Chhattisgarh Government***
  Ankit Anand, Secretary (Finance), Government of Chhattisgarh
- ***Q&A***

Lunch

SESSION 3 (02:30 – 05:00) Understanding Subsidies in State Finances

Chair: Sajjan Yadav, Additional Secretary (Public Finance States), Ministry of Finance, Govt. of India

- ***Presentation by NIPFP -*** *H.K. Amarnath*
- ***Presentation by Karnataka Government***
  Nitish K., IAS, Deputy Secretary (Budget & Resources), Government of Karnataka
- ***Presentation by Uttar Pradesh***
  Deepak Kumar, Additional Chief Secretary & Sameer Varma, Special Secretary, Government of Uttar Pradesh
- ***Q&A***

Tea break

DINNER AT HOTEL GRAND,

Pocket C, Vasant Kunj, New Delhi, India

*****End of the day 1*****

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AGENDA (CONTD.)

NOVEMBER 3RD 2023, FRIDAY

Day 2 Theme: Green Fiscal Policy, Innovations in Budgeting and Financial Management

SESSION 1 (10:30 –01:15) Green Fiscal Policy

Chair: Suman Bery, Vice Chairman, NITI Aayog

- ***Presentation by Assam***
  Samir Kumar Sinha, Additional Chief Secretary and PS to CM- Assam, Government of Assam **&** *Laya Madduri, Secretary (Finance) Government of Assam*
- ***India: Greener, Better, Stronger Budgets***
  Climate Informed Budgeting and Fiscal Policy at the State Level
  Emilia Skrok, Practice Manager, Fiscal Policy and Sustainable Growth Unit, Equitable Growth, Finance and Institutions, The World Bank

Tea break

- ***Climate Budgeting in Kerala***
  Mr. K Mohammed Y Safirulla, Deputy Chief Executive Officer, Rebuild Kerala Initiative, Government of Kerala &
  Supriti Dua, Sr. Financial Management Specialist, Governance Global Practice, The World Bank
- ***Q&A***

Lunch

SESSION 2 (02:00 –04:30) Innovations in State Finances

Chair: Ashok Lahiri, Member of the West Bengal Legislative Assembly & former Chief Economic Adviser to the Government of India

- ***Presentation by Gujarat***
  Riddhesh Raval, Joint Commissioner of State Tax, Government of Gujarat
- ***Presentation by Rajasthan***
  Rohit Gupta, Secretary (Budget) & Shrikrishana Sharma, Joint Secretary (Budget), Government of Rajasthan
- ***Presentation by West Bengal***
  Sudip Kumar Sinha, Secretary (Finance), Government of West Bengal
- ***Q&A***

VOTE OF THANKS

*****End of the day 2*****

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Synthesis Report: NIPFP State Forum

Summary of Deliberations at the State Forum, November 2-3, 2023

India is among the fastest growing economies in the world. Rapid growth along with aspirations of improved quality of life for its citizens requires progressive and nimble policy formulation and efficient execution. States play a significant role in both these spaces, given that they account for over 60 percent of total expenditure by governments in India. Commitments to SDGs and increasing aspirations have meant that states are also eager to innovate and deliver better value for money to their citizens. On the other hand, there are emerging concerns on fiscal sustainability and the role accorded to welfare programmes. Concerns of climate change and the need for mitigation and adaptation expenditure is another source of concern. Keeping emerging issues in mind, the National Institute of Public Finance and Policy has initiated an annual forum for interaction between state governments to discuss issues of concern and share ideas on innovations by States. The first of these interactions was organised during November 2-3, 2023 with the support of the World Bank. The following is a summary of the deliberations during the Forum.

Day 1: Session 1: State of State Finances

In the inaugural session of the State Forum at the National Institute of Public Finance and Policy (NIPFP), **Dr. R. Kavita Rao, Director, National Institute of Public Finance and Policy (NIPFP)**, highlighted the significance of creating an academic space for dialogue on public finances at the state level. State governments play a pivotal role in managing a significant share of public expenditure, serving as the primary implementing agency for developmental programs. The State Forum provides a platform for states to share innovations and experiments in revenue management and expenditure efficiency. Dr. Rao expressed hope for the forum to evolve into an annual event and reached out to states for their support. The support of the World Bank was instrumental in making the forum possible. **Dr. Hoon Sahib Soh, Practice Manager, Equitable Growth, Finance & Institutions, South Asia Region, the World Bank**, highlighted the longstanding collaborative effort of the World Bank and NIPFP on fiscal issues, public expenditure, public investment management and budgetary reforms at the state level. The World Bank underscored its commitment to enhancing the states' domestic revenue capacity and expenditure efficiency for sustainable economic growth through ongoing initiatives and plans. To support fiscal sustainability at the State level, the Bank has developed an analytical tool called the Fiscal Sustainability Analysis (FSA Tool).This tool can be utilized for simulating various fiscal scenarios that can help in budget formulation, and has been piloted in several states including Punjab, Kerala, Odisha, Assam, Himachal Pradesh, and Chhattisgarh. . Dr. Soh suggested that there is a scope for expanding the fiscal space in India for its critical investment needs. The fiscal policies of the states can be made more effective through technical assistance by sharing international best practices and experiences of other developing countries.

Shri Sanjay Malhotra, Revenue Secretary of the Ministry of Finance was invited to deliver the inaugural address. He emphasised the significance of NIPFP as a meeting ground for heads of state finance departments. Acknowledging the timeliness of the initiative during India's pursuit of becoming a developed country in the "Amrit Kaal," he hoped for the forum to become an annual feature, highlighting the Ministry's consistent support for the institute. Shri Malhotra conveyed his optimism for the positive impact and collaborative efforts to enhance state financial management. Shri Malhotra began his address by weighing in on the debate on India's tax collection performance. He argued that if the average decadal performance is considered, then India's tax to GDP ratio has increased over the last four decades. It also compares favourably to the averages for its peers. Moving on, he presented a case for further reforms in the GST regime, which require active collaboration between the Centre and the States.

This session was followed by presentations by **Dr. Sacchidananda Mukherjee, Professor, NIPFP and Dr. Kavita Rao, Director NIPFP**. Dr. Mukherjee presented a "study on the State of State Finances in India during the present decade". The paper examined the evolution of state finance pre-GST and post-GST, focusing on 28 Indian states (18 Major and 10 minor). The findings revealed an increase in the average annual revenue deficit for both major and minor states during the post-GST period. Major states experienced a decline in overall Fiscal Deficit (FD). However, minor states faced an increase due to challenges in generating additional revenue resources. Grants in aid and GST compensation receipts played significant roles in sustaining revenue streams for major states. The study emphasized the importance of sustaining economic growth, exploring revenue potential within given constitutional powers, improving forecasting methods, and addressing challenges in reducing public debt.

Dr. Kavita Rao in her presentation on the "Capital Expenditure of States: Intentions versus Achievements" assessed spending variations across Indian states. The paper identified trends in revenue and capital expenditure and the effective utilisation of allocated budgets. The results indicated a moderate increase in state expenditures (% of GSDP) over the years, with a notable surge in 2022-23 (RE) and a temporary drop during the COVID-19 pandemic. The analysis shows a declining trend in the share of capital expenditure to GSDP for General category states (2014-15 to 2020-21) followed by an increasing trend in recent years. Special category states, on the other hand, consistently increased capital expenditure from 2015-16 onwards. The findings suggest room for improvement in capital expenditure by enhancing allocation and utilization. Considerable variations across states in utilisation can be potentially attributed to challenges in project execution and the need to adjust allocations in response to emerging needs or revenue shortfalls.

In conclusion, the presentations shed light on critical aspects of state finances Dr. Mukherjee's study highlighted the impact of GST on state finances in India. To ensure sustainable economic growth and achieve greater financial stability, it is imperative to enhance revenue potential, implement more accurate forecasting methods, and effectively tackle the challenges of reducing public debt. Dr. Rao's analysis of state capital spending revealed notable trends, including fluctuations during Covid-19. The insights into variations across state budgets and the positive correlation between revenue and capital expenditure provide valuable guidance for enhancing utilization and fostering financial prudence.

Day 1: Session 2: Debt and Fiscal Sustainability

The second session on **"Debt and Fiscal Sustainability"**, was chaired by **Shri Rajiv Mishra, Senior Economic Advisor in the Department of Economic Affairs, Ministry of Finance, Government of India**. The session began with a brief overview of the debt scenario in India by the Chair. Shri Mishra began by stating that the general government debt level has consistently remained at 82-83% - with the Union government accounting for close to 60 percent and the states accounting for the rest. There is substantial variation among state governments in the level of debt. However, since the RBI has been managing the debt of the states, they have not been subject to market discipline – with very little variation in the cost of borrowing across states. In the last few years, states have greatly benefitted from the removal of plan and non-plan distinction, increased share in central taxes following from Finance Commission recommendations, and greater revenue accrual through GST. While these have created additional fiscal space for the states, there is need for better fiscal discipline. Some concerns on debt sustainability were raised but Shri Mishra argued that the government has been more responsible that other countries in both protecting the vulnerable groups and limiting the burden on the exchequer.

Dr. Auguste Tano Kouame, Country Director, India, The World Bank was invited to share his opening remarks. Mr. Kouame began by congratulating the National Institute of Public Finance and Policy (NIPFP) for organizing the State Forum that provides a platform for sharing analysis on emerging issues and innovations in subnational public finance. He noted that the State Forum represents the strong knowledge partnership between NIPFP and the World Bank. He also highlighted the critical role of states in public finances since they are responsible for the delivery of key public services, for example about 85 percent of education spending, and 66 percent of health spending. Over 50 percent of general government capital spending is implemented at the state level.

Dr. Kouame further expressed that over the years the states have displayed good fiscal prudence, with the aggregate fiscal deficit of the states as a share of national GDP remaining well below 3 percent on average over 2005-20. However, there is scope to increase their own-revenue generation capacity and improve the quality of fiscal consolidation so that they have the requisite fiscal space to undertake expenditures that are critical for long term growth. These issues have assumed renewed importance with debt levels remaining elevated in the aftermath of the COVID-19 pandemic. Adding resilience to subnational finances and improving fiscal space will require robust assessment of subnational fiscal risks, improving own-revenue generation capacity and the efficiency and quality of expenditures, as well as better fiscal forecasting to deal with shocks. The externally aided projects financed by the multilateral institutions, including the World Bank, can be leveraged to bridge potential financing gaps both in service delivery and in tackling emerging issues stemming from climate change.

The first presentation in this session was by **Dr. Rangeet Ghosh, Senior Economist, Macroeconomics, Trade and Investment Unit, South Asia Region, The World Bank**. The presentation provided an overview of the sub-national fiscal scenario in India and articulated the need to monitor fiscal risks. He presented an overview of certain tools that the World Bank has developed for these purposes. The overview of state finances in India highlighted the adoption of the fiscal rules framework by the state governments following incentives provided by the 12th

Finance Commission, which kept their aggregate FD at below 3 percent of GDP over the period 2005-2020. The surge thereafter is attributed to the stress from COVID-19. Inter-state differences in the sub-national debt burden was discussed.. The presentation also suggested that efforts towards fiscal consolidation too varied across states with less consolidation observed in the relatively well-off states. Providing a discussion on international experience in monitoring sub-national fiscal risks, Dr. Ghosh described alternative models used – some involving performance benchmarking of states with the ratings in performance becoming the basis for sub-national borrowing limits. Mexico and Brazil were mentioned as two countries using this model. Dr. Ghosh suggested that tools such as Fiscal Sustainability Analysis tool and Public Debt Dynamics Tool could be useful to provide inputs for better fiscal management in states.

Taking off from this discussion, the second presentation of the session was by **Shri Rishabh Prasashar, Deputy Secretary, Finance Department, Government of Chhattisgarh**. This presentation was about the benefits and difficulties of working with the FSA tool by the finance department of Government of Chhattisgarh. As benefits, the presentation suggested that the tool provides a comprehensive view of the state's fiscal space and allows for verification of compliance with the FRBM Act. It offers alternative forecasting techniques to validate the estimates of fiscal indicators. The tool facilitates the development of risk mitigation measures to minimise impact of state finances and allows for integrating the budget process into a medium term framework. The challenges in the using the tool were broadly identified in terms of difficulties in consistent data capture, need for manual intervention to align forecasting with state specific needs and need for adequate training for effective use of the tools, to avoid inconsistent or unrealistic outputs.

In response to a question posed by Shri Rajiv Mishra regarding the utilization of the fiscal sustainability analysis (FSA) tool in budget formulation, Shri Rishabh Prasad explained that the tool was employed for the current year's budget (2023-24) for the Chhattisgarh government with beneficial outcomes for fiscal projections. However, there are challenges for the subsequent year (2024-25) due to the involvement of a new government and potential unforeseen expenditures. Dr. Sudip Kumar Sinha, Secretary (Finance), Government of West Bengal offered an observation related to the fiscal deficit target, suggesting that states with less development expenditure on capital accounts were better at containing fiscal deficits below 3% of their GSDP. This initiated a discussion on revising the formula suggested by the Finance Commission to tailor fiscal deficit levels based on states' expenditure requirements and revenue performance. Mr. Rangeet Ghosh, World Bank highlighted the possibility of expenditure rules in incentivizing states to maintain a specific expenditure profile while emphasizing the need for complementary reforms. The discussion also touched upon the fiscal capacity disparities among states (Shri Reny Wilfred, Joint Secretary, Finance Department, Government of Nagaland) and possibility of measuring quality of capital expenditure (Shri Anurag Goyal, Senior Advisor, NITI Aayog) and the benchmarking expenditure on subsidies to establish some potential limits on the use of fiscal space for subsidies (Shri Sameer Verma, Special Secretary (Finance), Government of Uttar Pradesh). The session concluded with insights into the FSA tool, its limitations, and considerations for improving public investment management and assessing the quality of public investment projects. Additionally, the discussion delved into the socialization of the toolkit, its incorporation into departmental processes, and the potential for refining rules to ensure fiscal sustainability.

Day 1: Session 3: Understanding Subsidies in State Finances

The **final session on day 1 focused on Understanding Subsidies in State Finances was chaired by Dr. Sajjan Yadav, Additional Secretary (Expenditure), Ministry of Finance, Government of India**, provided an overview of subsidies and freebies while emphasising their increased prevalence during election seasons. He cites examples from upcoming legislative assembly and Parliament elections. The historical roots of the subsidies versus freebies debate were discussed, tracing it back to the 1920s in the United States. Clear definitions for both subsidies and freebies remain elusive despite the longstanding debate. Institutions successfully define subsidies but lack consensus on freebies. The discussion extended to the perceived benefits or disadvantages of subsidies and freebies which have important socio-economic ramifications. Dr. Yadav highlighted the lack of consensus in accounting for subsidies. In the fiscal year 2022-23, nearly Rs. 3.5 lakh crore in subsidies were reported, however, it could significantly increase when considering unreported and implicit subsidies. In some states, subsidies accounted for a substantial percentage of own revenue collection and receipts.

The first presentation in this session was by **Dr. H. K. Amarnath, Associate Professor from NIPFP**. The paper locates the discussion on subsidies in India in the context of the on-going wider debate on subsidies and welfare payments. It builds a case for using the following definition "Explicit payments made in cash or kind to individuals, producers or organisations to alter their price and output decisions of the intermediate and final goods, without any return to the provider of the subsidy. The benefits of explicit subsidies are directly available to the individuals and firms". This definition expands the scope of payments to be considered. Preliminary estimates of explicit subsidies as a percentage of revenue receipts for some states are presented in the paper. The estimates suggest considerable variables across states – Gujarat, Maharashtra, Punjab and Haryana are among the states which show a high level of explicit subsidies while Uttar Pradesh, Odisha, Bihar and Jharkhand show relatively lower levels. These variations across states could be changing with the evolving demands for enhanced welfare payments across states.

Shri Nitish K., Deputy Secretary (Budget & Resources) of the Government of Karnataka, made a presentation on "Budgetary Subsidies in the State of Karnataka". The presentation focused on the budget for 2023-24 in the context of recent elections and a range of commitments for welfare programmes made by the new government. The presentation provided an overview of the revenues and expenditures of the government and highlighted the fact that the state has been compliant with the FRBM rules in most years apart from the COVID years. The presentation provided an overview of the trends in major explicit subsidies in the state over the last five years. For the new set of welfare payments announced by the present government, the presentation provided an assessment of the number of beneficiaries and the expected fiscal cost. There was also some discussion on proposed rationalisation to reduce the fiscal impact of these welfare measures followed by a brief discussion on the potential economic benefits for the state from the proposed measures.

The second state presentation in this session was by **Shri Deepak Kumar, Additional Chief Secretary, Government of Uttar Pradesh**. The presentation began with an overview of the achievements of the state over the past six years, both in terms of economy and in terms of infrastructure development. UP's evolution in fiscal terms was presented as one supported by augmented revenue receipts, a consistent revenue surplus and fiscal deficit lower than the average for major states in most years. With control on committed expenditures at 11-13 percent of GSDP, the government has been able to support higher capital expenditure alongside modest increases in subsidies from 0.7 percent of GSDP to 1.26 percent by 2022-23 (RE). An overview of the major subsidies provided by the state were presented. The presentation highlighted the government's focus on better targeting of subsidies – for supporting production as well as for welfare - through the use of the Direct Benefit Transfer (DBT) mechanism. UP is reported to be ranked 2nd in DBT implementation.

Following the presentation, Dr. Sajjan Yadav acknowledged the positive impact of the state government's subsidy schemes. He highlighted the importance of rationalizing these schemes for more targeted benefits. The discussions revolved around the challenges of increasing committed expenditure, the need for flexibility in state borrowing limits, and the long-term repayment considerations. Various concerns on issues such as increased registration fees, electricity subsidies, and the success of DBT schemes were raised. The states shared insights on subsidy utilization, self-selection in schemes, and the effectiveness of conditional cash transfers. The session concluded with reflections on the need for defining objectives in subsidy schemes, considering progressivity and regressivity in welfare-enhancing subsidies, and the importance of impact analysis to gauge the productivity of subsidies in the broader socio-economic context. The discussions on the complexity of subsidies and freebies offered insights that extend beyond theoretical debates to practical considerations.

Day 2: Session 1: Green Fiscal Policy, Innovations in Budgeting and Financial Management

The theme of Session 1 on Day 2 was Green Fiscal Policy. It was chaired by **Shri Suman Bery, Vice Chairman of NITI Aayog**. His introductory remarks emphasized the significance of innovative approaches at the state level and suggested that NIPFP was best placed to encourage sharing of such experiences among the states given its close relationship with states. While talking about the implications of fiscal federalism, he pointed out that there is need for incentive compatible mechanisms for sub-national finances – this might be an issue for the next Finance Commission to explore. In the context of climate discussion, he also mentioned the need to focus on finding the fiscal resources for financing transition. Further, given the need for envisioning expenditures on a longer time horizon, Shri Bery suggested that there is need to repurpose the planning departments in the states to become analytical organisations like the NITI. Further, he raised a question about states' role in this ongoing dialogue, particularly in relation to incorporating climate adaptation and mitigation measures within the broader national discourse.

The first presentation in the session was by **Shri Samir Sinha, Additional Chief Secretary and Principal Secretary to CM-Assam**, on "Green Budgeting in Assam: Journey so Far". The presentation began with the context – Assam is prone to disasters like floods, landslides and erosion resulting in loss of lives and livelihoods. Assam also has 15 of the 25 most climate vulnerable districts of India. Green budget was envisioned to achieve the Sustainable Development Goals 2030 and the Goals and Strategies set under State Action Plan for Climate Change and Disaster Risk Reduction Roadmap 2030. The methodology adopted in preparing a green budget involves identifying the key departments, categorisation of the schemes into highly favourable, moderately favourable, neutral and less favourable on one side and into mitigation, adaptation and sustainability on the other. This is followed by a documentation of the expenditure on green activities by the departments. The process of capacity building and interactions for the creation of the first green budget, Mr. Sinha remarked this has improved awareness in departments and there is effort to understand and identify greener initiatives across the board.

The second presentation for the session by Kerala could not be shared due to connectivity problems. Following the presentation by Shri Samir Sinha, several insightful questions were posed by participants. Dr. Suman Bery inquired whether the tea sector is included in agriculture and asked about its susceptibility to climate change, both of which were confirmed by Shri Sinha. Dr. Ashok Lahiri mentioned the existing issue of solid waste management in villages and towns across India and seeks initiatives by the Assam Government to tackle this challenge. Shri Sinha acknowledged ongoing efforts towards waste collection and waste segregation by Guwahati Municipal Corporation. Dr. Sudipto Mundle, raised concerns about potential negative contributions by some of the departments or sectors in green budgeting and asked whether independent evaluations have been done. Shri Sinha acknowledged the need for independent reviews and expressed the intention to conduct studies on the efforts taken so far. Dr. Suman Bery appraised the Aspirational District Program of NITI Aayog flagship program, and asked Ms. Laya about the efforts to cascade consciousness down to the district and block levels. **Ms. Laya Madduri, Secretary, Government of Assam** then discussed a campaign initiated by the Science, Technology and Climate Change Department in collaboration with ecoclubs of villages. She explained the scoring system used to assess the environmental impact of schemes and to motivate the departments to minimize negative impact. She highlighted that they have a team of experts from UNICEF, the Environment and Forest Department, and the

Climate Change Department that are involved in evaluations. Dr. Bery concluded the discussion by appreciating Assam's efforts in doing Green Budgeting.

The second presentation of the session was by **Ms. Emilia Skrok Practice Manager, Fiscal Policy and Sustainable Growth Unit, World Bank** on "India: Greener, Better, Stronger Budgets: Climate–Informed Budgeting and Fiscal Policy at the State Level." Ms. Skrok began by elaborating on the risk posed by climate change to the fiscal system of states and countries. She defined Climate-informed budgeting as the use of budgetary policy-making tools to achieve environmental and climate goals. This includes: (a) evaluating climate change fiscal impacts and the fiscal costs of policies to strengthen economic and social resilience, and (b) proposing fiscal reforms that help achieve state-level mitigation goals. She highlighted the differences across states both in climate vulnerability and its impact on lives and livelihoods. In addition, states are planning for addressing concerns of climate change through commitments on reduced emissions and augmented focus on renewables. The need for additional resources to meet these needs as well as the risks posed to the fisc consequent to shocks need to be assessed and managed. She presented a useful overview of the tools available to address these concerns ranging from green tagging, carbon pricing, climate fiscal risk assessment and spending/investment assessments.

Dr. Suman Bery expressed gratitude to her for comprehensive insights of the presentation covering Indian states to the European Union. It has been pointed out during the discussion that there should be incremental kind of expenditure for green budgeting and it requires an increase in revenue. Dr. Pinaki Chakraborty offered observations on fiscal sustainability and emphasised that apart from green tagging, there is a need for forward-looking investment estimates at local, state and subnational levels. He further questions the effectiveness of individual states versus a national council in achieving positive externalities in climate change mitigation. He also highlighted the regressive nature of the transition from old to new energy sources to states dependent on fossil fuels. Shri B. Karthikeyan and Shri Ajit Kesari defended that states might not explicitly use the term "green budgeting," but work towards it such as green initiatives adopted in Madhya Pradesh. In response, Ms. Emilia acknowledged the usefulness of the observations and stressed that green tagging is a tool for identifying spending, not sufficient for planning. Shri Reny Wilfred, Joint Secretary, Finance Department, Government of Nagaland further raised concerns about international funding for green solutions in developing countries and the potential exploitation of carbon trading by international companies.

This presentation was followed by a presentation by **Ms. Supriti Dua, Senior Financial Management Specialist, World Bank**, who provided an overview of the principles underlying the Green Expenditure Tagging approach. She discussed some of the alternative methods of tagging and provided insights into some Indian experiences including that in Kerala.

There was very interesting discussion following these presentations. Shrikrishana Sharma, Joint Secretary, Finance (Budget) Department, Government of Rajasthan, raised the issue of budget heads and suggested that the GoI should decide on both major and minor budget heads for better analysis and uniformity. His discussion further touched on the economic growth opportunities for India which emphasizes the need for equilibrium between industry shifts and environmental focus. Dr. Pinaki sought elaboration on biodiversity as a crucial parameter of climate change. Dr. Kavita Rao asserts that the homogenization of the terms- Climate Change and Biodiversity is not feasible. Ms. Farah Zahir discusses about the importance of considering non-tax revenue and emphasises first to look at the expenditure side and then moving towards the revenue side. Dr. Pinaki expresses his concern to Ms. Supriti Dua about the absence of guidance notes and the effectiveness of different approaches. Ms. Supriti Dua responded that countries are in the early stages of implementing Green Budgeting. The evaluation is being done for ongoing work and observations however the report is not published yet. The effectiveness of various approaches depends on the climate goals and the maturity of the Public Financial Management Information System (PFMIS) of the states. A state official emphasized that states' should be subjected to address their state-specific environmental challenges rather than their contributions to global climate change. Stressing the uniqueness of each state's position, problems, and vision, it was noted that one size does not fit all. Shri A.N. Jha underscored the persisting challenge of integrating the fiscal and environmental systems which is unproblematic from the fiscal side but difficult from the environmental side. In response to a question from Dr. Pratap Ranjan Jena, Ms. Dua acknowledged the necessity of a state-centric approach and readiness to move forward, emphasizing the importance of integrating climate related budgeting with fiscal policy for a medium-term perspective. The discussion concluded with a focus on the intersectionality of fiscal and public financial management with environmental and climate aspects, emphasizing the role of the PFMIS as an enabler for achieving state-level green climate goals.

Day 2: Session 2: Innovations in State Finances

The theme of the second session was "Innovations in State Finances". It was chaired by **Dr. Ashok Lahiri, a Member of the West Bengal Legislative Assembly and a former Chief Economic Adviser to the Government of India**. This session was initiated with the presentation by **Shri Riddhesh Raval, Joint Commissioner of State Tax, Government of Gujarat.** His presentation was on the initiatives taken by the Gujarat State Tax Department in Revenue Augmentation. He discussed various measures employed by the government, such as economic intelligence units, 24x7 Control and Command Centre, and a mobile-based analytical tool named PRIME, to enhance revenue mobilization. He highlighted successful efforts like "Operation AADHAR Mission," which identified 61 bogus firms, and the "Mera Bill, Mera Adhikaar" scheme encouraging consumers to request bills. Responding to the questions raised by Dr. Lahiri about the registration process and invoice matching, Shri Riddhesh replied that there is a single registration application at the centre and state level for CGST and SGST. Further, there is no invoice-matching facility at the moment.

The session was followed by a presentation by **Shri Rohit Gupta, Secretary (Budget), Government of Rajasthan**, on "Next GEN PFM Architecture –Principles and Innovations from Rajasthan." The presentation focused on the evolving space of Public Financial Management in Rajasthan. Some of the key features of the regime are automation of PFM processes reserving manual intervention for exceptional circumstances, transition from traditional physical treasuries to centralised virtual treasuries and harnessing power of emerging technologies and advanced data analytics to facilitate evidence-based decision-making. Some of the important changes highlighted include first in first out in budget expenditures where officials who are more efficient in spending are given preference, prepopulating commitments into the budgeting process in upcoming cycles so that new projects are undertaken considering available resources. Significant incorporation of automation is highlighted in the case of workflow for salary and non-salary bill, employee pension and social security pensions, integrated tax management system and in procurement and inventory management. The Integrated Cash and Debt Management Systems has been set up to manage borrowing requirements and reduce cost of borrowing.

Dr. Lahiri raised queries about the utilization of e-procurement, the incorporation of announcements in the middle of budget cycles, and the transparency of e-tendering in Rajasthan. On Dr. Rao's question of future implications on quality improvement of service delivery, Shri Gupta explained the emphasis on breaking down silos within the government for efficient procurement management and improving service delivery. Dr. Pratap Ranjan Jena, Professor, NIPFP, inquired about the impact of technology involvement for PFM on revenue and capital expenditure while Dr. Sri Hari Nayudu, Economist, NIPFP, asked about the openness of the systems to the audit process. He also mentioned that the Rajasthan Public Procurement Act is full transparency and there is no involvement of any third party.

The session then moved forward with a presentation by **Dr. Sudip Kumar Sinha, Secretary (Finance), the Government of West Bengal** on "Public Financial Management Reforms in West Bengal 2011-12 to 2022-23." The presentation elaborated on the reforms undertaken in three broad categories – revenue, expenditure and cash and debt management. Within revenue, the initiatives elaborated include reforms in registration and centralised land record system to ensure seamless mutation after registration. E-stamping to curb fake non-judicial stamp paper and E-abkari to management the state excise system have been shared as useful initiatives to improve revenue collections. On the expenditure side, introduction and continuous upgradation of IFMIS along with integration of independent external portals has contributed to better management of expenditure as well as expenditure rationalisation. E-tendering and adoption of DBT have resulted in closer monitoring of expenditures. The presentation highlighted the improvements in the fiscal performance of the state and discussed some of the new initiatives being considered.

Dr. Lahiri sought clarification on the differentiation between capital expenditure and capital outlay, the scrapping of the Letter of Credit, and the impact of e-Abgari adoption. On the question raised by Mr. Soh about the improvement in public investment management, Dr. Sinha responded that there have been delays in the implementation of some projects such as for rural infrastructure. Further, there is no mechanism to track the quality of expenditure. Efforts are needed in this matter.

The Forum ended with a vote of thanks by **Dr. R. Kavita Rao, Director, NIPFP**. She thanked all the speakers, the Chairpersons and the participants for making the First State Forum a success and sought support to institutionalise it as an annual event.

OVERVIEW OF STATE FINANCES

3

State of State Finances in India in the Present Decade

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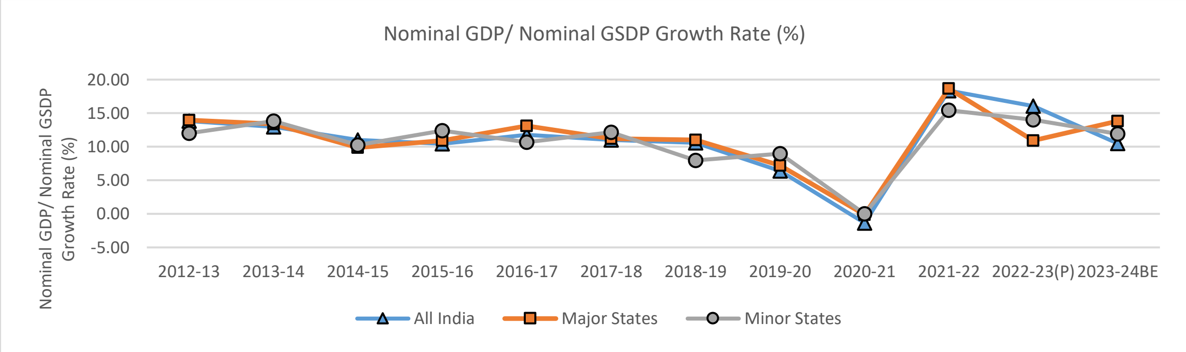
1. Introduction

Indian economy has gone through economic slowdown during 2019-21. Unexpected economic shock in 2019-20 and COVID-19 pandemic in 2020-21 led to fall in economic growth (as measured by nominal GDP) to 6.37 per cent in 2019-20 and -1.36 per cent in 2020-21 from average annual growth rate of 11.7 per cent observed during 2012-19 (Figure 1). In aggregate 18 major states experienced a larger fall in growth rate of aggregate GSDP (nominal) in 2019-20 as compared to 10 minor states. In 2021-22 economic growth improves and improvement in growth rate was higher for major states as compared to minor states. As compared to 2021-22, economic growth in 2022-23(P) falls and the fall in economic growth was sharper for major states as compared to minor states. In aggregate states project a fall in economic growth rate in 2023-24BE as compared to 2022-23(P) which may have impact on fiscal positions of states. In aggregate GSDP of 18 major states and 10 minor states contribute 94 per cent of GDP (nominal) during 2011-23.

After two consecutive years of fiscal stress during 2019-21 (Mukherjee 2023a), state finances in India improve in 2021-22 with the gradual recovery of the Indian economy from the shock of COVID-19 pandemic. To assess the state finances of Indian states, we divide the time period of our analysis (2013-14 to 2021-22) into two sub-periods – 2013-14 to 2016-17 and 2018-19 to 2021-22. We named the first sub-period as pre-GST period and the second sub-period as post-GST period, as India introduced comprehensive Goods and Services Tax (GST) on 1 July 2017. It is to be highlighted that the present paper does not envisage to assess the impact of GST on Indian state finances.[1] For our convenience we have divided the period of our analysis into two sub-periods and named them accordingly. In addition, we also assess the state finances for recent years (i.e., 2022-23RE and 2023-24BE) in this paper. Average annual growth rate of GDP falls to 8.5 per cent during post-GST period from 11.5 per cent during pre-GST period. For major states, average annual growth rate of GSDP falls to 9.2 per cent during post-GST period from 11.8 per cent during pre-GST period. For minor states, average annual growth rate falls to 8.1 per cent during post-GST period from 11.8 per cent during pre-GST period. Economic slowdown during post-GST period has impact on fiscal health of states.

[1] This issue has been discussed elsewhere (e.g., Mukherjee 2023b).

Figure 1: Dynamics of Economic Growth in India during 2011-12 to 2023-24BE



Notes: P-stands for Provisional Estimate, BE- stands for Budget Estimate
Source: Computed by the author based on data compiled from *National Accounts Statistics 2023*[2] and State GSVA/NSVA Database[3] of Ministry of Statistics and Programme Implementation.

Except Odisha, average annual growth rate of nominal GSDP falls during post-GST period as compared to pre-GST period for all other major states. Among minor states, except Meghalaya, average annual growth rate of GSDP falls during post-GST period as compared to pre-GST period. All major states experience higher growth rate of GSDP in 2022-23(P) as compared to average annual growth rate of GSDP during post-GST period. Except Arunachal Pradesh, Manipur and Mizoram, all minor states experience higher growth rate of GSDP in 2022-23(P) as compared to post-GST average annual growth rate. Except Karnataka and Kerala among major states and Manipur and Mizoram among minor states, all states project lower growth rate of GSDP in 2023-24(BE) as compared to 2022-23(P). Therefore, states again project a fall in economic growth rate in 2023-24BE as compared to 2022-23(P) which may have impact on fiscal positions of states.

In the next section we present aggregate as well as state-wise analysis of state finances in India for the current decade. It is followed by conclusions in section three.

2. Results and Discussion

2.1 State of Public Finances of Major States

Table 1 shows that there is a marginal fall in average annual Total Revenue Receipts (TRR) (as % of GSDP) of major Indian states during post-GST period as compared to the pre-GST period. For major states, both the average shares of Own Tax Revenue (OTR) and Own Non-Tax Revenue (ONTR) in GSDP have fallen during the post-GST period as compared to the pre-GST period. The rise in the average annual federal transfers (comprising of states' share in the Union taxes as well as grants-in-aids from the Union government) in GSDP during post-GST period was not enough to compensate the entire fall in the average annual share of Own Revenue Receipts (OTR and ONTR) in GSDP during the post-GST period. This results in fall of average annual share of TRR in GSDP during post-GST period. In the revised estimate of 2022-23, TRR rises by 76 basis point of GSDP as compared to the average annual share of TRR during post-GST period. The sources of rise in the share of TRR in 2022-23RE are rise in the shares of OTR as well as grants-in-aids from the Union government in GSDP. In 2023-24BE, states expect a fall in the

[2] https://www.mospi.gov.in/publication/national-accounts-statistics-2023 (last accessed on 10 October 2023).
[3] https://mospi.gov.in/GSVA-NSVA (last accessed on 10 October 2023).

share of TRR and it will be largely driven by the fall in the share of federal transfers. In 2023-24RE, fall in the grants-in-aids from the Union government is quite expected as there will be no pending GST compensation payments to states after 2022-23. However, the apprehension that states' share in the Union taxes will fall by 11 basis point of GSDP in 2023-24BE as compared to 2022-23RE may be the result of uncertainty associated with growth prospect of 2023-24.

Average annual Revenue Expenditure (REVEX) increases by 58 basis point of GSDP during post-GST period as compared to pre-GST average. Average annual Capital Expenditure (CAPEX) declines by 23 basis point of GSDP during post-GST period as compared to pre-GST period. Fall in the average annual share of expenditure (both REVEX as well as CAPEX) on economic services by 23 basis point of GSDP during post-GST may be a concern for long-run growth of states.

In aggregate, 18 major states project to increase CAPEX by 24 basis point of GSDP in 2023-24BE as compared to 2022-23RE. However, this will be lower than the increase in the CAPEX presented in 2022-23RE as compared to the average annual CAPEX experienced during post-GST period.

Average annual Revenue Deficit (RD) of major states has gone up during post-GST period as compared to the pre-GST period. With the fall in average TRR, states cannot contain REVEX, as a result RD went up by 61 basis point of GSDP during post-GST period as compared to pre-GST period. In 2022-23RE, RD has fallen by 27 basis point from the average annual RD experienced during post-GST period. In 2023-24BE, 18 major states have envisaged to contain RD by 38 basis point of GSDP from the level presented in 2022-23RE. This shows the seriousness of states to contain RD aftermath of two consecutive years of fiscal shocks during 2019-21.

Major states have experienced fall in average annual Fiscal Deficit (FD) by 27 basis point of GSDP during post-GST period as compared to the pre-GST average when adjusted for GST back-to-back loans (hereafter GST loans) from the Union government in lieu of shortfall in the GST compensation cess collection. States received GST loans during 2020-22 and both interest and principle payment liabilities of these loans rest on the Union government which will be serviced from the GST compensation fund. For this purpose the GST compensation cess collection has been extended till 31 March 2026. In estimation of adjusted Fiscal Deficit of states we have taken these loans as revenue of states.

In 2022-23RE, fiscal deficit went up by 65 basis point of GSDP as compared to average annual FD during post-GST period. The rise in the FD in 20222-23RE is largely due to lower base effect, as states received GST loans during 2020-22. In 2023-24BE, states project a fall in FD by 24 basis point of GSDP as compared to 2022-23RE.

Average ratio of Revenue Deficit to Fiscal Deficit went up during post-GST period as compared to the pre-GST period. In 2022-23RE, states present it to 18.26 per cent and in 2023-24BE it is projected to be 7.53 per cent. This shows that states are financing capital expenditures from the fund generated by running fiscal deficit.

Table 1: State of State Finances of 18 Major States in India (as % of GSDP)

Major States	Pre-GST (2013-14 to 2016-17) (A)	Post-GST (2018-19 to 2021-22) (B)	2022-23RE (C)	2023-24BE (D)	B-A	C-B	D-C
Total Revenue Receipts (TRR) (1+2)	**13.09**	**13.05**	**13.81**	**13.73**	-0.03	**0.76**	**-0.07**
1. Tax Revenue (a+b)	**9.95**	**9.67**	**10.17**	**10.41**	**-0.27**	**0.50**	**0.24**
a. Own Tax Revenue	6.63	6.26	6.74	7.08	**-0.37**	0.48	0.34
b. Share in Central Taxes	3.32	3.41	3.43	3.32	0.10	0.02	-0.11
2. Non-Tax Revenue (c+d)	**3.14**	**3.38**	**3.63**	**3.32**	**0.24**	**0.25**	**-0.31**
c. Own Non-Tax Revenue	1.18	1.09	1.03	1.15	-0.09	-0.06	0.13
d. Grants-in-Aids from the Centre	1.96	2.29	2.61	2.17	**0.33**	0.32	-0.44
3. Revenue Expenditure (e+f+g+h)	**13.36**	**13.94**	**14.42**	**13.97**	**0.58**	**0.49**	**-0.46**
e. General Services	4.47	4.86	4.83	4.85	0.39	-0.03	0.02
f. Social Services	5.33	5.49	5.90	5.68	0.16	0.41	-0.21
g. Economic Services	*3.16*	*3.15*	*3.27*	*3.01*	*-0.01*	*0.12*	*-0.26*
h. Grants-in-Aids to Local Bodies	0.39	0.43	0.43	0.43	0.04	-0.01	0.00
4. Capital Expenditure (i+j+k)	**2.34**	**2.11**	**2.51**	**2.75**	**-0.23**	**0.40**	**0.24**
i. General Services	0.12	0.10	0.14	0.16	-0.02	0.04	0.02
j. Social Services	0.50	0.52	0.77	0.89	0.02	0.25	0.12
k. Economic Services	*1.71*	*1.49*	*1.60*	*1.70*	*-0.22*	*0.11*	*0.10*
5. Recovery of Loans & Advances	0.10	0.17	0.04	0.07	0.06	-0.12	0.03
6. Misc. Capital Receipts	0.00	0.02	0.01	0.09	0.01	-0.01	0.08
7. Disbursement of Loans & Advances	0.50	0.22	0.30	0.30	-0.29	0.09	0.00
8. Revenue Deficit (3-1)	**0.27**	**0.88**	**0.62**	**0.24**	**0.61**	**-0.27**	**-0.38**
9. Fiscal Deficit [(3+4+7)-(1+5+6)]	**3.01**	**3.02**	**3.38**	**3.13**	**0.02**	**0.35**	**-0.24**
10. Adjusted Fiscal Deficit (9-13)	**3.01**	**2.73**	**3.38**	**3.13**	**-0.27**	**0.65**	**-0.24**
11. Primary Deficit (10-12)	1.28	0.82	1.56	1.32	-0.46	0.74	-0.24
12. Interest Payment & Servicing of Debt	1.73	1.91	1.81	1.81	0.18	-0.09	0.00
13. GST Compensation B2B Loans	0.00	0.29	0.00	0.00	0.29	-0.29	0.00

Major States	Pre-GST (2013-14 to 2016-17) (A)	Post-GST (2018-19 to 2021-22) (B)	2022-23RE (C)	2023-24BE (D)	B-A	C-B	D-C
14. Revenue Deficit (as % of Fiscal Deficit)	9.21	26.20	18.26	7.53	**16.99**	-7.94	-10.73

2.2 State of Public Finances of Minor States

During post-GST period, together 10 minor states have experienced average annual TRR higher than pre-GST average by 83 basis point of GSDP (Table 2). This is largely backed by increase in the average annual share of states' in the Union taxes by 1.08 per cent of GSDP during post-GST period as compared to the pre-GST period. Average annual share of states' own revenue receipts (OTR and ONTR) rises by only 21 basis point of GSDP during post-GST period as compared to pre-GST period. Fall in the average annual share of grants-in-aids from the Union government by 46 basis point of GSDP during post-GST period as compared to pre-GST period counter balance the gains in Tax Revenue and Own NTR during the post-GST period.

In 2022-23RE, TRR increases by 3.77 per cent of GSDP as compared to average annual share of TRR in GSDP during post-GST period. This is largely driven by increase in the grants-in-aids from the Union government by 2.98 per cent of GSDP and increase in Tax Revenue by 83 basis point of GSDP as compared to average annual share during post-GST period. However, realisation of such optimistic revenue requires validation of public finance data of 2022-23RE with actual (audited) statement of accounts for 2022-23.

In 2023-24BE, together 10 minor states set a lower TRR target by 1.94 per cent of GSDP as compared to 2022-23RE, and the major fall in the revenue is expected to come from grants-in-aids from the Union government as compared to 2022-23RE. States also expect a fall in the share of the Union taxes in 2023-24BE as compared to 2022-23RE. Together 10 minor states project a fall in the federal transfer by 2.26 per cent of GSDP (1.98% in grants-in-aids and 0.28% in the share of the Union taxes) in 2023-24BE as compared to 2022-23RE.

Both revenue and capital expenditures as percentage of GSDP are higher for minor states as compared to major states. Minor states also receive higher federal transfers (both in the share of Union taxes as well as grants-in-aids) as percentage of GSDP as compared to major states. For minor states, average annual revenue expenditure went up by 1.21 per cent of GSDP during post-GST period as compared to pre-GST period. Increase in average annual share of REVEX in GSDP was higher than the increase in TRR during post-GST period which results in increasing revenue deficit during post-GST period. In 2022-23RE, substantial increase in revenue expenditure (by 4.62% of GSDP) reported by minor states as compared to post-GST annual average. A large part of the increase in REVEX is backed by the increase in the share of expenditures on social services and general services (Table 2). In 2023-24BE, REVEX is expected to fall by 3.25 per cent of GSDP as compared to 2022-23RE. Sudden spurt in REVEX in 2022-23RE demands validation of data of 2022-23RE with audited statements of accounts for 2022-23.

During post-GST period average annual share of capital expenditure in GSDP has gone up by 79 basis point as compared to average annual share during pre-GST period. It is largely driven by increase in CAPEX on economic services. In 2022-23RE, the share of CAPEX in GSDP has gone up by 1.7 per cent of GSDP as compared to average annual share during post-GST period. However, these states expect a fall in the share of CAPEX by 76 basis point of GSDP in 2023-24BE as compared to 2022-23RE and it will be largely driven by fall in the CAPEX on economic services.

On average during pre- as well as post-GST periods, together 10 minor states experienced revenue surplus. In 2022-23RE, these states present a revenue deficit of 0.19 per cent of GSDP. Again in 2023-24BE, together minor states project revenue surplus of 1.12 per cent of GSDP. Despite running revenue surplus during pre- and post-GST periods, states experienced fiscal deficits (adjusted). States present Fiscal Deficit of 5.9 per cent of GSDP in 2022-23RE and 3.8 per cent of GSDP in 2023-24BE. Rising fiscal deficits among minor states could be a concern during post-GST period, though a large part of it goes to finance CAPEX of the states.

Table 2: State of State Finances of 10 Minor States in India (as % of GSDP)

Minor States	**Pre-GST (2013-14 to 2016-17) (A)**	**Post-GST (2018-19 to 2021-22) (B)**	**2022-23RE (C)**	**2023-24BE (D)**	**B-A**	**C-B**	**D-C**
Total Revenue Receipts (TRR) (1+2)	**20.96**	**21.80**	**25.56**	**23.62**	**0.83**	**3.77**	**-1.94**
1. Tax Revenue (a+b)	**10.84**	**12.03**	**12.87**	**12.93**	**1.19**	**0.83**	**0.06**
a. Own Tax Revenue	4.70	4.81	5.18	5.52	0.11	0.37	0.34
b. Share in Central Taxes	6.14	7.22	7.69	7.41	1.08	0.47	-0.28
2. Non-Tax Revenue (c+d)	**10.12**	**9.76**	**12.69**	**10.69**	**-0.36**	**2.93**	**-2.00**
c. Own Non-Tax Revenue	1.36	1.46	1.41	1.39	0.10	-0.05	-0.02
d. Grants-in-Aids from the Centre	8.76	8.30	11.28	9.30	**-0.46**	2.98	-1.98
3. Revenue Expenditure (e+f+g+h)	**19.92**	**21.13**	**25.75**	**22.50**	**1.21**	**4.62**	**-3.25**
e. General Services	7.28	8.23	9.38	8.60	0.96	1.15	-0.78
f. Social Services	7.96	8.23	10.99	9.10	0.27	2.76	-1.88
g. Economic Services	4.37	4.37	5.02	4.42	0.00	0.66	-0.60
h. Grants-in-Aids to Local Bodies	0.31	0.30	0.36	0.38	-0.01	0.06	0.02
4. Capital Expenditure (i+j+k)	**3.22**	**4.02**	**5.72**	**4.96**	**0.79**	**1.70**	**-0.76**
i. General Services	0.22	0.33	0.78	0.88	0.11	0.45	0.10
j. Social Services	0.85	1.01	1.49	1.31	0.16	0.48	-0.19
k. Economic Services	2.16	2.68	3.45	2.77	0.52	0.77	-0.68

Minor States	Pre-GST (2013-14 to 2016-17) (A)	Post-GST (2018-19 to 2021-22) (B)	2022-23RE (C)	2023-24BE (D)	B-A	C-B	D-C
5. Recovery of Loans & Advances	0.04	0.08	0.02	0.03	0.04	-0.06	0.01
6. Misc. Capital Receipts	0.04	0.00	0.05	0.05	-0.04	0.05	0.00
7. Disbursement of Loans & Advances	0.31	0.10	0.06	0.04	-0.22	-0.04	-0.02
8. Revenue Deficit (3-1)	**-1.05**	**-0.67**	**0.19**	**-1.12**	**0.38**	**0.86**	**-1.31**
9. Fiscal Deficit [(3+4+7)-(1+5+6)]	2.41	3.36	5.90	3.80	0.95	2.54	-2.10
10. Adjusted Fiscal Deficit (9-13)	**2.41**	**3.04**	**5.90**	**3.80**	**0.63**	**2.86**	**-2.10**
11. Primary Deficit (10-12)	0.54	1.04	3.75	1.69	0.50	2.71	-2.06
12. Interest Payment & Servicing of Debt	1.87	2.00	2.15	2.11	0.13	0.15	-0.04
13. GST Compensation B2B Loans	0.00	0.32	0.00	0.00	0.32	-0.32	0.00
14. Revenue Deficit (as % of Fiscal Deficit)	-57.92	-23.97	3.17	-29.44	33.96	27.14	-32.60

2.3 Drivers of Change in Own Tax Revenue Profile of States

As we have noticed in Table 1 that there is a fall in average annual share of OTR in GSDP for major states during post-GST period as compared to pre-GST period by 37 basis point of GSDP. In Table 3 we try to identify the source(s) of this fall. Table 3 shows that for major states, average share of all sources of OTR have fallen during post-GST period as compared to the same during pre-GST period. The largest fall is observed in 'taxes on commodities'. Average annual share of 'taxes on commodities' fall by 32 basis point of GSDP during post-GST period as compared to the pre-GST period. It is worthwhile to explore the specific source(s) of this fall in tax revenue within the components of 'taxes on commodities'. Both in 2022-23RE and 2023-24BE, increase in the share of 'taxes on property' and 'taxes on commodities' are presented whereas the 'share of taxes on income' remains unchanged. Together 18 major states present 40 basis point of GSDP increase in 'taxes on commodities' in 2023-23RE as compared to post-GST average share. In 2023-24BE, the share of 'taxes on commodities' is projected to rise by 28 basis point of GSDP as compared to 2022-23RE.

For minor states there is a rise in the average annual share of 'taxes on commodities' in GSDP during post-GST period as compared to pre-GST period. Since the shares of 'taxes on income' and 'taxes on property' fall during post-GST period, overall OTR increase by only 11 basis point of GSDP. Together minor states present 31 basis point of GSDP increase in 'taxes on commodities' in 2023-23RE as compared to post-GST average share. In 2023-24BE, the share of 'taxes on commodities' is projected to rise by 31 basis point as compared to 2022-23RE. It will be worthwhile to see the changes in the revenue profile of states from 'taxes on commodities (or goods and services)' between pre- and post-GST periods.

Table 3: Average Annual Source-wise Statement of Own Tax Revenue Mobilisation of States (% of GSDP)

Major States	Pre-GST (2013-14 to 2016-17) (A)	Post-GST (2018-19 to 2021-22) (B)	2022-23RE (C)	2023-24BE (D)	B-A	C-B	D-C
Major States							
Taxes on Income[a]	0.04	0.03	0.03	0.03	-0.01	0.00	0.00
Taxes on Property[b]	0.82	0.77	0.86	0.92	-0.04	0.08	0.07
Taxes on Commodities[c]	**5.77**	**5.46**	**5.86**	**6.13**	**-0.32**	**0.40**	**0.28**
Own Tax Revenue	**6.63**	**6.26**	**6.74**	**7.08**	**-0.37**	**0.48**	**0.34**
Minor States							
Taxes on Income[a]	0.06	0.03	0.03	0.03	-0.03	0.00	0.00
Taxes on Property[b]	0.24	0.21	0.28	0.30	-0.03	0.07	0.03
Taxes on Commodities[c]	4.39	4.57	4.87	5.19	**0.17**	0.31	0.31
Own Tax Revenue	**4.70**	**4.81**	**5.18**	**5.52**	**0.11**	**0.37**	**0.34**

Notes: a-Taxes on Income include 'Agricultural Income Tax', 'Hotel Receipts Tax' and 'Taxes on Profession, Trades, Callings and Employment', b- Taxes on property include 'Land Revenue', 'Stamps and Registration Fees' and 'Urban Immovable Property Tax', c-Taxes on Commodities include 'State Good & Service Tax (SGST)', 'Integrated Goods Services Tax (IGST)', 'State Excise', 'Sales Tax (including Central Sales Tax)', 'Taxes on Vehicles', 'Taxes on Goods and Passengers', 'Taxes and Duties on Electricity', 'Other taxes and Duties (excluding 0045-901)'.

Table 4 shows that for major states, average annual share of some pre-GST taxes on commodities (or goods and services) fall during post-GST period as compared to pre-GST period. Since GST subsumes taxes from state sales tax/VAT (0040), taxes on passengers & goods (0042-106-Tax on entry of goods into Local Areas) and other taxes on commodities and services (0045), it is likely that there will be fall in revenue mobilisation for tax heads from where tax components are subsumed into GST. This is evident from Table 4 that for major states the increase in the share of new revenue stream (as presented as 'Total GST' in Table 4) cannot fully compensate the fall in the share of revenue in original revenue streams during post-GST period. This results in fall in the total taxes on commodities and services during post-GST period. If we consider the GST compensation receipts (both from GST compensation fund as well as GST loans) as own revenue of states, there will be marginal increase in average annual share of 'taxes on commodities' (by 47 basis point of GSDP) in GSDP during post-GST period as compared to pre-GST period (Table 4). This analysis shows that GST compensation payments helped states to sustain the revenue stream from taxes on goods and services which is subsumed into GST. However, there was no windfall gains for states from the GST compensation receipts.

For minor states, except for state sales tax/VAT, taxes on passengers and goods and other taxes on commodities and services, average annual share in GSDP has gone up for other taxes during post-GST period as compared pre-GST period. Overall there is an increase in the share of taxes on goods and services in GSDP during post-GST period as compared to the pre-GST period. In addition some minor states have received GST compensation, as a result overall share of taxes on goods and services increases by 1.03 percent of GSDP during post-GST period as compared to the pre-GST period.

Table 4: Average Annual Source-wise Statement of State Own Taxes on Commodities and Services (as % of GSDP)

Major States	Pre-GST (2013-14 to 2016-17) (A)	Post-GST (2018-19 to 2021-22) (B)	2022-23RE (C)	2023-24BE (D)	B-A	C-B	D-C
State GST (SGST)	0.00	2.50	2.81	2.98	2.50	0.31	0.17
IGST	0.00	0.02	0.00	0.00	0.02	-0.02	0.00
Total GST	**0.00**	**2.52**	**2.81**	**2.98**	**2.52**	**0.29**	**0.17**
Sales Tax	**4.19**	**1.52**	**1.56**	**1.59**	**-2.66**	**0.03**	**0.03**
State Excise	0.76	0.83	0.89	0.94	0.07	0.06	0.05
Taxes on Vehicles	0.36	0.34	0.36	0.38	-0.02	0.02	0.02
Taxes on Passengers & Goods	**0.17**	**0.01**	**0.01**	**0.01**	**-0.17**	**0.00**	**0.00**
Electricity Duty	0.22	0.21	0.22	0.23	-0.01	0.00	0.01
Other Taxes	**0.06**	**0.01**	**0.01**	**0.01**	**-0.05**	**0.00**	**0.00**
Total (Taxes on Commodities and Services)	**5.77**	**5.46**	**5.86**	**6.13**	**-0.32**	0.40	0.28
GST Compensation from GST Compensation Fund	0.00	0.50			0.50		
GST Compensation as Back-to-Back Loans	0.00	0.29			0.29		
Total GST Compensation	**0.00**	**0.79**			**0.79**		
Minor States	**Pre-GST (A)**	**Post-GST (B)**	**2022-23RE (C)**	**2023-24BE (D)**	**B-A**	**C-B**	**D-C**
State GST	0.00	2.34	2.60	2.76	2.34	0.27	0.16
IGST	0.00	0.04	0.10	0.10	0.04	0.06	0.00
Total GST	**0.00**	**2.38**	**2.70**	**2.86**	**2.38**	**0.32**	**0.16**
Sales Tax	**3.24**	**1.04**	**0.99**	**1.04**	**-2.20**	**-0.05**	**0.05**
State Excise	0.63	0.74	0.72	0.74	0.11	-0.01	0.02
Taxes on Vehicles	0.21	0.26	0.30	0.30	0.05	0.04	0.01
Taxes on Passengers & Goods	**0.15**	**0.01**	**0.01**	**0.01**	**-0.13**	**-0.01**	**0.00**
Electricity Duty	0.08	0.08	0.07	0.10	0.00	-0.01	0.02
Other Taxes	0.09	0.06	0.08	0.13	-0.03	0.02	0.05
Total (Taxes on Commodities and Services)	**4.39**	**4.57**	**4.87**	**5.19**	**0.17**	0.31	0.31
GST Compensation from GST Compensation Fund	0.00	0.54			0.54		
GST Compensation as Back-to-Back Loans	0.00	0.32			0.32		
Total GST Compensation	**0.00**	**0.86**			**0.86**		

2.4 Adjusted Grants-in-Aids from the Union Government

In Table 1, we observe that average annual share of grants-in-aids from the Union government increases by 33 basis point of GSDP during post-GST period as compared to pre-GST period. It is to be highlighted that during GST transition period (1 July 2017 to 30 June 2022) states receive GST compensation from the GST compensation fund on account of shortfall in State GST (SGST) collection from the projected SGST collection. States book the receipts of GST compensations under Grants-in-Aids from the Union government (under the budget head 1601-08-114). If we adjust the overall grants-in-aids receipts (broad budget head 1601) of states by taking out GST compensation receipts, the share of grants-in-aids in GSDP falls (Table 4). Therefore, the shares of grants-in-aids in GSDP reported in Table 1 & 2 changes. For major states, average annual share of adjusted grants-in-aids in GSDP falls by 17 basis point during post-GST period as compared to pre-GST period. If we consider GST compensation receipts (from all sources) as states' OTR, annual average share of OTR in GSDP increases by 42 basis point (-0.37+0.79) of GSDP during post-GST period as compared to pre-GST period.

Table 5: Average Annual Statement of Grants-in-Aids from the Centre (% of GSDP)

Major States	**Pre-GST (2013-14 to 2016-17) (A)**	**Post-GST (2018-19 to 2021-22) (B)**	**B-A**
Grants-in-Aids from the Centre	1.96	2.29	0.33
GST Compensation from Compensation Fund (GSTCCF)	0.00	0.50	0.50
Grants-in-Aids without GSTCCF	**1.96**	**1.79**	**-0.17**
Minor States	**Pre-GST (2013-14 to 2016-17) (A)**	**Post-GST (2018-19 to 2021-22) (B)**	**B-A**
Grants-in-Aids from the Centre	8.76	8.30	-0.46
GST Compensation from Compensation Fund (GSTCCF)	0.00	0.54	0.54
Grants-in-Aids without GSTCCF	**8.76**	**7.76**	**-1.00**

2.5 Adjusted Fiscal Deficit of States

During 2020-22 states received GST compensation as back-to-back loans from the Union government. States booked the receipts of these loans under 'Loans and Advances from the Union government' (under the budget head 6004-09-101/106 or 6004-08-101). Unlike GST compensation from the GST compensation fund which is accounted under the grants-in-aids from the Union government and already taken into account to derive fiscal deficits of states, GST compensation receipts as back-to-back loans is often not adjusted (or accounted as states' revenue) to derive fiscal deficit numbers of states. Not adjusting GST loans leads to over estimation of fiscal deficits of states for 2020-21 and 2021-22. In Table 6 we present adjusted fiscal deficits of states.

Out of 18 major states, 9 states experienced fall in average annual FD during post-GST period as compared to pre-GST period. The largest fall in FD observed for Punjab and it is followed by Uttar Pradesh, Odisha, Jharkhand, and Rajasthan. The largest increase in FD observed for Tamil Nadu and it is followed by Madhya Pradesh, Karnataka and Chhattisgarh. Overall FD of major states fall by 27 basis point of GSDP during post-GST period as compared to pre-GST annual average. We observe 65 basis point of GSDP rise in FD for major states in 2022-23RE**.** The largest rise in FD is observed for Bihar (6.08% of GSDP) followed by Odisha, Goa, Uttar Pradesh and Punjab. To validate the fiscal deficits of states presented in the revised estimate of 2022-23, we derive fiscal deficits of states based on Monthly Key Indicator (MKI) database of the Comptroller and Auditor General (CAG) of India and present it as Provisional Estimate of 2022-23 (PE) in Table 6. We also present key indicators of state finances for 2022-23RE vis-à-vis 2022-23PE in Appendix Table A.1. We see that except own non-tax revenue of major states and revenue deficit of minor states values of all indicators are higher in 2022-23RE as compared to 2022-23PE. Revenue deficit of minor states exceeds revised estimate of 2022-23 in 2022-23PE whereas own NTR of major states remains unchanged between RE and PE of 2022-23.

As compared to post-GST annual average, overall FD of major states increases by only 4 basis point of GSDP in 2022-23PE. In comparison to 2022-23RE, overall FD of major states is lower in 2022-23PE. In 2023-24BE, overall FD of major states is expected to increase by 36 basis point of GSDP as compared to 2022-23PE.

Out of 10 minor states, 5 states (Assam, Himachal Pradesh, Meghalaya, Tripura and Uttarakhand) have received GST loans. For others either there was no shortfall in SGST collection or GST compensation received from the GST compensation fund was enough to compensate for the shortfall in SGST collection. Together average annual FD of 10 minor states went up by 63 basis point of GSDP during post-GST period as compared to pre-GST period**.** Together these states observe increase in FD by 2.86 per cent of GSDP in 2022-23RE from post-GST annual average. As compared to post-GST annual average, overall FD of minor states increases by 1.81 per cent of GSDP in 2022-23PE. Fiscal deficits of states are higher in 2022-23RE as compared to 2022-23PE by 1.05 per cent of GSDP. In 2023-24BE, these states together aim to reduce FD by 1.05 per cent of GSDP as compared to 2022-23PE.

Table 6: Average Annual Fiscal Deficit (Adjusted) (% of GSDP)

State	Pre-GST (A)	Post-GST (B) (Adj.)	2022-23RE (C)	2022-23PE (D)	2023-24BE (E)	B-A	C-B	D-B	E-D
Andhra Pradesh	4.52	3.95	3.62	3.90	3.77	-0.57	-0.32	-0.04	-0.14
Bihar	3.14	3.15	**9.23**	**12.16**	2.98	0.01	**6.08**	**9.01**	-9.18
Chhattisgarh	2.51	2.92	3.17	1.01	2.99	0.41	0.25	-1.91	1.98
Goa	2.49	2.75	4.86		4.31	0.26	**2.12**	-2.75	4.31
Gujarat	1.98	1.43	1.48	0.56	1.75	-0.55	0.05	-0.87	1.19
Haryana	4.00	3.35	3.29	3.12	2.96	-0.65	-0.06	-0.23	-0.16
Jharkhand	3.47	2.31	2.23	1.37	2.76	-1.16	-0.08	-0.94	1.38
Karnataka	2.11	2.69	2.73	1.71	2.18	0.58	0.04	-0.98	0.48
Kerala	3.66	3.73	3.61	2.51	3.50	0.07	-0.12	-1.22	0.99
Madhya Pradesh	2.87	3.49	3.58	3.28	4.02	0.62	0.09	-0.20	0.73
Maharashtra	1.64	1.71	2.69	1.91	2.46	0.07	0.99	0.20	0.56
Odisha	1.95	0.65	2.82	1.68	2.99	-1.30	**2.17**	1.03	1.31
Punjab	5.63	2.86	4.93	4.59	4.98	-2.77	2.07	1.73	0.39
Rajasthan	5.25	4.14	4.33	3.48	3.98	-1.11	0.19	-0.66	0.50
Tamil Nadu	2.94	3.75	3.15	3.06	3.44	0.81	-0.60	-0.69	0.38

State	Pre-GST (A)	Post-GST (B) (Adj.)	2022-23RE (C)	2022-23PE (D)	2023-24BE (E)	B-A	C-B	D-B	E-D
Telangana	2.60	3.79	3.82	2.45	4.06	1.19	0.03	-1.34	1.62
Uttar Pradesh	3.80	1.52	3.60	2.98	3.48	-2.28	**2.08**	1.46	0.50
West Bengal	3.29	3.22	3.97	3.16	3.83	-0.07	0.75	-0.06	0.67
Major States	**3.01**	**2.73**	**3.38**	**2.77**	**3.13**	**-0.27**	**0.65**	**0.04**	**0.36**
Arunachal Pradesh	0.74	4.48	6.99	4.58	6.63	3.74	2.51	0.10	2.05
Assam*	1.50	3.34	8.15	5.95	3.70	1.84	4.81	2.61	-2.25
Himachal Pradesh*	3.71	2.47	6.39	6.14	4.61	-1.23	3.91	3.66	-1.53
Manipur	1.49	4.25	6.88	4.57	6.11	2.77	2.63	0.32	1.55
Meghalaya*	2.66	5.51	4.36	6.23	3.41	2.85	-1.15	0.71	-2.82
Mizoram	2.69	3.92	7.22	9.13	3.14	1.22	3.31	5.21	-5.99
Nagaland	1.97	3.52	5.47	18.12	2.82	1.55	1.95	14.60	-15.30
Sikkim	1.16	4.55	4.44	4.45	4.67	3.39	-0.10	-0.09	0.22
Tripura*	3.59	2.78	3.10	1.50	4.83	-0.82	0.32	-1.28	3.34
Uttarakhand*	2.91	1.96	2.68	0.91	2.72	-0.95	0.72	-1.05	1.80
Minor States	**2.41**	**3.04**	**5.90**	**4.85**	**3.80**	**0.63**	**2.86**	**1.81**	**-1.05**

Notes: *-received GST back-to-back loans during 2020-22

In three major states (viz., Madhya Pradesh, Tamil Nadu and Telangana) post-GST average annual FD exceeds 3 per cent of GSDP as compared to pre-GST average of less than 3 per cent (Table 7). Jharkhand, Punjab and Uttar Pradesh have reduced average annual FD to less than 3 per cent of GSDP during post-GST period as compared to pre-GST annual average exceeding 3 per cent of GSDP. For Andhra Pradesh, Bihar, Haryana, Kerala, Rajasthan and West Bengal average annual FD exceeds 3 per cent of GSDP in both the periods. In 7 minor states (viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Sikkim) average annual FD exceeds 3 per cent of GSDP during post-GST period as compared to pre-GST average of less than 3 per cent. Himachal Pradesh and Tripura have reduced their average annual FD to less than 3 per cent of GSDP during post-GST period from pre-GST average annual FD greater than 3 per cent. This analysis shows that different states have faced different challenges in public finance management during pre- and post-GST periods.

Table 7: Changing Fiscal Deficits of Indian States (as % of GSDP)

Category of States	Fiscal Deficit	Pre-GST	Post-GST	States
Major States	Increased	<3%	>3%	Madhya Pradesh, Tamil Nadu, Telangana
	Reduced	>3%	<3%	Jharkhand, Punjab, Uttar Pradesh
	Exceeds 3%	>3%	>3%	Andhra Pradesh, Bihar, Haryana, Kerala, Rajasthan, West Bengal
	below 3%	<3%	<3%	Chhattisgarh, Goa, Gujarat, Karnataka, Maharashtra, Odisha
Minor States	Increased	<3%	>3%	Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim

Category of States	Fiscal Deficit	Pre-GST	Post-GST	States
	Reduced	>3%	<3%	Himachal Pradesh, Tripura
	Exceeds 3%	>3%	>3%	--
	below 3%	<3%	<3%	Uttarakhand

2.6 State of Public Debt of Indian States

As we have discussed earlier, states have booked GST loans as "Loans and Advances from the Central Government". Since there is no liability of these loans rest on states, proceeds of these loans cannot be considered as public debt of states.[4] So, we have adjusted public debt of states after taking out the amount of these loans received in 2020-21 and 2021-22.

Figure 2 shows that for major states in aggregate public debt has gone up during 2014-15 to 2016-17 and it remains stable during 2017-18 to 2018-19, and thereafter it exceeds 20 per cent of GSDP since 2019-20. The rise in public debt since 2015-16 may be a result of *Ujwal DISCOM Assurance Yojana (UDAY)* scheme introduced in November 2015 to provide debt relief to public power Distribution Companies (DISCOM).The scheme aims to clean up the balance sheet of DISCOMs by taking over 75 per cent of the outstanding debt (as on 30 September 2015) in two tranches - 50 per cent in 2015-16 and 25 per cent in 2016-17 - by the participating state governments and free the credit blocked by creditors (mostly Public Sector Banks). During 2019-21, states faced fiscal shocks due to unexpected economic slowdown in 2019-20 and COVID-19 pandemic in 2020-21. With gradual recovery of the economy from the shock towards the end of 2020-21, the second wave of the pandemic strikes during Q1 of 2021-22. Together major states are yet to recover from the fiscal shock experienced during 2019-21 (Mukherjee 2023). GST loans helped these states to reduce public debt by 53 basis point of GSDP in 2020-21 and 1.09 per cent of GSDP in 2021-22. Barring three years (i.e., 2019-22), aggregate public debt of major states was lower than 20 per cent of GSDP during 2011-22.

Figure 3 shows that aggregate public debt of minor states is increasing since 2014-15 and it crosses 20 per cent of GSDP in 2019-20. Except during 2019-22, aggregate public debt of minor states was lower than 20 per cent of GSDP during 2011-22. The rise in public debt since 2015-16 could be due to adoption of UDAY scheme by some minor states. Like major states, minor states also face fiscal shock during 2019-21 and all minor states have not recovered from the shock yet (Mukherjee 2023). The GST loans helped minor states to reduce aggregate public debt by 55 basis point of GSDP in 2020-21 and 1.21 per cent of GSDP in 2021-22.

[4] Public Debt is comprising of Internal Debt of the State Government (6003) and Loans and Advances from Central Government (6004). Internal Debt of the State Government is comprising of Market Loans (6003-101) and Other Loans.

Figure 2: State of Public Debt of Major States (% of GSDP)

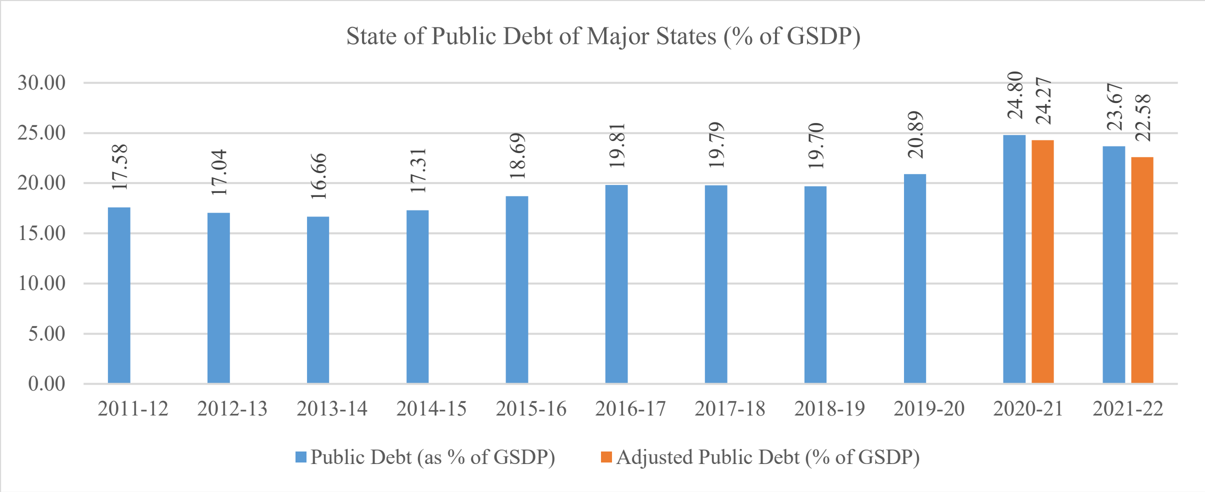


Figure 3: State of Public Debt of Minor States (% of GSDP)

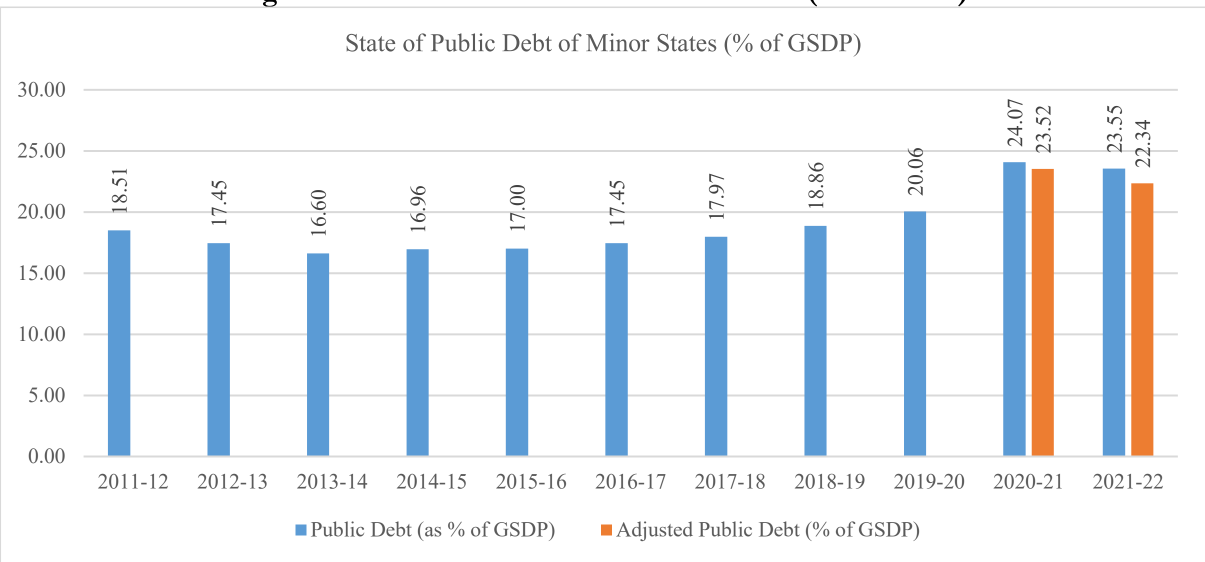


Figure 4 shows that during 2011-17, for major states aggregate public debt of Non-UDAY states was higher than UDAY states. Since 2014-15 difference in aggregate public debt between Non-UDAY and UDAY states is going down and public debt of UDAY states surpasses non-UDAY states in 2017-18. For Non-UDAY states public debt has also risen in 2015-16 and thereafter it remains stable during 2015-19. For UDAY states, aggregate public debt is rising since 2014-15. Therefore, adoption of UDAY scheme cannot be the only reason for rising aggregate public debt of major states since 2015-16. Except for three years (2019-22), aggregate public debt of both UDAY and Non-UDAY states remain lower than 20 per cent of GSDP during 2011-22.

Figure 5 shows that aggregate public debt of Non-UDAY minor states remains higher than UDAY minor states during 2011-22. For minor states aggregate public debt is continuously increasing since 2016-17 and it exceeds 20 per cent of GSDP since 2019-20.

Figure 4: Status of Average Annual Public Debt of Major States (% of GSDP)

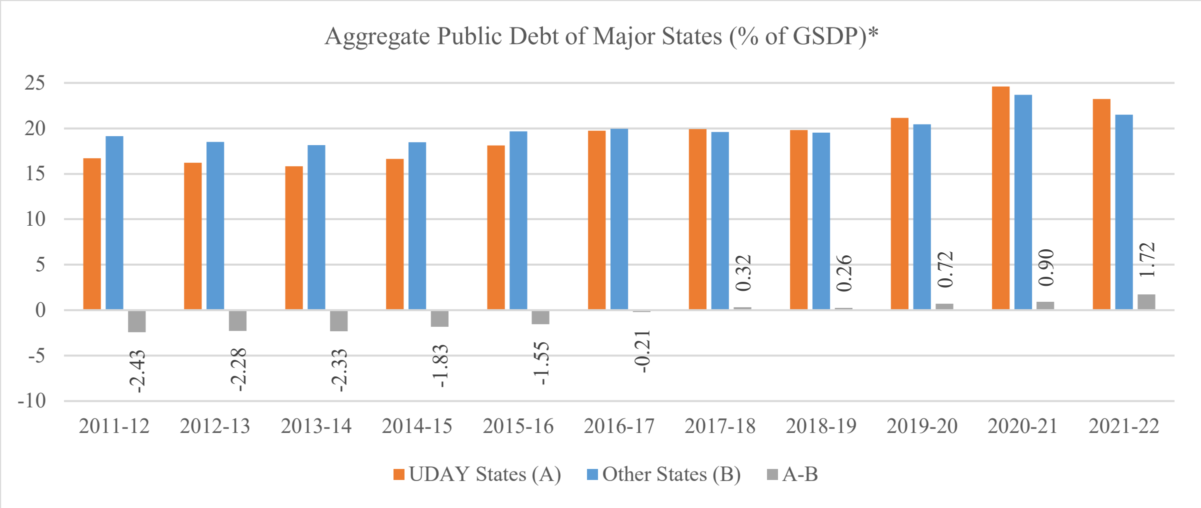


Figure 5: Status of Average Annual Public Debt of Minor States (% of GSDP)

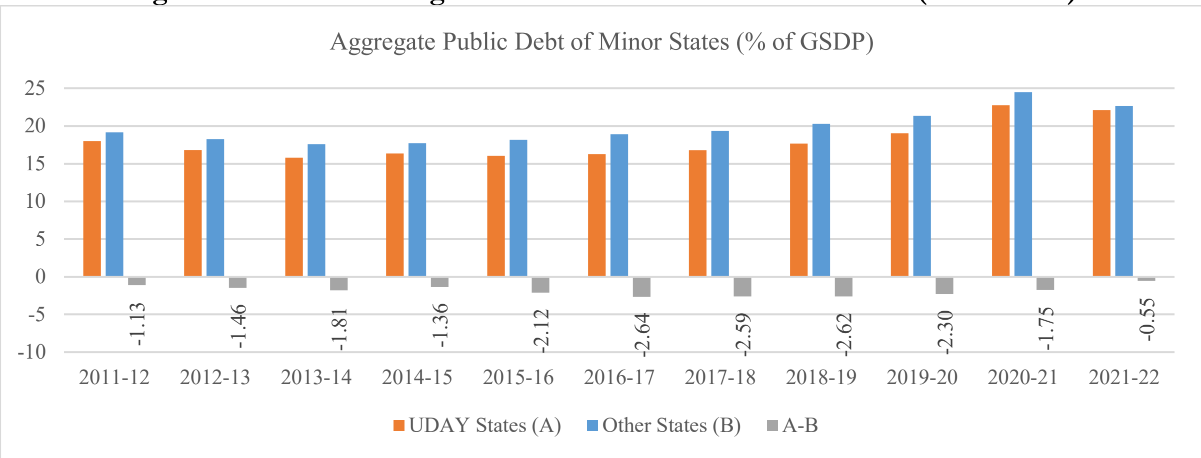


Figure 6 shows that number of major states having public debt exceeding 20 per cent of GSDP has gone up since 2015-16. During 2020-21 public debt situation further deteriorates. Since 2018-19, number of minor states having public debt exceeding 20 per cent of GSDP has gone up. Public debt of five major states is exceeding 20 per cent GSDP consistently during the period of our analysis (viz., Andhra Pradesh, Bihar, Punjab, Uttar Pradesh[5] and West Bengal) (Table 8). Except for a few years (2011-12 and 2016-18), public debt of Goa is also exceeding 20 per cent of GSDP during 2011-22. Since 2015-16, public debt of another 3 states exceeds 20 per cent of GSDP (viz., Haryana, Jharkhand[6] and Rajasthan). For Kerala, public debt exceeds 20 per cent of GSDP since 2017-18. In recent years, public debt of another three states exceeds 20 per cent of GSDP (viz., Madhya Pradesh, Tamil Nadu, Telangana). Therefore, containing public debt to below 20 per cent of GSDP would be a challenge for many states in coming years.

Public debt of three minor states (viz., Himachal Pradesh, Manipur and Nagaland) is consistently higher than 20 per cent of GSDP during 2011-22. Public debt of Uttarakhand since 2018-19, public debt of Arunachal Pradesh and Tripura since 2019-20 and the same for Mizoram and Sikkim since

[5] Except during 2013-15.
[6] Except in 2018-19

2020-21 is higher than 20 per cent of GSDP. This shows that more minor states are exceeding 20 per cent GSDP limit in public debt in recent years.

Figure 6: Number of States having Public Debt > 20% of GSDP

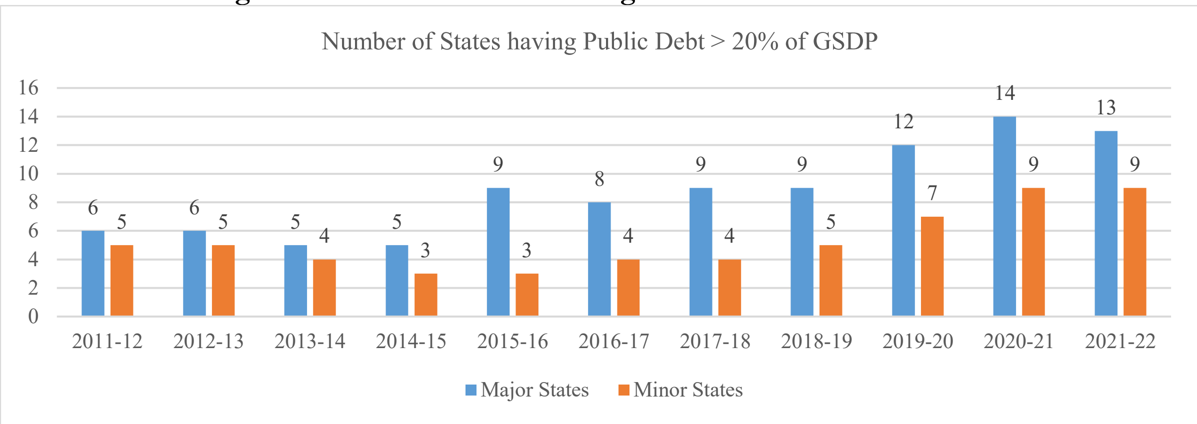


Table 8: Status of Public Debt (adjusted) of Indian States (% of GSDP)

State	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh	--	--	--	20.86	20.65	21.90	21.47	22.16	24.48	28.01	26.82
Bihar	20.63	20.35	20.27	21.74	23.90	25.22	24.47	23.89	25.47	30.55	30.48
Chhattisgarh	6.76	6.59	7.23	9.07	11.57	11.56	13.80	15.97	18.32	21.16	18.41
Goa	16.22	21.17	25.15	20.78	20.61	19.68	19.63	21.18	22.52	26.27	26.13
Gujarat	20.05	18.82	18.51	17.73	17.56	17.08	16.00	16.10	16.52	18.49	15.92
Haryana	13.91	14.60	15.10	16.22	20.53	22.19	21.88	22.44	25.33	27.70	26.15
Jharkhand	16.11	15.64	15.93	15.94	22.19	21.52	20.77	19.88	21.31	25.37	21.84
Karnataka	10.78	10.79	10.84	11.55	11.73	12.11	12.24	13.11	14.54	18.17	17.52
Kerala	16.97	17.52	17.95	18.76	19.53	19.83	20.38	20.07	21.48	25.87	23.59
Madhya Pradesh	19.45	17.48	16.41	17.14	18.00	18.82	19.06	18.97	19.49	23.78	22.25
Maharashtra	14.48	13.73	13.15	13.35	13.50	13.73	14.20	13.25	13.83	15.85	14.71
Odisha	10.66	8.91	7.86	8.54	10.27	10.70	11.85	11.68	12.73	14.01	9.28
Punjab	24.06	23.92	23.69	24.45	26.45	36.01	34.99	34.95	36.19	39.76	36.60
Rajasthan	16.49	15.59	15.85	16.33	22.97	25.69	25.50	25.59	25.97	29.79	28.05
Tamil Nadu	13.84	14.06	14.46	15.35	16.50	19.35	19.71	19.73	21.26	25.22	25.47
Telangana				15.29	15.92	18.42	19.05	19.26	20.52	24.63	23.96
Uttar Pradesh	21.81	20.04	18.24	19.54	22.37	23.42	23.22	23.08	24.50	28.61	25.81
West Bengal	35.49	34.30	32.65	34.05	33.87	33.84	32.42	30.89	31.86	36.32	33.68
Major States	**17.58**	**17.04**	**16.66**	**17.31**	**18.69**	**19.81**	**19.79**	**19.70**	**20.89**	**24.27**	**22.58**
Arunachal Pradesh	19.97	18.48	17.17	16.65	12.56	13.84	18.19	19.79	21.49	25.23	25.16
Assam	13.93	12.63	11.15	11.64	11.54	11.07	12.24	13.84	15.54	19.43	19.41
Himachal Pradesh	26.83	25.07	24.39	24.79	24.43	25.92	25.02	24.55	25.49	28.64	26.50
Manipur	29.99	29.40	25.73	24.16	24.88	24.73	22.82	24.51	24.34	30.23	29.38
Meghalaya	15.05	15.33	16.07	18.12	18.75	20.07	21.69	22.78	24.18	30.35	30.72

State	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
Mizoram	29.36	27.09	21.99	18.19	16.32	16.94	17.20	14.71	16.08	20.95	20.75
Nagaland	39.92	37.16	34.84	32.04	34.50	32.76	32.00	30.59	30.68	35.70	35.75
Sikkim	16.59	16.03	15.77	16.29	16.46	16.95	16.24	17.56	17.19	20.87	23.04
Tripura	20.65	20.71	19.75	17.91	16.63	16.73	17.47	17.75	20.71	24.47	20.92
Uttarakhand	15.00	14.28	14.33	15.51	16.84	18.04	18.62	20.07	21.00	23.14	20.41
Minor States	**18.51**	**17.45**	**16.60**	**16.96**	**17.00**	**17.45**	**17.97**	**18.86**	**20.06**	**23.52**	**22.34**

Except for Gujarat and West Bengal, average annual public debt of major states has gone up during post-GST period as compared to pre-GST period (Figure 7). Aggregate public debt of major states has gone up by 3.7 per cent of GSDP during post-GST period as compared to pre-GST period. The largest increase in public debt is observed for Punjab (9.2%) followed by Chhattisgarh (8.6%), Haryana (6.9%), Tamil Nadu (6.5%) and Telangana (5.6%). Except Chhattisgarh, Gujarat, Karnataka, Maharashtra and Odisha, post-GST annual average public debt exceeds 20 per cent of GSDP for all other major states.

Except Mizoram and Nagaland, average annual public debt of minor states has gone up during post-GST period as compared to pre-GST period (Figure 8). Aggregate public debt of minor states has gone up by 4.2 per cent of GSDP. The largest increase in public debt is observed for Meghalaya (8.8%) and it is followed by Arunachal Pradesh (7.9%), Assam (5.7%) and Uttarakhand (5%). Except Assam, Mizoram and Sikkim, post-GST average annual public debt exceeds 20 per cent of GSDP for all other minor states.

Figure 7: Changing Average Annual Public Debt of Major States (% of GSDP)

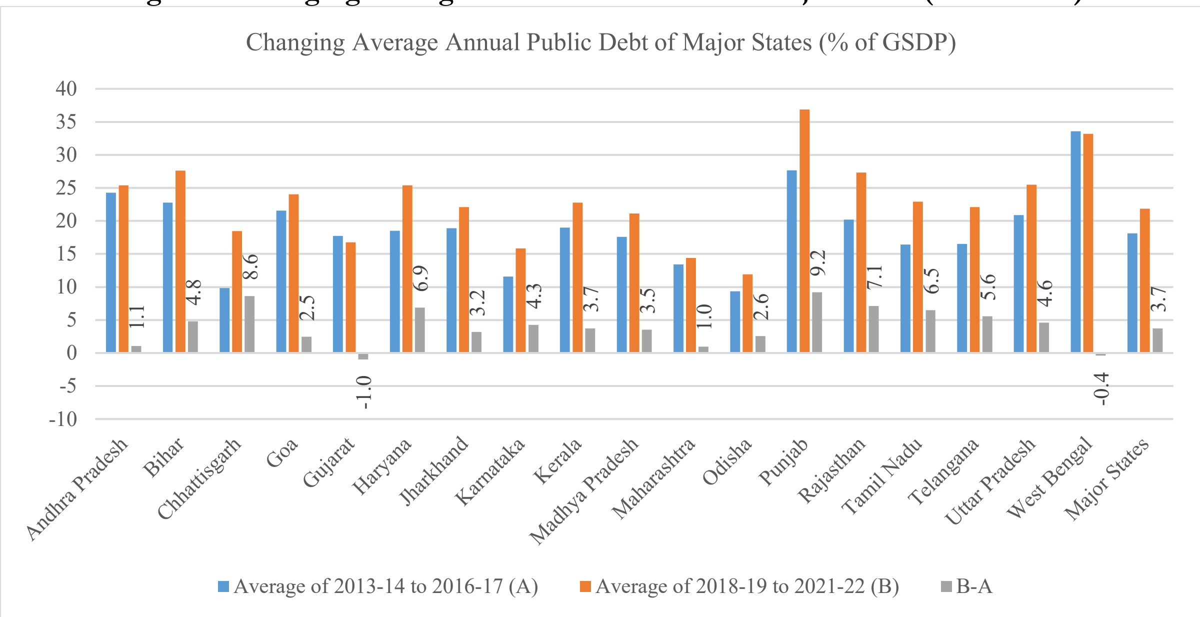
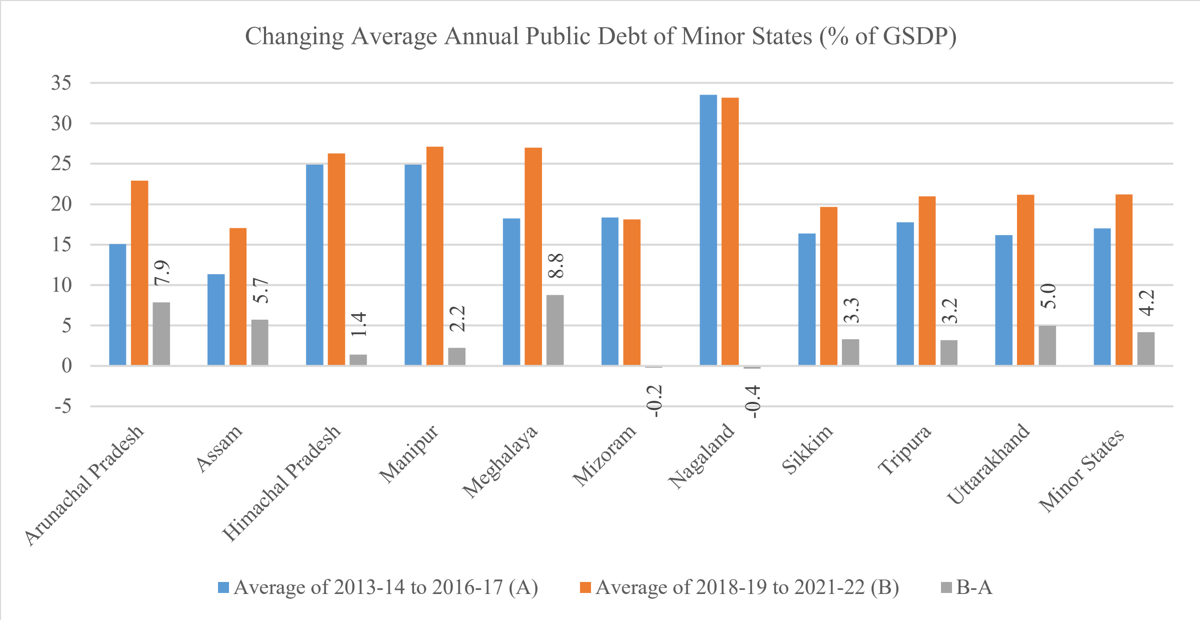


Figure 8: Changing Average Annual Public Debt of Major States (% of GSDP)



2.7 Outstanding Guarantees of States

According to the Government Guarantee Policy 2022 (Ministry of Finance 2022), *"Guarantees are contingent liabilities that arise on occurrence of an event covered by the guarantee. Since guarantees result in increase in contingent liability, … Government will be liable to pay in case the entity/organization defaults in respect of which guarantee is given."* Like the Union Government, state governments also provide guarantees to public entities (e.g., statutory corporations, government companies, co-operative institutions, financial institutions, autonomous bodies and authorities) to take loans from the markets to reduce pressure on the budgetary resources.

We find that except Andhra Pradesh and Telangana outstanding guarantee amount lies below 10 per cent of GSDP for other major states during 2020-22 (Figure 9). For Rajasthan and Uttar Pradesh outstanding guarantee amount lies between 7.5 to 10 per cent of GSDP. Except Bihar, Kerala, Maharashtra, Tamil Nadu, Telangana and West Bengal, outstanding guarantee amount of all other major states has gone down in 2021-22 as compared to 2020-21. Aggregate outstanding guarantee amount of major states has gone down from 4.23 per cent of GSDP in 2020-21 to 4.14 per cent of GSDP in 2021-22.

Among minor states outstanding guarantee amount of Sikkim exceeds 10 per cent of GSDP during 2020-22 (Figure 10). For Meghalaya, outstanding guarantee amount lies between 7.5 to 10 per cent of GSDP during 2020-22. Except four minor states (viz., Arunachal Pradesh, Assam, Manipur and Nagaland), outstanding guarantee amount has fallen in 2021-22 as compared to 2020-21. In aggregate, outstanding guarantee amount of minor states has fallen from 1.18 per cent of GSDP in 2020-21 to 1.05 percent of GSDP in 2021-22.

Figure 9: Status of Outstanding Guarantee Amount (Principal & Interest) of Major States (% of GSDP)

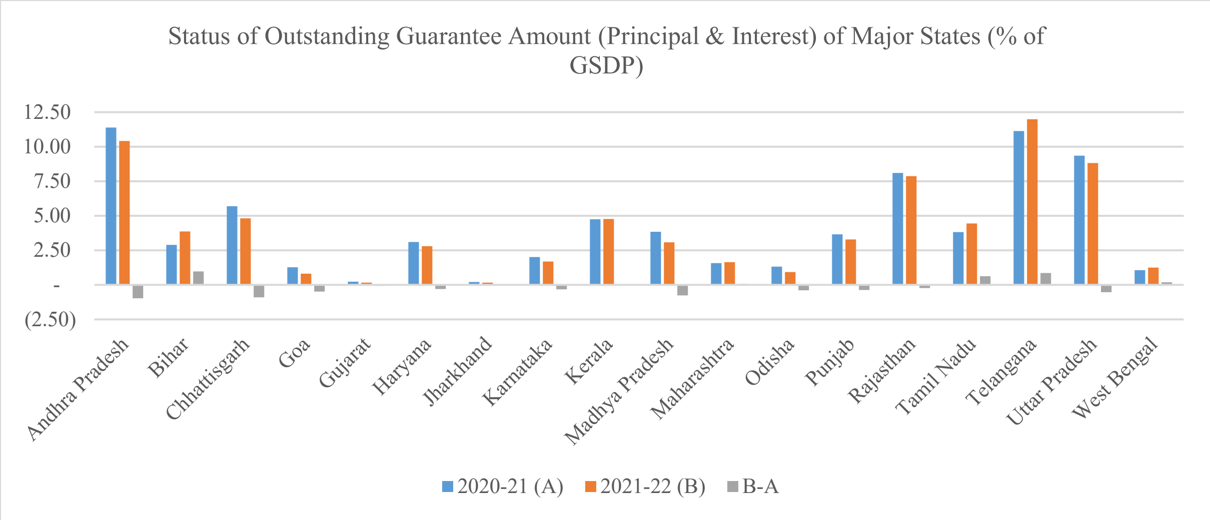
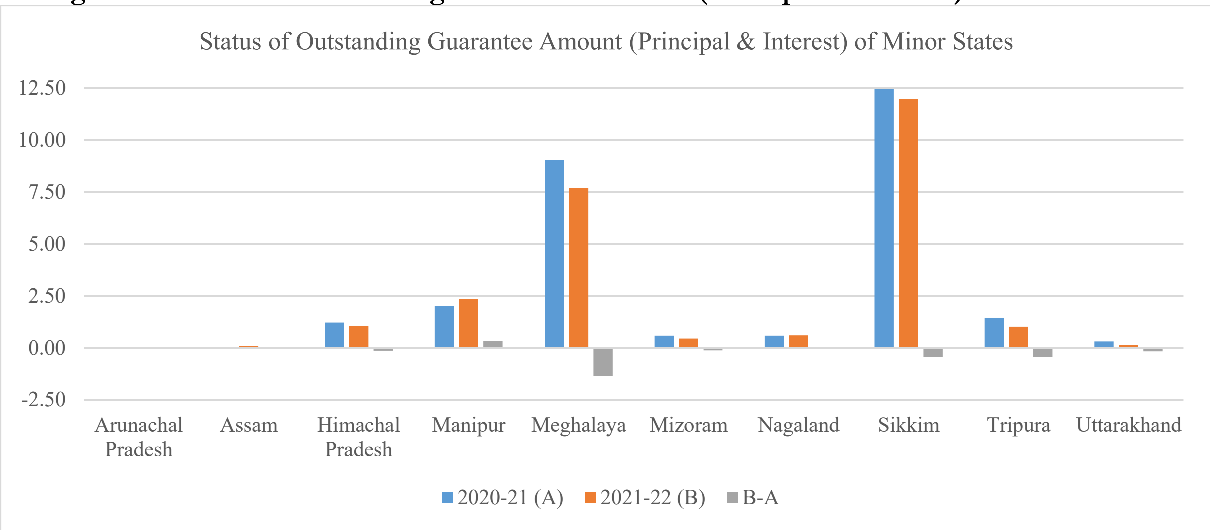


Figure 10: Status of Outstanding Guarantee Amount (Principal & Interest) of Minor States



3. Summary and Conclusions

Indian economy has gone through economic slowdown during 2019-21 – annual economic growth (as measured by growth rate of nominal GDP) falls to 6.37 per cent in 2019-20 and -1.36 per cent in 2020-21 from average annual growth rate of 11.7 per cent during 2012-19. In 2021-22 economic growth improves with the gradual recovery of the Indian economy from the shock of COVID-19 pandemic. As compared to 2021-22, economic growth in 2022-23(P) falls.

To assess the state finances of Indian states (18 major states and 10 minor states), we divide the time period of our analysis (2013-14 to 2021-22) into two sub-periods – 2013-14 to 2016-17 and 2018-19 to 2021-22. We named the first sub-period as pre-GST period and the second sub-period as post-GST period, as India introduced comprehensive Goods and Services Tax (GST) on 1 July 2017.

Except Odisha, average annual growth rate of nominal GSDP falls during post-GST period as compared to pre-GST period for all other major states. All major states experience higher growth rate of GSDP in 2022-23(P) as compared to average annual growth rate of GSDP during post-GST period.

Among minor states, except Meghalaya, average annual growth rate of GSDP falls during post-GST period as compared to pre-GST period. Except Arunachal Pradesh, Manipur and Mizoram, all minor states experience higher growth rate of GSDP in 2022-23(P) as compared to post-GST average.

Except Karnataka and Kerala among major states and Manipur and Mizoram among minor states, all states project lower growth rate of GSDP in 2023-24(BE) as compared to 2022-23(P), which may have impact on fiscal positions of states.

After two consecutive years of fiscal stress during 2019-21, state finances in India improve in 2021-22. Recovery from the fiscal shock of 2019-21 is slow for majority of Indian states. Moreover, GST compensation has not been extended beyond 30 June 2022. Therefore, it will be important to see how states manage their public finances with growing pressure of public expenditures and constraints to mobilise additional public resources from own as well as shared sources of revenues.

As compared to pre-GST period, average annual Revenue Deficit (RD) of major states increases by 61 basis point of GSDP during post-GST period. In 2022-23RE, aggregate RD of these states shows a fall by 27 basis point of GSDP as compared to post-GST average. In 2023-24BE it is expected to fall by 38 basis point as compared to 2022-23RE. During post-GST period average annual capital expenditure (CAPEX) falls by 23 basis point of GSDP as compared to pre-GST average. Apart from cutting CAPEX, rising share of non-debt capital receipts (by 7 basis point of GSDP), containing disbursement of fresh loans and advances (by 29 basis point) and GST compensation receipts as back-to-back loans from the Union government during 2020-22 helped major states to reduce the pressure on fiscal space during post-GST period. Average annual fiscal deficit (adjusted) has gone down by 27 basis point of GSDP during post-GST period as compared to pre-GST average. In 2022-23RE, aggregate FD of major states rises by 65 basis point of GSDP as compared to post-GST average. In 2023-24BE, aggregate FD is expected to fall by 24 basis point of GSDP as compared to 2022-23RE.

For minor states, average annual revenue deficit increases by 38 basis point of GSDP during post-GST period as compared to pre-GST period. In 2022-23RE, aggregate revenue deficit increases by 86 basis point of GSDP as compared to post-GST average. In 2023-24BE, it is expected to fall by 1.31 per cent of GSDP as compared to 2022-23RE. Average annual CAPEX increases by 79 basis point of GSDP during post-GST period as compared to pre-GST period. Though, minor states reduced disbursement of fresh loans and advances, they could not generate additional revenue on account non-debt capital receipts. Moreover, only a few minor states received GST back-to-back loans for protection of their revenue under GST. As a result, average annual fiscal deficit (adjusted) went up by 63 basis point of GSDP during post-GST period as compared to pre-GST average. Aggregate fiscal deficit increases by 2.86 per cent of GSDP in 2022-23RE as compared to post-GST average. In 2023-24BE, it is expected to be reduced by 2.10 per cent of GSDP as compared to 2022-23RE.

For major states, average annual share of all sources of OTR in GSDP has fallen during post-GST period as compared to the pre-GST period. The largest fall is observed in 'taxes on commodities' - falls by 32 basis point of GSDP during post-GST period as compared to the pre-GST average. If we consider GST compensation receipts from all sources as states' OTR, annual average share of OTR in GSDP increases by 42 basis point (-0.37+0.79) of GSDP during post-GST period as compared to pre-GST period. Therefore, GST compensation payments helped states to sustain the revenue stream from taxes on goods and services which is subsumed into GST. However, there was no windfall gains for states from the GST compensation receipts.

For minor states, there is an increase in the share of taxes on goods and services in GSDP during post-GST period as compared to the pre-GST period.

For major states, if we adjust the overall grants-in-aids receipts (broad budget head 1601) of states by taking out GST compensation receipts from the GST compensation fund (1601-08-114), average annual share of adjusted grants-in-aids in GSDP falls by 17 basis point during post-GST period as compared to pre-GST average.

GST compensation receipts as back-to-back loans from the Union government is often not adjusted (or accounted as states' revenue) to derive fiscal deficit numbers of states. Out of 18 major states, 9 states experience fall in average annual fiscal deficit (adjusted) during post-GST period as compared to pre-GST period. The largest fall in FD observed for Punjab followed by Uttar Pradesh, Odisha, Jharkhand, and Rajasthan. The largest increase in FD observed for Tamil Nadu followed by Madhya Pradesh, Karnataka and Chhattisgarh. Overall FD of major states falls by 27 basis point of GSDP during post-GST period as compared to pre-GST average. We observe 65 basis point of GSDP rise in FD for major states in 2022-23RE.

As compared to post-GST average, overall FD of major states increases by only 4 basis point of GSDP in 2022-23PE (i.e., Provisional Estimate of 2022-23 based on CAG's Monthly Key Indicator Database). In comparison to 2022-23RE, overall FD of major states is lower in 2022-23PE. In 2023-24BE, overall FD of major states is expected to increase by 36 basis point of GSDP as compared to 2022-23PE.

Together average annual FD of 10 minor states has gone up by 63 basis point of GSDP during post-GST period as compared to pre-GST period. Together FD of these states increases by 2.86 per cent of GSDP in 2022-23RE from post-GST annual average. As compared to post-GST annual average, overall FD of minor states increases by 1.81 per cent GSDP in 2022-23PE. Fiscal deficits of states are higher in 2022-23RE as compared to 2022-23PE by 1.05 per cent of GSDP. In 2023-24BE, these states together aim to reduce FD by 1.05 per cent of GSDP as compared to 2022-23PE.

In three major states (viz., Madhya Pradesh, Tamil Nadu and Telangana) post-GST average annual FD exceeds 3 per cent of GSDP as compared to pre-GST average of less than 3 per cent. Jharkhand, Punjab and Uttar Pradesh have reduced average annual FD to less than 3 per cent of GSDP during post-GST period as compared to pre-GST average exceeding 3 per cent of GSDP. For Andhra Pradesh, Bihar, Haryana, Kerala, Rajasthan and West Bengal average annual FD exceeds 3 per cent of GSDP in both the periods. In 7 minor states (viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Sikkim) average annual FD exceeds 3 per cent of GSDP during post-GST period as compared to pre-GST average of less than 3 per cent. Himachal Pradesh and Tripura have reduced their average annual FD to less than 3 per cent of GSDP during post-GST period from pre-GST average of greater than 3 per cent. This analysis shows that different states have faced different challenges in public finance management during pre- and post-GST periods.

We have adjusted public debt of states after taking out the amount of the GST back-to-back loans received by states in 2020-21 and 2021-22. For major states, aggregate public debt has gone up during 2014-15 to 2016-17 and it remains stable during 2017-18 to 2018-19, and thereafter it exceeds 20 per cent of GSDP since 2019-20. Adoption of *Ujwal DISCOM Assurance Yojana (UDAY)* scheme cannot be the only reason for rising aggregate public debt of major states. For Non-UDAY states public debt has also risen in 2014-15 and thereafter it remains stable during 2015-19. For UDAY states, aggregate public debt is rising since 2014-15. GST back-to-back loans helped major states to reduce aggregate public debt by 53 basis point of GSDP in 2020-21 and 1.09 per cent of GSDP in 2021-22. Barring three years (i.e., 2019-22), aggregate public debt of major states was lower than 20 per cent of GSDP during 2011-22.

Aggregate public debt of minor states is increasing since 2014-15 and it crosses 20 per cent of GSDP in 2019-20. Aggregate public debt of Non-UDAY minor states remains higher than UDAY minor states during 2011-22. Except during 2019-22, aggregate public debt of minor states was lower than 20 per cent during 2011-22. The GST back-to-back loans helped minor states to reduce aggregate public debt by 55 basis point of GSDP in 2020-21 and 1.21 per cent of GSDP in 2021-22.

Public debt of five major states is exceeding 20 per cent of GSDP consistently during the period of our analysis (viz., Andhra Pradesh, Bihar, Punjab, Uttar Pradesh and West Bengal). Except for a few years (2011-12 and 2016-18), public debt of Goa is also exceeding 20 per cent of GSDP during 2011-22. Since 2015-16, public debt of another 3 states exceeds 20 per cent of GSDP (viz., Haryana, Jharkhand and Rajasthan). For Kerala, public debt exceeds 20 per cent of GSDP since 2017-18. Since 2019-20, public debt of another three states exceeds 20 per cent of GSDP (viz., Madhya Pradesh, Tamil Nadu, Telangana). Therefore, containing public debt to below 20 per cent of GSDP would be a challenge for many states in the coming years.

Public debt of three minor states (viz., Himachal Pradesh, Manipur and Nagaland) is consistently higher than 20 per cent of GSDP during 2011-22. Public debt of Uttarakhand since 2018-19, Arunachal Pradesh and Tripura since 2019-20 and Mizoram and Sikkim since 2020-21 is higher than 20 per cent of GSDP. This shows that more minor states are exceeding 20 per cent of GSDP limit in the public debt in recent years.

Except for Gujarat and West Bengal, average annual public debt of major states has gone up during post-GST period as compared to pre-GST period. Aggregate public debt of major states has gone up by 3.7 per cent of GSDP during post-GST period as compared to pre-GST period. The largest increase in public debt is observed for Punjab (9.2%) followed by Chhattisgarh (8.6%), Haryana

(6.9%), Tamil Nadu (6.5%) and Telangana (5.6%). Except Chhattisgarh, Gujarat, Karnataka, Maharashtra and Odisha, post-GST annual average public debt exceeds 20 per cent of GSDP for all other major states.

Except Mizoram and Nagaland, average annual public debt of minor states has gone up during post-GST period as compared to pre-GST period. Aggregate public debt of minor states has gone up by 4.2 per cent of GSDP. The largest increase in public debt is observed for Meghalaya (8.8%) and it is followed by Arunachal Pradesh (7.9%), Assam (5.7%) and Uttarakhand (5%). Except Assam, Mizoram and Sikkim, post-GST average annual public debt exceeds 20 per cent of GSDP for all other minor states.

We find that except Andhra Pradesh and Telangana outstanding guarantee amount lies below 10 per cent of GSDP for other major states during 2020-22. For Rajasthan and Uttar Pradesh outstanding guarantee amount lies between 7.5 to 10 per cent of GSDP. Except Bihar, Kerala, Maharashtra, Tamil Nadu, Telangana and West Bengal, outstanding guarantee amount of all other major states has gone down in 2021-22 as compared to 2020-21. Aggregate outstanding guarantee amount of major states has gone down from 4.23 per cent of GSDP in 2020-21 to 4.14 per cent of GSDP in 2021-22.

Among minor states outstanding guarantee amount of Sikkim exceeds 10 per cent of GSDP during 2020-22. For Meghalaya, outstanding guarantee amount lies between 7.5 to 10 per cent of GSDP during 2020-22. Except four minor states (viz., Arunachal Pradesh, Assam, Manipur and Nagaland), outstanding guarantee amount has fallen in 2021-22 as compared to 2020-21. In aggregate, outstanding guarantee amount of minor states has fallen from 1.18 per cent of GSDP in 2020-21 to 1.05 percent of GSDP in 2021-22.

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Appendix

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Description	2022-23RE			2022-23PE			D-A	E-B	F-C
	Major States (A)	Minor States (B)	All States (C)	Major States (D)	Minor States (E)	All States (F)			
Total Revenue Receipts (A+B+C)	13.81	25.56	14.39	12.84	21.72	13.28	-0.96	-3.84	-1.11
A. Tax Revenue	10.17	12.87	10.31	9.87	12.81	10.02	-0.30	-0.05	-0.29
B. Own Non-Tax Revenue	1.03	1.41	1.05	1.02	1.34	1.04	**0.00**	-0.07	-0.01
C. Grants-in-Aids from the Union Government	2.61	11.28	3.04	1.95	7.57	2.23	-0.66	-3.72	-0.81
D. Revenue Expenditure	14.42	25.75	14.99	13.25	22.04	13.69	-1.17	-3.70	-1.30
E. Capital Expenditure	2.51	5.72	2.67	2.14	4.47	2.25	-0.38	-1.25	-0.42
F. Revenue Deficit	0.62	0.19	0.60	0.41	0.32	0.41	-0.21	**0.13**	-0.19
G. Fiscal Deficit	3.38	5.90	3.50	2.79	4.85	2.89	-0.59	-1.05	-0.61

4

Capital Expenditure of States: Intentions versus Achievements

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Aspirations of becoming a developed economy require the country to achieve higher levels of growth. Governments are key players in creating an enabling environment for investment as well as for supporting acceptable quality of life for the citizens. The FRBM framework and the periodic review of the targets for deficits and debt for centre and states in India seeks to keep a check on growth in revenue expenditures while protecting space for capital expenditures. However, there have been a few shocks to the economy and to the fisc in the last years. The introduction of GST constituted a paradigm change in the structure of indirect taxation in India. The transition to the new regime did impose some costs on the fisc of governments in India. This was further exacerbated by the impact of the lockdowns to control the spread of COVID-19. The economy is emerging from these shocks and there is a sharp focus on increasing capital expenditure by the Union government, with support being provided in the form of interest free loans for capital formation. Given these concerns, in this paper, we explore trends in and composition of revenue and capital expenditure in the past decade. (Section 1) The paper then explores the effectiveness of the budgeting process by examining the trends in utilisation of budget allocations, especially for capital expenditure to understand the differences across states. (Section 2) Section 3 puts together some of the key takeaways.

1. Trends in Expenditure:

Total expenditure in state budgets have been increasing on an average rate of 12-14 percent for General Category States(GC states) while Special Category States (SC States) report an average growth of 12 percent with more volatility year on year. These trends are however disrupted during the COVID_19 pandemic with the averages dropping to 4-6 percent during 2019-20 and 2020-21. The subsequent years report a return to the earlier trends. Since the size of the economy tends to determine the scale of revenues states are able to raise and hence the levels of expenditures, in what follows, the analysis focuses on expenditures as a percentage of GSDP.

Trends in revenue expenditure and capital expenditure are presented in Figures 1 and 2. Average revenue expenditure as a percentage of GSDP for GC states has been stable around 13.75 percent while that for SC states at around 21 percent.[7] There is a surge evident in 2020-21 for GC states attributable to disruptions on account of COVID-19 where GSDP fell more sharply that the reduction in growth of expenditures. Both these categories however show a clear increase in average revenue expenditure as a percentage of GSDP in 2022-23 (RE)[8]. In capital expenditure

[7] The surge observed in 2014-15 is on account of change in fund flow patterns – CSS funds which were earlier going to various implementation agencies are now being routed through state budgets.
[8] The GSDP used here is NSO, except in recent years, where it is derived from budget numbers.

on the other hand, the two groups display very different trends. For GC states, there is a decline in the share of capital expenditure to GSDP during 2014-15 to 2020-21 after which a pickup is observed. Efforts towards fiscal consolidation following recommendations of the 14th FC could have contributed to these trends. In SC states, there is a consistent increase from 2015-16 onwards, on an average.

Taken together, total expenditure by states as a percentage of GSDP is clearly increasing as a percentage of GSDP, the increase more modest in general category states.

Figure 1: Trends in Expenditure GC States (% of GSDP)

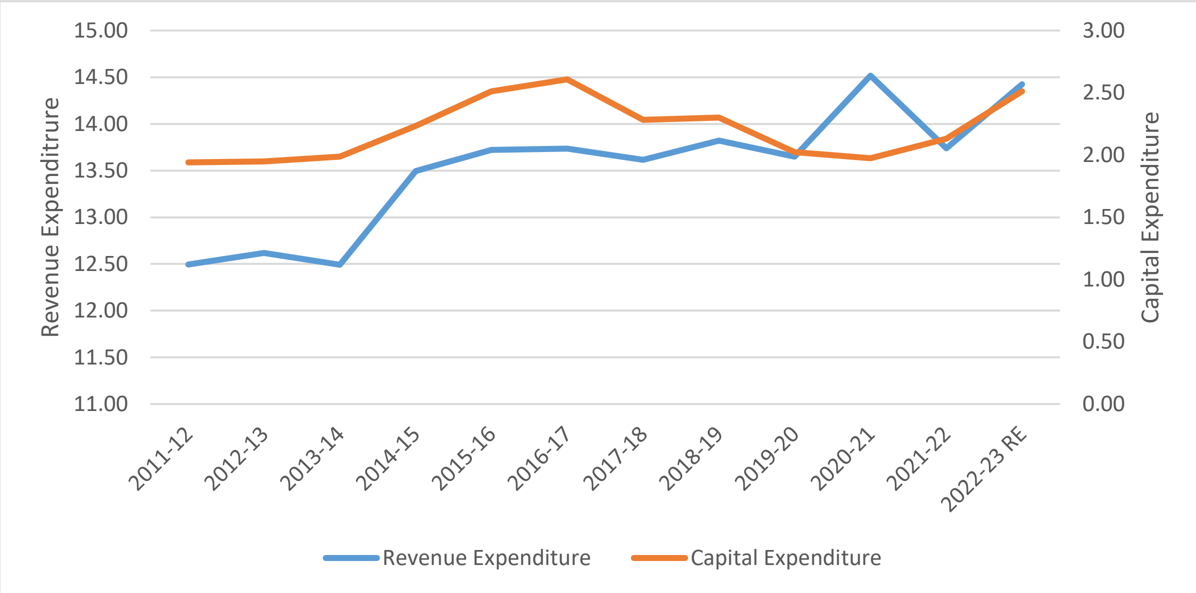
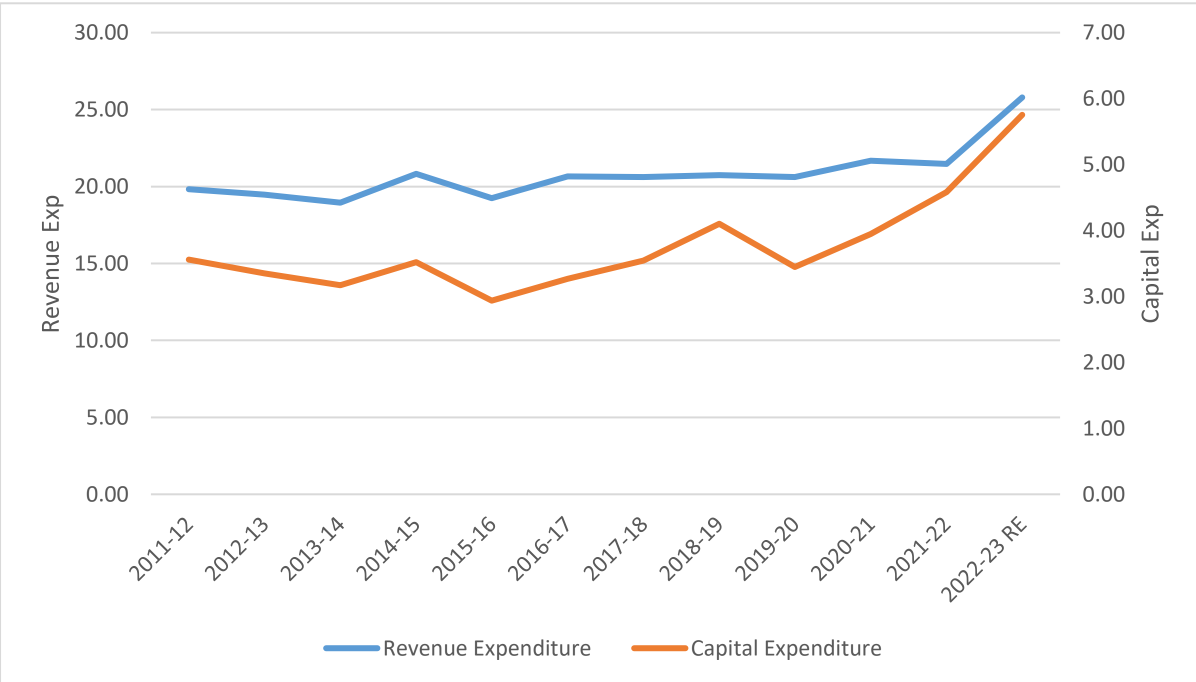


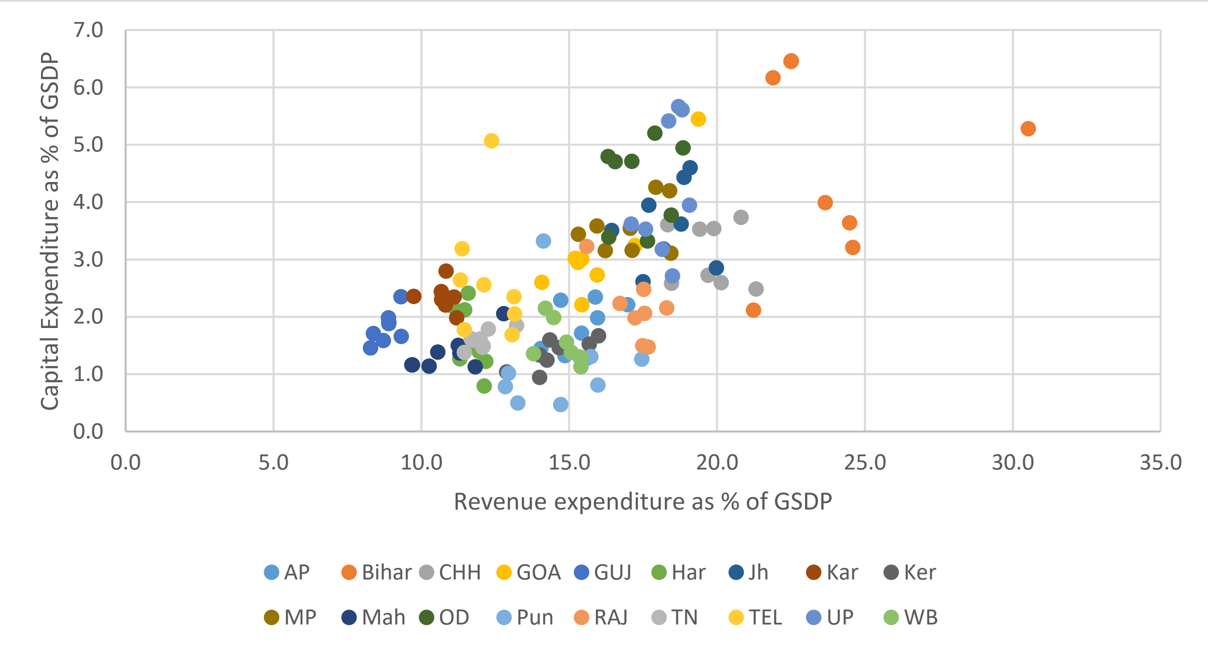
Figure 2: Trends in Revenue Expenditure SC States (% of GSDP)



Within these overall trends, considerable variation can be observed across states. Revenue expenditure as a percentage of GSDP in 2021-22 for instance varies from 8.28 percent of GSDP for Gujarat to 24 percent for Bihar within GC states and between 14 percent for Uttarakhand to 45 percent in Arunachal Pradesh among SC states. Further, between 2015-16 and 2022-23(RE)[9], revenue expenditure as a percentage of GSDP has increased for some states and declined in some others.

To understand the differences, Figure 3 shows a scatterplot of revenue expenditure and capital expenditure for major states for the years from 2015-16 to 2021-22. The first point to note from this figure is a positive relation between revenue expenditure and capital expenditure as a percentage of GSDP, i.e., states with higher revenue expenditure are also showing higher capital expenditure as well. The points representing Gujarat, Maharashtra, Karnataka and Tamil Nadu show low ratios of both revenue expenditure and capital expenditure, while those for Bihar, Uttar Pradesh, Chhattisgarh and Jharkhand show relatively higher ratios for both revenue expenditure and capital expenditure. The evidence seems to suggest that states with higher per capita income have lower spending when compared those with lower per capita income.

Figure 3: Revenue Expenditure to CAPEX (% of GSDP) 2015-16 to 2022-23

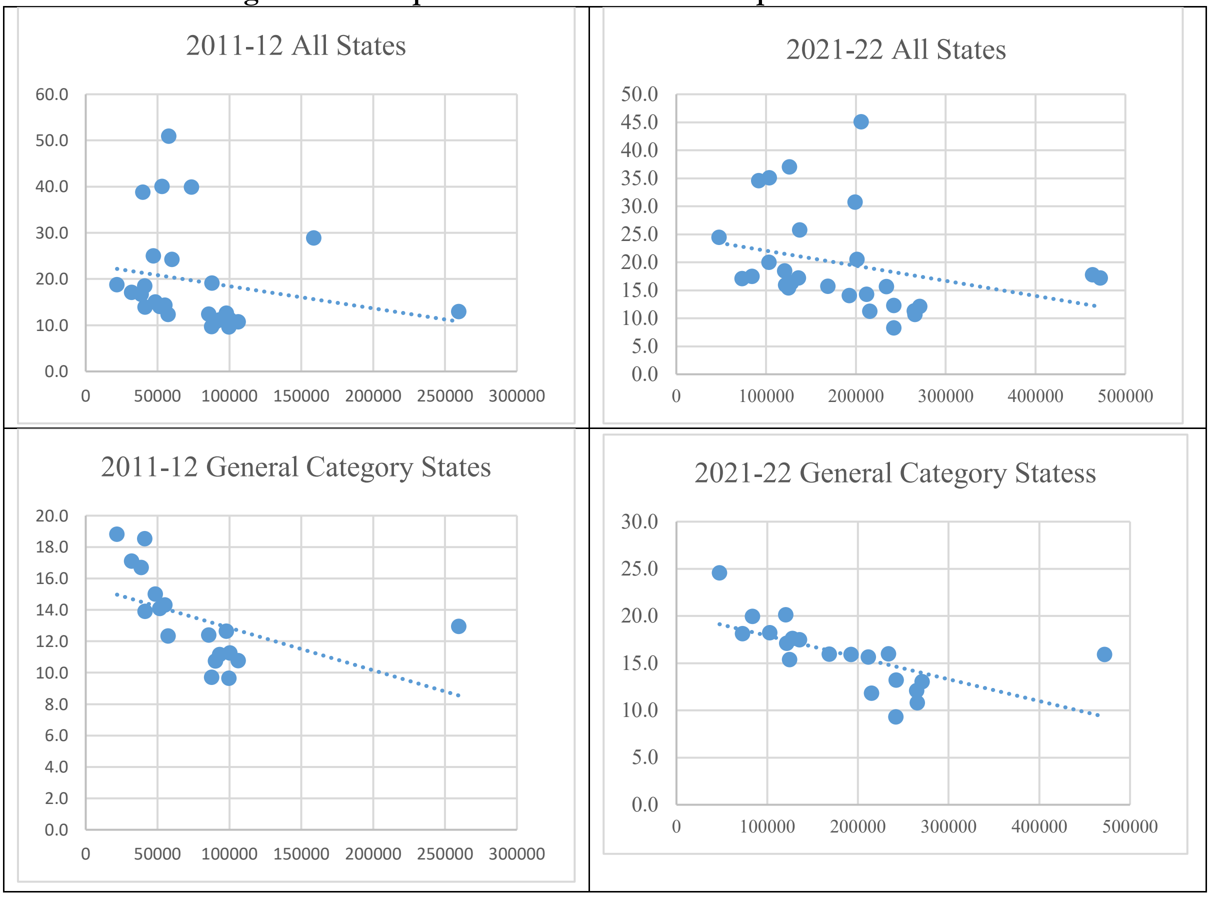


This is substantiated by Figure 4, which shows the relation between per capita GSDP and revenue expenditure as a percentage of GSDP. The negative relation between these variables is more pronounced for general category states. Given that own revenue receipts do not vary as much across states, these differences are being sustained largely through devolutions from the Union

[9] This period is considered since the bifurcation of Andhra Pradesh, as well as some accounting framework changes make the series less comparable over time.

government capturing the redistribution of resources across states to compensate for fiscal handicaps and support similar levels of expenditures across states.

Figure 4: Per capita GSDP and Revenue Expenditure to GSDP



Source: NSO and Finance Accounts for various states

1.1 Composition of Expenditure:

Composition of revenue expenditure and capital expenditure in the two periods as presented in Mukherjee(2023)[10] are reproduced in Table 1 and 2. Expenditure is decomposed into General, Social and Economic Services. General services can be loosely visualised as expenditures meant to support public goods in the economy. Social services focus on sustaining a reasonable quality of life and creating human capital while economic services could be interpreted as contributing to expansion in the productive potential of the economy by augmenting infrastructure and supporting production.

The last decade can comfortably be divided into two periods aligning with the introduction of GST in 2017-18, since the subsequent period included shocks to the economy and the fisc. The tables show that there is some change in the composition of revenue expenditure between the two periods: the share of general services and social services has increased for GC states as well as in SC states. The stress from increasing debt as well as the need for enhanced support through social

[10] Mukherjee, S. (2023): "State of State Finances in India in the Present Decade", paper presented at State Forum, 2023.

services during the pandemic could have contributed to the change in composition of expenditures.

Table 1: Composition of Revenue Expenditure (% of GSDP)

	GS States		SS States	
	2013-14 to 2016-17	2017-18 to 2021-22	2013-14 to 2016-17	2017-18 to 2021-22
Revenue Expenditure	**13.36**	**13.94**	**19.92**	**21.13**
General Services	4.47	4.86	7.28	8.23
Social Services	5.33	5.49	7.96	8.23
Economic Services	3.16	3.15	4.37	4.37
Grants-in-Aids to Local Bodies	0.39	0.43	0.31	0.3

Source: Mukherjee(2023)

In capital expenditure on the other hand, total capital expenditure for GS states has declined on average while that for SS states has increased. The decline for GS states is accounted for mainly by decline in spending on economic services, while the increase in spending by SS states is on account of increase in expenditure in all categories, but mainly by increases in economic services.

Table 2: Composition of Capital Expenditure (% of GSDP)

	GS States		SS States	
	2013-14 to 2016-17	2017-18 to 2021-22	2013-14 to 2016-17	2017-18 to 2021-22
Capital Expenditure	**2.33**	**2.11**	**3.23**	**4.02**
General Services	0.12	0.1	0.22	0.33
Social Services	0.5	0.52	0.85	1.01
Economic Services	1.71	1.49	2.16	2.68

Source: Mukherjee(2023)

These average trends once again mask significant differences between states. Within capital expenditure, a large majority of the states book more than 60 percent of the expenditure in economic services, with less than 10 percent being accounted for by general services. The share for economic services varies from a low of 46 percent in Goa to 84 percent in Maharashtra if one considers an average over the last five years. In revenue expenditure on the other hand, the share of economic services is relatively low on average, with general services and social services commanding higher shares. The share of general services in revenue expenditure ranges from 26 percent for Chhattisgarh to 50 percent for Punjab while that for social services ranges from 25 percent for Punjab to 47 percent for Andhra Pradesh. These variations perhaps capture the differences in priorities and needs of different states.

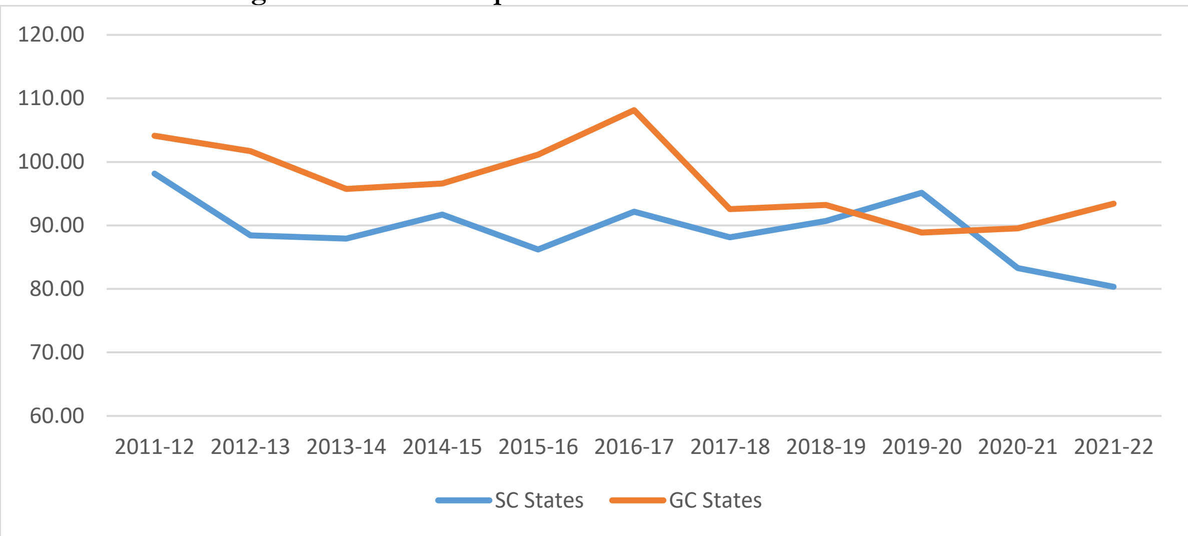
2. Budget versus realised expenditures:

The effectiveness of the budgeting exercise is often assessed on the basis of the deviation of the actual expenditures from the budgeted levels.

2.1 Revenue expenditure

Observing the trends in utilisation to budgeted expenditures in revenue expenditure, it is clear that for GC states, the ratio fluctuated around 100 percent till 2017-18, after which there is a drop in levels. (Figure 5) For SC states, the average ratio remains around 90 percent for most of the period, and drops lower to 80 percent in 2021-22 – the last year for which such a comparison is feasible. The period since 2017-18 appears to have contributed to some uncertainty in revenues, perhaps explaining the drop in utilisation of budgeted revenue expenditures.

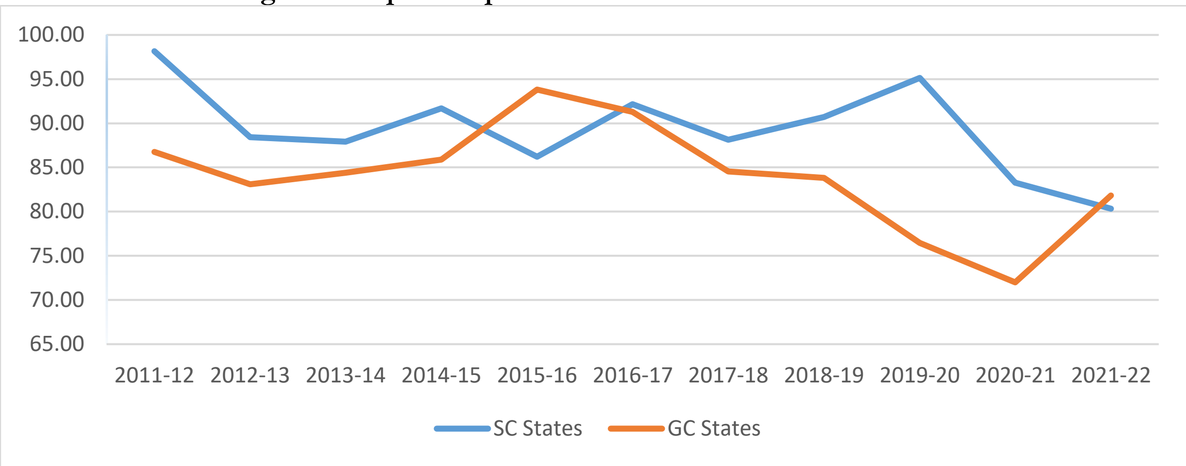
Figure 5: Revenue Expenditure: Utilisation of BE allocations



2.2 Capital Expenditure

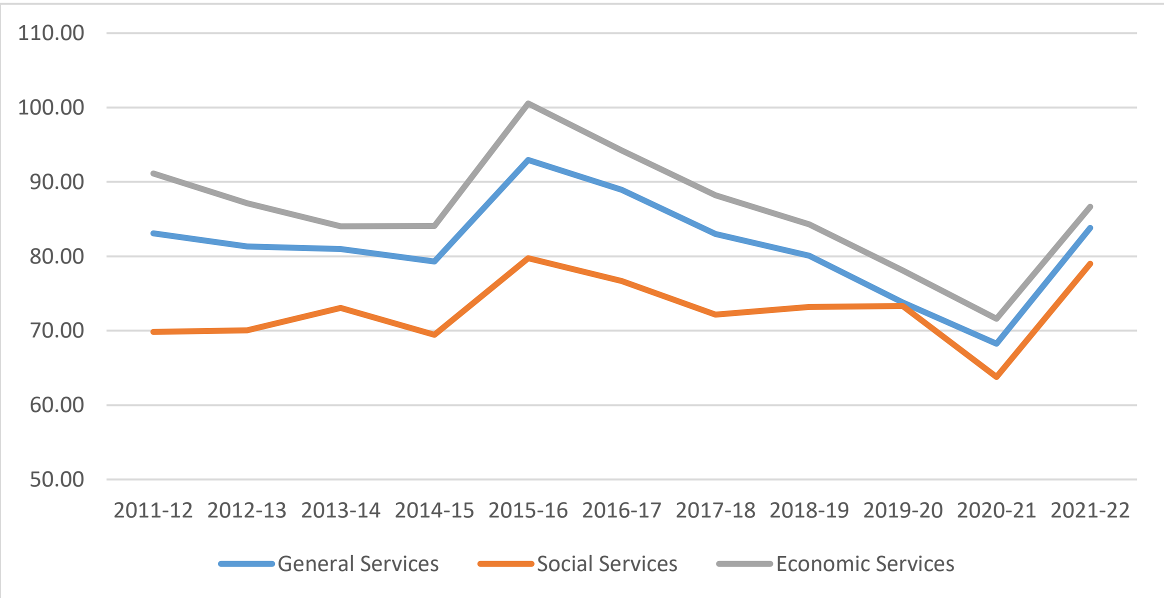
The picture is quite different for capital expenditures – on an average, for both GC States and SC States, the utilisation of budgeted expenditures has remained consistently below 100 percent. Further, for GC States, while there is an increase in the utilisation from 2011 to 2015-16, thereafter, there is a systematic decline till 2020-21. For SC States, the average level fluctuates around 90 percent – there is a drop in the last two years. The decline observed for major states too reinforces the idea that there was some uncertainty in resource availability, which could have resulted in compression of expenditures.

Figure 6: Capital Expenditure: Utilisation of BE allocations



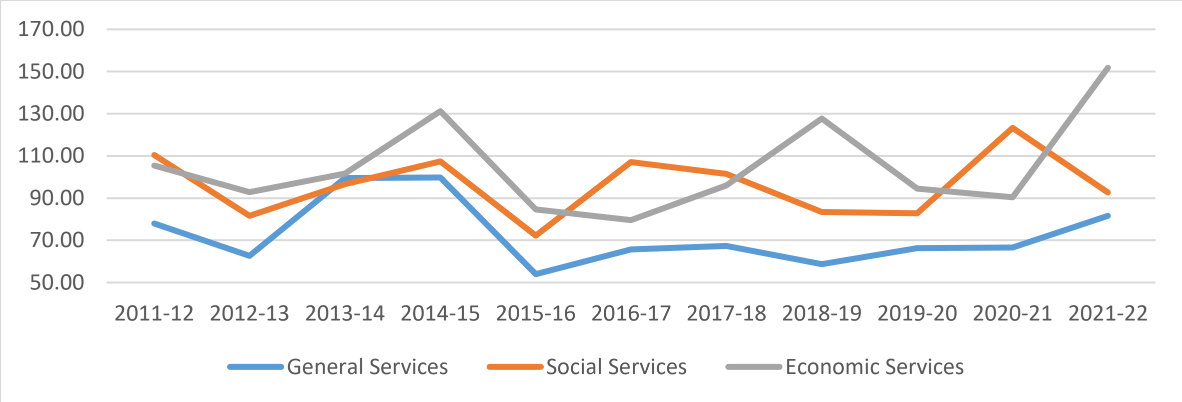
With uncertainty in sustaining budgeted expenditures, the choice of programmes to cut back on might throw some light on the medium term growth implications for the states concerned and for the country as a whole. Figures 7 and 8 presents the trends for utilisation of allocations in capital expenditures general, social and economic services. From the averages, there is a difference in strategy adopted by major states and special category states – in the former, social services are subject to the largest cuts while in the latter, it is general services. Economic services appear have been largely protected from uncertainties, more so in major states. Apart from the sectoral profile, it should be noted that the average utilisation for both economic services and general services exhibit a downward trend from 2016-17 onwards with a recovery in evidence only in 2021-22., for major states. For special category states there is no systematic trend.

Figure 7: Utilisation of allocations in CAPEX: GC States



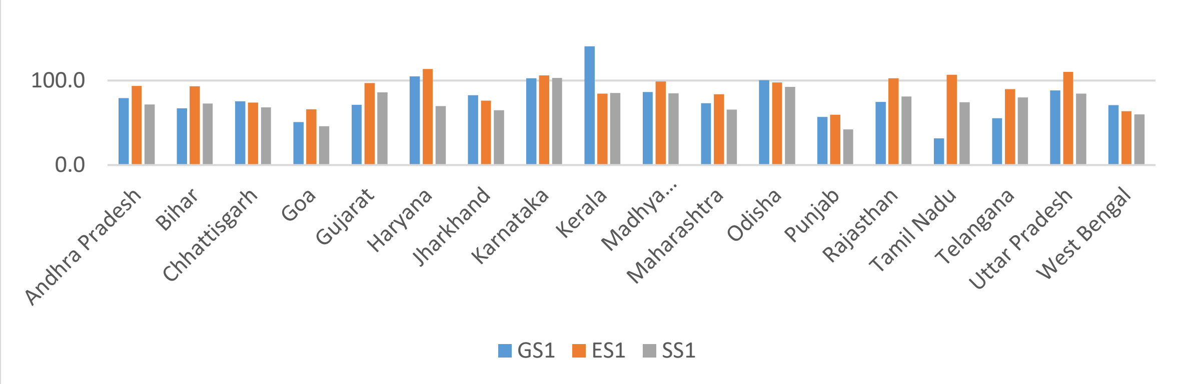
These trends suggest that GC states do accord more importance to expenditure on economic services, which are expected to support improvements in the economic activity.

Figure 8: Utilisation of allocations in CAPEX: SC States



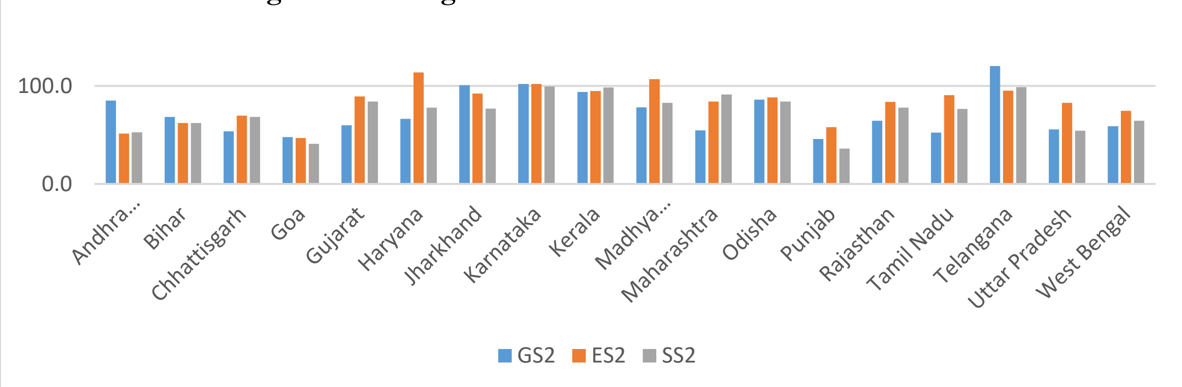
To understand the differences across states, state specific trends for GS states are presented in Figure 9 and 10. The analysis for individual states is divided into two periods 2011-2016 and 2017-2021. In the first period, Karnataka and Odisha emerge as two states with a very good record of

Figure 9: Average Utilisation of allocations: 2011-2016



utilising over 90 percent of the budgetary allocations all three groups. On the other hand, Chhattisgarh, Goa, Punjab and West Bengal were able to utilise less than 80 percent of the budgeted amounts in all three categories. The rest of the states show good utilisation levels in one or two groups and poor utilisation in the others. The scenario changes somewhat during the second period - Karnataka, Kerala and Telangana emerge as the good performers while Bihar joins the group of states with challenges in utilising budgeted allocations.

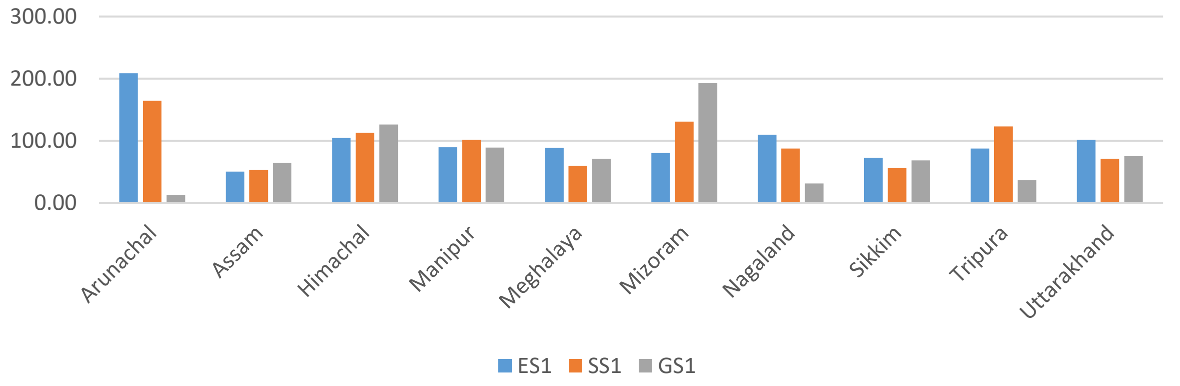
Figure 10: Average Utilisation of Allocations: 2017-2021



It may also be noted that more states achieve better utilisation of allocations for economic services, than for social and general services. During the first period, of the 18 GC states, 11 report more than 90 percent utilisation of the allocated expenditures for economic services, while for social services and general services, the numbers are considerably lower at 2 and 4 states respectively. In the second period, given the stress in the economy on account of COVID-19, it is expected that there would be some slippages, even with the considerable focus on capital spending. Here, 7 states report utilisation of more than 90 percent in economic services, while for social services and general services, the numbers are lower at 4 states each.

Turning to special category states, considerable volatility is observed in the utilisation in these states. Specifically, Arunachal Pradesh and Mizoram in the first period and Mizoram in the second period show average utilisation of close to 200 percent or more, in one or more categories of expenditure. Himachal Pradesh shows consistent performance across groups over both the periods, with expenditures moderately higher than allocations. In terms of sectoral priorities, five out of ten states show utilisation of over 90 percent for economic services in both the periods. In contrast to general category states, the utilisation within social services too was high in the first period, with 5 states spending over 90 percent of the allocations. This number drops to 3 states in the second period.

Figure 11: Utilisation of Allocations: 2011-2016



Following up from this discussion, it would be useful to ask whether there are specific heads of expenditure which are more likely to face a cut in different states. As an exploratory analysis, the present exercise is limited to major heads of expenditure as taken from RBI State Finances[11]. Of the major heads considered, Table 3 presents the number of heads of expenditure which have reported higher than budgetary allocations as well as number of heads which experienced spending at less than 50 percent of the total allocations. The analysis is limited to the period 2018-19 to 2021-22[12]. The table brings to light considerable differences across states. Some states like Andhra Pradesh, Goa and Punjab have almost no sector where spending exceeds allocation. Karnataka and Telangana have a large number of sectors where expenditures exceed allocations in two or more of the four years analysed in the table. In Kerala, Madhya Pradesh and Maharashtra, close to half of the heads considered have expenditure exceeding allocations. The obverse of this trend can

[11] Water supply, sanitation, housing and urban development are presented as one head of expenditure.

[12] Analysis cannot be undertaken for 2022-23, since the available numbers are only for revised estimates which can differ significantly from audited expenditures.

be observed in underutilisation of allocations. Andhra Pradesh, Goa, Punjab and West Bengal have a sizeable number of sectors with utilisation falling short of 50 percent. Augmenting the levels of capital investment might benefit from a closer focus on improved utilisation of budget allocations.

Figure 12: Utilisation of allocations - 2017-2022

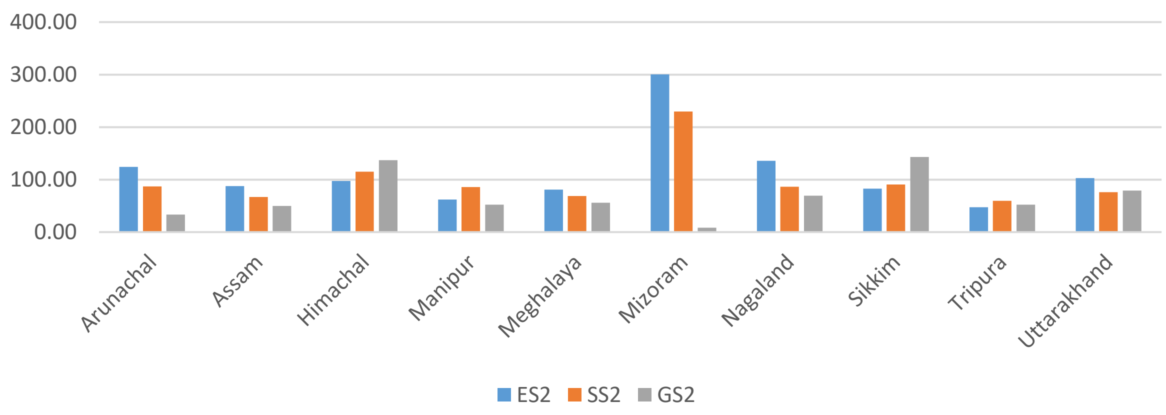


Table 3: Effectiveness of utilisation of Budgetary Allocations

		Over-utilisation of BE (>100% of BE)				Underutilisation of BE (<50% of BE)			
	Number of heads	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22
GC States									
Andhra Pradesh	12	0	0	0	0	7	9	8	7
Bihar	11	2	1	0	1	3	9	6	2
Chhattisgarh	13	0	1	0	3	5	4	4	5
Goa	12	0	0	0	0	5	9	11	10
Gujarat	12	4	1	2	4	2	2	3	2
Haryana	13	3	1	1	4	6	4	6	5
Jharkhand	11	2	0	4	4	1	3	1	2
Karnataka	13	2	4	8	11	4	4	0	0
Kerala	13	2	4	7	6	5	7	3	4
Madhya Pradesh	13	5	2	6	5	3	1	3	3
Maharashtra	12	6	5	1	5	3	4	5	2
Odisha	12	5	3	1	3	0	2	2	0
Punjab	12	1	0	1	0	9	9	8	10
Rajasthan	14	0	0	2	9	7	5	5	6
Tamil Nadu	14	4	3	4	5	2	1	2	1
Telangana	10	2	10	9	8	5	0	2	2
Uttar Pradesh	12	4	3	0	2	3	2	3	7
West Bengal	13	7	2	0	0	3	8	12	9
SC States									
Arunachal Pradesh	12	4	2	4	9	6	4	6	1
Assam	12	1	2	0	3	5	6	6	3
Himachal Pradesh	12	7	5	7	5	0	1	0	0
Manipur	12	4	2	7	1	4	5	0	6
Meghalaya	10	4	1	1	6	1	5	6	3

		Over-utilisation of BE (>100% of BE)				Underutilisation of BE (<50% of BE)			
	Number of heads	2018-19	2019-20	2020-21	2021-22	2018-19	2019-20	2020-21	2021-22
Mizoram	11	10	8	5	4	1	0	0	1
Nagaland	13	5	7	5	7	3	1	3	2
Sikkim	12	5	3	5	3	1	6	2	6
Tripura	12	3	1	2	2	5	9	5	3
Uttarakhand	11	5	2	2	2	3	0	3	5

To examine the sectors which experience considerable shortfall in spending, Table A1 presents the sectors with the lowest level of utilisation in each year for each of the states. The analysis suggests that social security and nutrition and industries and minerals are two sectors which have faced a significant cut in many states and in multiple years. On the other hand, among the best performers with utilisation exceeding allocations are medical and public health, agriculture and allied services, rural development, energy and Industries and minerals.

3. Some Key Takeaways:

The trends in expenditures show a moderate increase in expenditures for GC states on average and a sharper increase for SC states. The overall trends show an uptick in the expenditure patterns as reported in 2022-23 in revised estimates.

In the post pandemic period, there have been concerns of sustaining growth given expectations of slow-down in the world economy and its impact on Indian economy. Private sector investment was found to be slow in reviving. The drive to step up capital formation in the country in order to sustain higher levels of growth currently therefore depends on governments augmenting their capital spending. In this context, the paper suggests that increase in expenditures could come from better utilisation of budgetary allocations. As the analysis demonstrates, there is considerable differences among states in utilisation of allocations for capital expenditure.

While this is a preliminary exercise to explore challenges to capital expenditure in states, the analysis does suggest that there is room for augmenting capital expenditure by improving utilisation of allocations. The significant variations in allocations across states can be a manifestation of the different priorities of states while the differences in utilisation can perhaps be attributed to

a. Need to compress allocations in response to emerging needs and/or shortfall in revenue collections
b. Challenges in execution of projects and programmes

The former should be related to revenue performances while the latter might not be related to the same. Perhaps the differences in performance across states can provide some useful information on the mechanisms which can improve execution of projects and programmes.

Appendix Table: Sectors with lowest utilisation in CAPEX

(Figures in Parenthesis represent % utilisation of budget allocations)

State	2018-19	2019-20	2020-21	2021-22
ANDHRA PRADESH	Education, Sports, Art & Culture (36.3)	General Economic Services (-4.8)	Agricultral & Allied Services (6.5)	Energy (12.7)
	Energy (7.4)	Medical & Public Health (8.4)	Energy (3.4)	Industries and Minerals (-12.2)
	Welfare of SC, SC & Backward Classes (24.5)	Social Security & Nutrition (10.4)	Social Security & Nutrition (7.6)	Social Security & Nutrition (3.8)
ARUNACHAL PRADESH	Agricultral & Allied Services (7.6)	General Economic Services (19.4)	Agricultral & Allied Services (12.8)	Agricultral & Allied Services (35.7)
	Industries and Minerals (8.6)	Other Social Services (0.3)	General Economic Services (18.1)	General Economic Services (90.7)
	Other Social Services (0.4)	Rural Development Programmes (6.6)	Information, Publicity & Broadcasting (10.8)	Industries and Minerals (77.6)
ASSAM	Education, Sports, Art & Culture (7.2)	Energy (27.5)	Education, Sports, Art & Culture (13.1)	Other Social Services (25.3)
	Science & Technology (24.8)	General Economic Services (10.7)	General Economic Services (29)	Social Security & Nutrition (2.1)
	Welfare of SC, SC & Backward Classes (5.8)	Special Areas Programmes (17.3)	Special Areas Programmes (14.5)	Special Areas Programmes (40.9)
BIHAR	Other Social Services (28)	Education, Sports, Art & Culture (13.3)	Education, Sports, Art & Culture (15.1)	General Economic Services (45.1)
	Rural Development Programmes (9.8)	Irrigation & Flood Control (19.9)	Other Social Services (13.1)	Medical & Public Health (35.5)
	Social Security & Nutrition (32.4)	Rural Development Programmes (15.2)	Social Security & Nutrition (21.9)	Other Social Services (15)
CHHATTISGARH	Industries and Minerals (28.5)	Education, Sports, Art & Culture (39.7)	Agricultral & Allied Services (42.6)	Industries and Minerals (7.4)
	Medical & Public Health (36.8)	General Economic Services (41.8)	General Economic Services (18.8)	Science & Technology (-14.7)
	Social Security & Nutrition (18.8)	Industries and Minerals (13.6)	Industries and Minerals (8.4)	Social Security & Nutrition (6.7)

State	2018-19	2019-20	2020-21	2021-22
GOA	Industries and Minerals (14.9)	Agricultral & Allied Services (-74.8)	Agricultral & Allied Services (-104.2)	Agricultral & Allied Services (12.2)
	Rural Development Programmes (-0.2)	Social Security & Nutrition (2.4)	Rural Development Programmes (13.8)	Social Security & Nutrition (2.3)
	Welfare of SC, SC & Backward Classes (6)	Water supply, Sanitation, Housing & Urban Development (23.6)	Social Security & Nutrition (0.4)	Welfare of SC, SC & Backward Classes (28.1)
GUJARAT	Social Security & Nutrition (40.9)	Education, Sports, Art & Culture (38)	Education, Sports, Art & Culture (44.1)	Education, Sports, Art & Culture (52.6)
	Special Areas Programmes (5)	Industries and Minerals (42.8)	Social Security & Nutrition (15.9)	Other Social Services (48)
	Welfare of SC, SC & Backward Classes (52.9)	Welfare of SC, SC & Backward Classes (53.5)	Welfare of SC, SC & Backward Classes (32.9)	Social Security & Nutrition (37.7)
HARYANA	Industries and Minerals (13.9)	Agricultral & Allied Services (-2228.6)	Education, Sports, Art & Culture (23.2)	Agricultral & Allied Services (1.5)
	Rural Development Programmes (3.9)	Rural Development Programmes (9.5)	Rural Development Programmes (29.7)	Energy (0)
	Welfare of SC, SC & Backward Classes (39.5)	Social Security & Nutrition (11.9)	Welfare of SC, SC & Backward Classes (8.4)	Science & Technology (31.4)
HIMACHAL PRADESH	Industries and Minerals (62)	General Economic Services (64.8)	Agricultral & Allied Services (54)	Agricultral & Allied Services (81.6)
	Information, Publicity & Broadcasting (56.9)	Industries and Minerals (53.7)	General Economic Services (41.9)	Irrigation & Flood Control (71.7)
	Welfare of SC, SC & Backward Classes (61.3)	Welfare of SC, SC & Backward Classes (24.3)	Social Security & Nutrition (56.6)	Transport (84.8)
JHARKHAND	Agricultral & Allied Services (60.9)	Industries and Minerals (25.3)	General Economic Services (54.5)	Education Sports Art & Culture (51.1)
	Industries and Minerals (53.1)	Other Social Services (17.4)	Social Security & Nutrition (12.3)	Energy (30.2)
	Other Social Services (18.2)	Social Security & Nutrition (3.4)	Water supply Sanitation Housing & Urban Development (55.6)	Social Security & Nutrition (16.8)

State	2018-19	2019-20	2020-21	2021-22
KARNATAKA	Agricultral & Allied Services (45.6)	Agricultral & Allied Services (45.9)	Education, Sports, Art & Culture (75.3)	General Economic Services (-1664)
	Other Social Services (40.4)	Industries and Minerals (46.5)	Information, Publicity & Broadcasting (-	Industries and Minerals (89.5)
	Social Security & Nutrition (47.6)	Other Social Services (46.7)	Welfare of SC, SC & Backward Classes (58.9)	Other Social Services (93.5)
KERALA	Energy (17.9)	Energy (8.3)	Information, Publicity & Broadcasting (34.3)	Information, Publicity & Broadcasting (8.6)
	Industries and Minerals (42.1)	Water supply, Sanitation, Housing & Urban Development (26.1)	Irrigation & Flood Control (47.9)	Social Security & Nutrition (17.8)
	Irrigation & Flood Control (40.7)	Special Areas Programmes (1.4)	Special Areas Programmes (0.7)	Special Areas Programmes (18.5)
MADHYA PRADESH	Information Publicity & Broadcasting (13.3)	Agricultral & Allied Services (34.5)	Information Publicity & Broadcasting (10.8)	Education Sports Art & Culture (45.5)
	Science & Technology (30)	Other Social Services (52.3)	Other Social Services (47.1)	Information Publicity & Broadcasting (4.4)
	Social Security & Nutrition (21.1)	Social Security & Nutrition (51.5)	Social Security & Nutrition (38.1)	Welfare of SC SC & Backward Classes (32.9)
MAHARASHTRA	Rural Development Programmes (29.1)	Industries and Minerals (11.1)	General Economic Services (19.1)	General Economic Services (37.7)
	Social Security & Nutrition (19.7)	Other Social Services (10)	Other Social Services (18.4)	Industries and Minerals (28.8)
	Welfare of SC, SC & Backward Classes (36.8)	Rural Development Programmes (18.9)	Rural Development Programmes (25.8)	Rural Development Programmes (31.1)
MANIPUR	Agricultral & Allied Services (38.6)	General Economic Services (31.1)	Economic Services (71.8)	Industries and Minerals (19.9)
	Other Social Services (1.5)	Irrigation & Flood Control (25.2)	Irrigation & Flood Control (50.3)	Irrigation & Flood Control (20.6)
	Special Areas Programmes (43.2)	Social Security & Nutrition (2.7)	Water supply, Sanitation, Housing & Urban	Social Security & Nutrition (13.2)

State	2018-19	2019-20	2020-21	2021-22
			Development (55.9)	
MEGHALAYA	Education, Sports, Art & & Culture (54.3)			
	Rural Development Programmes (4.3)			
	Special Areas Programmes (56.7)			
MIZORAM	General Economic Services (60.3)	General Economic Services (67.9)	General Economic Services (112.1)	Irrigation & Flood Control (17.2)
	Irrigation & Flood Control (25.2)	Irrigation & Flood Control (65.4)	Irrigation & Flood Control (107.5)	Social Security & Nutrition (51.3)
	Special Areas Programmes (103.5)	Other Social Services (100)	Transport (176.1)	Water supply, Sanitation, Housing & Urban Development (63.6)
NAGALAND	E-education, Sports, Art & Culture (38.1)	Medical & Public Health (8.4)	Irrigation & Flood Control (29.3)	Special Areas Programmes (23.8)
	Irrigation & Flood Control (19.2)	Science & Technology (84.2)	Medical & Public Health (22.2)	Irrigation & Flood Control (25.7)
	Medical & Public Health (8.7)	Special Areas Programmes (89.7)	Special Areas Programmes (39.7)	Medical & Public Health (62.9)
ODISHA	Industries and Minerals (-62.9)	Industries and Minerals (31.7)	Industries and Minerals (55)	Education, Sports, Art & Culture (55.4)
	Irrigation & Flood Control (69)	Medical & Public Health (56.3)	Irrigation & Flood Control (48.7)	Rural Development Programmes (-
	Medical & Public Health (71.6)	Welfare of SC, SC & Backward Classes (31.7)	Welfare of SC, SC & Backward Classes (45.6)	Special Areas Programmes (54.6)
PUNJAB	Other Social Services (18.2)	Agricultral & Allied Services (0.1)	Agricultral & Allied Services (-2.8)	Agricultral & Allied Services (0.2)
	Science & Technology (13)	Other Social Services (5.3)	Rural Development Programmes (14.3)	Other Social Services (0.5)
	Social Security & Nutrition (16.7)	Welfare of SC, SC & Backward Classes (10.9)		Social Security & Nutrition (8.4)

State	2018-19	2019-20	2020-21	2021-22
RAJASTHAN	Industries and Minerals (4.5)	Industries and Minerals (20.7)	Energy (21.3)	Education, Sports, Art & Culture (37.6)
	Science & Technology (16.6)	Science & Technology (17.3)	Science & Technology (15.6)	Science & Technology (25.4)
	Social Security & Nutrition (30.8)	Social Security & Nutrition (48)	Special Areas Programmes (36.3)	Social Security & Nutrition (10.4)
SIKKIM	Agricultral & Allied Services (53.4)	Agricultral & Allied Services (26)	Agricultral & Allied Services (39.1)	
	Rural Development Programmes (66.8)	Rural Development Programmes (19)	Water supply, Sanitation, Housing & Urban Development (54.5)	
	Welfare of SC, SC & Backward Classes (47.1)	Welfare of SC, SC & Backward Classes (30.3)	Welfare of SC, SC & Backward Classes (42.9)	
TAMIL NADU	Energy (40.3)	Industries and Minerals (38.6)	Agricultral & Allied Services (48.4)	Agricultral & Allied Services (34.1)
	Social Security & Nutrition (-306.5)	Social Services (56.7)	Industries and Minerals (63.3)	Education, Sports, Art & Culture (63.9)
	Special Areas Programmes (21.3)	Water supply, Sanitation, Housing & Urban Development (51.6)	Science & Technology (19)	Welfare of SC, SC & Backward Classes (54.5)
TELANGANA	General Economic Services (21)	Economic Services (88)	General Economic Services (18.3)	Education, Sports, Art & Culture (8.4)
	Other Social Services (14.9)	General Economic Services (7.8)	Social Services (19.9)	General Economic Services (27.3)
	Social Security & Nutrition (15.7)	Water supply, Sanitation, Housing & Urban Development (153.9)	Water supply, Sanitation, Housing & Urban Development (10.2)	Welfare of SC, SC & Backward Classes (35.2)
TRIPURA	E-education, Sports, Art & Culture (32.8)	Economic Services (23.4)	Social Security & Nutrition (8.3)	
	Rural Development Programmes (29.1)	Rural Development Programmes (10.4)	Transport (30.2)	

State	2018-19	2019-20	2020-21	2021-22
	Special Areas Programmes (32.9)	Welfare of SC, SC & Backward Classes (23.1)	Welfare of SC, SC & Backward Classes (16)	
UP	Social Security & Nutrition (45.1)	Industries and Minerals (45.9)	Agricultral & Allied Services (-154.7)	General Economic Services (19.9)
	Social Services (47.2)	Social Services (47)	Other Social Services (39)	Medical & Public Health (40)
	Water supply, Sanitation, Housing & Urban Development (39.1)	Water supply, Sanitation, Housing & Urban Development (35.2)	Social Security & Nutrition (24.3)	Social Security & Nutrition (31.5)
UTTARAKHAND	Education, Sports, Art & Culture (44)	Industries and Minerals (54.9)	Industries and Minerals (9.1)	Industries and Minerals (20.8)
	Industries and Minerals (36.8)	Medical & Public Health (54.9)	Irrigation & Flood Control (35.7)	Other Social Services (32.3)
	Social Security & Nutrition (12.9)	Other Social Services (53.6)	Social Security & Nutrition (8.5)	Social Security & Nutrition (10.5)
WEST BENGAL	Agricultral & Allied Services (49.8)	Industries and Minerals (17.3)	Industries and Minerals (13.4)	Information, Publicity &
	Information, Publicity & Broadcasting (37.1)	Other Social Services (28.4)	Other Social Services (21.1)	Rural Development Programmes (18)
	Other Social Services (30.9)	Rural Development Programmes (20.1)	Social Security & Nutrition (13.7)	Welfare of SC, SC & Backward Classes (10)

DEBT & FISCAL SUSTAINABILITY

5

Fiscal Sustainability Assessment Tool: Experiences from Chhattisgarh

Ankit Anand, Rishabh Parashar

To strengthen Chhattisgarh Public Finance and the credibility of the budget process, the Finance department in consultation with the World Bank has used the Fiscal Sustainability Analysis tool through a Medium-Term Fiscal Framework to support annual budget formulation and medium-term fiscal planning.

The MTFF is a set of forecasting and analytical processes that enable the State to prepare macroeconomic and fiscal projections for a three-year period. These projections are based on assumptions concerning global, national and local conditions. The framework takes into account variables such as global economic growth, inflation, volatility in the industry and specific fiscal risks. The objective of developing the MTFF is to use it as a reference for the preparation of the annual budget and fiscal planning over the subsequent two years. It gives a clear and comprehensive sense of the fiscal strategy within the broad objectives of the FRBM Act. This Fiscal Strategy Report is an outcome of the MTFF process. We intend to publish it annually as a pre- budget disclosure document to provide stakeholders with an early indication of how the State government is planning to approach the coming budget and the medium-term outlook.

1. Snapshot on Finances of Chhattisgarh State

- Government of Chhattisgarh has taken successful efforts to augment State's own revenue and Centre share through which there is a boost in the growth rate since last many years. At a time when majority of the states and Government of India are in fiscal stress, Government of Chhattisgarh has a very healthy fiscal position. Infact Budget FY 2023-24 was a revenue surplus budget.

- State has also taken steps to for Rationalizing Expenditure & Increase Efficiency in the Expenditure incurred. As majorly revenue expenditure are categorized into committed and other revenue expenditure and understanding the fact that committed expenditure has very less room for rationalization, hence State has taken initiatives to optimize costs in subsidies, grant-in-aid and other maintenance & establishment expenditure which majorly includes below (not limited to) :-

    - Merge schemes with same/similar objectives (GoI schemes/State Schemes funds should focus on different objective)
    - Close schemes with very small budgets/do not align with Government’s priorities
    - Identify high priority schemes and increase budget provision

    - Every scheme to be reviewed before continuation (Impact Assessment of every scheme)

- Organizing review meetings with all major revenue-earning departments to augment State's own receipt with fruitful measures suggested to departments has resulted in benefits and maintaining the financial discipline for the State.

- State continued to have net borrowing facility from GOI in FY 2022-23 as per the limits defined (3% of GSDP). But by augmenting State's own revenue, State didn't use any of the facility & ended up with much less than stipulated 3% (of GSDP as per FRBM Act) borrowing. That's one of the best achievements in such financially stressed time and State will continue to take such efforts and initiatives such to maintain this sustainability. Other key Fiscal Indicators (as part of Disclosure of FRBM act for the state for the FY 2022- 23 are as follows :-

    - Fiscal Deficit (State 1.01 %; Benchmark 4%)
    - Debt to GSDP (State 17.40%; Benchmark 25%)
    - Interest payments to Revenue Receipts (State 5.64 %; Benchmark 10%)

- Government of Chhattisgarh has also setup Centralized Revenue Analytics cum Asset Monetization Cell to support Revenue Earning Departments to identify ways to improve revenue using analytics, policy/process changes. This Cell also supports in monetization of assets of the states and other key reforms to bring marginal improvements for the State Revenue.

2. Overview of the Fiscal Sustainability Analysis and usage of Tool

Fiscal Sustainability Analysis (FSA) is an important component of macroeconomic analysis for developing countries. To enhance understanding on fiscal policy and the constraints faced by policy makers, there is a need of toolkit for Fiscal Sustainability Analysis (FSA) which can be used to overcome challenges which we face to manage finances at Sub-National Level. FSA tool is built with considerations on previous work in this area and new developments dealing with uncertainty and suited forecasting customized to the user requirements.

The FSA toolkit includes an excel-based FSA tool (developed by World Bank's Macroeconomics and Fiscal Management Global Practice) and a technical manual accompanying it. The FSA tool is standardized and simple, but at the same time flexible enough to allow for user-defined specifics by the state. The FSA Tool manual provides step-by-step technical instructions for running the FSA tool and includes mathematical appendices and a glossary.

2.1 Usage of FSA Tool for FRBM Disclosure

As per Section 3, Fiscal Responsibility and Budget Management (FRBM) Act, 2005 requires presentation on the Medium-Term Fiscal Policy Statement to the State Legislature and sets forth a three-year rolling target for the expenditure indicators with specification of assumptions and risks involved. It was mandated by the act that the following must be placed along with the Budget documents annually.

The FSA tool has assisted to build scenario-based outcomes and report FRBM disclosures through deriving projections for forecasted period using logical techniques and states actual performance.

Fiscal Responsibility and Budget Management (FRBM Act, 2003)

- Mandates State for disclosure of Medium-Term Fiscal Policy Statement to the State Legislature and sets forth a three-year rolling target

Medium Term Fiscal Framework (MTFF)

- MTFF enable State to prepare macroeconomic and fiscal projections for a future period
- These projections are based on assumptions concerning global, national and local conditions
- The framework has to take into account variables such as economic growth, inflation,

Fiscal Sustainability Analysis (FSA) Tool

- It is used to assess the impact from-
    - Uncertain events that trigger fiscal costs and
    - Public debt
    - Positive or negative shocks to Fiscal parameters (majorly Revenue or Cost)
- Tool generates fiscal sustainability outcomes under various scenarios and stress tests
- It presents the deterministic and probability distributions of various macro-fiscal and debt indicators
- The FSA tool uses standardized and simple

Fiscal Strategy Report

- Report is majorly used for:-
    - Compliance to FRBM Disclosure
    - Deterministic Projections for the desired period using proven methodology
    - Annual budget and Fiscal Planning for the State

2.2 Structure of FSA Tool

FSA tool has 3 sections - Input Section, Model Section and Result Section, which keeps the tool more in sequence to derive the result as per the state needs and bring hands on experience to user through following the flow of Tool. Following are the details of the overall structure of the model :-

i. Input Section - This section acts as a data entry point for the tool through where past data is updated from different sources to trigger the baseline scenario. This section majorly captures GSDP, Financial data sets, for the past period etc.

ii. Model Section – This section auto populates data from the inputs section and allow user to select the projection techniques and create multiple scenarios. It broadly analyse the data considering the data entered for the past period, create scenarios for future projections. This section also allows to select projection techniques for each Fiscal Parameters to set the rolling target for the projected period.

iii. Result Section- This section allows user to analyze overall summary of Fiscal Indicators for the projected period, Annual Budget Planning, Committed Expenditure review, Borrowings of the State. Summary reports are also available in Graphs, Charts, Trendline for the review period

2.3 Forecasting Techniques for Fiscal Parameters

There are 13 Forecasting Techniques available in the FSA tool for making projections for the Fiscal Parameters (Revenue & Expenditure). Each technique has its own set of rules to derive the projections and these techniques provide flexibility in forecasting, allowing users to choose the approach that best aligns the State needs and objectives. Out of 13, Key Forecasting Techniques used in Chhattisgarh are listed below :-

- Level Shock to Raw Data- Allow users to add/subtract certain figure of shocks (negative or positive)
- New Level- Allow overwriting the raw data by manually typing in a set of new input
- Growth Rate- Defines variable growth rate for each year. Allow users to put variable growth rate for the Fiscal Parameters
- Share of GDP - Allow user to Set user-defined share of GDP for the forecasted period

Note- Application of techniques has to be backed up with the justification and need of consideration such as performance, financial parameters etc. to use the forecasting techniques to generate output with a real scenario.

2.4 Benefits of FSA Tool

Following are the benefits of using FSA tool which directly or indirectly aided State of Chhattisgarh for aligning Fiscal discipline and controlled expenditure for the financial years and preparing for disclosure requirement thereof. Key benefits of the FSA tool are as follow:-

- Provides overview of Fiscal Space for the State and compliance to FRBM Act

- Use of Standardized & Logical Forecasting Methodologies for justifying the Fiscal Indicators
- Devise Risk Mitigation Measures to minimize the impact on State Finances and work in a controlled environment
- Prepares State to use customized approach for the upcoming budget and the medium-term outlook of the state
- Set Control on Deficit considering focus on prioritized socio-economic sectors and other capital expenditure

2.5 Practical Challenges faced while adopting and using FSA Tool

While Finance Department, Government of Chhattisgarh has used this FSA tool for aforesaid purpose, there were practical challenges for adopting this tool for setting the alignment on the State needs. Below are the listed challenges (not limited to) :-

- Data to be manually populated for the past years leading to potential chances of errors and is time consuming
- Require customization through manual intervention for forecasting the fiscal parameters to State Needs
- Inbuilt file errors (Referencing issues in Model) may lead to give incorrect or no output
- Reporting of figures in different denominations (Crores, Millions etc.)
- Requires adequate training for adoption of techniques to use forecasting fiscal parameters for the State without which unrealistic output may be generated

3. Conclusion

Focus of the State Government in the upcoming budget and in the medium term is to mobilize additional resources for increasing expenditure. With sound financial condition of the State, the nature of capital expenditure are to be incurred through revenue surplus. These remains continued thrust of the Government for creation of quality infrastructure. Through effective policy decisions, Chhattisgarh Government has taken actions to maintain the Fiscal Discipline for the state. Government is also prioritizing spending in key social sectors to improve the quality of life of people of state. Sound Fiscal Planning and quality of expenditure over the years have resulted in sustainable financial condition of the State.

SUBSIDIES

6

Shrinking Fiscal Space and its Impact on Welfare Expenditure and Subsidies at State Level in India

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India's stagnant revenues and increasing expenditures at state level has been a major fiscal concern. In this context, shrinking fiscal space and continued COVID-19 pandemic induced welfare expenditure and explicit subsidies are major factors which affect the deterioration of fiscal health of the States. Overall analyses show that those states which have revenue deficit need to think of not only restrict committed expenditure but also rationalising subsidies. Financing subsidies and welfare expenditure through borrowing is not sustainable in the long run and also result in reduction of expenditure on infrastructure. Thus, there is a need for improving the fiscal space and rationalising the subsidies including in the form of freebies.

1. Introduction

In the process of achieving socio-economic objectives, the governments provides various goods and services to its citizens and organisations. Majority of them are autonomous (in Keynesian sense) and some are subsidised. Historically, welfare expenditures and subsidies (which are often viewed as the converse of a tax) are used as a welfare augmenting instrument of fiscal policy across the world (Srivastava and Sen, 1997). Subsidies per se are not good or bad, but its socio-economic outcomes, impact on economic agents and their fiscal impacts on the government finances makes this topic highly contested. This is more so in the context of deteriorating finances at state level in India.

Expansion of activities by the governments, not only in provision of goods and services but also on investments in infrastructure development at state level has resulted into increasing debt burden in terms of increasing debt service payments like interest payments. Expansion of the public service delivery results into increasing personnel payments like salaries, wages and pensions. All these and other committed expenditures leave very limited fiscal space for welfare expenditures and subsidies from the revenues and result into dependence on borrowings for the revenue expenditure purpose. Keeping in mind the importance of welfare expenditure and subsidies in a developing country like India, this paper attempts to look at the fiscal comforts of the states and analyses the scope for subsidies and welfare expenditure at state level and need for their rationalisation.

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The paper analyses the state of state finances at state level and defines Fiscal Space in broader sense in the second section. Estimation of explicit subsidies at state level for selected states in the context of available fiscal space is given in third section, followed by broad conclusions in the last section.

2. State Finances and Fiscal Space

The “budget” is the expression of interest and testimony of the government. The fiscal position of the state is presented through budgets primarily to meet accountability and to increase transparency. Ideally, the government design the budget in such a way that optimally allocates scarce resources, after taking into account the socio, economic and political considerations. However, lack of effective expenditure controls threaten macroeconomic stability and fiscal prudency as well as undermines faith in government's effective utilisation and management of public resources. Hence, India adopted fiscal rules in the form of Fiscal Responsibility and Budget Management Act 2003 at central level and same law is ratified and enacted by state level rules.

After the adoption of fiscal rules, major fiscal indicators of the state governments started showing significant improvement. In the FY 2006-07, around 20 states reported revenue surplus and the states reported a consolidated surplus on revenue account (0.3%) for the first time after almost two decades (RBI, 2007-08). However, the global financial crisis had seriously affected the state finances during 2010-11. According to the Reserve Bank of India (RBI) State Finances Report 2021-22, “the states have maintained the consolidated gross fiscal deficit below FRBM limit of 3% of GSDP since 2005-06, except for the years 2009-10, 2015-16 and 2016-17. The deviation in 2009-10 is due to global financial crisis and in 2015-16 and 2016-17 due to Ujwal Discom assurance Yojana (UDAY)”.

The Covid-19 pandemic deteriorated the government’s fiscal balances across the world and across the levels of government’s (i.e. increase in revenue deficit, fiscal deficit and primary deficits on the one hand and decrease in spending on creation of capital assets on the other). States in India are no exception to fiscal impacts of the pandemic and, hence, their finances have been seriously affected. The state governments are borrowing to finance much of their expenditures. For most of the states, the upper limits of FRBM are crossed in the recent years.

The Indian states were on positive growth trajectory before the pandemic. Though, some states faced the transitional effects of the implementation of goods and service tax in 2017, overall the states were growing healthy. The COVID-19 has brought economies to a halt with lockdowns, loss of lives and livelihoods. The pandemic seriously affected the economic growth of all the states. Some states even registered the negative growth rates in 2020-21 (e.g. Haryana, Jharkhand, Kerala and Maharashtra). The state governments had to respond with additional expenditures on health and to save livelihoods. This increased the expenditure burden on the states exchequer. With opening up the economy in post-lockdown period, most of the state economies have recovered (V-shaped recovery) and registered a positive growth in 2021-22. The GSDP growth rates in 2021-22 were higher on account of positive recovery and due to base effect.

2.1. Status of Revenue at State Level

Table-1 shows the revenue receipts position of the states, expressed as percentage of GSDP. For general category states, the revenue receipts as percentage of GSDP vary in the range of 10 to 25%. This includes Andhra Pradesh, Odisha, Punjab, Rajasthan, Punjab, Uttar Pradesh and West Bengal. Most of these have shown a reduction in their revenue receipts due to two effects. First, dip in the actual revenues (the numerator affect). Second, ratio is altered due to low GSDP growth (Denominator affect).

Any improvement in the tax-gdp ratio will create additional fiscal space, which is crucial to expand investments into capital infrastructures (Rao and Kumar, 2017). But, unfortunately, in the post-GST scenario, the state's residual tax powers have been limited. At present, State Excise, Stamp and Registration are the only taxes which are generating sizable revenues. Scope to generate additional tax revenues from these sources are marginal as most of the states tapping these residual tax avenues to their full potential (as we can see that many of the states increased excise and stamp duty rates in 2021-22). Under these circumstances, expansion of states' fiscal space from revenue side is challenging. Hence, rationalisation of expenditure is the need of the hour but this does not mean curtailing or reducing expenditure.

Table-1: Total Revenue Receipts as a percentage of GSDP

State	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Andhra Pradesh	13.36	13.12	11.49	11.55	12.84	14.27
Bihar	25.06	24.96	20.91	20.72	24.89	26.39
Chhattisgarh	21.13	20.46	18.52	18.04	20.99	20.31
Goa	15.94	15.92	15.18	14.56	20.40	18.98
Gujarat	9.28	9.11	8.77	7.74	8.39	8.26
Haryana	9.81	9.44	8.90	8.91	10.34	10.70
Jharkhand	19.55	18.37	18.19	17.71	20.34	20.65
Karnataka	11.03	11.17	10.86	9.05	9.25	10.07
Kerala	11.83	11.78	10.94	12.21	13.07	13.41
Madhya Pradesh	18.57	18.10	15.73	14.99	14.69	16.96
Maharashtra	10.36	10.86	10.36	9.94	11.32	11.26
Odisha	19.32	19.97	18.59	19.23	22.15	22.77
Punjab	11.25	12.15	11.40	12.75	13.65	15.14
Rajasthan	15.29	15.12	14.02	13.25	15.84	16.11
Tamil Nadu	9.98	10.66	9.71	9.15	9.35	9.31
Telangana	11.84	11.83	10.81	10.41	13.52	14.85
Uttar Pradesh	19.36	20.85	21.42	17.24	19.83	24.37
West Bengal	13.47	13.24	11.83	11.41	11.46	11.56
Average	14.80	14.84	13.76	13.27	15.13	15.85
SD	4.54	4.48	4.06	3.84	4.92	5.25

Source: Author's Compilation, Basic Data, Finance Accounts, CAG of respective states, various years

2.2. Level of Expenditures at State Level

There is a consensus in the literature that the states have more expenditure responsibilities than Union Government (Rao, 2005). When there are fiscal rules (FRBM targets), revenue uncertainties (due to GST implementation) and low revenue collections (due to pandemic or low tax effort), the states took recourse to expenditure compression or expenditure reorientation/switching (RBI, 2022). This trend is clearly visible in revenue and capital expenditures for most of the states as shown in Table 2 and Table 3 respectively.

Revenue expenditures have been linearly growing over time in most of the states. The pandemic created a "ratchet effect" kind of situation. There was fall in revenues but expenditures (especially, revenue expenditure) could not be cut down. Moreover, expenditures grown further due to pandemic control related expenditures. States had to finance the additional expenditures through borrowings, curtailing/reducing capital expenditure, and expenditure switching or reorientation.

When it comes to capital expenditure, states were decreasing capital spending over the study period from 2017 (except states like Uttar Pradesh). In most of the general category states, capital expenditures have been lower at below 5 percent. This has been less than the state's fiscal deficits, which implies that the capital expenditures have been entirely financed by borrowings, except in cases of revenue surplus, especially in post-pandemic scenario.

Table-2: Total Revenue Expenditure as a percentage of GSDP

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Andhra Pradesh	15.42	14.72	14.23	15.05	14.46	15.54
Bihar	21.89	23.66	20.80	22.55	30.36	25.76
Chhattisgarh	19.92	20.25	21.30	19.99	21.25	20.15
Goa	15.20	15.42	15.47	15.41	20.42	18.50
Gujarat	8.88	8.90	8.65	9.10	8.35	8.22
Haryana	11.47	11.05	11.13	11.86	11.74	11.69
Jharkhand	18.88	16.44	17.58	18.69	20.21	18.97
Karnataka	10.69	11.13	10.79	10.17	9.55	10.85
Kerala	14.25	13.99	12.70	15.44	16.61	15.71
Madhya Pradesh	17.93	17.04	16.03	16.87	15.18	17.28
Maharashtra	10.27	10.40	10.98	11.45	12.29	11.94
Odisha	16.29	17.12	18.14	17.56	18.86	20.24
Punjab	13.26	14.71	14.04	15.94	17.17	17.14
Rajasthan	17.52	18.29	17.67	17.60	18.82	17.87
Tamil Nadu	11.46	12.10	11.71	12.42	11.89	11.44
Telangana	11.38	11.32	11.47	12.71	13.14	14.56
Uttar Pradesh	18.49	19.06	17.47	17.38	18.67	22.27
West Bengal	14.47	14.19	13.46	13.68	13.60	13.21
Average	14.87	14.99	14.65	15.22	16.25	16.19
SD	3.62	3.75	3.53	3.44	5.06	4.37

Source: Same as in Table 1.

Table-3: Total Capital Expenditure as a percentage of GSDP

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Andhra Pradesh	1.72	2.29	1.27	1.87	1.54	2.29
Bihar	6.17	3.99	2.07	2.94	5.66	3.99
Chhattisgarh	3.54	2.80	2.48	2.58	3.55	3.48
Goa	3.02	3.01	2.22	2.64	7.84	5.21
Gujarat	1.98	1.88	1.57	1.62	1.49	1.63
Haryana	2.12	2.19	2.32	0.77	1.65	2.25
Jharkhand	4.43	3.50	3.08	2.67	2.73	4.13
Karnataka	2.30	2.35	2.20	2.62	1.93	2.31

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Kerala	1.25	0.94	1.03	1.61	1.36	1.49
Madhya Pradesh	4.26	3.54	3.12	3.11	3.17	3.97
Maharashtra	1.14	1.36	1.33	1.09	1.81	1.82
Odisha	4.79	4.71	3.71	3.31	3.65	5.38
Punjab	0.50	0.47	3.30	0.81	1.69	1.74
Rajasthan	2.48	2.15	1.47	1.51	2.35	2.61
Tamil Nadu	1.38	1.49	1.43	1.74	1.74	1.73
Telangana	3.19	2.64	1.78	1.64	2.25	2.29
Uttar Pradesh	2.71	3.95	3.51	3.04	5.05	6.05
West Bengal	1.99	2.15	1.32	1.00	1.25	1.93
Average	2.72	2.52	2.18	2.03	2.82	3.02
SD	1.42	1.09	0.83	0.82	1.73	1.40

Source: Same as in Table 1.

2.3. Deficit Profile of the States

Various Union Finance Commissions awarded revenue deficit grants to the states after taking into account of revenue gap, own revenue receipts and tax devolution, revenue expenditure projections. For instance, 14th Finance Commission (FC) awarded Rs. 194821 crore as revenue deficit (RD) grants to eleven states during the award period 2015-16 to 2019-20. The 15th FC recommended for revenue deficit grants of Rs. 294514 crore for seventeen States during the award period 2021-22 to 2025-26. The RD grants will be reported under fiscal transfers and hence, are part of revenue receipts. The RD grants are untied transfers and contributory to enhance the fiscal space to the state. In general, other central transfers (expect tax devolutions) are conditional or specific purpose grants and the states cannot have free for their allocation and spending.

During the pandemic, Government of India's Atmanirbhar package had allowed states an additional fiscal deficit of 2 percent over and above 3 percent of Gross State Domestic Product (up to 5 percent) for the year 2020-21 (RE). Of the additional 2 per cent (0.5% unconditional and 1.5% conditional). Conditional component was linked to specific reforms related to distribution of electricity, one nation one ration card scheme, ease of doing business, and urban local bodies.

The 15th FC report recommended relaxations in state borrowing limits to overcome the fiscal impacts of pandemic. The nominal net borrowing limit has been fixed at 4% of GSDP for 2021-22, 3.5% for 2022-23 and 3% for 2023-24 to 2025-26. In addition, 0.5% additional borrowing is allowed on account of power distribution sector reforms for 2021-22 to 2024-25. In addition, The 15th FC recommended that "If a State is not able to fully utilise its sanctioned borrowing limit, as specified above, in any particular year during the first four years of award period (2021-22 to 2024-25), it will have the option of availing this unutilised borrowing amount (calculated in rupees) in any of the subsequent years within our award period."

Table 4 and Table 5 presents the revenue and fiscal deficit position of the states respectively. Most of the states have accumulated revenue and fiscal deficits in 2020-21 and 2021-22. States' with revenue surplus in 2017-18 and 2018-19 have plunged into deficit due to pandemic and shortfall in revenue mobilisation. Another reason for increasing revenue deficit is the expansion of welfare expenditure during pandemic lockdowns. Continuation of these welfare expenditure beyond pandemic recovery has been a stress on state finances. For states' to return to fiscal sustainability path, the deficits needs to be curtailed and brought down within the range of fiscal rules at the earliest. This can be done either increasing revenues, rationalisation of expenditures or both. Given the limited scope for additional revenue mobilisation at state level, the only option is to rationalise expenditures.

Table-4 Total Revenue Deficit Surplus (+)/Deficit (-) as a percentage of GSDP

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Andhra Pradesh	-2.05	-1.59	-2.74	-3.50	-1.63	-1.27
Bihar	3.16	1.31	0.12	-1.83	-5.48	0.64
Chhattisgarh	1.21	0.21	-2.79	-1.96	-0.26	0.16
Goa	0.74	0.49	-0.29	-0.85	-0.02	0.48
Gujarat	0.39	0.22	0.12	-1.36	0.04	0.05
Haryana	-1.65	-1.61	-2.23	-2.95	-1.40	-0.98
Jharkhand	0.67	1.93	0.61	-0.98	0.14	1.68
Karnataka	0.34	0.05	0.07	-1.12	-0.30	-0.78
Kerala	-2.41	-2.22	-1.76	-3.23	-3.54	-2.30
Madhya Pradesh	0.64	1.06	-0.30	-1.88	-0.49	-0.32
Maharashtra	0.09	0.47	-0.63	-1.52	-0.96	-0.68
Odisha	3.03	2.85	0.44	1.67	3.29	2.53
Punjab	-2.01	-2.56	-2.64	-3.19	-3.52	-1.99
Rajasthan	-2.23	-3.17	-3.64	-4.34	-2.98	-1.76
Tamil Nadu	-1.47	-1.44	-2.00	-3.28	-2.54	-2.12
Telangana	0.46	0.51	-0.66	-2.30	0.38	0.29
Uttar Pradesh	0.87	1.78	3.95	-0.14	1.16	2.11
West Bengal	-1.01	-0.94	-1.63	-2.27	-2.15	-1.65
Average	-0.07	-0.15	-0.89	-1.95	-1.13	-0.33
SD	1.64	1.63	1.72	1.38	1.98	1.41

Source: Same as in Table 1.

Table-5: Total Fiscal Deficit Surplus (+)/Deficit (-) as a percentage of GSDP

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
Andhra Pradesh	-4.12	-4.06	-4.11	-5.44	-3.18	-3.64
Bihar	-3.05	-2.62	-2.06	-4.82	-11.31	-3.47
Chhattisgarh	-2.41	-2.61	-5.21	-4.52	-3.81	-3.33
Goa	-2.32	-2.51	-2.52	-3.49	-7.88	-4.71
Gujarat	-1.61	-1.77	-1.51	-2.44	-1.51	-1.64
Haryana	-2.99	-3.14	-4.00	-3.78	-2.99	-2.98
Jharkhand	-4.42	-2.05	-2.50	-3.65	-2.60	-2.46
Karnataka	-2.33	-2.60	-2.36	-3.88	-2.39	-3.26
Kerala	-3.83	-3.42	-2.89	-5.12	0.06	-3.91
Madhya Pradesh	-3.13	-2.60	-3.51	-5.11	-3.70	-4.56
Maharashtra	-1.02	-0.90	-1.97	-2.64	-2.79	-2.50
Odisha	-2.12	-2.04	-3.44	-1.80	-0.38	-3.00
Punjab	-2.65	-3.13	-3.11	-4.17	-5.44	-3.78
Rajasthan	-3.04	-3.78	-3.77	-5.86	-5.18	-4.36
Tamil Nadu	-2.72	-2.90	-3.35	-4.94	-4.17	-3.89
Telangana	-3.53	-3.14	-3.35	-5.06	-3.88	-4.01
Uttar Pradesh	-1.93	-2.22	0.65	-3.18	-3.91	-3.96
West Bengal	-2.97	-3.11	-3.05	-3.43	-3.47	-3.64
Average	-2.79	-2.70	-2.89	-4.07	-3.81	-3.51

State\UT	2017-18	2018-19	2019-20	2020-21	2021-22 RE	2022-23 BE
SD	0.84	0.73	1.22	1.09	2.53	0.76

Source: Same as in Table 1.

The above analysis highlights the importance of having effective expenditure controls and strict adherence to fiscal rules in the budgets to maintain macroeconomic stability, fiscal prudency, effective and efficient utilisation of public money. Further, improving the tax-GDP ratio is crucial to expand investments into capital infrastructures. In the post-GST scenario, the state's residual tax powers have been limited and the residual taxes have been exploited to the maximum extent.

2.4. Committed Expenditure

Committed expenditure are those which are mandatory on part of the Governments and cannot be avoided. Traditionally these expenditures include Salaries and Wages, Pensions and Debt servicing[14]. With expansion of governance to third tier of governments at local body level, all the grants in aid given to local bodies both statutory and for service provision are treated as committed expenditures.

In this paper, committed expenditures are measured by sum of expenditures on salaries, pensions, interest payments and statutory grants to local bodies. Assuming compliance with various statutory requirements (as per FRBM Act 2003), this paper assumes no revenue deficit and borrowings would fund only capital expenditures. Accordingly, Fiscal Space is defined as net revenue receipts available after meeting the committed expenditures.

The committed Expenditure can be defined in the following way.

2.4.1 Committed expenditure 1:

The committed expenditure is calculated as the sum of total Revenue Expenditure on Salaries & Wages (Finance Account), Pensions and other Retirement Benefits (2071) and Interest Payments (2049).

Table 1. Committed Expenditure 1 as % of Revenue Receipts

State	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh	55.23	53.39	60.84	63.48	53.66
Assam	68.8	60.07	63.66	64.24	63.53
Bihar	35.02	34.92	39.02	42.07	36.16
Chhattisgarh	33.11	40.03	50.73	53.33	45.77
Goa	46.8	47.06	49.76	51.77	48.47
Gujarat	35.06	36.26	35.75	42.32	34.26
Haryana	61.49	62.39	68	72.21	67.13
Jharkhand	41.23	40.84	41.25	45.28	39.91
Karnataka	24.6	26.64	29.35	35.5	32.03
Kerala	80.53	72.33	77.53	69.3	81.19

[14] FC definition of committed exp…15th FC Report Page 82…. "pensions, interest payments and administrative services".. + **Annex-FI.13: Committed Expenditure (Interest, Pension and Salary) as % of GSDP**

State	2017-18	2018-19	2019-20	2020-21	2021-22
Madhya Pradesh	31.89	33.43	37.7	45.28	40.05
Maharashtra	32.3	29.78	35.09	39.18	35.51
Odisha	36.63	35.88	40.39	39.54	30.22
Punjab	84.75	74.9	79.04	76.75	73.48
Rajasthan	55.54	66.17	66.3	73.5	58.77
Tamil Nadu	49.39	56.94	59.88	60.22	53.37
Telangana	47.08	43.34	45.93	51.22	46.75
Uttar Pradesh	40.18	38.32	37.64	45.91	39.91
Uttarakhand	72	68.54	70.71	59.41	55.09
West Bengal	43.04	41.03	46.21	50.55	68.89

2.4.2 Committed expenditure 2:

The committed expenditure is calculated as the sum of committed expenditure 1 and compensation and assignments to local bodies and panchayat raj institutions (3604) by the State Governments..

Table 2: Committed expenditure as % of Revenue Receipts

State	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh	55.32	53.42	60.86	63.5	53.68
Assam	69.04	60.51	64.23	64.81	63.91
Bihar	35.02	34.92	39.02	42.07	36.16
Chhattisgarh	35.4	41.41	52.49	55.12	47.17
Goa	46.8	47.06	49.76	51.77	48.47
Gujarat	35.44	36.53	36.04	42.63	34.51
Haryana	62.11	62.72	68	72.21	67.13
Jharkhand	41.23	40.84	41.25	45.28	39.91
Karnataka	29.01	29.93	33.01	39.13	35.41
Kerala	89.2	81.92	84.26	79.02	89.47
Madhya Pradesh	37.13	38.53	41.69	49.31	43.88
Maharashtra	38.78	36.98	42.59	46.75	43.3
Odisha	38.11	37.25	41.8	40.81	31.21
Punjab	87.21	78.54	84.26	85.4	78.42
Rajasthan	55.54	66.17	66.3	73.5	58.77
Tamil Nadu	57.24	65.51	68.87	69.29	62.77
Telangana	47.11	43.34	45.93	51.22	46.75
Uttar Pradesh	44.33	41.99	41.6	50.71	44.36
Uttarakhand	77.42	73.21	76.3	64.46	58.67
West Bengal	43.41	41.36	46.53	50.85	69.08

2.4.3 Committed expenditure 3:

The committed expenditure is calculated as the sum of committed expenditure 1, compensation and assignments to local bodies and panchayat raj institutions (3604) and Grants-in-aid from Central Government to local bodies routed through State Budgets. (1601).

Table 3: Committed expenditure 3 as % of Revenue Receipts

State	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh	57.39	54.68	63.61	67.39	55.09
Assam	70.56	61.22	70.58	68.12	65.74
Bihar	38.46	38.47	44.1	47.87	39.02
Chhattisgarh	37.52	43.45	55.41	58.06	49.62
Goa	47.34	47.63	51.17	52.41	49.22
Gujarat	37.61	38.63	38.94	46.02	35.89
Haryana	63.8	64.17	70.62	74.99	67.98
Jharkhand	43.66	42.17	46.08	49.59	41.78
Karnataka	30.7	31.8	35.38	42.17	37.08
Kerala	91.01	83.48	86.7	81.49	90.79
Madhya Pradesh	39.45	40.94	45.37	51.35	44.94
Maharashtra	38.78	36.98	42.79	49.84	44.83
Odisha	40.21	39.32	44.76	44.02	33.14
Punjab	87.5	79.18	87.99	90.1	80.41
Rajasthan	58.17	67.74	70.81	77.04	61.6
Tamil Nadu	58.19	67.23	71.97	71.36	65.53
Telangana	48.43	44.9	48.6	53.88	47.87
Uttar Pradesh	47.3	44.7	44.91	55.47	46.78
Uttarakhand	77.42	74.77	78.73	66.69	60.33
West Bengal	47.11	44.05	50.29	55.12	71.83

Apart from these fixed committed expenditures, the states also face another type of committed expenditure on account of inter-governmental fiscal transfers. Apart from the transfers under tax devolution, most of the transfers require states matching grants or comes with conditionalities. Hence, the state's hands are tied further to that extent. Under Centrally Sponsored Schemes (CSS), the states matching contribution has increased over time. Earlier, it was about 10 to 20 % in the 11th and 12th FC period and gradually increased to 25% in some schemes. By 14th FC period, the states matching share is generally fixed at 40%.

Before 2014, the CSS and Centrally Sector Scheme' (CSS) transfers were routed through society route. To enhance transparency, all the CSS and CS transfers are given in treasury route from 2014. The implication of this can be seen on both revenue and expenditure side. All transfers are now accounted under revenue receipts and hence, revenues will go up to that extent but expenditures are divided and accounted under both revenue and capital expenditures. This resulted in an increase in the revenue deficits and capital accounts (RBI, 2014-15). Another issue that the states face is the timing of central transfer's release. Due to delayed releases till the lasts quarter of a financial year, , states are not able to pump expenditures adequately and face budget execution issues.

Table 4 details the Committed Expenditure under CSS as percentage of total revenues for all states for 2017-18 and 2020-21. These expenditures vary from state to state depending on the implementation of CSS at state level. The share of CSS is low at about 3 to 4% in states like Haryana, Goa and Gujarat and higher by about 15 to 16% in states like Andhra Pradesh and Madhya Pradesh. Amarnath and Singh (2019) analysed the additional gains from higher tax devolution (under 14th FC period) against the additional burden due to the withdrawal of certain CSS and CS schemes and the changes in the sharing pattern of major CSS calling for greater contribution from the states. The study found that increased states share in CSS takes away the gains accrued due to higher tax devolution. This results in the net gains for states to be marginal from the CSS.

Table-4 CSS Expenditure as percentage of Revenue Receipts

State	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh	9.99	9.69	5.91	9.06	8.00
Bihar	21.81	26.96	25.33	24.87	25.20
Chattisgarh	22.07	15.11	15.84	12.97	12.05
Goa	0.00	0.00	0.00	0.00	0.00
Gujrat	12.18	11.29	13.32	15.89	11.03
Haryana	3.79	6.88	10.99	7.38	7.89
Jharkhand	15.22	14.57	16.48	18.15	11.24
Karnataka	0.00	0.00	0.00	0.00	0.00
Kerala	2.15	3.14	2.00	3.96	2.26
Madhya Pradesh	21.54	16.71	17.90	23.84	15.63
Maharashtra	6.53	5.83	3.06	8.22	5.92
Odisha	19.32	18.93	20.44	18.99	13.75
Punjab	0.00	0.00	0.00	0.00	0.00
Rajasthan	10.87	13.06	14.28	12.47	10.78
Tamilnadu	5.77	11.68	10.81	11.48	10.59
Telangana	7.94	4.53	5.10	6.69	3.48
Uttar Pradesh	9.35	11.89	8.81	13.05	9.18
West Bengal	28.58	13.94	14.97	11.61	0.00

Source: Basic Data from Finance Accounts, CAG – Various years

2.5 Fiscal Space

Fiscal space is defined as the surplus of revenue receipts after meeting the committed expenditure which is mainly from Revenue expenditure. These surplus is to finance the remaining expenditure of Centrally sponsored schemes, state schemes including subsidies. There are quite few subsidies which are part of centrally sponsored schemes.

Fiscal Space considering the committed expenditure, which includes Salaries, wages, Interest payments, Pensions, Statutory grants to local bodies (SFC recommendations) and Central grants to rural local bodies routed through state budget (CFC Recommendation) is given in the table below.

Fiscal Space as % of Revenue Receipts

State	2017-18	2018-19	2019-20	2020-21	2021-22
Andhra Pradesh*	42.61	45.32	36.39	32.61	44.91
Bihar*	61.54	61.53	55.9	52.13	60.98
Chhattisgarh	62.48	56.55	44.59	41.94	50.38
Goa	52.66	52.37	48.83	47.59	50.78
Gujarat	62.39	61.37	61.06	53.98	64.11
Haryana*	**36.2**	**35.83**	**29.38**	**25.01**	**32.02**
Jharkhand	56.34	57.83	53.92	50.41	58.22
Karnataka*	69.3	68.2	64.62	57.83	62.92
Kerala*	**8.99**	**16.52**	**13.3**	**18.51**	**9.21**
Madhya Pradesh	60.55	59.06	54.63	48.65	55.06
Maharashtra*	61.22	63.02	57.21	50.16	55.17
Odisha	59.79	60.68	55.24	55.98	66.86
Punjab*	**12.5**	**20.82**	**12.01**	**9.9**	**19.59**
Rajasthan*	41.83	32.26	29.19	22.96	38.4
Tamil Nadu*	41.81	32.77	28.03	28.64	34.47
Telangana*	51.57	55.1	51.4	46.12	52.13
Uttar Pradesh	52.7	55.3	55.09	44.53	53.22
West Bengal*	**52.89**	**55.95**	**49.71**	**44.88**	**28.17**

Note: * indicates the states having revenue deficit in 2021-22

The table provides the Fiscal Space as a percentage of Revenue Receipts for different states in India from the fiscal years 2017-18 to 2021-22. Fiscal space refers to the capacity of a government to provide resources for public spending after meeting committed expenditure. It is evident that there is significant variation in fiscal space among the states over the years.

States like Kerala consistently had low fiscal space, indicating limited space.. On the other hand, states like Karnataka, Gujarat, and Maharashtra had relatively higher fiscal space throughout the years, suggesting a greater flexibility. Of these states only Gujarat has revenue surplus.

It's noteworthy that some states, such as Punjab and Tamil Nadu, fiscal space is declining. It is worth to note that many states having higher fiscal space also have revenue deficit meaning that these state borrow for current expenditure in addition the surplus they have after meeting committed expenditures..

In conclusion, the analysis of the fiscal space data highlights the diverse fiscal capacities among Indian states. States with higher and stable fiscal space have more room for policy manoeuvring, enabling them to invest in infrastructure, social welfare, and economic development. On the contrary, states with lower and fluctuating fiscal space face constraints in their ability to undertake significant public spending initiatives.

2.6 Subsidies Definition, Conceptual Issues and Measurement

Rationalisation of government subsidies has been prominent on the public policy agenda in India, since 1990, when the first comprehensive estimate of subsidies as unrecovered costs was made by Mundie and Rao (1991). Since then, two White Papers on subsidies have been brought out by the Government of India, first in 1997 and the latest in 2004, both emphasizing the need for rationalisation of this significant component of government expenditure. There have been other documents of the government which have expressed similar policy imperatives regarding specific subsidies or subsidies as a whole, or have drawn attention to their magnitude (thereby implying the need for carefully thought out policies).

It is time to arrive at proper definition of Subsidy in the context of Budgetary accounting systems in India.

The Concise Oxford Dictionary defines subsidy as "money granted by the State, public body, etc., to keep down the price of commodities, etc." This definition of subsidy is convenient from a layman's perspective. However, from the perspective of an economist it is quite vague. Till date, economists and various eminent institutions have provided their respective definitions of subsidy, but they have been unable to arrive at a universal definition for it.

As stated by the Central Statistical Organisation (CSO), subsidies are "all grants on current account made by government to private industries and public corporations, and grants made by the public authorities to enterprises in compensation for operating losses when these losses are clearly the consequence of the policy of the government to maintain prices at a level below costs of production. In the case of irrigation schemes, operating loss is classified as subsidy. " (National Account Statistics Sources and Methods 2007)

The definition of subsidy used by the CSO has the following limitations:

1. It includes subsidies received by the producers and importers, but consumer subsidies are excluded from the definition.
2. All subsidies are treated as current expenditure. Capital subsidies are referred to as capital transfers.

According to the Government Finance Statistics, International Monetary Fund (IMF), "Subsidies are current unrequited transfers that government units make to enterprises on the basis of the level of their production activities or the quantities or values of the goods or services they produce, sell, export, or import." (Government Finance Statistics Manual 2014)

The subsidies can be categorised as per the institutional sector of the beneficiary:

- subsidies to public corporations,

- subsidies to private sector enterprises and
- subsidies to other sectors.

The IMF definition includes subsidies payable to producers only, in certain cases, general government units, non profit institutions serving households and households may receive subsidies in their capacity as producers**.**

It included subsidies which are paid to the producers only. The subsidies to final consumers are not included.

Subsidies are treated as current transfers and not capital transfers.

The transfers that the Government units make directly to the households as consumers and almost all transfers to non profit institutions which are serving households are treated as social benefits or transfers not elsewhere classified, according to the reason for payment.

2.6.1 UN SNA

"Subsidies are current unrequited payments that government units, including non-resident government units, make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services which they produce, sell or import. They are receivable by resident producers or importers**."**

According to their definition, the subsidies are not payable to final consumers, rather the current transfer made to the household as consumers are referred to as social benefits. Also, the grants that the Government makes to enterprises in order to finance their capital formation or compensate them for damage to their capital assets are referred to as capital transfers.

According to UN SNA, the subsidies can be further categorised into Subsidies on Products (includes import subsidies, export subsidies and other subsidies on products) and Other Subsidies on Production.

2.6.2 European System of Accounts (ESA 2010)

According to ESA 2010, "subsidies (D.3) are current unrequited payments which general government or the institutions of the European Union make to resident producers". Subsidies granted by the institutions of the European Union cover only current transfers made directly by them to resident producer units.

Subsidies are classified into subsidies on products (including import subsidies and other subsidies on products) and other subsidies on production. "Subsidies on products are recorded as negative resources in the goods and services account of the total economy. Other subsidies on production (D.39) are recorded as resources in the generation of income accounts of the industries or sectors which receive them."

Some of the items not classified as subsidies include:

- Current transfers from the General Government to households as consumers. These current transfers are treated as social benefits or miscellaneous current transfers.
- Investment grants
- Current transfers between different parts of the General Government as producers of non-market goods and services, except other subsidies on production. These transfers are treated as current transfers within the General Government.

The World Bank provides subsidies under the heading 'Subsidies and other transfers'. As per the World Bank Databank, "Subsidies, grants, and other social benefits include all unrequited, non repayable transfers on current account to private and public enterprises; grants to foreign governments, international organisations, and other government units; and social security, social assistance benefits, and employer social benefits in cash and in kind." The statistical concept and methodology followed is from the International Monetary Fund's Government Finance Statistics Manual 2014, which undertakes an accumulation accounting method that includes all economic events, not just those events which reflect cash transactions, and their effect on assets, liabilities, revenues and expenses. It includes all changes in stocks as well.

However, this method also has a drawback. In terms of data, for most countries the Central Government Finance data is merged into one account, but for certain countries only budgetary Central Government accounts are available. At times these budgetary accounts may not include all the Central Government units like social security funds. This can lead to creation of incomplete datasets. Additionally, the data on Government revenue and expenses is collected by the IMF and by the Organisation for Economic Cooperation and Development (OECD). The IMF sends questionnaires to member countries to collect the data. In spite of sincere attempts by the IMF to ensure uniform data collection, the statistics usually lack completion, are untimely and incomparable across the nations.

2.6.3 U.S. Congress, Joint Economic Committee (1972)

As per the U.S. Congress Joint Economic Committee subsidies are "financial assistance to special groups in the private sector to get them to do things that, it is argued, are in the public interest." They stated that the full significance of subsidies for the American economy is unclear, but subsidies are important because they alter private market incentives, reallocate resources within the private sector, change the structure of private markets, alter the distribution of income and taxpayers bear a huge cost because of the subsidy. The report highlighted the following weakness in the definition of subsidies:

- Federal Subsidies are not organised as per their areas of economic impact and objectives.
- There is a bias towards producer rather than consumer subsidies.
- Most of the content to evaluate the subsidies is hidden from the general public. In most cases, the subsidy programs are renamed as tax incentive, loans and cost sharing.

Mundle and Rao (1991) have presented an empirical definition of subsidies. According to them, "Government subsidies may be defined as the difference between the cost of delivering various publicly provided goods or services (henceforth, services) and the recoveries arising from such deliveries." Their definition of subsidies is quite broad as it includes subsidies provided to the consumer and to the producer.

In spite of being a relatively complete definition of subsidies, prior to its application on data of Government receipts and expenditure, a number of adjustments made in estimation are still questionable.

1. In this definition, the non-departmental public enterprises or co-operatives are not classified in the Government sector. The Government is inclusive of only those departments which are directly under the Central Government or the Governments of the state in which the study is being conducted. Thus, this makes it a narrow definition.

   The general services expenditure of the government is treated as pure public goods and is excluded from subsidies. There are some explicit subsidies provided in the general services like subsidies given to departmental and defence canteens, etc.

   However, despite these eliminations, there may still be a range of social services which can be included under pure public services. If these are not removed then the measured value of subsidies may turn out to be larger than the actual value. Therefore, the definition is open ended.

2. Transfer payments are not included to arrive at a measure of subsidy as they cannot be treated as costs incurred in the provision of a service. However, tax expenditure, which are revenue losses incurred while providing tax incentives, are usually treated as subsidies in written works, have been excluded by Mundle and Rao (1991). The exclusion of tax expenditure may underestimate the value of subsidy obtained via this method.

3. Arriving at the actual cost of service delivery is a trivial exercise and assumptions to estimate the annualised cost of capital is debatable.

Mundle and Rao realised that there would be differences in evaluation of items that are to be included while calculating the subsidy. However, the greater concern was that a considerable portion of the GDP was distributed in the form of subsidies. Thus, using the formula developed, Mundle and Rao aimed to quantify the flow of subsidies so as to ensure that the subsidies are distributed to the actual beneficiaries and the process of distribution is transparent.

Kenneth P. Thomas (2011) defines subsidy as, "money given to a firm by government. This can take many forms: cash grants, tax measures, loans at below-market interest rates, loan guarantees, capital injections, guaranteed excessive rates of profit, below-cost or free inputs including land and power, and purchasing goods from firms at inflated prices. This list is not exhaustive, but includes the type of support used in virtually all subsidies."

He uses the European Union definition of state aid and the term subsidy interchangeably. It has been specified in the report that this given definition of subsidy is not complete.

Hemlata Rao and Amar Nath H.K. (2003) mention that the Government gives subsidies in two ways - explicit and implicit subsidies. The explicit subsidies are defined as, "money granted by state or public body to individuals/firms or organisations (who has to bear a part of the cost) to bring down the cost by way of tax exemption, part payment by government, lower interest charges and so on. Or to bring down the final price of those goods and services, which have large externalities or which lead to distributive justice".

In the monograph, the authors have mentioned that the Government also incurs an implicit subsidy. These implicit subsidies give rise to unrecovered costs.

As per Cees van Beers and Andre de Moor (2001), "Subsidies comprise all measures that keep prices for consumers below market level or keep prices for producers above market level or that reduce costs for consumers and producers by giving direct or indirect support". This definition implies two types of economic policy intervention.

Nonetheless, the authors still exclude external costs from their definition of subsidy due to the following two reasons:

- Subsidies are incurred on account of active Government intervention, however, lack of internalisation of external costs is lack of Government policy.
- External costs have large uncertainty margins and are difficult to evaluate, while subsidies estimates are more reliable.

2.6.4 To Sum-up

The internationally comparable definitions are those prepared by the United Nations Statistics Division, World Trade Organization (WTO), IMF-Government Financial Statistics (GFS), OECD.

Most of the studies undertaken in India used Mundle and Rao (1991) definition. The Mundle and Rao (1991) definition is derived from the definition of the U.S. Congress, Joint Economic Committee (1972), which define subsidies as "any government assistance, in cash or in kind, to private sector producers or consumers for which" the government receives no equivalent compensation in return". Apart from the above, there are two important definitions which are proposed by United Nations- System of National Accounts (SNA) and International Monetary Fund (IMF). SNA defines "Subsidies are current unrequited payments that government units make to enterprises". IMF defines as "Goods and services acquired and transferred in kind without being used by the general government unit in a production process are classified as transfer payments (subsidies, grants, social benefits or other transfers).

This paper limits itself to explicit subsidies and are defined as,

"Explicit payments made in cash or kind to individuals, producers or organisations to alter their price and output decisions of the intermediate and final goods, without any return to the provider of the subsidy. The benefits of explicit subsidies are directly available to the individuals and firms".

In the context of Indian budgetary accounting system, The explicit subsidies can be defined as, 'money granted by state or public body to individuals/firms or organisations to bring down the cost by way of tax exemption, part payment by government, lower interest charges, and cash and kind transfers to individuals' . Thus the Explicit subsidies have been defined to include:

1. Explicit payments made to individuals,
2. Explicit payments made to private organisations or public sector undertakings providing private goods and
3. Explicitly stated expenditure categorised as subsidies in the budgetary transaction.

Now, there is a need to look at the similarities and differences among all these definitions and explain the definition followed in this paper is broader.

Our definition is limited to explicit budgetary subsidies, but all other definitions includes both explicit and implicit. However, due to high spill-over nature of implicit subsides, the exact qualification of these implicit subsides are always questioned.

Both SNA and GFS definitions coverage is limited to producer subsides (defined as Unrequited Payments to Enterprises) and does not consider consumer subsidies. However, our definition considers both. In that sense, these are broader definitions.

However, there is consensus on certain categories of items across the definitions. First, only current transfers are considered as Subsidies and not capital transfers. But, SNA and IMF limit them to only producers only. Whereas, This paper considers for both producers and consumers. Second, all intergovernmental transfers are included in grants and hence not considered as subsidies in all the definitions. Specific transfers meant for benefiting the individuals or firms are included as explicit subsidies in this paper

2.6.5 Freebies vs. Subsidies

Over the last few years, many state governments in the country have been providing freebies in the name of subsidy for their political benefit. The recent increase in the 'freebies facility' has led to an increase in their share in the total expenditures of the state governments. In some cases, states are borrowing money in order to provide freebies to the citizens of their state. However, these are not two words which can be used interchangeably. Hence, it is essential to distinguish between the two. One significant difference between a subsidy and a freebie is that, subsidies when provided can lead to cost recovery in some cases, but in case of freebies, all the cost is unrecovered cost.

On the basis of various definitions provided by the institutions and empirical literature, it can be said that a well defined explanation of subsidy can be attained. However, for freebies there is no general agreement. Freebies can be identified as a subset of subsidies. As per the dictionary, a freebie is "a thing that is provided or given free of charge". This vague definition implies that anything which is provided by the government without incurring any cost can be referred to as a freebie. Although the government's role consists of providing health, education, minimising inequality, provision of public goods etc. of which all cannot be categorised as a freebie. Some of these 'freebies' are required for the good health of the economy. Thus, not all freebies can be categorised as bad. The aim should be to distinguish between the good and bad freebies.

C Rangarajan differentiates the two terms in his article in the Indian Express. According to him, a subsidy refers to "the difference between the price at which the good is procured and the price at which it is sold." On the other hand, classification of a good or service as a freebie depends on the nature of the good or service in question. He argues that a subsidy is justified only when it is provided on essential and merit goods. Any free provision beyond these two categories of goods is a freebie.

In another article, 'Accounting for Subsidies', freebies are defined as a non-merit subsidy. Subsidies are referred to as government transfers of money, implicit or explicit, which are used to artificially lower prices. It states, "When deciding whether a certain freebie qualifies as a merit or non-merit subsidy, the lines between the aforementioned goals start to blur. Freebies cannot be defined in a finite context, and the definition varies among geographic and economic contexts." Additionally, a debt burden which arises due to a freebie can have a negative impact on the state finances as it can threaten the fiscal sustainability of the state.

Vivek Kaul, has defined freebies as, "a good or service offered by a government free to the citizens or below the cost of producing it." From the perspective of a free market economist, schemes like Public Distribution System and Mahatma Gandhi National Rural Employment Guarantee Scheme are freebies. However, these schemes have proven to be highly beneficial, especially during the time of Covid.

Non-merit subsidies offered by the government or political parties do not bring about long-term benefits are popularly called as freebies.

Niranjan Sahoo and Alok Chaurasia 'There are no clear definitions yet, while the freebie debate can be traced back to 1920s' American politics. While the dictionary meaning of the word connotes "a thing that is given free of charges", it is far more complex than this.. Thus, someone's freebies could be another person's bare essentials.

The RBI Bulletin, June 2022, emphasises that there is no precise definition for freebies, but differentiating them from public/merit goods is essential. The public/merit goods prove to be beneficial to the economy, whereas provision of free water, free electricity, farm loan waivers etc. which are all referred to as freebies result in price distortion and lack of incentive to work.

2.6.6 Welfare Expenditure vs. Subsidies

Welfare expenditure pertains to assistance provided by the government to the individuals and households which are in need of upliftment. The government helps those in need by providing financial assistance and support through their programmes. Most of the programmes are based on healthcare, education, unemployment insurance and income support. Welfare expenditure helps to reduce poverty, provide a safety net during economic downturn and improve health outcomes and educational opportunities.

Subsidies are provided by the government to incentivise the production or consumption of certain goods and services. They refer to financial assistance provided by the government to support certain industries or organisations via tax breaks or grants. However, various institutions and literature have defined subsidies in their own manner. Whereas, as compared to subsidies, all economists have reached a general consensus regarding the definition of welfare expenditure. They define welfare expenditure as "public spending in order to reduce the persistence of poverty or inequality in the economy".

The two terms do seem to have similar meanings as both have the objective to encourage economic activity and support the under-privileged citizens. The only significant difference between the two terms is that welfare expenditure is provided by the government until the impoverished individuals and households in the society are uplifted to the required capacity. Subsidies are instruments which ensure that the benefits of the government programmes reach the intended beneficiaries.

Thus, welfare expenditure is an all-inclusive concept which supports the overall welfare of the individuals and subsidies are target oriented and focussed on specific issues of the economy.

Thus, from the above discussion it can be inferred that there is a thin line between freebies and subsidies and welfare expenditure and subsidies. Whilst, there is a minor difference in between welfare expenditure and subsidies, but when it comes to freebies and subsidies sometimes tend to be used synonymously due to lack of consensus on the meaning of freebies.

2.6.7 Derived Definition of Explicit Subsidies

In the context of Indian budgetary accounting system, The explicit subsidies can be defined as, 'money granted by state or public body to individuals/firms or organisations to bring down the cost by way of tax exemption, part payment by government, lower interest charges, and cash and kind transfers to individuals' . Thus the Explicit subsidies have been defined to include:

1. Explicit payments made to individuals,
2. Explicit payments made to private organisations or public sector undertakings providing private goods and
3. Explicitly stated expenditure categorised as subsidies in the budgetary transaction.

In this definition of explicit subsidies, the expenditure on public goods (general services), expenditure in the form of provision of services for which cost recoveries are either made or not and grants in aid given to institutions or local bodies for providing services have been excluded.

Explicit subsidies include payments in cash or kind to individuals or organisation without any return. The organizations include state level PSUs, NGOs, extra departmental wings like corporations for the purpose spending towards explicit payments towards individuals. For instance, assistance given to Electricity boards for free power supply to farmers and poor households and grants give to Road Transport corporations for free travel concessions to certain section of people. However CAG accounting system includes only those expenditures which are explicitly stated as subsidies and do not cover such grants or assistance towards providing the explicit subsidies.

2.6.8 Level of Explicit Subsidies

CAG while preparing the finance accounts of the state provide a statement on explicit subsidies given by the states (Appendix VI of the state finance accounts). This statement is expected to bring out all expenditures of the states in the nature of subsidy, rather than only those that are classified as subsidy in the State Budgets. There are instances where states have classified subsidies as 'other expenditure' or 'grant-in-aid' and which have, thus not been reflected in the finance accounts as subsidies. In many cases, the accounts of the recipient of assistance show it as subsidy, and thus, it has been accounted as subsidy by the Audit report (Commercial) of the C&AG but not in the finance accounts. Thus, in some cases, the statement does not provide a true reflection of the aggregate subsidies provided. To be relevant, it is essential that these statements provide comprehensive data on all subsidies.

As per the Appendix VI of the Finance Accounts, the explicit subsidies as percent of revenue receipts is around 8 to 20%. The explicit subsidies in finance accounts look to be an underestimate due to its exclusion of other such expenditure on subsides made through PSUs, local bodies and special purpose vehicles like corporations. To show the magnitude of this underestimation of explicit subsidies, a comparison of explicit subsidies compiled from state budgets as a percentage of revenue Receipts of six states is given in Table 8 in parenthesis. The results show that the estimates of explicit subsidies in the finance accounts is less than estimates based on budget documents. For instance, the explicit subsidies as a percentage of revenue receipts for Andhra Pradesh as per budget documents is 35.97% of revenue receipts against 4.22% as per finance accounts in 2020-21.

Explicit Subsidies as a Percentage of Revenue Receipts

STATE	Explicit Subsidies					Committed expenditure 2021-22	Fiscal Space	Revenue Deficit 2021-22 (% of GSDP
	2017-18	2018-19	2019-20	2020-21	2021-22			
Andhra Pradesh	6.8	2.05	5.71	4.22	9.76	55.09	44.91	-0.76
		-30.57	-28.27	-35.97	-48.39			
Bihar	4.28	6.32	5.73	6.37	6.46	39.02	60.98	-0.06
Chattisgarh	8.39	12.79	17.98	11.57	8.24	49.62	50.38	
Goa	2.38	2.63	2.31	2.34	0	49.22	50.78	
Gujarat	11.05	12.7	12.89	17.28	13.39	35.89	64.11	
Haryana	13.47	12.98	11.94	11.32	12.21	67.98	32.02	-2.34
Jharkhand	2.73	3.73	7.32	5.75	8.11	41.78	58.22	
Karnataka	9.62	9.33	9.99	11.76	14.41	37.08	62.92	-0.7
Kerala	1.91	1.79	1.58	6.71	3.56	90.79	9.21	-3.17
Madhya Pradesh	14.37	14.11	8.56	9.32	10.38	44.94	55.06	
Maharashtra	13.91	9.56	10.02	15.16	8.74	44.83	55.17	-0.53
Odisha	3.32	3.18	3.31	4.11	3.07	33.14	66.86	

STATE	Explicit Subsidies					Committed expenditure 2021-22	Fiscal Space	Revenue Deficit 2021-22 (% of GSDP
	2017-18	2018-19	2019-20	2020-21	2021-22			
		-17.73	-19.01	-17.95	-12.38			
Punjab	13.17	21.46	16.5	14.12	18.57	80.41	19.59	-3.01
		-26.26	-21.39	-20.23	-27.06			
Rajasthan	18.6	15.62	13.55	11.04	12.7	61.6	38.4	-2.12
		-24.89	-25.07	-23.54	-25.68			
Tamil Nadu	10.41	10.89	11.54	14.42	10.45	65.53	34.47	-2.25
Telangana	6.93	6.22	6.68	9.48	8.02	47.87	52.13	-0.83
Uttar Pradesh	3.33	4.26	3.85	3.94	5.43	46.78	53.22	
		-9.83	-8.94	-11.41	-14.93			
West Bengal	8.9	9.18	6.79	8.34	NA	71.83	28.17	-2.35
		-20.74	-18.36	-21.15	-25.43			

Source: (Basic data) Finance Accounts of Respective States, CAG and Budget Documents of Andhra Pradesh, Odisha, Punjab, Rajasthan, Uttar Pradesh and West Bengal.
Note: Figures in Parenthesis or estimates of explicit subsidies from detailed demand for grants of respective states.

3. Conclusion

Fiscal space has been shrinking and is less than 50% of revenue receipts at state level. State have moved to revenue deficit situation from the comfort zone of revenue surplus. Covid pandemic resulted in to losses in revenue collection. Welfare expenditure and subsidies initiated by the various state governments continued beyond lockdowns and recovery.

In addition, due to the committed expenditures and statutory transfers to local bodies, states have to spend additionally on centrally sponsored schemes. Committed expenditure including CSS expenditure is resulting into states borrowing for recurring expenditures. It is those state which have revenue deficit need to think of not only restrict committed expenditure but also rationalising subsidies.

Explicit subsidies estimated from Budget documents is above 20% of revenue expenditure in few selected states and all these states except Odisha are having revenue deficit 2020-21. Financing subsidies and welfare expenditure through borrowing is not sustainable in the long run and also result in reduction of expenditure on infrastructure. Therefore there is a need for improving the fiscal space and rationalising the subsidies including in the form of freebies.

It is very difficult to distinguish between subsidies, freebies and welfare expenditure. Secondly judging the subsidies as merit and non-merit, good and bad, many time is judgemental and differs based on geography, timing of implementation and so on.

It is therefore suggested in this paper that, the total volume of subsidies to be linked to fiscal space available. Rationalisation of subsidies can be done by TTTE Formula - proper **T**argeting, maintaining **T**ransparency, fixing the **T**imelines and **E**valuating the effectiveness of subsidy regime in achieving the desired objective.

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7

Understanding Subsidies in State Finances: Uttar Pradesh

Deepak Kumar and Sameer Verma

There has been this discussion in the country regarding subsidies and freebies. The Apex Court of the country is also hearing “irrational freebies” case. Supreme court is hearing and attempting to decide the question whether “giving freebies would be a corrupt practice under section 123 of the Representation of Peoples Act, 1951. The election Commission of India however in an affidavit filed in the Court refused to regulate the practice of promising freebies in election campaigns. The commission is of the view that it was the voter’s duty to assess the freebies financial viability and effect on the economy. The promises made in the pre-election and during election campaigns are often converted into subsidies which are financed through state budget. These days, subsidies and freebies are even “guaranteed” by political parties. There seems to be a competition among political parties, offering such things. This note delves into the economic trajectory of Uttar Pradesh (over the past few years), with a specific emphasis on the pivotal role of fiscal responsibility and subsidy management as key drivers of economic growth. This analysis unfolds UP's success story, showcasing the impact of prudent fiscal policies on capital outlay, infrastructure development and at the same time managing “good” and welfare-oriented subsidies.

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Special Secretary (Finance), GoUP

1. Introduction

1.1 Background

The recognition that "a judicious mix of capital expenditure and disciplined expenditure paves the way for sustainable economic growth" has become a widely accepted principle guiding Uttar Pradesh's fiscal policies. In light of this understanding, there is a growing realization that fiscal strategies should prioritize caution over exuberance, emphasizing restraint instead of profligacy.

As perspectives on development priorities in Uttar Pradesh continue to evolve, they are increasingly attuned to four crucial factors. These factors include a nuanced understanding of economic constraints and priorities, the imperative for responsible fiscal management, the need for strategic resource allocation, and a commitment to sustainable long-term development over short-term gains. This paradigm shift has been instrumental in shaping the state's approach to economic policies, encouraging a more prudent and measured stance to ensure sustained, balanced, and inclusive growth.

Within this context, subsidies emerge as pivotal instruments shaping economic policies, influencing resource allocation, and fostering socio-economic development. Serving as financial support mechanism provided by the state or public bodies to individuals, firms, or organizations, subsidies aim to address various economic challenges and promote specific activities. Uttar Pradesh, as one of India's largest states, has garnered attention for its unique fiscal strategy, particularly in subsidy management. This paper seeks to delve into an analysis of Uttar Pradesh's fiscal landscape, with a specific focus on subsidies and their integral role in shaping the state's distinctive economic model.

1.2 Objectives

The primary objectives of this study are as follows:

- To provide an understanding of the conceptual framework of subsidies, exploring definitions, classifications, and the rationale behind their implementation.
- To analyse UP's fiscal landscape, specifically examining fiscal stability, revenue surplus status, available fiscal space, and the utilization of this space for capital outlay and subsidies.
- To discuss UP's fiscal prudence, highlighting the state's approach to strike a fine balance between capital outlay and subsidies for the welfare of its citizens.

1.3 Significance

The significance of this study lies in its potential contributions to both academic discourse and practical policy considerations. By delving into the fiscal strategy adopted by Uttar Pradesh, the analysis seeks to unravel the nuances of subsidy management within a large and diverse state economy. Understanding UP's approach can offer insights for policymakers, researchers, practitioners & other Indian States grappling with similar challenges. Furthermore, this analysis contributes to the broader discussion on the effectiveness of subsidies in achieving socio-economic objectives while maintaining fiscal stability.

As the note progresses, each subsection of the introduction will further expand to provide an overview of the study's context, objectives, and significance.

2. Conceptual Framework of Subsidies

2.1 Definition and Purpose

Subsidies and transfers, as financial instruments, involve the provision of support by the state or public bodies to individuals, firms, or organizations, requiring them to bear a portion of the associated costs. This financial assistance can take various forms, including tax exemptions, direct payments, or reduced interest charges. The key objectives of subsidies are twofold: i) to reduce overall costs and ii) to lower the final prices of goods and services, especially those with significant externalities, social benefits, or contributions to distributive justice [Budgetary Subsidies in India - D.K. Srivastava, C. Bhujanga Rao (2003)].The primary purpose of subsidies is to encourage the consumption of goods and services, thereby strengthening social welfare and promoting economic growth. By providing financial support to individuals and organizations, subsidies aim to stimulate higher levels of consumption, contributing to the overall well-being of society.

2.2 Types of Subsidies

Within the intricate realm of economic governance, subsidies manifest in diverse forms. This section navigates through multiple classifications of subsidies, acknowledging the complexity inherent in these economic instruments. Our exploration recognizes that subsidies defy a one-size-fits-all categorization, demanding a nuanced approach to comprehend their diverse nature, impact, and transparency.

2.2.1 Explicit vs. Implicit Subsidies

Explicit Subsidies: Explicit subsidies involve direct and visible financial transfers from the government to individuals, businesses, or specific sectors. Examples include direct cash transfers, price subsidies on essential goods, and targeted financial assistance programs.

Implicit Subsidies: In contrast, implicit subsidies are not explicitly outlined in the budget but are embedded in the economic system through various mechanisms. These subsidies often result from government policies that reduce the cost of certain activities or create favorable conditions for specific industries. Tax breaks, concessional loans, and favorable regulations are examples of implicit subsidies.

2.2.2 Merit vs. Non-Merit Subsidies

Merit Subsidies: Merit subsidies are designed to promote activities or behaviors that contribute to societal well-being or align with strategic objectives. These subsidies are directed towards activities deemed socially desirable or essential for economic development. For instance, subsidies for education, healthcare, or renewable energy can be classified as merit subsidies, as they address critical societal needs.

Non-Merit Subsidies: Non-merit subsidies, on the other hand, are provided without a specific focus on promoting socially beneficial activities. These subsidies may be driven by historical factors, political considerations, or other non-economic reasons. Examples include subsidies for industries with significant lobbying power or subsidies that inadvertently lead to negative externalities.

2.3 Rationale for Subsidies

The decision to implement subsidies is guided by several key considerations:

2.3.1 Size of Subsidies

The size of subsidies should be determined in relation to social benefits, per capita income, fiscal space, and sustainability. Sustainable subsidies should not exert undue fiscal pressure, striking a balance between the desired social benefits and fiscal responsibility.

2.3.2 Target Beneficiaries

Identifying the appropriate sectors and goods for subsidies is crucial. Ensuring that the target beneficiaries receive the funds effectively directs the economic impact of subsidies to the intended recipients.

2.3.3 Opportunity Cost

Analyzing the costs associated with subsidies and ensuring efficient allocation of resources is fundamental. Balancing fiscal prudence and development goals requires a comprehensive understanding of the opportunity costs involved.

2.3.4 Allocation of Resources

Maintaining fiscal prudence involves balancing the development of the state through asset creation and welfare transfers. Efficient allocation of resources ensures that subsidies contribute to both economic growth and social welfare.

In summary, the conceptual framework of subsidies involves an understanding of their definitions, classifications, and the rationale behind their implementation. The subsequent sections of this paper will delve into the specific context of Uttar Pradesh, analyzing how these concepts manifest in the state's fiscal landscape.

3. Uttar Pradesh's Model for Subsidy Management

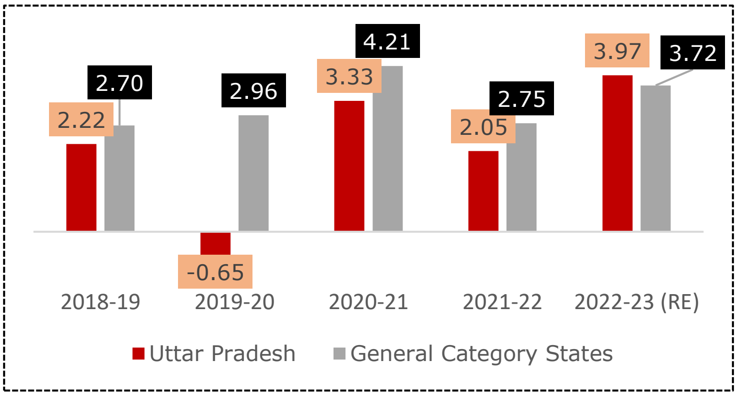
3.1 Fiscal Landscape of Uttar Pradesh

3.1.1 Upholding Fiscal Deficit Limits

Uttar Pradesh (UP) boasts a consistent and stable fiscal balance expressed as a percentage of Gross State Domestic Product (GSDP). Adhering to the Fiscal Responsibility and Budget Management (FRBM) norms, UP has demonstrated responsible fiscal practices over the years, with a minor deviation in FY21 attributed to the COVID-19 pandemic.

Post the COVID-19 pandemic, UP actively focused on recovery and aspires to achieve the vision of a sone-trillion-dollar economy. The substantial increase in Fiscal Deficit from 2.22% of GSDP in FY 2018-19 to 3.97% in FY22-23 reflects efforts towards economic revival, with a significant emphasis on capital expenditure. Capital expenditure has witnessed a twofold increase, escalating from 62,463 Crores (2.22% of GSDP) in FY 2018-19 to 1,26,601 Crores (6.18% of GSDP) in FY 22-23, emphasizing a robust focus on investment for economic growth.

Fiscal Deficit as a % of GSDP – UP vs average of General Category States(GCS)



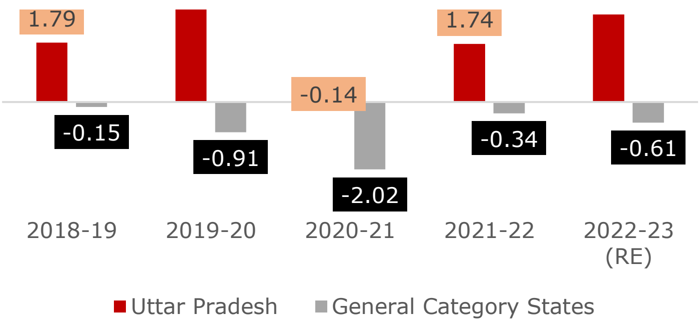
Sources: RBI, Budget Books

When compared to other General Category States (GCS), UP consistently maintains a lower fiscal deficit, showcasing prudent fiscal management, except for FY22-23. Despite challenges faced in FY21 due to the pandemic, UP expresses confidence in its available fiscal space, strategically utilizing it for asset creation and economic development.

3.1.2 Consistently Maintaining Revenue Surplus

UP maintains a commendable track record of consistently operating with a revenue surplus. The state has sustained a revenue surplus over the last 5 years, with an exception in FY21, attributed to the impact of the Covid-19 pandemic.

Revenue surplus as a % of GSDP – UP vs average of General Category States(GCS)



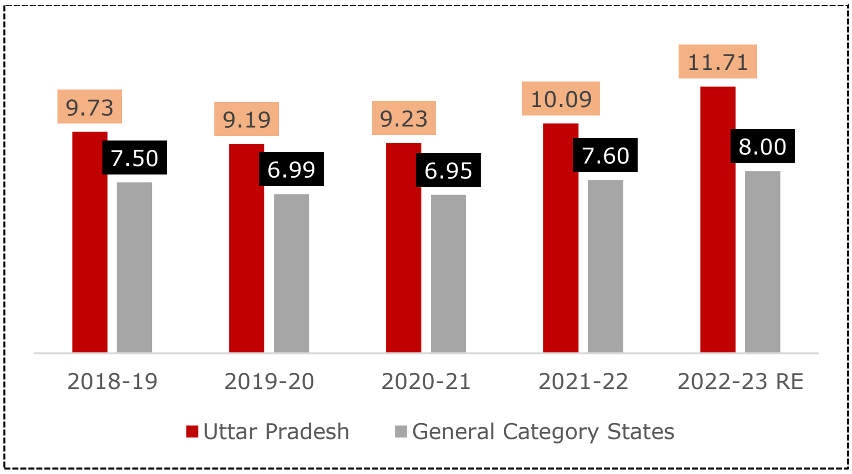
Sources: RBI, Budget Books

Demonstrating resilience, UP swiftly recovered from the challenges posed by the COVID-19 pandemic. The revenue surplus made a notable leap from -0.14% in FY20-21 to 2.63% of GSDP in FY22-23. UP consistently outperforms other General Category States in maintaining a revenue surplus, reflecting robust financial health. The state's financial resilience is evident in the post-COVID recovery, shifting from a revenue deficit of 2,367 Crores (0.14% of GSDP) to a substantial revenue surplus of 53,907 Crores (2.63% of GSDP). This increase is supported by UP's continuous efforts to boost tax revenues, exhibiting a robust Compound Annual Growth Rate (CAGR) of over 26% during the same period, escalating from 1,51,588 Crores to 2,39,794 Cr ores.

3.1.3 Available Fiscal Space - Revenue Effort and Fiscal Performance

UP has strategically leveraged its available fiscal space through a concerted revenue effort. Prudent fiscal performance is achieved by maintaining control over revenue expenditures while actively working to boost revenues, particularly from State's Own Tax Revenues (SOTR). Controlled revenue expenditures contribute to a more robust fiscal position, allowing UP to sustain high State's Own Tax Revenues, primarily driven by the collection of GST, state excise, stamp duty, and registration fees. Some of the key reforms undertaken by the State include:

Efforts made to generate higher SOTR as a % of GSDP- UP compared with General Category States (average)



Sources: RBI, Budget Books

Excise Reforms:

- Strengthened Track & Trace system for alcohol movement across the State.
- Increased number of distilleries

Stamps and Registration Fees:

- Implemented Geo-tagging and Geo-referencing for property database.
- Draft Valuation Rules 2022 for uniform valuation (awaiting Cabinet approval).

Goods and Services Tax (GST):

- Established Tax Research Unit for policy analysis and fraud analytics
- Special GST campaigns to incentivize registration and broaden the tax base
- Innovative schemes, like insurance for new registrants, to maximize dealer participation

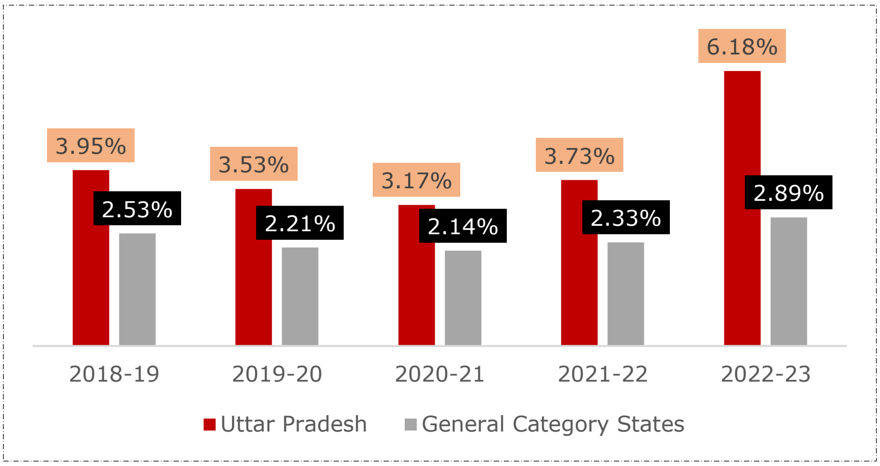
UP has consistently aligned withFRBM norms for key fiscal indicators. Despite adhering to these norms, the state has managed to increase both capital expenditure and expenditure on subsidies, a crucial aspect discussed in subsequent sections. The sustained high performance in State's Own Tax Revenues, coupled with compliance with FRBM norms, positions UP as a leader in fiscal responsibility and resource management among General Category States. The state has experienced a substantial increase in Own Tax Revenue, rising from 1,53,878 Crores in FY2018-19 to 2,39,794 Crores in FY2022-23. This growth is reflected in a Compound Annual Growth Rate (CAGR) of 11.8%, moving from 9.73% of GSDP to 11.71% of GSDP. UP's SOTR as a percentage of GSDP at 11.71% in FY2022-23 surpasses the average for other General Category States, which stands at 8%, underscoring UP's effective utilization of its revenue potential.

3.2 Utilization of Available Fiscal Space

3.2.1 Enhanced Capital Outlay for Growth

UP has strategically utilized its enhanced fiscal space to increase capital outlay. The focus is on creating both social and physical infrastructure to support and drive economic growth. Post the challenges posed by COVID-19, UP is actively on the path of accelerated recovery and growth.

Capital Outlay as a % of GSDP – UP vs average of General Category States(GCS)

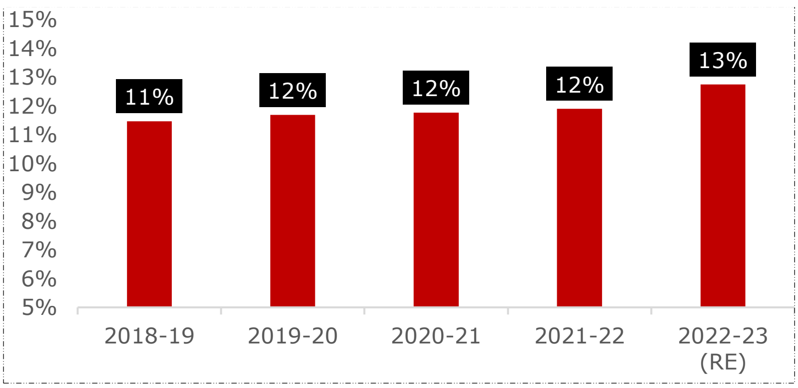


UP has consistently allocates a higher percentage of its Gross State Domestic Product (GSDP) to capital outlay compared to the national average. It holds the highest position among all General Category States (GCS) in terms of capital outlay across the years. This enhanced capital expenditure is part of UP's growth-oriented approach, reflected in the increased capital expenditure in 2022-23, with a percentage of GSDP more than double that of other General Category States (2.89%). The fiscal space created through prudent management and revenue augmentation efforts allows for a substantial scaling up of capital expenditure.

UP's vision of a one-trillion-dollar economy is being fueled by this massive investment. This investment aims to attract private investors for infrastructure development, creating a ripple effect for accelerated growth.

3.2.2 Optimizing Committed expenditure

Closely ensuring limited Committed Expenditure as a % of GSDP

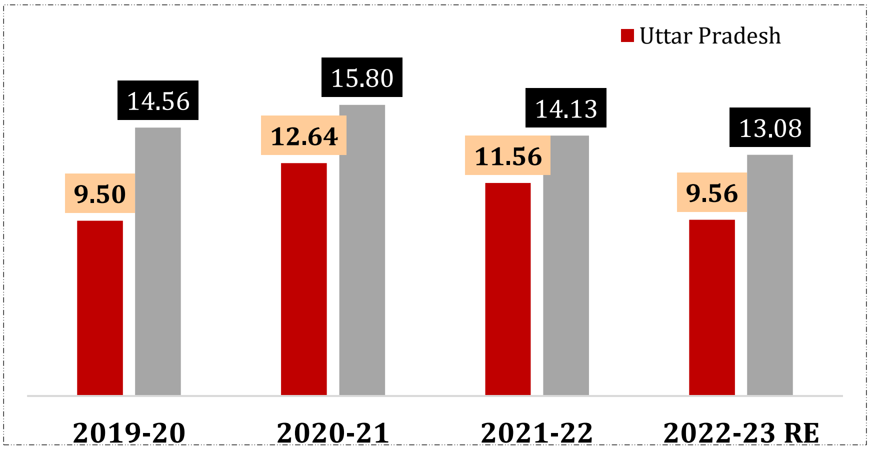


Committed expenditure generally constitutes a substantial portion of the state's finances. UP's growth in committed expenditures is parallel to the Gross State Domestic Product (GSDP) growth, maintaining a range of about 11%-13% of GSDP over the years.

Interest payments, a significant component of committed expenditure, are managed prudently by UP. The percentage of interest payments as a share of revenue receipts is notably lower compared to other General Category States, exemplifying sound fiscal management. While targeted capital expenditures are a primary focus, UP ensures effective control over committed expenditures. The graph illustrates a substantial gap between UP and the average of General Category States, showcasing the state's commitment to fiscal discipline.

The steep decline in the percentage post the COVID-19 pandemic vividly demonstrates UP's successful recovery and financial resilience. Over the last 5 years, committed expenditure has grown at a Compound Annual Growth Rate (CAGR) of 9.5%, aligning with the GSDP trend. The state aims to sustain these expenses within the range of 11%-13% of GSDP, consciously managing interest payments. UP is actively working on managing interest payments, evident in the lower percentage of interest payments as a share of GSDP (9.56%) compared to other General Category States (13.08%). The sharp decline post the COVID-19 high of 12.64% reflects the state's commitment to fiscal stability.

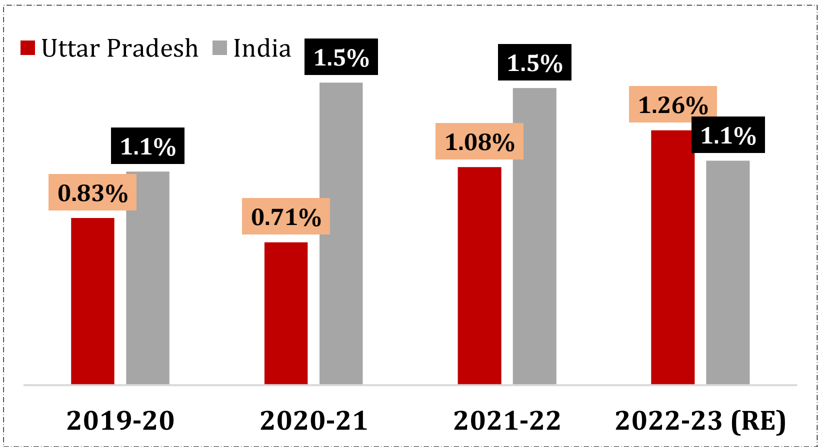
Interest Payment as a % of Revenue Receipts– UP vs average of General Category States(GCS)



3.3 Fiscal Prudence - Balancing Capital Outlay and Subsidies for Welfare

UP has maintained a strong fiscal position while adhering to Fiscal Responsibility and Budget Management (FRBM) targets. The focus extends beyond just increasing capital outlay to include subsidies for the welfare of citizens. Following the challenges of COVID-19, UP showcased a swift recovery in subsidies as a percentage of Gross State Domestic Product (GSDP) over the three years.

UP has adopted a comprehensive strategy for subsidy implementation, addressing both social welfare and benefit payments. The strategy also emphasizes augmenting growth by building capacity and empowerment through the enhancement of social and physical infrastructure.



The government consciously manages targeted subsidy expenditure, increasing it in a controlled manner. The philosophy is that with more fiscal space, there is room to enhance both capital expenditure and subsidies.

UP has taken a balanced approach to subsidies, refraining from proliferation and instead using them judiciously for welfare and growth. The primary focus is on augmenting social and physical infrastructure to drive overall economic growth for the state. Post-COVID, UP accelerates its subsidies at a faster pace, recognizing the needs of vulnerable sections of society. The Compound Annual Growth Rate (CAGR) of subsidies for the period 2019-2023 is 22%, reflecting the state's commitment to supporting its citizens.

The overarching focus is on empowering people by accelerating growth through Own Tax Revenues (OTR) and simultaneously supporting vulnerable sections through targeted subsidies.

In conclusion, UP's fiscal strategy goes beyond financial stability to encompass a holistic approach, balancing increased capital outlay with targeted subsidies for citizen welfare. The conscious and controlled management of subsidy expenditure reflects the state's commitment to using fiscal resources judiciously for the dual purpose of economic growth and social welfare.

3.4 Subsidy expenditure for UP

Uttar Pradesh's current emphasis on supporting its citizens through power subsidies, particularly in agriculture and industrial sectors, reflects a targeted approach to address immediate socio-economic needs. The state's strategic fiscal vision, outlined under the One Trillion Dollar Economy (OTD) initiative, anticipates a shift in subsidy allocation towards industrial support.

% of Total Subsidy Expenditure (Budgeted FY 23-24)	
Power Subsidy	50%
Agriculture and Allied Subsidies	17%
Industrial Subsidies	10%
Rural Development	7%
Social Welfare	7%
Namami Gange & Rural Water Supply	3%
Land Development and Water Resources	2%

Power Subsidies for Agricultural and Industrial Sectors:

- The existing focus on power subsidies in agriculture aligns with UP's commitment to bolster the agricultural sector, a key component of its economy.
- Industrial support through power subsidies contributes to creating a conducive environment for economic activities and job creation.

Anticipated Shift in Subsidy Allocation:

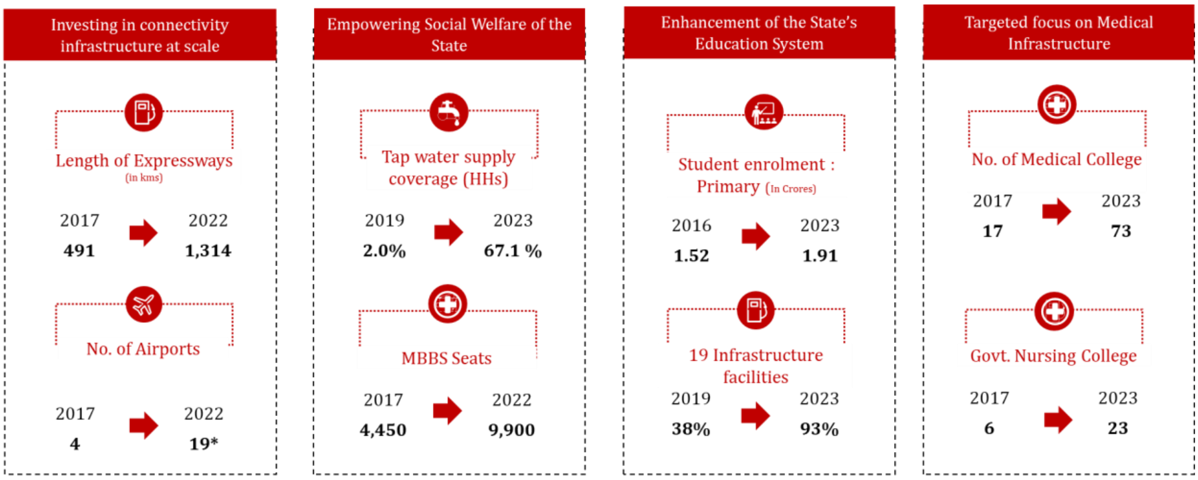
- With the unfolding OTD vision and strategy, UP anticipates a paradigm shift in subsidy allocation.
- The government signals a move towards directing subsidies more significantly to industrial sectors, emphasizing private investments and overall economic growth.

4. Impact Creation across sectors

Uttar Pradesh’s economic journey over the past six years stands as a remarkable success, characterized by robust growth and comprehensive development across diverse sectors. The state’s strategic focus on fortifying every aspect of its economy has yielded noteworthy achievements, positioning Uttar Pradesh as the third-largest economy in India. One key factor contributing to this success has been the adept management of fiscal resources, resulting in a substantial increase in capital expenditure.

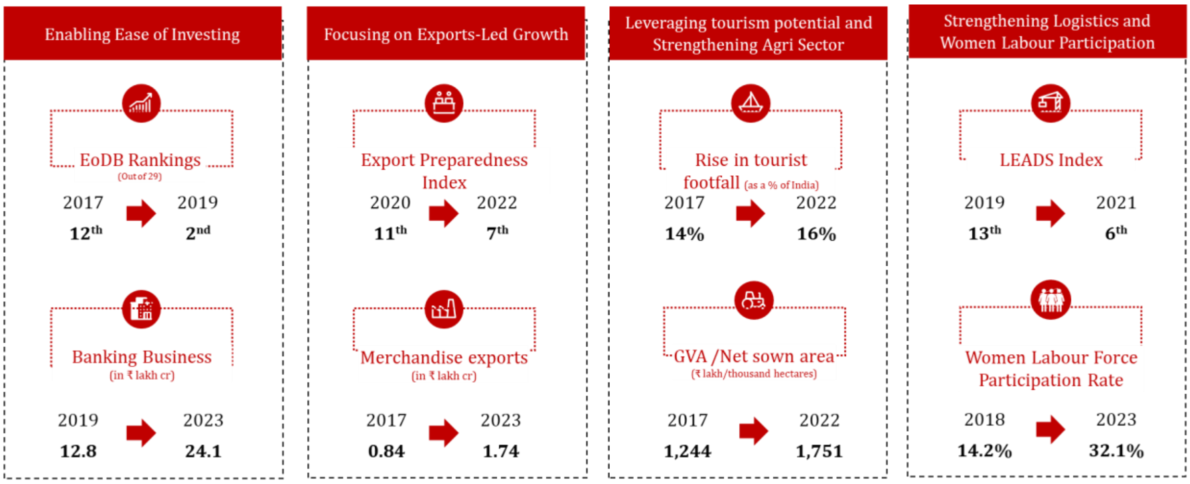
The state's commitment to improving its business environment for achieving the same objective is evident in the noteworthy ascent of its Ease of Doing Business rankings, soaring from 12th in 2017 to an impressive 2nd in 2019. This progress is attributed to proactive policies such as the Uttar Pradesh Micro, Small & Medium Enterprises Promotion Policy. The flourishing banking sector, witnessing a surge from 12.8 lakh crore in 2019 to 24.1 lakh crore in 2023, can be credited to the successful implementation of the Nivesh Mitra Portal.

The Jal Jeevan Mission has been a triumph for Uttar Pradesh, resulting in a substantial increase in tap water supply coverage from 2.0% in 2019 to an impressive 67.1% in 2023. Simultaneously, the aviation sector has thrived, witnessing the addition of 15 new airports since 2017. The State has also witnessed an 823 km increase in the length of expressways, reflecting a concerted effort to push infrastructural development. Significant projects like the Kanpur Metro Rail Project, Agra Metro Rail Project, and the Delhi-Ghaziabad-Meerut Corridor Regional Rapid Transit System Project have been allocated funds in the state budget for 2023-24.



Sources : https://aishe.gov.in/aishe/gotoAisheReports, https://dashboard.udiseplus.gov.in/#/reportDashboard/Report, https://ejalshakti.gov.in/jjmreport/JJMState.aspx

Uttar Pradesh has also experienced a positive shift in education metrics, with primary student enrollment rising from 1.52 in 2016 to 1.91 in 2023. Infrastructure facilities have improved, thanks to initiatives like the "Sampark Smartshala-Smart Block" scheme. Notably, the state has made substantial progress in poverty alleviation, with 3.4 crore people lifted out of poverty in the last five years, the highest across any state, according to Niti Aayog's National Multi-Dimensional Poverty Index.



As per Niti Aayog's National Multi Dimensional Poverty Index, 3.4 crores people lifted out of poverty in last 5 years – highest across any State in India.
Out of 13.5 crore people lifted out of poverty in India, 25.3% belonged to Uttar Pradesh

Sources:, State Level Bankers Committee, Reserve Bank of India, Ministry of Agriculture & Farmers Welfare, InvestUP, DPIIT, Niti Aayog, JJM Dashboard
*Note: *Including airports under construction*

UP's Export Promotion Policy has played a pivotal role in enhancing Uttar Pradesh's global trade, with merchandise exports surging from 0.84 lakh crores in 2017 to 1.74 lakh crores in 2023. The state's ranking in the Export Preparedness Index has also seen an upward trajectory, rising from 11th in 2020 to an impressive 7th in 2022.

Tourism has thrived in Uttar Pradesh, with a noticeable increase in tourist footfall over the five-year period from 2017 to 2022. The state's share of tourist footfall as a percentage of India has risen from 14% to 16%, reflecting its growing appeal as a destination. In essence, Uttar Pradesh's dynamic and multifaceted approach to fiscal management and economic development has not only elevated its status as the third-largest economy in India but has also fostered significant advancements across key sectors, setting a promising trajectory for continued growth and prosperity.

5. Conclusion

Uttar Pradesh's journey of fiscal management, revenue surplus, and strategic subsidy allocation over the past years reflects a commendable commitment to economic stability, growth, and welfare. The state's fiscal prudence has been instrumental in maintaining a consistent revenue surplus, even amidst challenges like the COVID-19 pandemic. This resilience is further underscored by the fast-paced recovery post-COVID, demonstrating UP's ability to navigate economic uncertainties.

The deliberate effort to enhance fiscal space and utilize it judiciously for capital outlay and subsidies has positioned Uttar Pradesh as a frontrunner among General Category States. The significant leap in capital expenditure, reaching 6.18% of GSDP in FY22-23, illustrates a visionary approach toward creating a robust infrastructure for sustained economic growth.

Furthermore, the meticulous management of committed expenditures, coupled with controlled interest payments, showcases UP's commitment to maintaining fiscal discipline. The state's focus on targeted subsidy expenditure, especially in the domains of social welfare and infrastructure development, highlights a balanced approach that aligns with broader developmental goals.

The success of UP's fiscal strategy is evident in its economic recovery, the attraction of private investments, and the fostering of a conducive business environment. The One Trillion Dollar Economy initiative, marked by policy overhauls and investment commitments, signifies Uttar Pradesh's proactive stance in shaping its economic trajectory.

In conclusion, Uttar Pradesh's journey exemplifies the effective interplay of fiscal responsibility, targeted subsidies, and strategic economic policies, positioning the state as a leader in India's economic landscape. The outcomes achieved so far are indicative of a promising path ahead, where the synergy between fiscal prudence and growth aspirations propels Uttar Pradesh toward sustained economic prosperity.

GREEN BUDGETING

8

Green Budgeting – India's experience

Resham Nagpal and Pratap Ranjan Jena[15]
November 2023

1. Introduction

Green budgeting is defined as "using the tools of budgetary policymaking to help achieve environmental goals" (OECD, 2020). It has emerged as one of the crucial fiscal instruments available to the government to implement climate change actions. Given the requirements of long term planning, continuing flow of funds, and accountability for climate change commitments, budgeting becomes ideal vehicle to operationalize national policies on environment. Budget brings remarkable focus to government activities due to its control over public money and elements of public management while assigning resources for activities and establishing links between politicians and managers in a democratic process (Wildavsky, 1984; Schick, 2011).

Through a range of tools and mechanisms, green budgeting facilitates integration of environmental concerns into national decision making apparatus. The tools range from evaluating the green relevance of the budgetary policies, undertaking fiscal risk assessments, environmental impact assessment, green spending reviews to undertaking a comprehensive modification of the public financial management in line with nation's climate and environmental objectives.

The exercise gains significance due to limited availability of international climate finance that has put added pressure on public funds for financing green initiatives. With the governments in charge, this integration of environmental goals with the fiscal and budgetary framework is inescapable. The mechanism can also be leveraged to generate additional funds for the green initiatives by exploring markets for green bonds.

Green budgeting is a newer technique and is far from being a standardised one. There are plethora of frameworks and tools that are being developed simultaneously at the national and international level. Global experience shows varied methodologies and tools adopted by countries in line with their domestic goals. In India too, five states have adopted the framework so far, with wide variation in their methodologies and objectives. Internationally, organisations and forums like OECD Paris Collaborative on Green budgeting, World Bank and IMF are striving to bring together the global experience to drive improvements in the green budgeting techniques as well as provide a framework to guide their member states towards its effective implementation.

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2. International scenario

2.1 Environment- and climate-related agreements

At the turn of the century, concerns about climate change and environment started featuring prominently in the international forums. Climate concerns were first discussed during the earth summit in Rio de janerio in 1992. The summit tried to highlight the interconnections between economic decisions and environment and urged policymakers to devise tools that caters to both the aspects. It led to signing of the Convention on Biological Diversity which aims at conservation of biological diversity and sustainable use of its components as well as fair and equitable sharing of benefits arising from genetic resources. Another important convention, United Nations Framework Convention on Climate Change (UNFCCC), was opened for signature during this time and came into force in 1994 with an objective of "preventing dangerous human interference with the climate system". The convention calls for cutting global emissions with developed countries leading the way as they are mainly responsible for historic emissions. It also puts the onus of supporting funding for mitigation and adaptation activities in the developing countries on them.

Recent agreements are seen as major breakthrough in the international action to tackle climate change. A landmark was the Paris Agreement of 2015. Signed under UNFCC, Paris Agreement has an objective of keeping the increase in the global average temperature to well below 2°C above pre-industrial levels by this century and make efforts to keep it below even further to 1.5°C. The agreement requires all parties to submit nationally determined contributions (NDCs) and to pursue their best efforts at the national level to achieve them. Yet another important international agreement catering to climate goals is The United Nations Sustainable Development Goals (UN SDGs). Adopted in 2015, Goal 13 directly tackles climate change by aiming to "to "take urgent action to combat climate change and its impact" while goal 6 "Clean water and sanitation", goal 7 "Affordable and clean energy", goal 11 "Sustainable cities and communities", goal 12 "Responsible consumption and production", goal 14 "Life below water", and goal 15 "Life on land" indirectly impact climate and environment.

2.2 Arrangements supporting green transition

In the backdrop of the international commitments, there has been efforts to come up with institutions and systems that support environment and climate responsive actions. In 2017, the "OECD Paris Collaborative on Green Budgeting" was formed to help countries develop budgetary tools to progress towards national commitments on climate change and the environment. At the 2018 annual meetings of the World Bank Group and the International Monetary Fund, The Coalition of Finance Ministers for Climate Action was formed to bring together "fiscal and economic policymakers from over 90 countries in leading the global climate response and in securing a just transition towards low-carbon resilient development"[16].

Multilateral agencies are supporting their member countries in number of ways. World Bank has framed Climate Change Public Expenditure and Institutional Review which provides framework

[16] https://www.financeministersforclimate.org/about-us

for better fiscal planning and management of public expenditure when climate actions are incorporated in national plans. IMF also provides supports in various ways. First, it provides policy guidance on international carbon floor price for countries who wish to use this policy tool. Second, it has launched Climate Macroeconomic Assessment Program (CMAP) to help countries integrate climate in macro-fiscal frameworks, covering climate risk and preparedness, national strategy, mitigation, risk management, adaptation, and macroeconomic implications of climate policy. Third, it has come up with a framework on Green Public Financial Management (Green PFM) that guides member countries to make existing PFM practices more environment- and climate-sensitive. Fourth, it has launched Climate Change Public Investment Management Assessment Framework (C-PIMA) to assess a country's capacity to manage climate-related infrastructure from climate adaptation and mitigation perspectives (OECD, European Commission, IMF 2021).

European Union is trying to lead by becoming the first climate-neutral continent. In 2019, European Commission came up with European Green Deal with an objective to transform the EU into a "modern, resource-efficient and competitive economy". It has objective to reach climate neutrality by 2050; reduce net greenhouse gas emissions by atleast 55% by 2030, compared to 1990 levels and plant 3 billion additional trees in the EU by 2030[17]. An explicit target of the European Green Deal is to adopt green budgeting practices in the EU. To make this possible, EU has come up with Green Budgeting Reference Framework for its members states. At the same time, European Commission is also providing Green Budgeting training to its Member States in building administrative and technical capacity for developing a green budgeting framework at a national level.

3. Green Budgeting as an important fiscal instrument

For nations trying to achieve international commitments by incorporating climate and environmental priorities in domestic plans, availability of finance remains a serious challenge. The problem is exacerbated for the developing countries. While there has been a lot of discussion around flow of funds from developed to the developing countries, the availability of international climate finance has been limited (World Bank, 2014). Developing countries have mostly relied on their domestic sources to fund climate activities. Moreover, lack of enabling conditions for private funding has put the onus on the public sector to lead the climate agenda.

With the government at the helm, it is vital that ambitious development plans incorporating green elements are integrated into long-term budget planning. This is because public funds have to be judiciously allocated among several pressing agendas: poverty reduction, social welfare, investment for long run growth, and combating climate challenges. There were instances when development plans were not prepared with budget realities in mind and failed to materialise. For instance, countries such as Ethiopia and Rwanda framed low emissions development strategies without proper implementation as the latter was contingent on the availability of international finance.

Another challenge finance departments/ministries face is from increasing climate and weather related risks that put stress on macroeconomics and fiscal stability of a nation. There are a wide

[17] https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

range of fiscal risks that are posed by extreme weather events and climate change. These events such as floods and storms, heat waves, rising sea level etc. are increasingly leading to large losses both for the public and the private sector. For the government, it would mean disruption of plans and unanticipated increase in government deficit and debts. Accounting for such risks is critical for long-term macro-fiscal sustainability.

Green budgeting plays an important role in guiding public investment decisions, fiscal and budgetary towards green priorities. Green budgets entails fiscal measures where fiscal policy - both the revenue and expenditure side - is steered towards environmental sustainability. It also brings to the fore role that newer fiscal tools such as carbon taxes can play to address climate challenges. Through wide range of tools, green budgeting promotes efficiency, accountability and transparency of policies while having an end objective of increasing the public funds dedicated to environment and climate action.

4. Public Financial Management ecosystem for green budgeting

A sound public financial management (PFM) system consisting of all the government's institutional arrangements to secure and use resources effectively, efficiently and transparently facilitates implementation of budgeting for climate and environment action. The World Bank, in its policy notes (World Bank, 2014) identified the lead role for the national government (Specific responsibility on Ministry of Finance) in climate planning and actions through application of medium and long-term planning and strategy, implementation of policies, and prioritizing climate related funding in both capital and recurrent spending. The policy note based on the recommendations given in "The Climate Change Public Expenditures and Institutional Review Sourcebook" (World Bank, 2014) suggested on three general areas of financial and expenditures management considering the fiscal implications of climate change and sustainable economic development. These three areas are:

- Including climate change among the long term needs of the national budget and expenditure framework.
- Improving financial tracking and accountability for performance among the spending agencies in order to inform allocation decisions of scarce public funds.
- Raising the capability of government financial management systems to efficiently use external climate finance

The PFM institutional arrangements were further elaborated in IMF Climate Staff Note (IMF 2021), which outlined the green PFM framework in the context of green budget. The framework emphasized on fiscal transparency and external oversight, and coordination with state-owned enterprises and subnational governments while implementing the green budget. The effective implementation of a green PFM strategy requires securing political backing for the reform and strong stewardship role of the ministry of finance; integrating the strategy within the existing PFM reform agenda. The framework outlined the budget cycle with features like an enabling legal framework, strategic and fiscal policy goals, preparation of the annual budget and its approval by the legislature, execution of the approved budget and the production of accounts and financial reports, and independent oversight and audit of the budget. The Note also elaborated the public investment management cycle in the context of green PFM with planning, allocation, execution, and control.

The key components of a good PFM system are not only needed for desirable fiscal and budgetary outcomes but are also a prerequisite for integrating climate and environmental perspectives in the budget management process. These are outlined here (PEFA 2016).

- The budget is credible - it is realistic and is implemented as planned
- Information on PFM is comprehensive, consistent, and accessible to users.
- Effective management of assets and liabilities ensuring to ensure public investments provide value for money.
- The fiscal strategy and the budget are prepared with due regard to government fiscal policies, strategic plans, and adequate macroeconomic and fiscal projections.
- The budget is implemented within a system of effective standards, processes, and internal controls, ensuring that resources are obtained and used as intended.
- Accurate and reliable records are maintained, and information is produced and disseminated in a timely manner for better decision-making.
- Public finances are independently reviewed and there is external follow-up on the implementation of recommendations for improvement by the executive.

5. Green Budgeting frameworks and their key elements

Reconciling country development agenda with climate change actions require a long term strategic framework taking into consideration multifaceted challenges faced by the countries in terms of poverty reduction, financing needs, and governance issues. Many countries have made progress in incorporating climate change actions, for instance low-carbon emission plan, into the process of national policy making and budget planning.

Divergence in green budget practices to deliver national and international environmental commitments emerges due to varying PFM institutional structure and other national priorities. Strengths and limitations of the existing budgeting process to a large extent determine effectiveness of green budget. While searching for a single approach to incorporate climate and environmental perspectives into budgeting may not be desirable, examining some of the basic building blocks will lead to understanding the green budget process. Towards this end, a number of green budgeting frameworks have been put forth by international organizations to support their members in adopting good green budgeting practices.

OECD Green Budgeting Framework draws from Paris Collaborative on Green Budgeting. It comprises of four elements: (i) strategic and fiscal planning; (ii) budgeting tools for evidence generation and policy coherence, (iii) accountability and transparency, and (iv) an enabling budgeting environment. Each element covers important aspects of budgetary policy-making enabling its effective integration with environmental and climate goals.

European Commission too has developed a Green Budgeting Reference Framework. The framework acts as a basic toolkit comprising of the operational steps that should be undertaken in preparing green budgets. It covers five key aspects that should be given due consideration: (i) coverage, (ii) methodology, (iii) deliverables, (iv) governance, (v) transparency and accountability. The framework acts as a reference document for its member countries undertaking the exercise as well as a monitoring tool for European commission which screens and benchmarks the green budgeting practices of its members.

IMF's Green PFM aims at "adapting existing PFM practices to support climate-sensitive policies" (IMF, 2021). The framework talks about the entry points of climate priorities within the budget cycle and areas of interaction within, across, and beyond the budget cycle. IMF further provides five principles ensuring successful design and principles of green PFM reform strategy: (i) several prerequisites are necessary for successful green PFM reforms such as existence of basic elements of a functional PFM system, strong political backing and ownership, presence of green expertise, (ii) key role should be assumed by the ministry of finance, (iii) green PFM reforms should be integrated with the existing PFM reforms, (iv) appropriate sequencing of green PFM reforms is vital, and (v) effective communications on green PFM reforms should be made to stakeholders to be able to receive and incorporate their feedback.

World Bank proposed Climate Change Public Expenditures and Institutional Review (CCPIER) as a public expenditure framework to align climate-related spending with countries objectives. The framework involves (1) fiscal sustainability, (2) strategic resource allocation, (3) the role of government, (4) the efficiency and effectiveness of spending, (5) the incidence of spending, and (6) the capability of institutions and the alignment of incentives. It assesses the financial implications of climate change policies providing valuable inputs to the process of prioritising and allocating scarce resources of expenditure programs. This, in turn, facilitates the integration of climate change policies into budgets and the implementation of plans.

All these frameworks share common elements. They emphasize on the importance of incorporating strategic priorities and objectives pertaining to environment and climate needs in fiscal planning to ensure resource availability and broad expenditure planning. Ministry of Finance has the lead role in integrating climate actions into fiscal management and long-term budget planning.

Transparency and accountability structure including comprehensive, consistent and accessible information on green budgeting will be crucial to take policy decisions and implement the climate plan. An efficient expenditure classification system enabling effective application of resources and tracking expenditure, relevant documents containing budget proposals, an efficient system of legislative approval and scrutiny, transparent funding arrangement from various sources, and performance information are major features of a transparent budgeting system that enhances accountability. Accurate and reliable reporting to relevant stakeholders facilitates scrutiny of the quality and the impact of green budgeting. A Green Budgeting Statement accompanying the budget is suggested to provide an overall picture of how the budget is aligned with green objectives in any given budget year. The external audit system of the country with adequate follow-up system through legislative committees helps in proper utilization of resources in planned climate action activities.

Improving budgeting environment by emphasizing on performance orientation, establishing medium term perspective, and improving capacity and technical efficiency in the government organizations are other important elements of budgeting to achieve climate goals. Strong institutional structure create an enabling environment for green budgeting. The medium term framework helps linking strategic planning to the budgeting system and performance orientation provides outcome and evidence-based budget processes. The implementation of green budgeting is also supported by active participation of stakeholders, particularly the political leadership, civil society and bureaucracy.

6. Key Green Budgeting tools

Current practices related to green budgeting vary immensely. A joint survey of OECD and European commission showed that of the 14 countries that have adopted green budgeting in EU and OECD, frequently adopted tools are ex-ante and ex-post environmental impact assessment, green budget tagging, environmental cost-benefit analysis and carbon assessments. In this section, we discuss key tools that are widely referred to and adopted across the globe. However, many of these tools are evolving with the experience of countries that have implemented them.

6.1 Greening of fiscal and budgetary frameworks

Economic and fiscal policy of the government may not be aligned with the climate targets. Concurrently, climate and environment risks can alter the targeted macro-fiscal outcomes. Greening of fiscal and budgetary frameworks entails incorporating climate and environmental goals in the medium term macro-fiscal plans. Currently, many macro and fiscal forecasting models do not take into account for economic and budgetary costs of climate change. Adapting these models to capture the economy-environment linkages is an important element of the process.

6.2 Managing the fiscal risk

There are a large no of weather-and climate-related risks that undermine the effective management of public finances. These risks such as floods, storms, land erosion, loss of biodiversity causes disruption to production, trade and supply chains, triggers pandemics and leads to sudden and unplanned increase in public expenditure. Quantifying these risks and incorporating them in macro-fiscal planning the medium run is crucial for long-term fiscal sustainability. IMF's Fiscal Transparency Handbook calls for identification and disclosure of these risks in the budget documents such as Fiscal Risk Statement. Some of the tools that can be used for managing these risks are macro-fiscal scenario analysis and fiscal stress tests. For modelling and assessing impact of natural disasters, techniques such as Monte Carlo simulation, probabilistic disaster risk modelling and stochastic analysis can be used. World Bank's Climate Change Public Expenditures and Institutional Review is an effective mechanism to address the issue.

6.3 Green/Climate tagging of budgets

It is one of the most widely adopted tools of green budgeting. Tagging includes classifying budget items according to their impact on climate or environment. The first step in the budget tagging involves stating the climate goals/objectives to which activities/programs are then tagged. Next, a part or whole of a policy measure is tagged as green or not. Countries here vary in their practice. For instance, Ireland tags entire cost of an activity as green while France compute green content of an activity. Many countries build upon existing tools such as OECD Rio markers methodology for tagging. Tagging tool requires sound judgments in order to assign a part or whole of expenditure as green or climate-sensitive.

6.4 Policy evaluation - environmental impact assessment and green spending reviews

Many countries in the EU and UK undertake environment impact assessment of their budgetary measures. For instance, Italy prepares a Climate Annex that assesses how policies are meeting emission reduction targets and presents the effects of specific measures included in the National Energy and Climate Plan. Ex-ante evaluation and assessment of policies increases the cost of policies that have negative environmental impact and thus discourages them. Ex-post impact assessments help understand how policy measures have contributed towards environmental objectives and how learning from the past can help make improve the design of the future policy interventions.

Green spending reviews are another way of policy evaluation. The objective here is to analyze budgetary spending not only in terms of the proportion of money spent but also in terms of its green impact. It is important to design the implementation of the spending review following best practices.

6.5 Amending the legal framework

Green budgeting framework can be built into legislation to ensure its smooth implementation. This also establishes accountability in terms of roles and responsibilities of different factions of the government like ministries, departments etc. towards the green budgeting process. Several OECD countries specifically Austria, Colombia, France, Italy, Luxembourg, Mexico, Netherlands and Portugal have amended their national budget laws to implant green budgeting requirements.

6.6 Carbon pricing

Computing a price to capture the true cost of carbon is a cost-effective way to reduce emissions. Carbon pricing can be achieved either by levying carbon tax or by introducing market for emissions trading. Carbon pricing can be a powerful tool for abating CO_2 emissions as well as incentivizing industries and governments to look for alternatives. Carbon tax or auction of market permits can also help to generate additional revenue for the government.

7. Select global experience

7.1 Indonesia

Indonesia was amongst the first countries to adopt climate budget tagging. Indonesia initially started tagging mitigation activities, but subsequently included tagging of adaptation activities as well. The country follows a robust tagging mechanism. The climate relevant expenditures are initially tagged by the Echelon II units/directorates' work teams, which are verified in reconciliation meetings between line agencies and the Climate Change Secretariat of the Ministry of National Development Planning. Tagging is then validated by the Ministry of Environment and Forestry for consistency with the nationally determined contribution and endorsed by the Ministry of Finance before the budget is submitted for legislative approval. Moreover, Indonesia is the first country to use the climate budget tagging system as the basis for a sovereign green bond (SGB) or green sukuk. They are also exploring the possibility of using historical data to established auto tagging feature in the budgetary system and connect government spending with the performance data. This is expected to promote performance based budgeting and facilitate green sukuk impact assessments.

7.2 France

France was the second OECD country to adopt green budgeting in 2020. Their green budget is prepared by a working group of representatives from the Ministry of Finance and the Ministry of Ecological and Inclusive Transition and is published as an annex to the Finance Bill. They undertake a green budget tagging at the lowest level of the program budgeting framework called "actions" across 6 environmental issues including climate mitigation and adaptation, circular economy, water resource management, pollution abatement, and the protection of biodiversity. Besides assessing green component of all budget expenditures, two key elements that make France's green budget distinctive are: (i) It covers tax expenditures and (ii) It tags expenditures that are favourable as well as unfavourable to the environment. It is the only country to tag expenditures have adverse environmental impact. Some of this expenditure identified in 2021 budget included subsidies for fossil fuels, tax expenditures for airlines and shipping. France also provides a good example of earmarking of climate-relevant revenues to climate-relevant expenditures. For instance, the country utilises the tax on energy to subsidise the renewable energy sector.

8. Green initiatives in India

India, with its high population density, seasonal variability of rainfall, soaring pressure on natural resources, and high poverty rates is extremely vulnerable to the adverse effects of climate change. India ranks eighth on Global Climate Risk Index (CRI) that classifies countries according to their vulnerability to climate events. According to the IPCC synthesis report, India will witness increased frequency and intensity of extreme weather events. These events will have far reaching consequences on the country's economy endangering the food security and livelihoods of its people.

In an attempt to combat climate change, India launched National Action Plan on Climate Change (NAPCC) in 2008. The plan aims to maintain a high growth rate in tandem with environmental and ecological sustainability. It comprises of eight missions focusing on adaptation and mitigation, energy efficiency and natural resource conservation. Indian states and Union territories too were directed to prepare an action plan on the same line, known as the State Action Plans on Climate Change (SAPCC). These eight missions under NAPCC are:

1. National Solar Mission aims at creating an enabling environment for solar technology penetration in the country.

2. National Mission for Enhanced Energy Efficiency aims to strengthen the market for energy efficiency by creating conducive regulatory and policy regime.

3. National Mission on Sustainable Habitat aims to align city development plans with government's mitigation and adaptation efforts.

4. National Water Mission aims to integrate water resource management helping to conserve water, minimize wastage and ensure more equitable distribution both across and within states.

5. National Mission for Sustaining the Himalayan Eco-system addresses concerns relating to Himalayan Glaciers, Biodiversity, Wildlife and livelihood.

6. National Mission for a Green India aims to sustainably manage forests and other ecosystems of the country.

7. National Mission for Sustainable Agriculture aims at making agriculture more productive, sustainable, and remunerative and climate resilient.

8. National Mission on Strategic Knowledge for Climate Change aims to build a dynamic knowledge system that informs and supports national action for responding effectively to the objective of ecologically sustainable development.

India is signatory to many environment- and climate-centric conventions and has made ambitious commitments in recent global agreements. Under UNFCCC's Paris Agreement, India committed to reduce the emission intensity of its GDP 30-35% by 2030 from 2005 levels. It committed reduction in carbon emissions by one billion tonnes till 2030. It also committed to create additional carbon sink of 2.5 to 3 billion tonnes of CO_2 equivalent through additional forest and tree cover by 2030. At the same time, it committed to create 40% of the total installed capacity from renewable energy. In UNFCCC's Glasgow summit in 2021, the country renewed these commitments. The emission intensity of GDP is now targeted to be reduced by 45%. India also increased the share of renewable energy in total installed capacity to 50%. Moreover, it committed to become a net zero emission economy by 2070. Besides this, India advocated LIFE'– 'Lifestyle for Environment', "a healthy and sustainable way of living based on traditions and values of conservation and moderation".

In 2022, India submitted its Long-Term Low Emission Development Strategy to UNFCCC. Among other things, the strategy included India's plan to transition from fossil fuels through rapid expansion of green hydrogen production; low carbon development of the transport sector through use of electric vehicles and increased use of biofuels; development of smart cities for sustainable and climate resilient progress; improving energy efficiency of the industrial sector through schemes such as Perform, Achieve and Trade (PAT) scheme.

Keeping up with India's commitments, Union budget 2023-24 has ushered in a number of reforms as the government identified "green growth" as one of its seven priorities. This included launch of National Green Hydrogen Mission with an outlay of ₹19,700 crore to reduce fossil-fuel dependence and carbon intensity of the country; allocation of ₹35,000 crores for priority capital investment toward energy transition; providing viability gap funding facility for battery energy storage systems; construction of interstate transmission system for evacuation and grid integration of 13 Gigawatt renewable energy from Ladakh; introduction of Green Credit Programme, a market-based approach for issuing green credits to incentive environmentally sustainable actions by various stakeholders; and push to phasing out of old vehicles with vehicle scrappage policy. Moreover, there is an impetus to protect the biodiversity through schemes such as Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) for promoting mangrove plantation along India's coastline and on salt pan lands; and Amrit Dharohar to encourage wetland conservation. Besides, many other new as well ongoing schemes of the government are aimed at environment protection. These include PM PRANAM that encourages alternative fertilisers with balanced use of chemical fertilisers, GOBARdhan scheme that supports effective management of biodegradable waste and Bhartiya Prakritik Kheti Bio input resource centers that support farmers to take natural farming.

In line with the national agenda, many Indian states announced green initiatives in various sectors. In 2023, Tamil Nadu announced launch of Tamil Nadu Green Climate Fund (TNGCF) with ₹1,000 crore to fund green initiatives ranging from pollution control, renewable energy, greenhouse gas reduction technologies, forest expansion, electric vehicles and waste management. In the same year, Gujarat announced its Renewable Energy Policy with an aim to generate 50 per cent of power through renewable energy sources by 2030. Haryana too announced series of green initiatives. In its 2022-23 budget, it for the first time, allotted funds under "climate change-related initiatives". It launched an afforestation project called Green Wall Project that entails development of a 1,400-km-long and a 5-km-wide green belt buffer around the Aravalli mountain range as well as announced its plan to set up climate and sustainable development fund. In 2022, the government of Himachal Pradesh announced its ambition of becoming the first green state in the country by meeting 100% of its energy requirement through renewable energy. Currently, it meets about 17% of its requirement from the thermal sector. Rajasthan aims to launch e-waste disposal policy and develop an e-waste recycling park in Jaipur. Moreover, a number of states including Himachal Pradesh, Jharkhand, Gujarat, Chhattisgarh, Haryana, have taken initiatives for production of solar energy through installation of solar panels on rooftops, installing solar water pumps under PM-KUSUM scheme. Furthermore, several states have embarked on preparing green budgets. We discuss this in detail in the next section.

9. Experience of Indian states with Green Budgeting

Green budgeting is a relatively new concept in India. Some Indian states including Odisha, Bihar, Puducherry, Meghalaya and Assam have started preparing green/climate budgets along with their annual budgets. Puducherry, Meghalaya and Assam have prepared their first green budget in the current financial year. Odisha was the first state to come up with a climate budget. Punjab came up with Action Plan for Green budgeting in 2014 but haven't come up with a green budget as yet.

While the green budgeting methodology varies across the Indian states, all states perform a budget tagging exercise where they label part or whole of the climate- or environment-sensitive expenditure as green. Mostly, budget tagging methodologies are developed by finance departments, often in collaboration with other departments. For most of these states, the methodology is at very nascent stage and is evolving as they learn from their experiences.

As part of the tagging, all states undertake a process of identification, measurement, and monitoring of environmentally-relevant public expenditures. However, they differ across the key elements of the tagging methodology: (i) defining green or environmentally-relevant expenditure, (ii) defining appropriate coverage of sectors or departments that will be tagged, and (iii) estimating green expenditures. Below we discuss the green budgeting methodology adopted by the five Indian states.

9.1 Odisha

Odisha is highly vulnerable to climate extreme events such as cyclones, heat waves, frequent flooding, ocean warming and acidification, draughts etc. The states proximity to the coastal area and excessive dependence on monsoon exacerbate the situation. Odisha prepares climate budget to analyse the climate relevance and sensitivity of its public expenditure. The state has identified the 11 sectors most vulnerable to climate change - Agriculture; Revenue and Disaster Management; Energy, Fisheries and Animal Resources; Forest, Environment and Climate Change; Health and Family Welfare; Panchayati Raj and Drinking Water; Rural Development; Commerce and Transport; Housing and Urban Development and Water Resource.

The state undertakes a climate change budget tagging exercise using the Phased Climate Change Impact Appraisal (CCIA) analysis. In this, programme-level linkages of the identified sectors with climate change are measured using two metrics - Climate Change Relevance Share (CCRS) and Climate Change Sensitivity Share (CCSS). The former estimates how benefits from development programmes additionally contribute to improving resilience to climate change while the latter estimates how programme benefits are likely to be impacted by climate change itself in the absence of climate change specific planning interventions. These benefits could be both negatively and positively impacted by the climate change. A snapshot of the CCIA analysis for Agriculture sector where 100% of the expenditure is coded is presented below. Table 1 shows the coding exercise undertaken at scheme level for selected schemes in the agriculture sector while Table 2 shows the coding undertaken for agriculture sector as a whole.

Table 1: Climate coding of selected schemes under Agriculture sector in Odisha

Scheme	Programme Expenditure 2022-23(RE)	CCRS	CCSS-positive	CCSS-negative	CCRS Expenditure 2022-23(RE)	CCSS (Positive) Expenditure 2022-23(RE)	CCSS (Negative) Expenditure 2022-23(RE)
Promotion of Integrated Farming in Tribal areas	381952	73%		-33%	278824.96	0	-126044.16

Scheme	Programme Expenditure 2022-23(RE)	CCRS	CCSS-positive	CCSS-negative	CCRS Expenditure 2022-23(RE)	CCSS (Positive) Expenditure 2022-23(RE)	CCSS (Negative) Expenditure 2022-23(RE)
State Potato Mission	30000	25%		-63%	7500	0	-18900
Innovative Agroforestry for Food and Nutrition Security	100000	50%	10%	-56%	50000	10000	-56000

Note: The data is extracted from Climate Budget 2023-23, Government of Odisha.

Table 2: Coding of Agriculture sector under Odisha's Climate budget

Head	2022-23(RE)	2023-24(BE)
Total Programme Expenditure	5235.00	6116.68
Climate Change Relevant Expenditure	37.51%	32.63%
Climate Change Sensitive Expenditure (Positive)	2.68%	4.67%
Climate Change Sensitive Expenditure (Negative)	-36.88%	-31.12%

Note: The data is extracted from Climate Budget 2023-23, Government of Odisha.

After estimating the CCRS and CCSS, the following inference is made about a programme expenditure for further action.

- High Relevance and High Sensitivity: Need for climate proofing of schemes with higher climate vulnerability, while ensuring that benefits that have climate-relevance are retained.
- Low Relevance and High Sensitivity: Need to take steps to insure against welfare losses from climate risks as well as explore options to enhance climate relevance.
- High Relevance and Low Sensitivity: Should be encouraged as climate change benefits accrue with relatively less impact (or loss) from climate risks.
- Low Relevance and Low Sensitivity: Need regular monitoring and review to explore the future scope of mainstreaming climate concerns.

The analysis helps policymakers in identifying expenditures that are priorities for climate change as well as those that need modifications. It is important though that the budget tagging is adequately matched with inferred action to achieve the desired climate objectives.

9.2 Bihar

Bihar uses green budget as a tool to measure the impacts of its efforts towards achieving national and international commitments especially, SDGs. From 2021-22 onwards, Bihar started preparing as well as presenting the green budget before the State's legislative assembly. Their green budget document gives a complete overview of department-wise and scheme-specific assessment of budget expenditure towards meeting environment-related sustainable development goals. In their approach, the first step entails identification of state departments that are contributing towards environment-promoting activities. The next step involves reviewing Demand for Grants and other budget documents of these departments to identify schemes/programme that have green components. Thereafter, the green-component carrying schemes of various departments along with their budgetary allocations are collated by the finance department. In the final step, the modified Rio-Marker methodology is used to compute green coefficient of these environmentally relevant schemes. Under this methodology, each scheme's objectives and components are scored to arrive at the cumulative scheme score. Table 3 below provides illustration of the score ranges in which schemes are categorized.

Table 3: Green budget coding adopted by Bihar

Green range	Examples of schemes/activities
Fully Dedicated (100 percent)	National Afforestation Programme, Project Tiger, E-vehicle scheme, Energy efficiency etc.
Very High (90-75 percent)	National River Conservation Plan; Conservation, Development and Sustainable Management of Medicinal Plants, etc.
High (75-50 percent)	Groundwater Management and Regulation, National Groundwater Management Improvement Programme, etc.
Medium (50-25 percent)	National Horticulture Mission, National Mission on Agriculture Extension and Technology, National Mission on Sustainable Agriculture, Integrated Watershed Management Programme, etc.
Low (25-05 percent)	Pradhan Mantri Krishi Sinchayee Yojana, National Mission on Micro Irrigation, Paramparagat Krishi Vikas Yojana, etc.
Marginal (05 percent or less)	Training and Awareness programmes, Environment Volunteering Programmes, Information, Education and Communication materials, etc.

Source: Green Budget 2022-23, Government of Bihar.

Over the years, the number of schemes has increased from 103 (FY 2020-21) to 267 (FY 2021-22) and further increased to 316 (FY 2022-23). For the Green Budget Statement for FY 2022-23, the state also identified the SDG and activity profiles of various departments. Table 4 below presents a summary of last three years green budget and budget estimates.

Table 4: Summary of green budget of Bihar

Head	FY 2020-21 Budget Estimates (₹ crore)	FY 2021-22 Budget Estimates (₹ crore)	FY 2022-23 Budget Estimates (₹ crore)
Total state budget	211761.49	218302.70	237691.19
Total scheme budget allocations of identified departments under green budget	81176.46	79359.73	79255.54
Total allocation of schemes/programmes budget identified by the department	27162.85	29337.33	28380.42
Total green budget components of identified schemes/ programmes	5693.88	7682.91	7710.25
Percentage of green budget from the total allocation identified by the department	7.01%	9.68%	9.73%

Head	FY 2020-21 Budget Estimates (₹ crore)	FY 2021-22 Budget Estimates (₹ crore)	FY 2022-23 Budget Estimates (₹ crore)
Percentage of green budget from the total scheme/programmes of the identified department	21%	26.19%	27.17%

Source: Green Budget 2022-23, Government of Bihar.

9.3 Puducherry

The Union territory came up with its first green budget in the FY 2023-24. Puducherry follows a similar green tagging methodology as Bihar. Like the latter, it also does a department level mapping of schemes in line with environmental objectives and SDGs. However, a key difference is that Puducherry has taken year 2022-23 as baseline to support evaluation of green budgets over time. They have decided on five baseline indicators: (i) green budget outlay (ii) percentage of green budget of identified scheme budget; (iii) percentage of green budget of revised estimates/budget estimates; (iv) number of departments that identified schemes and green components; and (v) number of budget line items with green components. Table 5 below provides a summary of the analysis undertaken by the state on these parameters.

Table 5: Summary of green budget of Puducherry

Heads	2022-23 (baseline)	2023-24
Total state budget (Rs crore)	11500	11600
Total scheme budget allocations of identified departments under green budget (Rs crore)	2452	2943
Total green budget components of identified schemes/ programmes (Rs crore)	191	483
Percentage of green budget from the total allocation identified by the department	7.78	16.42
Percentage of green budget from the total scheme/programmes of the identified department	1.66	4.17
Number of schemes with green components	120	134
Number of departments involved	9	15

Source: Green Budget 2023-24, Government of Puducherry.

9.4 Assam

Assam initiated the process of green budgeting from the current financial year (FY 2023-24). The methodology followed comprises of several steps. In the first step, departments that deal with sectors vulnerable to climate change are identified. The Assam State Action Plan on Climate Change 2021-30 lists nine sectors highly vulnerable to climate change. 14 departments have been identified based on this criteria. The nine vulnerable sectors and 14 departments are listed in the Table 6 below.

Table 6: Vulnerable sectors and departments that deal with them in Assam

Vulnerable Sectors	Identified Departments for FY 2023-24
1. Agriculture and Allied Sector	1. Agriculture
2. Forestry and Biodiversity	2. Environment and Forest
3. Water Resources	3. Water Resources

Vulnerable Sectors	Identified Departments for FY 2023-24
	4. Soil Conservation 5. Irrigation
4. Energy	6. Electricity (Power)
5. Strategic Knowledge	7. Science, Technology and Climate Change
6. Disaster Management	8. Revenue and Disaster Management 9. Public Works(Roads) 10. PWD
7. Urban and Rural (Human Settlement)	11. Panchayat and Rural development 12. Housing and Urban Affairs
8. Human Health	13. Public Health Engineering
9. Transport	14. Transport

Source: Green Budget 2023-24, Government of Assam.

In the next step, the selected departments identify schemes that have some components directly or indirectly relevant for protecting environment or climate. The schemes are then assigned an impact category ranging from highly favourable (Green), moderately favourable (Yellow), neutral (Grey) and less favourable (Brown). Table 7 below defines these categories.

Table 7: Criteria for classifying schemes under various heads in Assam's green budget

Classification	Criteria
Highly Favourable (Green)	Scheme/programmes with highly favourable direct impact for environment and climate change, schemes with main objective of improving environment sustainability or climate resilience and adaptation.
Moderately Favourable (Yellow)	Scheme/programmes with indirect but moderately positive impact for environment and climate change (and /or) if the improvement of environment sustainability and climate resilience and adaptation efforts are smaller components of the scheme.
Neutral (Grey)	Schemes which are not targeted or do not have relevant impact for environment and climate change
Less Favourable (Brown)	Schemes that may not be favourable to the environment and will need improvement in green share.

Source: Green Budget 2023-24, Government of Assam.

Thereafter, schemes are tagged based on their relevance to identified nine vulnerable sectors. Further, a second level of tagging is done based on which schemes are categorised under three broad domains, namely, climate change mitigation, climate change adaptation and environment sustainability. Table 8 below provides a snapshot of tagging exercise undertaken by Assam

Table 8: Green tagging of selected schemes under Agriculture sector in Assam

Department	Scheme	Budget Estimates (2023-24) (₹ lakhs)	Level of Impact on Environment				Broad domain	percentage	Amount (₹ lakhs)
			HF	MF	N	LF			
Agriculture	Assam Agribusiness and Rural Transformation Project	4000	Yes				Climate Adaptation	100%	4000
	Community Development	180		Yes			Environment sustainability	30%	54

Department	Scheme	Budget Estimates (2023-24) (₹ lakhs)	Level of Impact on Environment				Broad domain	percentage	Amount (₹ lakhs)
			HF	MF	N	LF			
	Programme, Gorukhuti-Null								

Note: The data is extracted Green Climate Budget 2023-24, Government of Assam.

Based on this tagging, Assam estimated that majority the schemes undertaken by the select departments in FY 2023-24 fall under the 'neutral' category. Of the 486 schemes reviewed, 286 worth ₹ 10,916 crore are tagged neutral followed by 118 schemes worth ₹ 4,989 crore tagged as moderately favorable. 81 schemes worth ₹ 1,289 crore are highly favorable. Most number of highly favorable schemes were under environment and forest department followed by irrigation department.

9.5 Meghalaya

Meghalaya prepared its first Climate Action Budget in FY 2023-24 with an objective of integrating climate action into the State's budgeting process. The methodology constitutes capacity building of relevant department stakeholders on climate change and its impact, identification of schemes relevant for climate action and estimating the proportion to which they contribute towards climate action, classification of identified schemes into climate change mitigation and adaptation categories, and analysis of the budget thus prepared.

Following this methodology, Meghalaya computed total allocation to climate action at ₹ 3,412 crore in 2023-24 (budget estimates) constituting 15.36% of the total state budget. Of this, ₹ 2,735 crore was towards mitigation-related activities while ₹ 676 was towards adaptation-related activities.

9.6 Benefits, challenges and possible improvements

Indian states have so far explored only budget tagging as a tool for conducting green budgeting. Green budget tagging builds upon earlier theme-based budget tagging notably gender and poverty. The methodology of green tagging of budgetary schemes and programmes builds on the OECD's Rio markers as well as the multilateral development banks' joint methodology for reporting on international flows of climate finance. The current practice of green budgeting followed by Indian states offer several benefits, however, it is plagued with a number of challenges.

9.6.1 Benefits

Green tagging of budgets makes the concerned departments more environmentally-conscious. It helps in aligning their actions and policies which leads to better planning towards improving the green objectives of public policies and schemes. It also increases transparency as well as creates accountability amongst the involved departments towards environmental sustainability.

Tagging exercise may also influence allocation decisions during budget preparation. By providing understanding of allocations and expenditures on green-centric schemes and programmes, it helps to systematically address inefficiencies, regional disparities, and other issues that may have arisen due to inadequate budgetary provisions.

Green budget also guides fiscal policy of the government. By providing an assessment of government's actions toward achieving the environmental goals and commitments, green budget guides policymakers in reorienting fiscal policy through taxes, subsidies, investments, etc. to facilitate fulfillment of the green targets.

Green budgets facilitate identification of environmentally-relevant programs, which can be effectively utilised to mobilize funding from external sources. For instance, in the Philippines, the information about climate-relevant programs gathered from the green budget was reportedly utilised by the government agencies to approach donors interested in funding specific climate change activities.

9.6.2 Challenges

Given that the responsibility for the application of green/climate tagging lies with several ministries and departments, there may be poor compliance by concerned departments with the tagging procedures. The process is also prejudiced in case of lack of inter-departmental co-ordination.

Tagging various scheme expenditure requires informed judgments about identification of schemes as well as assigning proportion of expenditure as green/climate-relevant. Weak understanding or poor training of the involved department officials may lead to under/over reporting of the green element. Also, there may be risk of exaggeration of the climate relevance of schemes and programs by departments to earn accolades from authorities.

Another weakness of the green budget process has been a lack of credibility analysis evaluating variance of actual spending from the budget estimates. A credible budget reflects the ability of the government to deliver planned public services. While budget estimates are typically tagged during budget preparation, information on allocations as well as on the performance of the government in adhering to planned budgets in past years is seldom provided. Thus, the current practice does not help in evaluating the efficiency of environmental expenditure.

Moreover, tagging by itself does not guarantee a consistent increase in the public finance towards green schemes. Tagging can effectively align resources with policy priorities only when linkages with the upstream and downstream aspects of public expenditure management are strengthened.

Green tagging provides a partial analysis of the budget. Only the expenditures on various schemes/programmes are tagged. The methodology is completely silent on revenue side of the budget. Since there is no systematic mapping and coding of sources of funds, the green budget does not help in facilitating newer sources of finance for achieving additional finances for funding green schemes.

Moreover, owing to the differences in tagging methodologies across states, the comparability of the green budgets across states is of lesser significance. For instance, some states tag expenditure according to their relevance to climate mitigation and adaptation while others tag expenditure across a range of environment-relevant activities. Thus, there is little scope of aggregation of green expenditures by states to understand the picture at all India level.

9.6.3 Possible improvements

Green tagging of budgets practised by Indian states may not be a flawless exercise but it is a crucial first step towards achieving environmental and climate goals. However, green tagging alone is of not much significance unless it is integrated into the system of public expenditure management. Budget tagging should be complemented with ex-ante planning and ex-post reflection as well as subsequent appraisal of schemes and policies for making them more environmentally- and climate-sensitive.

It is important to clearly define the objectives of budget tagging. It may be the case that systematic appraisal of programs is a more suitable alternative. Also, since tagging runs the risk of "greenwashing", i.e., exaggeration of the green relevance of programs, there is need to put in place some validation mechanisms to review tagged expenditures and confirm their green relevance.

Proper training and involvement of line agencies is key to make the exercise successful as they are best placed to ascertain the green-relevance of a scheme as well as monitor implementation. Procedures and processes followed by these departments is of great significance in generation of meaningful green budgets.

The scope and coverage of the tagging should be well-defined. Tagging should be at as granular level as possible, say at the level of scheme, project, and component. More, it should have a wide coverage across categories of expenditure and government departments. This ensures that the information thus generated can be effectively utilised to design policy interventions.

Quality audits at regular intervals to verify the consistent application of the methodology and policy alignment is important to keep the green budget relevant over the years. Moreover, as the tagging methodology evolves with more learning, it is important that engage key institutional stakeholders, especially the line agencies, in the design and implementation of climate budget tagging.

10. A way forward

Increasing national commitments on climate change and environmental sustainability have led to widespread adoption of green budgeting across the globe. In India, commitments by the central and state governments have provided an opportunity to the nation to strengthen its footing on the environment front through the budgeting processes. However, there is no single way to integrating climate and environmental perspectives into budgeting. The variation in the approaches adopted by different nations is attributable to differences in national commitments, green objectives, and existing budgetary frameworks.

While most Indian states undertake a budget tagging exercise, differences exists in their approach. Though it is acceptable to have varied approaches to encourage states to explore and develop a methodology most suitable for their needs, there are merits in achieving some standardisation in the long run. India can strive to develop a strategic framework that guide states on broad principles while allowing for variation in implementation. The example of European Union Green Budgeting Framework is useful here as it acts as a toolkit to support its member states to undertake green budgeting exercise with some degree of standardisation.

A significant factor in implementing green budget is existence of a PFM system emphasizing institutional efficiency. In India, the initiatives to improve the PFM systems and processes over the years, although yielded some enduring changes, were hindered due to discontinuities and indifferent implementations (Premchand 2008, Jena, 2016, Report of FC-XV). Despite efforts at both the Centre and the state level, establishing a performance oriented management structure stretched over levels of governments in the Indian federation and adopting multi-year perspective in budgeting system remains a work in progress.

India should also strive to utilise green budgets towards mobilising finances for green initiatives. For instance, both green bond framework and climate tagging methodologies require information on green expenditures as well as institutional arrangements to select and report on expenditures. Thus, green budget tagging can be leveraged to facilitate development of green bond market. Indonesia presents a good example of this. They used the information from the tagging system as the basis for a sovereign green bond (SGB),

Carbon pricing is yet another important tool that can be explored. It can be achieved either through introduction of market for emission trading or by levying a tax. Besides achieving the target of reduced emissions, the revenue from carbon tax or auction of carbon permits can also supplement government finances for funding green initiatives. In the longer run, governments must also explore ways to attract and mobilize private sector finances.

Going forward, India should build upon existing frameworks and approaches developed by international agencies as well as be vigilant of the lessons emerging from the global experience. Important takeaways so far suggest that green budgeting should be a result-based approach with clearly defined climate and environment objectives to be achieved. It should aim to seamlessly integrate environmental concerns within existing frameworks and processes and should strengthen transparency and accountability standards of government agencies. Lastly, green budgeting should be able to steer the discussion and debate on climate policy in a more meaningful direction.

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9

A Note on Green Budget

Samir Kumar Sinha

1. Introduction:

Assam is an agrarian state, where the very heartbeat of our economy and livelihood is intricately entwined with agriculture and related activities. The State, grappling with the dual challenge of economic development and environmental sustainability, embarks on a pioneering journey with its Green Budget initiative. This strategic financial framework is tailored to mitigate climate change impacts while fostering economic growth.

Situated in the biodiversity-rich Eastern Himalayan region, Assam is highly vulnerable to climate-induced adversities. The state's economy, predominantly reliant on agriculture and tea production, faces significant risks from erratic weather patterns, flooding, and erosion.

Cognizant of the need for addressing the issue of climate change, we have been taking a multitude of initiatives at grass-root level as well as policy level. Some of the significant interventions are:

- State Action Plan on Climate Change (2015-2020) that identifies the climate vulnerable areas such as water resource, agriculture, etc. and provides strategies to reduce the vulnerabilities in the respective areas.
- Flood and River Erosion Management Agency of Assam (FREMAA) for tackling issues pertaining to flood and river erosion
- Assam Forest Policy (2004)
- Assam Green Mission – Reforestation initiative to increase the Green Cover
- Renewable Energy Policies such as Assam Renewable Energy Policy 2022 and Assam Solar Energy Policy 2017.
- Assam State Disaster Management Plan 2015 and 2022 (draft)
- Assam State Disaster Management Policy 2010
- Disaster Resilient Budget
- Most notably, in 2022-23, State Cabinet has approved allocating 3% of resources of every department towards building disaster resilience
- Assam has made significant strides in disaster management over the years including Early Warning Systems, Comprehensive Planning for Flood and Erosion Management

The policies, although in place, did not find mention under a common document that led to insufficient monitoring to assess our achievement of desired outcomes and effectively address concerns.

It was believed that a Green Budget document could serve as a valuable tool to align our objectives with environmental sustainability. It would also facilitate the tracking and monitoring of green initiatives, enabling us to reevaluate existing programs through an environmentally conscious lens. Further, this approach could significantly contribute to our progress towards achieving SDG goals related to climate change.

Assam Government in Finance Department commenced the publishing of a "Green Budget" in FY 2023-24 and placing on the table of the August House along with statutory budget documents, to incorporate environmental considerations into the heart of its fiscal planning. The Green Budget of Assam is available for public access under the link: https://fin.assam.gov.in/budget_documents/

1.1 Policy Framework:
The Green Budget is anchored in a robust policy framework that aligns with Assam's State Action Plan on Climate Change (ASAPCC). It integrates international commitments under the Paris Agreement and Sustainable Development Goals, reflecting a comprehensive approach to ecological conservation and sustainable development.

1.2 Green Budget Methodology:
In discussion with Environmental and Forest Department, Science, Technology and Climate Change Department and experts in this domain, a methodical approach was adopted to formulate the Green Budget in this endeavour. Initially, we began by identifying key departments, recognizing that covering every department in the inaugural year would be an enormous task and not entirely aligned with the initiative's objectives.

We carefully selected 14 departments based on the nine sectors outlined in the Assam SAPCC that are particularly susceptible to climate change as shown in the table below:

#	Vulnerable Sectors (as per SAPCC 2.0)	Departments (Identified for Inception Phase)
1.	Agriculture and Allied Sector	Agriculture
2.	Forestry and Biodiversity	Environment and Forest
3.	Water Resources	Water Resources, Soil Conservation
4.	Energy	Power
5.	Strategic Knowledge	Science, Technology and Climate Change
6.	Disaster Management	Revenue and Disaster Management, Public Works (Roads), Public Works (Buildings & NH)
7.	Urban and Rural (Human Settlement)	Panchayat and Rural Development, Housing and Urban Affairs

#	Vulnerable Sectors (as per SAPCC 2.0)	Departments (Identified for Inception Phase)
8.	Human Health	Public Health Engineering
9.	Transport	Transport

The next step was to classify the pertinent schemes within each department based on their impact on environmental sustainability. These categories included highly favorable, moderately favorable, neutral and less favorable schemes. The details of the criteria are shown below:

Classification	Criteria
Highly Favourable	Scheme and Programmes bringing highly favourable direct impact for Environment and Climate change (and /or) if the scheme's central objective is for the improvement of environment sustainability and climate resilience and adaptation efforts.
Moderately Favourable	Scheme and Programmes bringing indirect but moderately positive impact for Environment and Climate change (and /or) if the improvement of environment sustainability and climate resilience and adaptation efforts are smaller components of the scheme.
Neutral	These are the Schemes which are not targeted or not have relevant impact for Environment and Climate Change
Less Favourable	Schemes that may not be favourable to the environment and will need improvement in green share.

We then introduced an additional layer of categorization within three broad domains to assess our response to all stages of climate change effects. These domains were climate change mitigation, climate change adaptation, and overall environmental sustainability. The details of these are shown in the table below:

Domain	Definition
Climate change mitigation	Schemes/ Programmes are aimed at reducing the root cause of climate change i.e., Greenhouse Gases Emissions. For example: Addition of Renewable Energy, Energy Conservation, Promotion of Electric Vehicles etc.
Climate change adaptation	Schemes/ Programmes meant for adjusting to the current or expected climate and its consequences. For example: Rain-fed Area Development, MNREGS etc.
Environment sustainability	Interventions targeted at sustainable use and protection of natural resources, transition to a circular economy, pollution prevention and control, and, protection and restoration of biodiversity and ecosystem. For example: Project Tiger, River conservation, waste management and prevention of air pollution, managing water pollution, wildlife conservation etc.

Next, we integrated Green Budgeting within Assam's Integrated Financial Management Information System (IFMIS) for effective implementation and monitoring. Each department nominated a nodal officer who submitted information regarding their schemes online. These were later verified by the internal committee of experts under Finance department. We evaluated the budget allocation for each scheme that was specifically intended for green activities, with an intention of enhancing this allocation in future and potentially moving schemes from lower to higher sustainability categories.

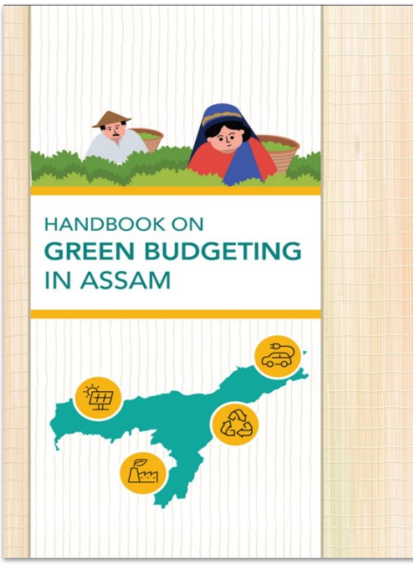
2. Stakeholder Engagement:

In developing the Green Budget, wide arrays of stakeholders were consulted. These included government departments, environmental experts, and representatives from civil society and the private sector. Their inputs were invaluable in shaping a holistic and inclusive budgeting process. These consultations primarily facilitated the following :

- The assessment of environmental impact of the activities undertaken by Government and finding of measures to improve it
- Devising of a format for presenting the schemes undertaken by key departments that support the green initiative

The internal consultations for the creation of framework for Green Budget was supported by various stakeholders such as

- Internal Agencies – Climate Change Cell under Science, Technology & Climate Change Department, ACCMS (Assam Climate Change Management Society), Department of Environment and Forest
- External Organizations - Centre for Budget and Governance Accountability (CBGA), CivicDataLab (CDL), UNICEF



Another outcome of these engagements was a Handbook on Green Budgeting to enable sensitization of departments and as a guiding document for departments to follow while reporting and operationalizing the Green Budget.

2.1 Outcomes and Impact:

Since its implementation, the Green Budget has led to heightened environmental awareness among various government departments. It has fostered the initiation of green initiatives across sectors, enhancing the state's resilience to climate change.

2.3 Future Directions:

Looking ahead, the Green Budget is set to evolve further. The plans include the introduction of climate budget tagging to ensure more objective and transparent allocation of resources, augmenting funding for environmentally friendly schemes, and formulating a Green Procurement Policy to promote sustainable practices in government purchases.

In the ensuing year, we are advancing to adopt an objective approach for Green Budget reporting in the form of questionnaire-based scoring system. The departmental responses against questions segmented into three aspects - environmental, social and economic, shall generate a green score against a scheme. Each component under a scheme is considered for scoring by departments which are then aggregated to arrive at a final score. The Assam IFMIS shall be tailored to facilitate the process.

Further, the Green Procurement Policy (GPP) Strategy Document is created to establish a framework that not only adheres to environmentally conscious practices but also contributes to the larger goal of promoting a green and resilient economy in Assam. The idea is to encourage departments for procuring greener alternatives wherever feasible. For instance, cement concrete boundary walls replaced with green fencing.

3. Conclusion:

The Green Budget initiative of Assam is a significant stride towards reconciling economic development with environmental stewardship. It strives to present Assam as a model for other regions facing similar ecological and developmental challenges, demonstrating the feasibility of integrating sustainability into fiscal planning and contribute to the broader national and global sustainability agenda.

10

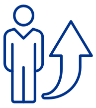
Kerala Environmental Budget Tagging

Mr. K Mohammaed Y Safirulla

1. Background

Kerala has been recognized for its success in achieving high levels of human development while also prioritizing environmental sustainability. Major achievements include

Ranked as the second-best performer among the larger states on the State Energy and Climate Index released by the NITI Aayog



Achieved high levels of human development while also preserving its natural resources for future generations

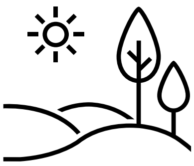
Made significant strides in promoting sustainable development in various sectors such as agriculture, livestock, fisheries, water resources, etc. by integrating environmental, economic, and social considerations into development planning.

Incorporating environmental impacts/sustainability in decision making along with economic and social considerations is a long-term commitment for which a proper framework to be evolved. Thus, there is the significance of tagging of schemes with environmental parameters.

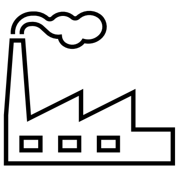
In this regard, The Kerala Environmental Budget Tagging (KEBT) is a novel initiative aimed at promoting sustainable development of the State by tagging budgetary allocations to specific environmental objectives / domains. This framework is an evolving one and will be refined in alignment with the challenges being faced, lessons learned from the experience and through the feedback from experts.

As an initial attempt four thematic dimensions are selected for this tagging as below:

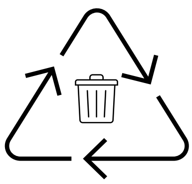
Climate Change



Bio-diversity conservation



Pollution abatement



Waste Management

2. Objectives of the Kerala Environmental Budget Tagging

The Kerala Environmental Budget Tagging (KEBT) is a novel initiative aimed at promoting sustainable development in the State by tagging budgetary allocations to specific environmental objectives / domains. The major objectives of Kerala Environmental Budget Tagging are:

Promoting environmental sustainability
Linking budgetary allocations and expenditures to specific environmental objectives such as biodiversity conservation, pollution control and prevention, climate change mitigation and adaptation, waste management, etc.

Effective utilisation of resources &evaluation of environmental impacts
The assessment of environmental impacts and fruitful utilisation of resources set apart under various sectors.

Increase the stakeholder participation.
Enabling stakeholders to track and monitor the use of environmental funds and to provide feedback on the effectiveness and impact of environmental programs and activities. This helps promote greater awareness of environmental issues and allows citizens to hold their government accountable for its environmental policies and actions.

Enhance transparency and accountability
Promote transparency and accountability in the use of public resources, ensuring that environmental expenditures are properly accounted for and reported on, and that they are consistent with the overall goals and objectives of the state or national environmental policies and strategies

Facilitating Policy Integration
Integrate environmental objectives into government decision-making processes, ensuring that environmental considerations are taken into account across all sectors of government

3. Methodology

The Kerala Environmental Budget Tagging Framework (KEBTF) is governed by the principle of prudence and uses the thematic focus methodology as the base structure. It is then developed further to suit to the needs and peculiarities of Kerala. The KEBTF distinguished four specific environmental sustainability thematic areas or dimensions or axes for tagging a particular scheme for its environmental sustainability initiatives. Based on its diverseness, some thematic dimensions are further fractionalized into its micro-dimensions, to refine the tagging process. The four thematic dimensions are:

Climate Change

Includes those schemes and its components with budget provisions for climate change mitigation and / or adaptation. The scheme's objectives and programs shall aim at mitigating greenhouse gas emissions, adapting to the impacts of climate change, and promoting the transition to low-carbon and climate-resilient economies. The micro-dimensions are Climate Change Mitigation[1] and Climate Change Adaptation[2]

Bio-diversity conservation

Involves those schemes allocating funds towards the protection and management of ecosystems, wildlife management, species of conservation importance, habitat restoration, biodiversity education and awareness, research and monitoring, international or national conservation efforts, etc

Pollution abatement

Includes budgeting for programs that aimed at prevention and control of pollution including monitoring and regulation, technology development, public awareness, etc in any of the micro-dimensions viz. air, water and soil pollution.

Waste Management

Includes those schemes with programmes or objectives for waste reduction and recycling programs, waste collection and disposal, hazardous waste management, public education and awareness, technology development, etc. in micro-dimensions viz. solid wastes and liquid waste management.

The proposed methodology for developing an environmental budget would encompass all schemes and components that significantly contribute, positively or negatively, to the attainment of at least one of the environmental objectives. In this assessment, it proposes to classify each scheme on each of these four dimensions and to rate them from favourable (Category 1) to unfavourable (Category 3) on each environmental dimension.

The schemes and the components are categorized into three: favourable, neutral and unfavourable, based on their stated objectives and expected outcomes/impacts based on the criteria specified below:

Favourable

The objective or the impact of the scheme corresponds to the production of environmental goods or services or to a main environmental objective, in the short and long term

Neutral

This category groups together two types of schemes of a different nature: (i) schemes with no significant impact on environment is deemed neutral, and (ii) schemes for which the significant environmental impact is unable to determine, due to a lack of available data or report

Unfavourable

A scheme may be considered 'unfavourable', if the objectives result in direct / indirect negative impact on environment or create incentives for behaviour that worsens any environmental dimensions

An activity should be classified as related to climate change mitigation if it helps to stabilize greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration.

An activity should be classified as related to climate change adaptation if it intends to reduce the vulnerability of human or natural systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience through an enhanced ability to adapt to or absorb climate change stresses, shocks, and variability and/or a reduced exposure to them. This encompasses a range of activities from information and knowledge generation to capacity development, planning, and the implementation of climate change adaptation actions.

INNOVATIONS IN STATE FINANCES

11

Initiatives for Revenue Augmentation

Samir Vakil and Riddhesh Rawal, Government of Gujarat

1. Overview-Gujarat State Tax Department

1.1 The State-Gujarat is one of the states punching above its weight. With only 6 per cent of India's land mass and barely 5 per cent of its population, Gujarat is one of the fastest growing economies of the country with 8.3% share of National economy. The Gujarat has always remained the first choice amongst the investors of various trade and industry because of the state government's attractive industrial policies emphasizing the concept of ease of doing business.

1.2 The distinctive factors like the geographical advantage of longest coastline of 1600 kms, native entrepreneurship, a historical edge in commerce and trade, lower unemployment rate, robust logistic infrastructure which drive State economy as a Growth Engine of Country. A large number of import-export transactions are carried out through ports of Gujarat. With the extraordinary accomplishment States' Gross State Domestic Product (GSDP) has grown at averaged 8.2 per cent from 2011-12 to 2021-22(Q), which is faster than that of All India.

1.3 Taxes are a critical measure of the State's development and governance. The tax-to-GDP ratio is used to determine how well the State's government directs its economic resources. Higher tax revenues mean the State can spend more on improving infrastructure, health, and education-keys to the long-term prospects for the State's economy and people.

1.4 In Gujarat, following taxation laws are administered by the Gujarat State Tax Department under the supremacy of the Finance Department, Government of Gujarat:

- The Gujarat Goods and Services Tax Act, 2017 (SGST Act);
- The Gujarat Value Added Tax Act, 2003 (VAT Act);
- The Central Sales Tax Act, 1956 (CST Act);
- The Gujarat Motor Spirit Cess Act, 2001 (Cess Act);
- The Gujarat Electricity Duty Act, 1958,
- The Gujarat State Tax on Professions, Trades, Callings and Employment Act, 1976 (Profession Tax Act).

1.5 The Chief Commissioner of Gujarat State Tax is the head of the Gujarat State Tax Department. He is assisted by various officials ranging from Special Commissioner to State Tax Inspectors, administering aforesaid Acts and recovery of taxes under the said Acts.

1.6 The Gujarat State Tax Department has its headquarters at Ahmedabad. The headquarter office is located at Rajya Kar Bhavan, Ashram Road, Ahmedabad. The Gujarat State Tax Department is further organized in Divisions, Ranges and Unit offices. The Divisional offices are

12 in numbers and are headed by officer of the rank of Joint Commissioner. There are 25 range offices headed by an officer of the rank of Deputy Commissioner. The cutting edge of the department is the unit office popularly known as Ghatak office. These offices are headed by officer of the rank of Assistant Commissioner or State Tax Officer.

1.7 To track movement of goods, there are number of mobile squads and barriers erected at a number of location at the roads approaching borders and the other important roads having goods movement.

1.8 With the optimal utilization of available resources and infrastructure, the Gujarat State Tax Department officials have always strive to augment the revenue of the Government of Gujarat under the supervisions and guidance of the Finance Department, Government of Gujarat. Initiatives taken by the Gujarat State Tax Department in revenue augmentation are elaborated in the ensuing paras.

2. Revenue Analysis

2.1 The contribution of Gujarat State Tax Department in the State's Total Tax Revenue has remained as below:-

Item	2019-20	2020-21	2021-22	2022-23 (R.E.)	2023-24 (B.E.)
Rev. of State Tax Department **(Rs. in Cr.)**	63,953	56,578	79,544	**1,10,913**	1,15,506
State's Own Tax Rev. **(Rs. in Cr.)**	79,020	70,280	97,709	1,33,435	1,38,881
Total Tax Rev. (Share in Central Taxes + State's Own Tax Rev.) **(Rs. in Cr.)**	99,240	90,485	1,28,784	1,66,469	1,74,407
Proportion of Dept.'s Rev. in State's Own Tax Reve. **(in %)**	**80.93**	**80.50**	**81.41**	**83.12**	**83.17**
Proportion of Dept.'s Rev. in State's Total Tax Reve. **(in %)**	**64.44**	**62.53**	**61.77**	**66.63**	**66.23**

2.2 The tax-wise revenue of the State Tax Department is given below:-

(Amount in Cr.)

Year	GST	VAT	Electricity Duty	Profession Tax	Total	Monthly Average
2021-22	56,637	30,512	7,004	249	94,402	**7,867**
2022-23	65,783	38,071	10,582	251	1,14,687	**9,557**
Contribution in Total Revenue	57.36%	33.20%	9.23%		100%	
2023-24 (Up to Aug-23)	35,890	14,075	4,569	105	54,639	**10,928**

2.3 GST Revenue to the State is given below:-

National GST Revenue to State (Rs. In Cr.) | **Gujarat GST Revenue** (Rs. In Cr.)

Month	2022-23	2023-24	Growth YoY%	Month	2022-23	2023-24	Growth YoY%
April	167540	**187035**	11.64	April	5055	**6499**	28.56
May	140885	157090	11.5	May	4218	5156	22.23
June	144616	161497	11.67	June	4194	5070	20.91
July	148995	165105	**10.81**	July	4476	5210	**16.39**
August	143612	159069	**10.76**	August	4054	4933	**21.7**
Sept	147686			Sept	4248		
October	151718			October	4926		
November	145867			November	4554		
December	149507			December	4856		
January	155922			January	5227		
February	149587			February	5006		
March	160122			March	5250		
Total	**2E+06**	**829796**		Total	**56064**	**26868**	
Average	150505	165959		Average	4672	5374	
YOY Growth		**10.27**		YOY Growth		**15.02**	
5 Year CAGR	10.86	**11.08**		**5 Year CAGR**	12.97	**15.02**	
4 Year CAGR	11.29	**12.98**		**4 Year CAGR**	15.02	**16.74**	
3 Year CAGR	13.9	**20.55**		**3 Year CAGR**	17.32	**28.08**	
2 Year CAGR	26.05	**15.61**		**2 Year CAGR**	35.15	**19.09**	

2.4. GST Revenue from the State is given below:-

National GST Revenue from State *(Rs. In Cr.)*				**Gujarat GST Revenue** *(Rs. In Cr.)*			
Month	**2022-23**	**2023-24**	**Growth YoY%**	**Month**	**2022-23**	**2023-24**	**Growth YoY%**
April	167540	**187035**	11.64	April	11264	**11721**	4.06
May	140885	157090	11.5	May	9321	9800	5.13
June	144616	161497	11.67	June	9207	10120	9.92
July	148995	165105	**10.81**	July	9183	9787	**6.58**
August	143612	159069	**10.76**	August	8684	9765	**12.44**
Sept	147686			Sept	9020		
October	151718			October	9469		
November	145867			November	9333		
December	149507			December	9238		
January	155922			January	10009		
February	149587			February	9574		
March	160122			March	9919		
Total	**2E+06**	**829796**		Total	**114222**	**51193**	
Average	150505	165959		Average	9518	10239	
YOY Growth	21.22	10.27		YOY Growth	17.57	7.57	
5 Year CAGR	10.86	**11.08**		**5 Year CAGR**	10.65	**10.84**	
4 Year CAGR	11.29	**12.98**		**4 Year CAGR**	11.67	**11.7**	
3 Year CAGR	13.9	**20.55**		**3 Year CAGR**	13.11	**18.23**	
2 Year CAGR	26.05	**15.61**		**2 Year CAGR**	23.95	**12.46**	

2.5 Analysis of revenue data:-

2.5.1 The State Tax Department is collecting VAT, Cess on petrol & diesel, CST & SGST since introduction of the concerned Acts. However, Electricity Duty is assigned to the Department since 2022.

2.5.2 The average proportion of Department's revenue in **State's Own** Tax Revenue is **81.83%** whereas such proportion in **State's Total Tax Revenue** is **65.26%.**

2.5.3 The Department has **first time achieved the total of Rs. 1 Lakh Crore** in the F.Y. 2022-23 in terms of revenue receipts.

2.5.4 The revenue from State includes tax in cash paid from CGST, SGST, IGST and CESS whereas the revenue to State includes the amount of SGST and IGST. In comparison with the YoY growth rate of **National GST Revenue 10.76%,** the ratio of **revenue to State** and revenue **from State** have remained **21.70%** and **12.44%,** respectively.

2.5.5 Gujarat is the major importer of goods having share of **16% in Country's imports**. In comparison to FY 2021-22, **import of Gujarat grew by 36% in FY 2022-23.**

2.5.6 IGST of Rs. 6,500 Cr per month is paid from Gujarat at the time of import which is credited in Centre's kitty. This amount is not considered as "Income from State".

- ✓ If this IGST amount is considered, average monthly revenue from Gujarat goes much higher than National average

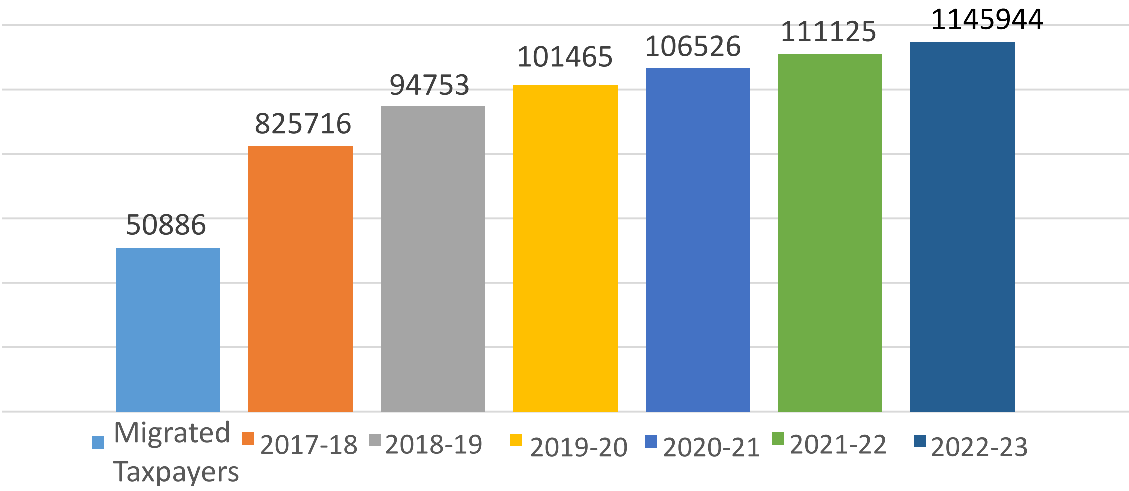
2.5.7 When the goods so imported is consumed by the importer, he utilizes ITC of IGST paid at the time of import to fulfill his GST liability and accordingly net tax paid in cash is less.

2.5.8 Gujarat is a **hub of export contributing 1/3 share in Country's exports**. In comparison to FY 2021-22, export from **Gujarat grew 18% in FY 2022-23**.

2.5.9 Many taxpayers exporting goods have huge accumulation of ITC. Therefore, no tax / marginal amount of tax in form of cash is paid as they utilize such accumulated ITC against domestic output tax liability.

3. Registration under GST

3.1 The number of taxpayers registered under GST Law in Gujarat:-



Notes:

(i) During F. Y. 2022-23, Gujarat State is on 3rd rank in India as per Number of Registered Taxpayers.

(ii) **Taxpayers allotted to State are 6,52,524 & Taxpayers allotted to Centre are 4,93,420.**

3.2 Monitoring Registration Process as Preventive Measures:-
The Department ensures significant control over Registration Process by following modes:

3.2.1 First step to curb bogus billing is to curb registration of bogus taxpayers and therefore following actions are being taken for curb registration of bogus taxpayers,-

- ✓ Compulsory spot visit in case of new registrations **since 2021;**
- ✓ **Strict verification of documents** to prevent registration based on fake documents (e.g. Light bill verified with local Electricity company);
- ✓ **Spot visit as special drives** had been executed in sensitive areas like Morbi, Bhavnagar, Gandhidham and Unjha.

3.2.2 Amendment of change of place or addition of place approved **only after spot visit** and proper verification.

3.2.3 Detailed scrutiny of taxpayers applying for cancellation and such cancellation of registration is approved only after due diligence.

3.2.4 The cancelled registrations are revoked only after permission of Dy. Commissioner.

4. Return Compliance

4.1 The return furnishing data of taxpayers is given below:-

Monthly Return Compliance FY 2022-23

Month	Filled in Due date Monthly									Over all Filling
	Centre	State	Total	Centre	State	Total	Centre	State	Total	
	Eligibility			Returns Filed			Returns Filed %			Returns Filed %
Apr-22	2,47,335	3,39,172	5,86,507	2,11,324	2,98,044	5,09,368	85.44%	**87.87%**	86.85%	**99%**
May-22	2,52,940	3,41,511	5,94,451	2,11,737	2,95,296	5,07,033	83.71%	**86.47%**	85.29%	**99%**
Jun-22	2,59,061	3,45,245	6,04,306	2,18,186	3,00,266	5,18,452	84.22%	**86.97%**	85.79%	**99%**
Jul-22	2,56,640	3,42,639	5,99,279	2,11,948	2,94,916	5,06,864	82.59%	**86.07%**	84.58%	**99%**
Aug-22	2,61,418	3,47,505	6,08,923	2,17,429	2,98,559	5,15,988	83.17%	**85.92%**	84.74%	**98%**

Month	Filled in Due date Monthly									Over all Filling
	Centre	State	Total	Centre	State	Total	Centre	State	Total	
	Eligibility			Returns Filed			Returns Filed %			Returns Filed %
Sep-22	2,65,596	3,46,713	6,12,309	2,32,441	3,15,512	5,47,953	87.52%	**91.00%**	89.49%	**99%**
Oct-22	2,64,904	3,45,549	6,10,453	2,17,903	2,98,188	5,16,091	82.26%	**86.29%**	84.54%	**98%**
Nov-22	2,68,104	3,49,884	6,17,988	2,27,842	3,10,084	5,37,926	84.98%	**88.62%**	87.04%	**98%**
Dec-22	2,69,974	3,48,877	6,18,851	2,33,640	3,15,173	5,48,813	86.54%	**90.34%**	88.68%	**99%**
Jan-23	2,74,178	3,51,407	6,25,585	2,29,720	3,10,827	5,40,547	83.78%	**88.45%**	86.41%	**97%**
Feb-23	2,65,009	3,52,030	6,17,039	2,32,312	3,13,992	5,46,304	87.66%	**89.19%**	88.54%	**98%**
Mar-23	2,66,749	3,54,298	6,21,047	2,22,212	2,98,434	5,20,646	83.30%	**84.23%**	83.83%	**95%**

Quarterly Return Compliance FY 2022-23

Month	Filled in Due date									Overall Filling	
	Centre	State	Total	Centre	State	Total	Centre	State	Total	Centre	State
	Eligibility			Returns Filed			Returns Filed %			Returns Filed %	
Jun-22	1,62,429	2,39,701	4,02,130	1,33,194	2,00,603	3,33,797	82.00%	**83.69%**	83.01%	96.37%	**98.03%**
Sep-22	1,68,337	2,39,214	4,07,551	1,40,692	2,04,842	3,45,534	83.58%	**85.63%**	84.78%	95.98%	**98.15%**
Dec-22	1,71,912	2,36,846	4,08,758	1,42,487	2,01,205	3,43,692	82.88%	**84.95%**	84.08%	95.59%	**98.33%**
Mar-23	1,68,819	2,35,728	4,04,547	1,40,388	1,96,006	3,36,394	83.16%	**83.15%**	83.15%	92.02%	**92.69%**

4.2 Return Compliance Monitoring:

4.2.1 On account of the awareness of taxpayers and alertness of the Department, the Gujarat **stands 1st in return filing** across the nation with an average 98% of return filings.

4.2.2 However, the Department ensures return filing compliance by way of following steps:

- ✓ The Department, through its own module, Informs all taxpayers by SMS twice before due date of return filing;
- ✓ The return defaulters are also informed by way of SMS;
- ✓ Strategy of zero tolerance strictly followed for non-filers of Large & medium category:-
    - Steps taken including Bank Attachment even in case of return default of one month;

- If returns are not filed even after issuance of notice, the proceedings of assessment of non-filer of returns;

4.2.3 The spot visit is carried out compulsorily in case of return default exceeding 4 months.

4.2.4 The registration numbers are cancelled immediately in case of taxpayers having six months default in return filing.

5. Measures for Revenue Augmentation

The Gujarat State Tax Department has effected following measures with an intention of revenue augmentation:

5.1 Scrutiny of Returns furnished by the taxpayers.

5.2 Conduction of GST Audit in selected category of taxpayers.

5.3 Formation of Economic Intelligence Unit (EIU) for,-

- ✓ Generation and dissemination of actionable inputs based on Integrated analysis of data from multiple sources;
- ✓ Identification of suspected taxpayers across the State;
- ✓ Preparing data bank of beneficiaries who have wrongly availed ITC through billing activity;
- ✓ Development of In-house Admin Module;
- ✓ Assignment of tasks such as spot visit, scrutiny, adjudication, etc. to the unit offices and its monitoring by Commissionerate.

5.4 24 x 7 Control and Command Center for,-

- ✓ Controlling 39 mobile squads deployed across state;
- ✓ Real time analysis of e-Way bill data and generating alerts to the mobile squads and field formations.

5.5 Procurement of advanced NIC PRIME and IIT Hyderabad:

- ✓ NIC has developed powerful analytical tool named PRIME, which provides variety of pin-pointed actionable inputs to field officers.
- ✓ IIT Hyderabad has developed Mobile based administrative tool enhancing multi-tasking ability of the filed officers enabling them to execute number of actions simultaneously like tracking of Return defaulters, issuance of Show Cause Notices (SCNs), Real time Action Tracking tool etc.

5.6 Focus on unexplored B2C area.

5.7 Initiatives undertaken to augment revenue of electricity duty.

6. Implementation of Revenue Augmentation Measures

6.1 Scrutiny of Returns furnished by taxpayers:-

The Gujarat State Tax Department has carried out Return Scrutiny proceedings in number of cases and the outcome of such proceedings is highlighted in the table below:

(As on 31th August, 2023) *(Rs. in Cr.)*

Year	Scrutiny Cases Allotted	Completed Cases	Pending Cases	Recovered Amount during scrutiny process (in Cr.)				Recovery due (in Cr.)		Total Amt.
				Cases	By Cash	By ITC	Total Amt.	Cases	Amt.	
2017-18	1973	1937	36	426	19	39	**57**	265	**183**	**240**
2018-19	6068	5970	98	1321	77	308	**385**	1102	**841**	**1226**
2019-20	6105	5969	136	1392	68	123	**191**	1073	**704**	**895**
2020-21	9669	8752	817	4452	67	138	**205**	767	**173**	**378**
Total	**23,815**	**22,728**	**1087**	**7591**	**231**	**606**	**838**	**3207**	**1,901**	**2739**

6.2 Conduction of GST Audit in selected category of taxpayers:-

The outcome of GST Audit conducted by the Gujarat State Tax Department is highlighted in the table below:

(As on 31th August, 2023) *(Rs. in Cr.)*

YEAR	Total Allotted Cases	Audit Report Approved	Amount Involved (Rs. in Cr.)	Amount Recovered (Rs. in Cr.)
2017-18	547	448	857	248
2018-19	549	66	115	53
2019-20	513	34	9	1
2020-21	448	7	1	1
Total	**2,057**	**555**	**982**	**303**

6.3 Details of Missions launched so far for physical spot verification of place of business based on the recommendations of EIU:-

Mission	Total	Bogus	Genuine	% of Bogus
Mission – 1	70	27	43	38.57
Mission – 2	110	62	48	56.36

Mission	Total	Bogus	Genuine	% of Bogus
Mission – 3	30	26	4	86.67
Mission – 4	158	155	3	98.10
Mission – 5	144	120	24	83.33
Mission – 6	122	104	18	85.25
Mission – 7	31	7	24	22.58
Mission – 8	17	13	4	76.47
Mission – 9	15	8	7	53.33
Mission – 10	218	171	47	78.44
Mission – 11	1	1	0	100.00
Mission – 12	454	163	291	35.90
Mission – 13	74	8	66	10.81
Mission – 14	28	6	21	21.43
Mission – 15	24	4	20	16.67
Mission – 16	12	6	6	50.00
Mission – 17	74	31	42	41.89
Mission – 18	237	47	186	19.83
Mission – 19	101	33	68	32.67
Mission – 20	90	63	27	70.00
Mission – 21	22	14	6	63.64
Mission – 22	190	29	151	15.26
Total	**2222**	**1098**	**1106**	**49.41**

6.4. The Gujarat State Tax Department has recovered following amount from the Beneficiaries of transactions:-

(As on 31th August, 2023) (Rs. in Cr.)

Task	Total Task created	Total Tax involve (Rs. in cr.)	Total Amount Recovered (Rs. in cr.)
Advisory	14,663	545.63	**35.62**
Summons	11,121	2,570.29	**77.82**
Grand Total	**25,784**	**3,115.92**	**113.44**

Note: Task for advisory and summons were created in the admin module.

6.5 The officers of Gujarat State Tax Department are Granting Refunds after due verification and precautions:-

- ✓ Verifying genuineness of input tax credit by utilizing GAIN tool.
- ✓ Compulsory spot Visit before sanctioning refund to the applicants.

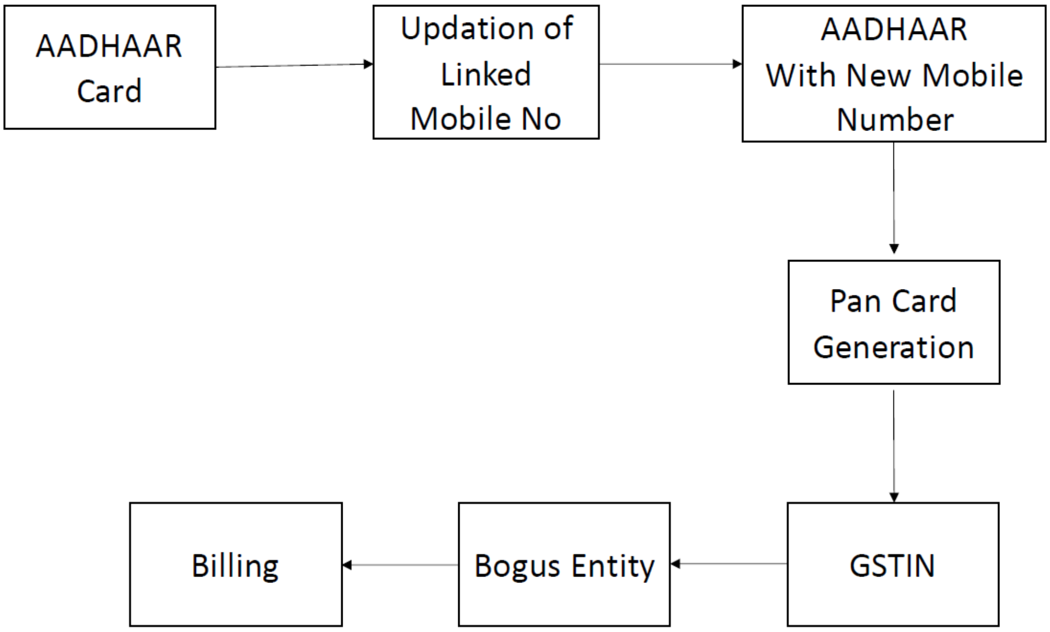
6.6 Bogus Billing Scam: A case study

Here are the photographs of persons on whose name registrations had been obtained under GST law with the intention of passing on ITC.

With a Turnover of 3.53 Crores!!!

With a Turnover of 6.06 Crores!!!

6.6.1 Modus Operandi of Bogus Billing can be understood by the following chart:-



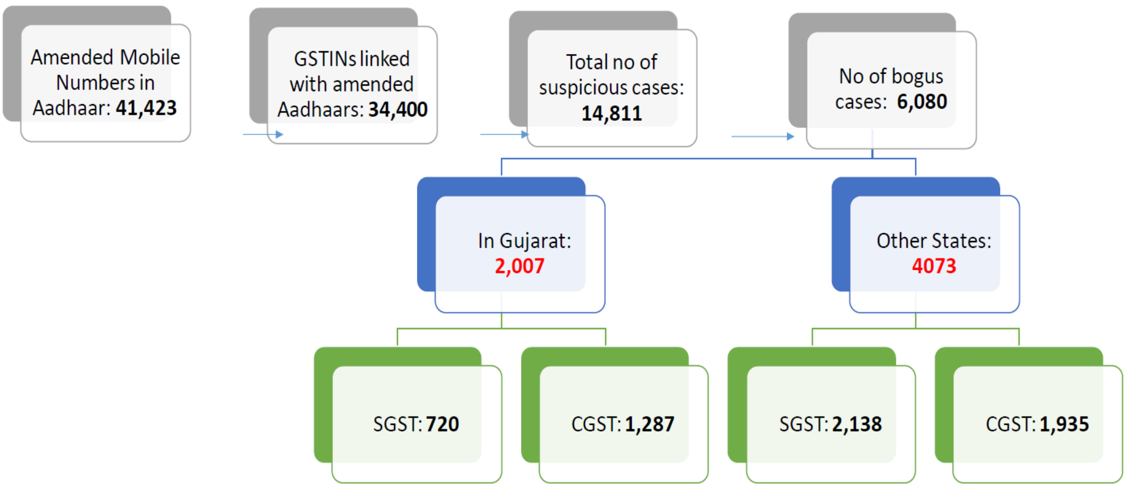
6.6.2 Operation AADHAR Mission:-

The Operation **"AADHAAR Mission"** was conducted across the State in order to detect the bogus registrations received by misusing the documents whereby:

- ✓ During spot verification at Surat, 61 firms were found bogus during February, 2023.
- ✓ In some cases, residential addresses of proprietors as per Aadhar were found to be located at Bhavnagar.
- ✓ It was found that the people in whose name registrations were obtained belongs to economically poor section of society.
- ✓ Such people were taken to nearby Aadhar Center for receipt of cash dole as part of Govt. Scheme.
- ✓ Such people had never applied for PAN/GSTIN on their own.
- ✓ Spot visits/investigations were conducted at 49 Aadhar Seva Kendra.

6.6.3 Findings:-

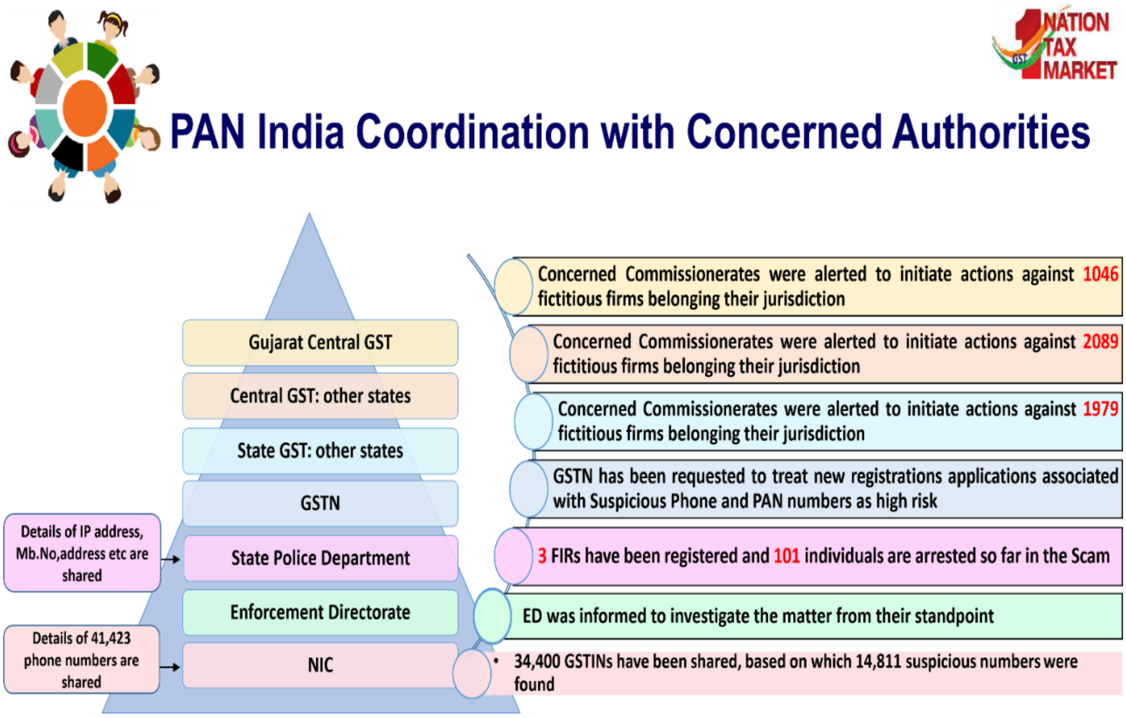
- ➢ The number of bogus registration cases found as a result of AADHAR Mission can be highlighted by the following chart:



- ➢ 3 FIRs have been registered against operators of Aadhar Kendra.
- ➢ Operation was conducted with help of SIT headed by IGP, Bhavanagar Range including 2 IPS officers (SIT constituted by DGP, Gujarat).
- ➢ Total arrest of 101 were made by Police including masterminds and number of co-conspirators.

➢ The number of cases of bogus registrations across the nation can be seen by the following image:

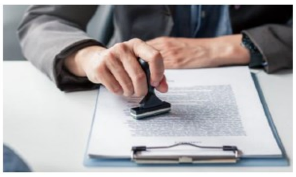
➢ Consequence of AADHAR Mission, the concerned authorities were coordinated on PAN India basis so as to take suitable actions in respect of fictitious firms:



6.6.4 How to tackle Menace of Bogus Registration:-

Approaching the following actions on advance basis can significantly curb the menace of bogus registration.

Way ahead

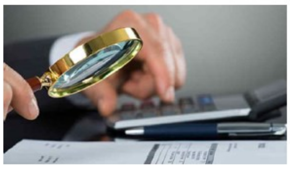


Stricter verification at the time of registration

Biometric verification of applicant

Site visit (Spot verification)

KYC in case of important tax payers particularly refund seekers



Periodic cleaning up

6.7 Rolling out of GST Facilitation Centres:-

6.7.1 The proposal to establish GST Seva Kendra (GSKs) for bio-metric based Aadhar Authentication was first accepted by GoM (on system Reform) and then by GST Council.

6.7.2 The required changes were made in GST Rules to implement the said proposal and Gujarat was selected to implement on pilot basis.

6.7.3 Ensuing this pilot project, 12 places in the State have been notified as GST Seva Kendra (GSKs).

6.7.4 The required tendering for all 12 GSKs including furnishing, computers, other hardware-software etc. and all other necessary formalities were concluded within a shorter period of 75 days and consequently all these GSKs have been put into operation.

6.7.5 GSK at Vapi (South Gujarat) has been inaugurated by Hon. Union Finance Minister on 7th November, 2023.

6.7.6 The applicant seeking new registration under GST who has been identified by the system as "high risk" will have to visit the GSK at a self-determined time. The following functions are carried out at such GSKs.

- ✓ Taking a live photograph of the applicant;
- ✓ Biometric-based Aadhaar authentication;
- ✓ Verification of applicant's documents and obtain their scan copies
- ✓ Issuance of registration immediately if the applicant is found eligible for registration at the end of the entire verification process

6.7.7 The implementation of bio-metric based Aadhar Authentication will help in curbing bogus registrations and billing activities carried out with an intention of passing ITC fraudulently.

6.8 Revenue Analysis based on data of e-way bill:-

6.8.1 Observations:

- ➢ The ratio of revenue as a percentage of e-way bill generated (inward supply) is relatively low;
  - ✓ **For Gujarat: 2.2%**, whereas for Maharastra, Karnataka and Tamilnadu, it is 3.5%, 3.4% and 2.3% respectively.
- ➢ The value of outward e-way bill exceeds that of incoming e-way bill by approx. Rs. 35,000 cr. per month.
- ➢ The value of e-way bills generated for domestic movements (Rs. 5.78 lakh crore) are relatively high when compared with Karnataka and Tamilnadu.

6.8.2 Findings:

- ➢ Lesser value of inward e-way bills as compared to value of outward e-way bills indicates possibilities of undeclared/undervalued goods moving into Gujarat from other states.
- ➢ Lower revenue in spite of high value of domestic e-way bills indicates existence of fake layers in the value chain, undeclared B2C sales and diversion of B2C invoice for passing ITC in the B2B chain.

6.9 Revenue Analysis based on UPI transactions:-

- ➢ The estimated monthly value of payments thorough UPI in Gujarat is around Rs. 60,000 cr.
  - ✓ 60% of this amount could be P2M (Merchant).

- It is decided to map the details of NPCI central database of top 10,000 wholesalers and retailers of Gujarat with details furnished in returns to arrive at taxpayer wise discrepancy for the purpose of Audit/ Enforcement.

6.10 Revenue Analysis based on B2C transactions:

6.10.1 Observations:

- The normal range for "ratio of B2C supply to total turnover" is 4 to 5 times, whereas in case of Gujarat this ratio is 13.6.
  - ✓ Thus, ratio is too high compared to national average.
- Against the estimated potential GST consumption base of Rs. 7.27 lakh Cr. for Gujarat, reporting is of only Rs. 4.31 lakh Cr.

6.10.2 Findings:

- There is a potential REVENUE GAP of Rs. 27,371 Cr.
- Presence of **high number of fake/dummy entities** in the supply chain floated with the intention of entering into circular transaction or outright evasion.
- **Diversion of B2C invoices into B2B supply** for wrongful transfer of ITC.
- Very low level of compliance is found in B2C transactions.

6.11 Focus on Improving B2C Compliance:

6.11.1 The Search Proceedings were conducted in following various sectors:

Education sector:

- In July 2022, Search operations were carried out in case of 13 coaching institutes spread across the state resulting into detection of tax evasion of **Rs. 7.87 Cr.,** out of which **Rs. 4.38 Cr.** is recovered till date.
- After the search operations, 248 new registrations were granted to educational institutes who paid Rs. 17.31 Cr in their returns reflecting 50% increase in new registrations and 39% growth in the revenue as compared to preceding 12 months of the search operation.

Architectural sector:

- In February 2022, Search operations were carried out in case of 9 Architecture firms spread across the state resulting into detection of **tax evasion of Rs. 2.96 Cr**., out of **which Rs. 91.75 lacs is recovered**.

- After search operations, 318 new registrations were granted to Architecture firms who paid Rs. 8.82 cr. reflecting 29% increase in the new registrations and 61% growth in the revenue in comparison to preceding 12 months of the search operation.

Computer Coaching Institutes:

- 15 computer coaching institutes were raided across the State on July 25, 2023 resulting into detection of tax evasion of **Rs. 7.07 Cr.** Out of this, **Rs. 3.42 Cr** has been recovered and further recovery is going on.

Immigration Services:

- 22 firms providing consultancy services for PR student visa and of Admissions in Foreign Universities, Immigration Services and Coaching of IELTS, TOFEL, GRE exams were raided across the state on August 09, 2023 resulting into detection of tax evasion of **Rs. 13.82 Cr.** Out of this, Rs.3.54 Cr has been recovered and further recovery is going on.

6.11.2 Scheme of "Mera Bill, Mera Adhikaar":

- The scheme aims to encourage consumers to request GST-compliant invoice.
- The initiative not only fosters financial accountability but also seeks to bolster transparency in business-to-consumer transactions.
- The scheme rewards consumers with cash prizes, which are distributed through monthly and quarterly lotteries.
  - ✓ The process is not just about fulfilling obligations, but it's also about reaping rewards.
- Minimum invoice value is Rs. 200/-.
- At present, the scheme is rolled out in the States of Assam, Gujarat, and Haryana, as well as in the UTs of Puducherry, Daman & Diu, and Dadra & Nagar Haveli.

6.12 Augmenting Revenue of Electricity Duty:

- Electricity Duty being an indirect tax, its administration was assigned to the State Tax Department during Mid-2022.
- DIS-COMs (6) are providing 83 to 85% revenue and captive power plants – CPP / firms holding DG Sets (4200) are providing 15 to 17% revenue.
- The Department has encouraged taxpayers to shift towards e-returns & e-payment.
- Field visits were conducted in more than 3000+ Units.
  - ✓ More than 400+ units have not enrolled their DG Sets
  - ✓ Approx. Rs. 1.6 Cr cash recovery during field visit

- API is developed for seamless transfer of data between office of Chief Electrical Inspector and State Tax Department to facilitate registration / enrollment process for taxpayers.

Future Roadmap of the State Tax Department in administration of Electricity Duty Act:
The Department has started working on,-

- Enactment of new law replacing the Gujarat Electricity Duty Act, 1958 & Rules for better tax administration.

- Making mandatory on-line process of registration, return filing, payment and application & granting benefit of concession / exemption of electricity duty.

- Collecting the data of recipients of DG Sets from FORM GSTR-1 (outward supply details furnished by GST Supplier) supply DG Sets to ensure revenue compliance.

12

Public Financial Management Reforms in West Bengal

(2011-12 to 2022-23)

Sudip Kumar Sinha IAS
Secretary, Finance Department
Government of West Bengal

1. Introduction

The Government of West Bengal has achieved remarkable improvements in the realm of public finance since 2011-12 due to significant Public Financial Management (PFM) Reform initiatives undertaken during the last decade. The state's own tax revenue has witnessed an impressive four-fold increase during this time frame. Furthermore, both capital expenditure and social sector expenditure have seen substantial growth. In addition to these financial achievements, there have been significant improvements in the state's debt-related indicators. The Debt-GSDP ratio has notably decreased, declining from 40.65% in 2010-11 to 36.93% in 2022-23. Moreover, the Revenue Deficit-GSDP ratio has been halved during this period, showcasing the government's prudent financial management. Other key indicators, such as Fiscal Deficit-GSDP ratio and Interest Payment-Revenue Receipt (IP-RR) ratio, have also experienced noteworthy reduction throughout this period except some aberrations during the Covid period: 2019-20 and 2020-21.

Table 1: Major improvements in macro-fiscal indicators

		2010-11	2022-23
Revenue (₹ cr.)	State's Own Tax Revenue	21,128.74	83,608.56
	State Excise Revenue	1,783.34	12,134.14
Expenditure (₹ cr.)	Capital Expenditure	2,225.75	22,188.78
	Social Sector Expenditure	6,845.61	77,795.64
Debt (%)	Debt-GSDP	40.65	36.93
	Revenue Deficit-GSDP	3.75	1.76
	Fiscal Deficit-GSDP	4.24	3.21
	IP-RR	29.23	20.46
GSDP (₹ cr.)		4,60,959	15,54,992

Source: West Bengal Budget Document

1.1 A closer look at the PFM Reforms implemented

Most of the PFM reforms in the state were undertaken as part of the implementation of three Asian Development Bank assisted programs - West Bengal Development Finance Program, Second West Bengal Development Finance Program and West Bengal Public Finance Management Reforms Program.

Some of the key transformative reforms in the area of Revenue Mobilization, Expenditure Management and Debt Management are described below.

2. Reforms in Domestic Revenue Mobilization:

West Bengal has witnessed a substantial surge in revenue collection since 2011 and this accomplishment can be attributed to a series of transformative reforms implemented by the state. A few of these pivotal reforms are discussed below.

Tax-administration reforms: The Government of West Bengal has implemented far reaching e-Governance reforms in tax administration reforms in Commercial Taxes, Excise and Registration and Stamp Duty Directorates during the period.

Major e-Governance reforms were implemented by the Commercial Taxes Directorate in the administration of Value Added Tax (VAT) in the pre-GST period. With the introduction of GST in July'2017, the scope of new e-governance initiatives in West Bengal Commercial Taxes has reduced to a large extent as the fully IT-based GST System is completely maintained and monitored by the central organisation, GSTN, for the taxpayers as well as the tax officials. Completely online registration, enrolment and payments of taxes has been implemented in Profession Tax administration.

The web-based centralised registration system, "e-Nathikaran" was integrated with "e-Bhuchitra", the centralized land record system of the Land & Land Reforms Department, and "OPTICS" of the UD&MA department for seamless and simultaneous mutation after registration. The concerned departments have digitized legacy deeds & records for better management and public service delivery. So far old records up to the year 1985 have been digitised.

e-Stamping via GRIPS have been implemented, offering online banking and in-person payment at banks to curb revenue leakage from fake non-judicial stamp papers. Other initiatives like same-day registered deed delivery under WBRTPS act, online availability of model deed formats, introduction of e-Deed (an end-to-end online process of registration) with e-Appointment facility have also been undertaken by the registration Directorate.

Another ground-breaking reform undertaken by West Bengal Government is introduction of e-Abgari, an online platform, to enhance state excise collection. The e-Abgari platform leverages advanced technologies to create an end-to-end supply chain management system in the alcohol industry. It ensures regulation of narcotics so that they are sold through legal channels and timely supply of medicinal and lifesaving narcotic drugs to hospitals. e-Abgari has significantly reduced service delivery time to stakeholders and enhanced government's regulatory capabilities by integrating wide range of technologies, such as, Web, Mobile Apps, SMS & Email based Notifications, QR code-based authenticity of packaged liquor, digital lock driven tracking of vehicles & GPS mapping etc.

These Tax Administration Reform initiatives in Excise Duty was supported by Tax Policy Reforms such as switching from the earlier proof measurement of spirit to the more rational percentage V/V measurement of spirit in IS 2302: 1989 system to MRP based duty structure.

Moreover, West Bengal Excise Service, Commercial Tax Service, Stamp and Revenue Service, and Agricultural Income Tax Service have been merged to form the foundation of the new West Bengal Revenue Service to improve the efficiency of tax collection.

3. Reforms for efficient Expenditure Management:

West Bengal has experienced particularly remarkable growth in both capital expenditure and social sector expenditure, which is the result of the Government's effective management of expenditures through a series of impactful reforms. Much of the improvements in expenditure rationalisation and management have been achieved through implementation and continuous upgradation of the Integrated Financial Management System (IFMS).

The capabilities of the IFMS have been expanded through implementation of a series of modules such as Schematic Bank Account Management System (SBMS), Approval and Financial Sanction (AAFS) module, IFMS mobile application, paperless AG interface, Unified Project management System (UPMS) and Non-Government Institutions Provident Fund (NGIPF) Management System. Moreover, integration with eKuber and with other external portals for Kanyashree, Yuvashree, i-OSMS, Sikshashree, Minority Scholarship, Lokaprasar Prakalpa has been completed. Furthermore, functionalities and features have been added to Government Receipt Portal System (GRIPS) and Human Resource Management System (HRMS).

GRIPS, an open internet-based platform for tax & non-tax payments, has been integrated with 20 banks and portal of 29 departments and directorates. During the FY 2021-22, more than 95% of total revenue collection (except SGST) was done through GRIPS. Upgradation to GRIPS 2.0 brought in some additional features such as, user registration and user dashboard, payment of multiple services in a single transaction, collection of receipts into deposit account/bank account of various Govt Companies/Undertakings/Corporations and also Local Bodies/ Govt. Parastatals, online defacement of services, online payment by stamp vendors, facility for making application of refund (through concerned departmental portal) and GRIPS Mobile App version 2.0 with all upgraded features.

Other reforms undertaken by West Bengal Government for efficient expenditure management include introduction of Financial Advisor (FA) system in 2012, Scrapping of Letter of Credit (LOC) system from 2015, mandating e-tendering for tenders worth Rs 5 lakhs or more through online budget management portal (i-Budget) since 2012 and introduction of Direct Benefit Transfer (DBT). West Bengal has achieved the remarkable milestone as 99.99% of the state's payment being disbursed through this DBT system directly from the state treasuries.

In order to monitor expenditure rationalisation on a real time basis and reduce time lags, the department has mandated the use of the e-Office platform for all files submitted to the Finance Department for approval of projects and release of funds.

4. Reforms for Cash and Debt Management:

The indicators of debt condition of the state have shown significant improvement since 2011 due to strategic fiscal consolidation measures aligned to recommendations of the successive Finance

Commissions. Debt-GSDP ratio has decreased from 40.65% in 2010-11 to 36.93% in 2022-23 and Fiscal Deficit-GSDP ratio came down to 3.21% in 2022-23 from 4.24% in 2010-11. IP-RR ratio have also decreased from 29.43% in 2010-11 to 20.46% in 2022-23 along with Revenue Deficit-GSDP ratio which have been halved during the span of 12 years. This has been achieved through better planning of borrowing activities and improved cash management. West Bengal became the first state to introduce online inter treasury transfer of funds to/ from any local authorities (Municipalities, Corporations etc.) across the state.

5. Reforms for Capacity Building:

Capacity building has been a priority of the Finance Department and several initiatives have been undertaken from time-to-time on this. Notable amongst these initiatives is the creation of Centre for Fiscal Policy and Public Finance (CFPPF) for building the technical and human capacity in the Finance department. The key objective of CFPPF is to deliver tailored and targeted training programs to government officials on macro-fiscal policies and public financial management (PFM). Moreover, CFPPF is tasked with conducting specialized research in resource mobilization, public expenditure rationalization, debt sustainability, debt management, and related fields.

CFPPF has conducted workshops on relevant aspects of Public Finance by engaging domain experts. Moreover, the institution has prioritised collaboration with reputed institutes and has signed MoU with the Institute of Development Studies, Kolkata (IDSK) and the Administrative Training Institute (ATI) Kolkata. Further, an MoU with the Centre for Studies in Social Sciences, Calcutta (CSSSC) is currently in the works.

5.1 Trends in State Finances in West Bengal – Empirical Results

In order to assess the state's fiscal health, two comprehensive studies have been undertaken. One is to look at the debt sustainability of the state and the other one is to look at the fiscal parameters.

The study on debt sustainability aims to assess subnational debt sustainability of West Bengal for the period 2000-01 to 2017-18 through an indicator-based approach. The period from 2000-01 to 2017-18 has been divided into 4 phases- Phase I: 2000-01 to 2003-04, Phase II: 2004-05 to 2008-09, Phase III: 2009-10 and Phase IV: 2010-11 to 2017-18. The study examines how the indicators of debt sustainability had changed from one phase to another. This paper concluded that after 2010-11 the debt condition of the state has improved significantly. The result of the study is shown in the following table:

Sl.	Indicators	Symbolic Representation	Phase-I	Phase-II	Phase - III	Phase-IV
1	Rate of growth of public debt (D) should be lower than rate of growth of nominal GSDP (G)	$D - G < 0$	9.24	−2.13	−1.07	−2.34
2	Real rate of interest (r) should be lower than real output growth (g)	$r - g < 0$	13.17	−6.97	−6.41	−2.62
3 (a)	Primary balance (PB) should be in surplus	$PB/GSDP > 0$	−0.03	0.00	−0.03	0.00

Sl.	Indicators	Symbolic Representation	Phase-I	Phase-II	Phase - III	Phase-IV
3 (b)	Primary revenue balance (PRB) should be in surplus	PRB/GSDP> 0	−0.94	0.60	−2.07	0.71
4 (a)	Revenue receipts (RR) as a percentage of GSDP should increase over time	RR/GSDP ↑↑	9.19	10.12	9.26	12.04
4 (b)	The public debt to revenue receipts ratio should decline over time	D/RR ↓↓	4.66	4.60	4.54	3.24
5 (a)	Interest burden, defined by interest payments (IP) as a percentage of GSDP, should decline over time	IP/G ↓↓	4.28	4.07	3.34	2.97
5 (b)	Interest payments (IP) as a percentage of revenue receipts (RR) should decline over time	IP/RR ↓↓	47.06	40.40	36.04	24.96

The second study uses econometric methods to assess whether the key fiscal parameters of the state has shown improvements over the last decade and a half. The fiscal parameters considered include Debt to GSDP, Revenue Deficit to GSDP, Fiscal Deficit to GSDP, Interest Payment to Revenue Receipt, State Tax to GSDP, Capital Outlay to Total Expenditure. To examine the change in fiscal parameters since 2011, the data set have been divided into 2 periods: pre-2011 and post 2011. Time period 1 (TP 1) consists of financial years from 2000-01 to 2010-11 and Time Period 2 (TP2) consists of financial years from 2011-12 to 2021-22. Welch t-test has been used to understand if there is significant improvement in performance of fiscal parameters in Time Period 2. This analysis has given sufficient evidence to conclude that there has been improvement in all the fiscal indicators since 2011. The results of this this test are shown in the following table:

Sl. No.	Key indicators (in percentage)	Result	P-value
1	Debt-GSDP	Improvement	0.0003657
2	Revenue Deficit-GSDP	Improvement	0.000000085
3	Fiscal Deficit-GSDP	Improvement	0.0002759
4	Interest Payments-Revenue Receipts (IP-RR)	Improvement	0.0000067
5	State Tax-GSDP	Improvement	0.000000025
6	Capital Outlay-Total Expenditure	Improvement	0.001109

New initiatives

The state recognises that PFM reform initiatives need to be undertaken constantly and is currently in the process of implementing two key initiatives on Budget Management –preparation of the Gender and Child Budget Statement with the support of UNICEF; and preparation of Climate Budget Tagging and preparation of Climate Budget Statement with the guidance of UNDP.

To support the state economy in its long term endeavour of achieving accelerating logistics supported economic growth and gender empowerment, the Government of West Bengal is implementing some major Multilateral Development Bank (MDB) assisted programs such as World Bank assisted "Building State Capability for Woman Empowerment" And "Strengthening of Logistics Sector" and Asian Development Bank assisted "East Coast Economic Corridor" projects.

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