Macro-Economic Impact of Covid-19 on the Economy of Chhattisgarh: Report I

2021



unicef for every child

All Rights Reserved @United Nations Children's Fund (UNICEF) 2021 This joint report reflects the activities of individual agencies around an issue of common concern. The principles and policies of each agency are governed by the relevant decisions of its governing body.

Each agency implements the interventions described in this document in accordance with these principles and policies and within the scope of its mandate.

The text has not been edited or fact-checked to official publications standards and UNICEF accepts no responsibility for error.

All Rights Reserved
@United Nations Children's Fund (UNICEF) 2021
Research and Writing by the following members of Centre for
Budget and Policy Studies (CBPS), Bangalore:
Jyotsna Jha, Madhusudhan B. V. Rao, Archana Purohit, Achala S Yareseeme,
Susmitha M. V, Shiboni Sundar and Atul Kumar

Suggested citation: Centre for Budget and Policy Studies (2021). Macro-economic Impact of Covid-19 on the economy of Chhattisgarh. Submitted to UNICEF, India.

Table of Contents

Executive Summary	1
Acknowledgements	17
List of Tables	18
List of Figures	20
List of Abbreviations	22
Chapter 1: Introduction	24
1.1. Background	24
1.2. Objectives of the Study	28
1.3. Methodology	28
1.4. Literature Review	30
1.4.1. Impact of Covid-19 on the Indian economy	30
1.4.2. Impact of Covid-19 on the Chhattisgarh economy	32
1.4.3. Spread of Covid-19 in Chhattisgarh and links to education and nutrition	34
1.5. Analytical Frame: Guiding Principles	36
1.6. Structure of the report	38
Chapter 2: Revenue Receipts: Past trends and Forecast for the present year .	39
2.1 Revenue receipts: past trends	39
2.1.1. Analysis of Total Revenue	39
2.1.2. Analysis of Tax Revenue	43
2.1.3. Analysis of Non-Tax Revenue	46
2.1.4. Past trends of revenue receipts: Key takeaways	48
2.2. The impact of Covid-19 on revenue receipts	48
2.2.1. Impact of Covid-19 on revenue: what we already know	48
2.2.2. Revenue Receipts Forecast: Three Scenarios	50
2.3. Revenue potentials and debt possibilities	55
Chapter 3: Gross State Domestic Product (GSDP): Past trends and Forecast the present year	
3.1 GSDP growth: past trends	57
3.1.1. Agricultural Sector in the GSDP	
3.1.2. Industrial Sector in the GSDP	60
3.1.3 Trends in the Services sector	67

3.2. Sector-wise distribution of Revenue	68
3.2.1. Grants-in-Aid (GIA) and Contributions	70
3.2.2. Non-Tax Revenue	71
3.2.3. Tax Revenue	72
3.3. Estimation of GSDP for the current year	73
3.3.1. Computation of subsector wise GSDP	75
3.4. Total Outstanding Liabilities as a percentage of GSDP	81
Chapter 4: Public Expenditure: Trends and patterns (2011-2020)	83
4.1. Total expenditure: Past Trends	83
4.1.1. Expenditure on Critical sectors	84
4.1.2. Spending on Social Services in the State	86
4.1.3. Analysis of Committed expenditures of the state	87
4.1.4. Analysis of scheme expenditures of the state	88
4.2. Key takeaways from expenditure analysis	88
Chapter 5: Financial Development and Access to Credit	90
5.1. Access to credit: Analysis of the present situation	90
5.2. Priorities for Government Assisted Non-Banking Finance Pro	grammes95
Chapter 6: Revival of the economy: potential mechanisms for higher and ensuring growth with equality	
6.1. Revenue and GSDP Forecasts: A Recap	97
6.2. Enhancing revenue receipts: potential measures	98
6.2.1. Own Source Tax Revenue	98
6.2.2. Own Source Non-Tax Revenue	100
6.3. Public expenditure: ensuring social security and turning expe	nditure
into investments	102
6.3.1. Infrastructure	102
6.3.2. Tourism	104
6.3.3. Social infrastructure and employment	105
6.3.4. Construction Cess	107
6.3.5. Education and Health	107
6.3.6. Proposal for Partial Credit Guarantee Intervention	110
References	112
Annexure 1: GoI Schemes (Rs in lakhs)	115

Annexure 2: Expenditure of State Schemes (Rs in Lakhs)	117
Annexure 3: District wise credit disbursement in Financial Year 202 two quarters)	`
Annexure 4: Detailed Analysis of Government Assisted Non-Bank Programmes	O
Notes	122
Notes	123
Notes	124
Notes	125

Executive Summary

1. Background

The Covid-19 crisis has impacted the growth of world economy severely and India is no exception. The first and second quarter Gross Domestic Product (GDP) estimates for 2020-21, published by National Statistical Office (NSO), registered a contraction of 22.8% and 7.5%, respectively, from the corresponding figures for 2019-20. While the overall impact on the economy is negative, the Covid-19 pandemic and induced lockdown are also expected to have a differential impact on different sectors, with the more severe impact being in the sectors of construction, manufacture and trade, and hotel and transport at 50.3%, 39.3%, and 47%, respectively. The agriculture sector was the only exception recording a 3.4% positive growth. Thus, the structure (relative presence of agriculture, manufacturing, and service sectors) of the economy of a state will be one of the determining factors in the extent of economic losses suffered by the state and has to be considered while assessing the economic impact of Covid-19. These contractions in the economic activities are expected to have enormous burden on fiscal health of the union government as well as that of the state governments.

The present study is an effort to analyse the macro-economic impact of the pandemic on the economy of Chhattisgarh. This study aims to estimate the extent of revenue loss likely to be incurred by the Government of Chhattisgarh (GoC) and extends this analysis using sectoral discussions to estimate the losses in Gross State Domestic Product (GSDP) in the current year. In addition, we also studied the expenditure trends and identified areas where the expenditure needs to be maintained or increased, especially from the perspective of social protection and enabling economic recovery. In the end, we provide a few suggestions for exploring potential ways in which the shortfall can be managed (through additional revenue generation and prioritisation of expenditure) to maintain expenditure in key social sectors while also giving a push to the economic recovery.

2. Method

The methodology adopted for the study has multiple components as mentioned below:

Literature review: This was focused on recent writings on the impact of Covid-19 on economy on different sectors, in different geographical contexts.

This helped us understand which sectors are likely to be the most impacted by the pandemic and the lockdown and to what extent.

Secondary data analysis: Analysis of time series data on sectoral growth, revenues, and expenditures have been undertaken to explore the patterns/trends. This helped in identifying the priority sectors/subsectors for the state economy that could be supported for translating it into revenue receipts.

Stakeholder Consultations: We carried out consultations with stakeholders from various departments of the state government as well as economists and members of the State Planning Commission to identify the underpinnings and their possible impact on economic growth and revenue receipts of the state.

Scenario Projections: This includes a scenario analysis that includes projected revenues of the state government and expenditures based on various scenarios and an assessment of the fiscal gap along with possible ways of filling the same. Similarly, this approach was extended for sectoral analysis for GSDP estimations and identifying the avenues for revival of the economy.

There are certain reasons why we decided to undertake the revenue analysis first, followed by the GSDP analysis. Sector-wise GSDP estimates were not available for the year 2020-21¹. Consultations with the departments indicated a different pattern of performance of sectors like agriculture, forestry, minor irrigation owing to policy changes such as the Rajiv Gandhi Kisan Nyay Yojana (RGKNY) (also known as the NYAY Yojana), higher allocation and utilisation of funds for Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA) works², Godhan Nyay Yojana, and their impact on revenues of the state, including Goods and Services Tax (GST) collections³. Some evidence exists to establish that there is a need to understand the GST pattern in greater detail to connect it with the economic

¹ The data on crop production and prices for the last season/year was also not available to us.

² https://thefederal.com/states/east/chhattisgarh/chhattisgarh-no-1-in-providing-employment-under-mgnrega/.

³ <u>http://www.businessworld.in/article/Chhattisgarh-Andhra-record-highest-spike-in-Octobers-GST-collection/02-11-2020-338390/.</u>

https://www.sify.com/finance/chhattisgarh-records-6-higher-gst-revenue-collection-news-news-ujcrkShgaighj.html.

activities and consumption pattern⁴. Moreover, the policy tweaks relating to land revenue administration, stamps and registration fees, and also electricity and excise had implications for the GSDP. The revenue dent at the Government of India (GOI) level was about 20% and similar impact was estimated for the state with respect to tax share⁵, while the revised debt limit was available and it was used to estimate the total receipts⁶, which was later mapped to sectors to estimate the GSDP.

3. Findings⁷

A. Revenue Receipts and estimated shortfalls

The economy of the state, like the country's economy as a whole, was witnessing a slowdown even before the pandemic struck, leading to a declining or stagnant trend in revenue receipts from a number of sources. The share of taxes during the period January–March 2020 declined compared to the period January– March 2019, and the cumulative reduction for the 2019-20 period was 14% (amounting to Rs 3,253 crore) compared to the corresponding figure for 2018-19. The tax revenue for the period January–March 2020 also declined, except for the revenues from electricity duties, land revenue, excise duties, vehicle tax, and stamps and registration, which had increased over the period January–March 2019. The cumulative tax revenues increased marginally by 3% for the year 2019-20 compared to 2018-19.

The policy tweaks relating to land revenue administration, stamps and registration fees, which include the registration of smaller plots along with reduction in guidance values with a slight increase in the registration charges, have contributed to the increase in the land revenue. The duties on electricity and excise were increased, which also contributed to the increase in the

⁴ Analysing the Impact of GST on Tax Revenue in India: The Tax Buoyancy Approach. https://www.researchgate.net/publication/338259747 Analysing the Impact of GST on Tax Revenue in India The Tax Buoyancy Approach.

 $^{^{5}\ \}underline{http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx.}$

https://www.prsindia.org/sites/default/files/parliament_or_policy_pdfs/State%20Finances_20_20-21.pdf, p. 23.

⁷ All data for expenditure and revenue have been sourced from the budget documents of the Government of Chhattisgarh. All other calculations and estimations, including scenario projections, are the authors' calculations.

revenue. The Covid-19 duties imposed on the excise too has yielded higher revenues for the state.

Table E 1: Revenue Receipts: Trends (2017-18 to 2019-20) and estimated shortfalls (2020-21) for three scenarios (realistic, pessimistic, and optimistic)

					wise	21 BE) (espect to	Shortfall Scenario-wise (with respect to 2020-21 BE, in percentage)				
Components of Revenue	201 7-18 AC	201 8-19 AC	2019- 20 AC	2020- 21 BE	Rea listi c	Pessi misti c	Optimi stic	Realist ic	Pessi mistic	Optimis tic		
Tax Revenue	19,8 95	21,4 27	2,2118	26,15 5	21,4 42	19,89 8	20,606	-18%	-24%	-21%		
Non-Tax Revenue	6,34 0	7,70 3	7,934	9,215	6,15 0	6,930	6,131	-33%	-25%	-33%		
Tax Share	20,7 55	23,4 58	20,206	26,80 3	17,7 06	17,74 7	19,965	-34%	-34%	-26%		
Grant-in-Aid (GIA) and Contributions	12,6 57	12,5 05	13,611	21,65 8	15,4 26	12,40 9	16,413	-29%	-43%	-24%		
Non-Debt Capital Receipts	142	168	261	300	117	160	602	-61%	-47%	101%		
Debt	9,65 2	14,3 70	19,588	15,70 1	17,9 18	17,91 8	17,918	14%	14%	14%		
Total	69,4 42	79,6 33	83,718	99,83 2	78,7 59	75,06 2	81,635	-21%	-25%	-18%		
Shortfall Receipts					21,0 51	24,74 9	18,175					
					21.1	24.8	18.2%					
Gross State Domestic Product (GSDP) Shortfall			3,12,87 ,805	3,44,2 6,865	2,83 ,96, 825	2,76, 14,49 9	3,06,66, 705					
(As compared to BE 2020-21)					- 17.5 %	- 19.8 %	-10.9%					
(As compared to AC 2019-20)					9.2 %	- 11.7 %	-2.0%					

Source: Authors' calculations

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

120000 84000 99832 81635 82000 100000 83718 79633 80000 78759 69442 80000 59340 78000 53619 60000 <mark>75062</mark> 76000 40000 74000 20000 72000 0 70000 2018-19 2015-16 2016-17 2017-18 2019-20 2020-21 2020-21 AC AC AC AC AC BE ER ■ Realistic Pessimistic Optimistic **─**Total Revenue

Figure E 1: Revenue Receipts: Trends (2017-2019-20) and estimated shortfalls (2020-21) (Rs in Crore)

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

The collections from land revenue were estimated at Rs 600 crore (2020-21 BE), while the collection till November 2020 was Rs 525 crore against Rs 289 crore for the period till November 2019 during the previous year. The stamps and registration revenues reduced by about Rs 60 crore for the period (Rs 754 crore during April–November 2020 against Rs 815 crore during April– November 2019); the collection for the last two months', i.e., October-November 2020 was significantly higher than for the same period in October-November 2019). Similar trends were observed for the vehicle tax, sales tax, and state excise revenues with higher revenues during the months of October 2020 and November 2020 compared to previous years. This could partly be indicative of a slow revival of the economy but partly also due to the relaxation of the payment deadlines in the wake of Covid-19. The taxes and duties on electricity posted a higher cumulative collection for the period April-November 2020 (Rs 1,553 crore) compared to April-November 2019 (Rs 1,226 crore) with no dent in revenues during the months of April–June 2020. The higher household consumption due to home-based work and education seems to have compensated for the loss of industrial and institutional usage during the lockdown period.

The SGST (State GST) collections for the period April–November 2020 had declined by about Rs 800 crore. The most significant dent was in the month of April 2020. However, the collections for the months of May 2020, July 2020, and October 2020 were higher than those for the same months during the

previous year, while they were marginally lower for the month of November 2020 (difference of Rs 2 crore over previous year). The total reduction in state's own tax revenues for the period April to November 2020 was Rs 1400 crore of which Rs 850 crore was from SGST, Rs 648 crore from excise duties, Rs 236 crore from vehicle tax and Rs 139 crore from sales tax.

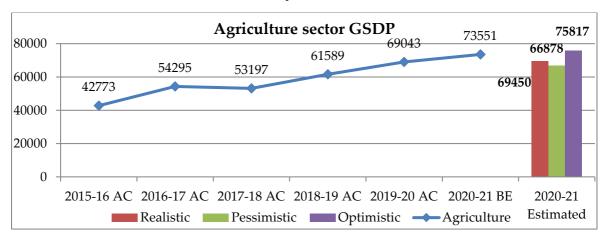
B. GSDP Trends and estimated shortfalls

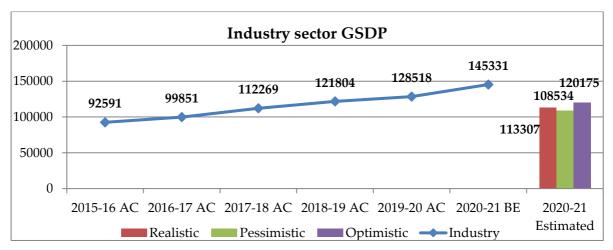
The three estimates for GSDP for the current financial year 2020-21 show a contraction of 9.2% (Rs 2,83,96,825 lakhs - realistic), 2% (optimistic) and 11.7% (pessimistic) for three scenario projections. Some of the sectors for which we estimated positive growth, based on the revenue estimations and assumptions based on discussions and national performance, included real estate, ownership of dwellings and professional services, electricity, gas, water supply, public administration, crops, livestock, fishing, communication & services related to broadcasting. Sectors which projected huge contractions included transportation, forestry and logging, financial services, and social services. All these projections are based on the revenue trends that was observed for the sectors and also the revenue performance of the item-wise break up of data we have from the GST collections between April-November 2020. Although the core sectors of the state were not strictly closed due to lockdown, the supply chain disruptions and low demand seem to have impacted the production and demand. However, with the re-starting of the economy, it is expected that these sectors will see a growth revival due to an increase in demand. Likewise, the services sector is also likely to see revival due to high forward and backward linkages if appropriate measures are undertaken.

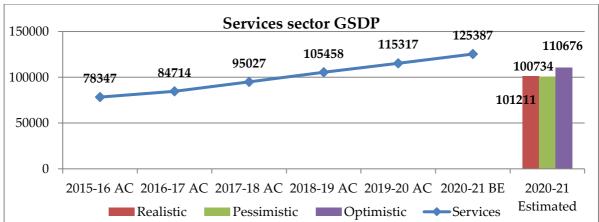
Table E 2: Gross State Domestic Product (GSDP) Trends (2017-18 to 2019-20) and estimated shortfalls (2020-21) for three scenarios (realistic, pessimistic, and optimistic).

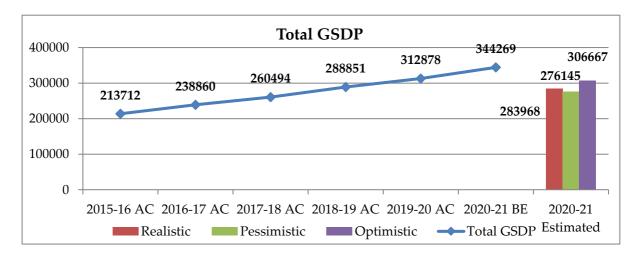
			Estimated GSDP 2020-21 (Rs in Crore)		Shortfall Scenario-wise (with respect to 2020-21 BE)			Shortfall Scenario-wise (with respect to 2019-20 AC)					
Secto rs	201 7- 18 AC	201 8- 19 AC	201 9- 20 AC	202 0- 21 BE	Re ali stic	Pessi misti c	Opti misti c	Rea listi c	Pessi misti c	Opt imi stic	Rea listi c	Pes sim istic	Opti misti c
Agric ultur e	53, 197	61, 589	69, 043	73, 551	69, 450	668,7 8	75,81 7	-6%	-9%	3%	1%	-3%	10%
Indus try	1,1 2,2 69	1,2 1,8 04	1,2 8,5 18	1,4 5,3 31	1,1 3,3 07	1,08, 534	1,20, 175	- 22%	-25%	- 17%	- 12%	- 16%	-6%
Servi ces	95, 027	1,0 5,4 58	1,1 5,3 17	1,2 5,3 87	1,0 1,2 11	1,00, 734	1,10, 676	- 19%	-20%	- 12%	- 12%	- 13%	-4%
Total GSD P	2,6 0,4 94	2,8 8,8 51	3,1 2,8 78	3,4 4,2 69	2,8 3,9 68	2,76, 145	3,06, 667	- 18%	-20%	- 11%	-9%	- 12%	-2%

Figure E 2: Gross State Domestic Product (GSDP) Trends (2017-18 to 2019-20) and estimated shortfalls (2020-21) by sector. (Rs in Crore)









C. Expenditure Trends (2017-18 to 2020-21)

The total expenditure in the last three years indicates a good growth of over 10% on a Year-on- Year (YoY) basis. The revenue expenditure also recorded a healthy growth of over 14% over the years 2017-18 to 2019-20 on a YoY basis, but the same has not been true for capital expenditure, which has recorded a negative YoY growth rate. The expenditure on social services declined during the year 2018-19 in absolute terms recording a 7% decrease over the previous

year. However, during 2019-20, the growth was 13% more than the previous year.

Table E 3: Expenditure Trends (2017-18 to 2020-21) and Year-on-Year Growth (%) (Rs in Crore).

Esman dituna	2017-18	2018-19	2019-20	2020-21	2017-	2018-	2019-
Expenditure	AC	AC	AC	BE	18 AC	19 AC	20 AC
Revenue							
Expenditure	56,230	64,411	73,473	81,400	17%	15%	14%
Capital							
Expenditure	10,001	8,903	8,566	13,814	6%	-11%	-4%
Loans and							
Advances	369	240	56	436	35%	-35%	-77%
Total							
Expenditure	66,600	73,554	82,095	95,650	15%	10%	12%
Social Services	27,024	25,229	28,565		14%	-7%	13%

Table E 4: Expenditure on Critical Sectors and Year-on-Year Growth (%) (Rs in Crore)

	2017-	2018-	2019-	2017-	2018-	2019-
Sectors	18	19	20	18	19	20
	AC	AC	AC	AC	AC	AC
Agriculture and Allied Activities	8,865	18,112	15,289	29%	104%	-16%
Education, Sports, Art and Culture	12,417	12,919	16,215	8%	4%	26%
Energy	2,874	2,209	4,733	66%	-23%	114%
Health and Family Welfare	4,008	3,757	4,671	22%	-6%	24%
Industry and Minerals	487	202	180	1%	-58%	-11%
Irrigation and Flood Control	2,132	2,040	1,607	-8%	-4%	-21%
Rural Development	3,695	2,433	4,362	-14%	-34%	79%
Social Welfare and Nutrition	2,222	1,999	2,714	3%	-10%	36%
Water Supply, Sanitation, Housing and						
Urban Development	7,087	5,243	3,616	32%	-26%	-31%
Welfare of Scheduled Castes, Scheduled						
Tribes and Other Backward Classes	564	482	437	0%	-15%	-9%
Sectoral Total	44,351	49,396	53,824	15%	11%	9%
Proportion of Critical sectoral total	67%	67%	66%			

Expenditure on critical sector hovered around 66% of the total expenditure. While the agriculture sector recorded very high growth in 2018-19, it declined in 2019-20. The expenditure on education, energy, health and family welfare increased during the year 2019-20 over the previous year, while the expenditure on water supply, sanitation, housing and urban development declined over the previous year.

For the current year, 2020-21, till November 2020, with four months of the financial year still to go, the expenditure was Rs 51,410 crore, which accounted for 54% of the budget estimates. This is lower than usual as the trends of past three years' expenditure indicate that about 62% of the expenditure is incurred till the end of November in the fiscal year. The expenditure against the receipts indicated that about 113% of the receipts were spent till November 2020, which was similar to the previous three years.

Table E 5: Expenditure incurred during April-November 2020 (Rs in crore)

Evnanditura	2017-18	2018-19	2019-20	2020-21
Expenditure	AC	AC	AC	BE
Total Expenditure	66,600	73,554	82,095	95,650
Expenditure till				
November	41,735	43,909	52,612	51,410
Receipts till November	37,708	38,717	47,498	45,588
Expenditure/Total				
Expenditure	63%	60%	64%	54%
Expenditure/Receipts	111%	113%	111%	113%

However, the expenditure pattern compared to the previous year (2019-20) for the same period (April–November) has changed. The expenditure on agriculture increased by over Rs 4,400 crore while the capital expenditure on water supply and sanitation increased by Rs 870 crore. This was followed by expenditure on calamities and medical and public health, which were increased by Rs 800 and Rs 600 crore, respectively. The expenditure on forestry, social security and welfare as well as the public works were increased by Rs 284 crore, Rs 130 crore and Rs 100 crore, respectively. The biggest cuts in the expenditure for the period April–November 2020 compared with the same period in 2019 were observed in co-operation, food

storage and warehousing, housing, roads and bridges, education, and assignments to local bodies. While the expenditure pattern largely reflects the needs of a pandemic struck society, it also indicates towards four other significant points for future:

- (i) the need for reviving capital expenditure, especially for housing, roads, and bridges—areas that are likely to have high multiplier effect on income and employment,
- (ii) the need for protecting, reviving, and even strengthening sectors such as education and health; while health received a lot of attention, regular services such as immunisation have been adversely affected,
- (iii) the need for supporting agriculture as well as other non-agricultural employment opportunities both to ensure livelihood and to revive the economy exists and demands higher expenditure and support from the government through a variety of real and monetary measures, and
- (iv) the rights and needs of the most vulnerable sections (e.g., women, children, tribals, etc.) need to be protected in all the above in both rural and urban areas.

D. Increasing Revenue Receipts and enabling Economic Revival: Suggestions for Actions

There is almost total agreement among economists that during a recession, the most important macroeconomic interventions have to be measures that push a generation of aggregate demand. This calls for expansionary public expenditure and given that the state is already facing revenue contraction, the challenge lies in gaining access to resources for funding public spending. Given below are some of the options that can have positive impact on revenue generation. These are a mix of fiscal, monetary, and governance measures. Since the state has already introduced a number of reforms in the right direction in its own source revenue leading to a higher revenue generation, we have not included those here.

i. Autonomy in fixing electricity tariffs: The Central Electricity Regulatory Commission fixes the rates to be charged per unit of power for the supply of power across the states. The latest one provides regulatory framework for 2019-24. The fixed rates often work against the supplier states whose revenue do not go up despite an increase in demand. Even a marginal hike at 10 paise or 15 paise per unit would provide much needed revenues to the state.

ii. Electricity grants: There is a need to incentivise efficient distribution and revenue generation by the power distribution companies in Chhattisgarh. In a year such as this, when there is a need to spend more on critical sectors such as health, education, nutrition and social protection, the government should divert the amount that is being given as grant to these DISCOMS (electricity distribution companies). According to past reports, GoC has extended graded Operational Funding Requirement (OFR) support of Rs 450 crore in the financial year 2015-16 and Rs 350 crore in the financial year 2016-17, to Chhattisgarh State Power Distribution Company Limited (CSPDCL) to ensure smooth cash flow till the DISCOM achieves a turnaround⁸. Instead, if the distribution companies are allowed to hike electricity tariffs for consumers and increase their billing efficiency, they can generate this revenue to support their expenses while the state government can spend this amount in other sectors where expenditure is much needed.

iii. Reforms in GST governance:

- Better scrutiny by enhancing features of computerised systems to enhance tax collection and prevent evasion.
- E-commerce and tax revenues: Since e-commerce companies are often based out of particular few large locations, all the trading that happens through these websites (even though sellers might be located in many states), accrue to the states where these companies are located. Thus, states like Chhattisgarh lose out on tax revenues that should accrue to them. If the system can be modified to recognise the location of production, there could be an improvement in the tax collection figures for the state.
- Timely and full release of state dues, including compensation, rather than suggesting borrowing, would be critical for the state.
- An extension of the time-limit for compensation for revenue losses from
 the currently committed period of five years, since the introduction of the
 GST, to seven years should also be argued for by states in view of the
 pandemic and serious revenue losses that the states are facing.

-

⁸ https://pib.gov.in/newsite/PrintRelease.aspx?relid=135788.

iv. Partial Credit Guarantee Scheme to enhance access to credit and development of women-lead Small and Medium Enterprises (SMEs) industries:

The Credit-Deposit ratio (C-D ratio) for the state for the period 2017-18 to 2020-21 has been consistent around 60%, which indicates lower utilization of deposits available with the banks. We also found that credit disbursement is lower for certain sectors (e.g., agriculture), communities (weaker sections), and districts compared to national averages. It indicates either a lower demand for credit or a risk aversion in the banks to fund these areas. The state can propose a partial credit guarantee scheme that can be made available to industrial sectors, such as value addition in minor forest produce and ecotourism. For instance, the state government could provide a partial credit guarantee to collectives of tribal women who undertake production of handicrafts using forest produce, such as lac, thus enabling entrepreneurship among the weaker sections of the population as well as stimulating a dormant sector of the economy without high costs for the exchequer. For instance, if a credit amount of Rs 15 lakh is required to set up one such unit and the government decides to provide guarantee of up to 10% for 100 such units, the government would provide a stimulus at a potential cost of only Rs 15 million. The cost to the exchequer is likely to be lesser than this as not all of the credit is likely to turn unproductive. Geographical areas where credit availability at present is low, such as the districts of Bijapur, Narayanpur, Sukma, and Balrampur, can be prioritised. This will help stimulate growth in these sectors and districts and lead to a more equitable growth in the state. However, this will also depend on complementary investment on rural infrastructure that could enable market linkages for these initiatives.

v. Higher capital/revenue expenditure for infrastructure and employment:

As mentioned here, capital expenditure on infrastructure such as roads and transport have the potential for furthering income, employment, and demand. Rural infrastructure is also needed to promote tourism, especially ecotourism, diversification, and marketing of forest and agriculture products. The state can consider accessing several means to generate resources for this. This could include accessing the union government's scheme for Special Assistance to States for Capital Expenditure⁹, where the state is yet to get its full release, or accessing National Bank for Agriculture and Rural

-

⁹ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1680145.

Development's (NABARD) Rural Infrastructure Development Fund¹⁰. Chhattisgarh can also ask for an increase in the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) fund based on the assessment done by the 15th Finance Commission (FC) as forest and ecology are one of the criteria. The state can also think of international aid through bilateral or multilateral agencies¹¹.

The state can think of an urban employment guarantee programme and link it to small infrastructure development in areas of urban sanitation and solid waste management. This will help in ensuring livelihood and income security to urban poor while also promoting much-needed infrastructure in these areas. With high propensity to spend, the poor tend to contribute much more to the demand than the rich who tend to save, especially in times of uncertainty¹². The state's committed expenditure averaged about 45% of the total expenditure and 50% of the revenue receipts for the years 2016-17 to 2018-19. This is low compared to the states like Karnataka, which has an over 80% share of committed expenditure. This gives much scope to expand the capital expenditure (rural health, education, and communication, including roads and infrastructure), which can aid growth and employment opportunities.

vi. Promoting Minor Forest Produce (MFP) and value-added forest products: In Chhattisgarh, MFP provides major revenue potential for the state. Support to communities involved in collection of forest produce through Van Vikas Kendras in providing them with the requisite information,

https://www.ndtv.com/business/nabard-news-farm-sector-lender-nabard-to-get-additional-rs-30-000-crore-amid-coronavirus-covid-19-2229127.
https://www.nabard.org/content1.aspx?id=573&catid=8&mid=488https://www.business-standard.com/article/economy-policy/nabard-estimates-rs-34-421-crore-credit-potential-for-chhattisgarh-120020600885_1.html.

¹¹ The World Bank has recently announced a USD 400 million project to protect India's poor and vulnerable from the impacts of Covid-19. The state should make efforts to channel funds from the programme to help in relief and rehabilitation efforts in the state. The World Bank already has an established relationship with the state through a USD 25 million Public Financial Management and Accountability Program Project (2019–2024). In December 2020, the World Bank approved a USD 100 million project for the development of sustainable production system, which will allow the tribal households of Chhattisgarh to practice throughout-the-year production of diversified and nutritious food.

¹² The fact that corporate spending remains low in the post-Covid period despite low interest rates lends support to this argument.

timely distribution of the seeds and other kinds of technical support can further boost the income from this source. For strengthening market linkages, producers of MFP and existing self-help groups could be organised into trading groups or marketing cooperatives for processing herbal, medicinal, and aromatic plants leading to promotion of agribusiness; this will lead to an increase in their bargaining power. Producers could be informed about profitable market locations in advance, along with the prevailing prices of other markets.

vii. Using Public-Private Partnership (PPP) for selected sectors: Publicprivate partnership may be a good model for attracting investments to develop tourist circuits, thus leading to infrastructure development and also generating employment. There is scope for promoting tourism—for this, both the creation of adequate infrastructure and aggressive marketing are important; emphasis on road and air connectivity would be critical. There is some scope for using PPP in strengthening of diversification in agriculture by promoting value added products, but the option of using programmes such as Jeevika and mechanisms such as farmers' cooperative should be the first choice. Public-private partnership can also be used for development of infrastructure, but it would be important to pay attention to learnings emerging from its use in other developing countries. Available literature suggests that the careful drafting of contracts, especially in the context of responsibilities assigned for delays and quality compromise and the size of the project and nature of contract in terms of tasks and responsibilities, play a major role in determining whether it is an efficient investment or not. It would be advisable for the state to pay attention to this literature while going for PPP as a mode for any sector.

viii. Additional debt for funding higher capital/revenue expenditure: The state has contained the fiscal deficit since 2015-16 below the prescribed limit of 3% of GSDP, except for the year 2019-20 (14th FC prescribed Fiscal Responsibility and Budget Management [FRBM] Act limit) apart from keeping its total liabilities under 25% of GSDP and interest payments below 10% of revenue receipts. In the current year, owing to the reduction in the receipts, GOI has overshot its fiscal deficit limit by 45% (145% of Budgeted Expenditure [BE] by end of December 2020). The fiscal deficit limit for the state has been revised to Rs 1,7918 crore. At the end of December 2020, the debt component was Rs 12,696 crore, going up from Rs 10,341 crore till the

end of November 2020. Considering the loans till December, another Rs 5,222 crore can be obtained as loan for the current year till March 2021. However, this will have a bearing on the interest payments as well as on the future; hence, it requires a proper debt management plan to make the best use of it. A prudent choice for both capital and revenue expenditure in productive schemes and initiatives with high potential for multiplier effect on income and employment, and therefore pushing the demand and contributing to the recovery of the economy would be important towards this end.

Acknowledgements

This report would not have been possible without the assistance and support of a number of people both within and outside of Centre for Budget and Policy Studies. Firstly, we would like to thank representatives from various departments of Government of Chhattisgarh who helped us with their inputs by providing us time from their busy schedule during the pandemic for consultations. We would also like to thank Shri Ajay Singh, Vice Chairman, State Planning Commission, Government of Chhattisgarh and other members from the State Planning Commission for their timely guidance and valuable feedback. Mr Anup Srivastava, Member Secretary, State Planning Commission helped us greatly during the consultations and provided valuable feedback. Representatives from various departments also helped us with access to data, and we could not have completed the study without their help.

We would also like to thank members from our technical advisory committee, Dr Vinod Vyasulu, Mr Vijay Mahajan, Dr K Subramaniam, Mr. L. V. Nagarajan, and Dr. Rajeswari Sengupta, for their valuable guidance and feedback on the work. Their suggestions helped us greatly improve on the work and made the report much more comprehensive and useful.

The study has been conducted with financial support from United Nations Children's Fund (UNICEF) Chhattisgarh. We would also like to thank Mr Job Zachariah, Mr Bal Paritosh Dash, and Mr Mehebub Rahaman from UNICEF Chhattisgarh and Mr Soumen Bagchi from UNICEF Delhi for their continuous engagement with the study with their valuable inputs and support.

CBPS TEAM

Jyotsna Jha Madhusudhan B. V. Rao Archana Purohit Achala S Yareseeme Susmitha M V Shiboni Sundar Atul Kumar

List of Tables

shortfalls (2020-21) for three scenarios (realistic, pessimistic, and optimistic)	4
Table E 2: Gross State Domestic Product (GSDP) Trends (2017-18 to 2019-20 and estimated shortfalls (2020-21) for three scenarios (realistic, pessimistic, and optimistic)	
Table E 3: Expenditure Trends (2017-18 to 2020-21) and Year-on-Year Grow (%) (Rs in Crore).	
Table E 4: Expenditure on Critical Sectors and Year-on-Year Growth (%) (Rein Crore)	
Table E 5: Expenditure incurred during April–November 2020 (Rs in crore)	.10
Table 1: Components of Revenue over years (Rs in Crore)	.40
Table 2: Components of Own Tax over years (Rs in crore)	43
Table 3: Growth of Own-Tax components over years	44
Table 4: Components of Tax Share over years (Rs in Crore)	45
Table 5: Growth of components of Tax Share over years	46
Table 6: Components of Non-Tax revenue over years	47
Table 7: Growth of components of Non-Tax revenue over years	47
Table 8: Assumptions for Estimation of Revenue scenarios of the state	50
Table 9: Revenue Receipts: Three Scenarios for the State	52
Table 10: Factor estimate for the Scenario 1	52
Table 11: Estimate of Revenues for the year 2020-21 under Scenario 1	53
Table 12: Revenues for 2019-20 (last four months and factor for Scenario 2).	53
Table 13: Estimate of Revenues for the year 2020-21 for Scenario 2	54
Table 14: Factor estimate for the Scenario 3	54
Table 15: Estimate of Revenues for the year 2020-21- under Scenario 3	55
Table 16: Compounded Annual Growth Rate (CAGR) of the Gross Value Added (GVA) in Manufacturing	63
Table 17: Quantity of major Minerals produced (in Lakh Tonnes)	65

Table 18: Royalty Receipt of Major Minerals	66
Table 19: Table of assumptions for different subsectors	77
Table 20: Gross State Domestic Product (GSDP) Estimates for 2020-2021	79
Table 21: Expenditures of the State (Rs in crore)	83
Table 22: Growth rates of Expenditures	83
Table 23: Trends in the Critical Sectoral expenditures	84
Table 24: Annual Growth rates of Expenditures across Critical Sectors	85
Table 25: Sectoral share in total Social Services Expenditure (in percentage)	.87
Table 26: Committed expenditures (CE) of the state	88
Table 27: Scheme expenditures in last 3 years (in Rs Crore)	88
Table 28: Disaggregation of Priority Sector Advances	94
Table 29: Spatial Concentration in disbursement of credit across districts in	
Chhattisgarh in the first two quarters of Financial Year 2020-21	95
Table 30: Revenue and Gross State Domestic Product (GSDP) forecasts for	07
Chhattisgarh (2020-2021)	9/

List of Figures

Figure E 1: Revenue Receipts: Trends (2017-2019-20) and estimated shortfalls (2020-21) (Rs in Crore)
Figure E 2: Gross State Domestic Product (GSDP) Trends (2017-18 to 2019-20) and estimated shortfalls (2020-21) by sector. (Rs in Crore)7
Figure 1: Number of cumulative Covid-19 cases34
Figure 2: Share of revenue components over years (in percent)41
Figure 3: Year on Year Growth of Revenue Components over years42
Figure 4: Share of subsectors in Gross State Domestic Product (GSDP)57
Figure 5: Year-on-year growth rate in Gross State Domestic Product (GSDP) of subsectors
Figure 6: Share of subsectors in Agricultural sector in Gross State Domestic Product (GSDP)58
Figure 7: Share of subsectors in the Industrial sector in Gross State Domestic Product (GSDP)61
Figure 8: Year-on-year growth rate of Gross State Domestic Product (GSDP) in subsectors of the Industrial Sector in real terms
Figure 9: Year-on-year (YoY) growth rate in production of different minerals
Figure 10: Share of subsectors Gross State Domestic Product (GSDP) in the67
Figure 11: Share of subsectors in Grants-in-Aid Contributions (in percent)71
Figure 12: Share of Mining and Quarrying in Non-Tax Revenues (in percentage)72
Figure 13: Share of subsectors in Non-Tax Revenues (in percentage)72
Figure 14: Share of Tax-revenues by subsectors73
Figure 15: Tax Revenue to Gross State Domestic Product (GSDP) Ratio (2011-12 to 2019-20)
Figure 16: Non-Tax Revenue to Gross State Domestic Product (GSDP) Ratio (2011-12 to 2019-20)76
Figure 17: Total Revenue to Gross State Domestic Product (GSDP) Ratio

Figure 18: Outstanding liabilities as a percentage of GSDP8	2
Figure 19: Share of Revenue and Capital Expenditure (in percentage)8	4
Figure 20: Share of Social Services Expenditure (SSE)8	6
Figure 21: Quarterly trends in deposit and credit with scheduled commercial banks in Chhattisgarh9	
Figure 22: Comparison of Credit-Deposit Ratio for Chhattisgarh (CG) and India	2
Figure 23: Proportion of outstanding credit by Scheduled Commercial Banks across industry sectors as on 31 March 2020	
Figure 24: Per Child Expenditure vs Gross State Domestic Product (GSDP) and Child Development Index (CDI)10	9

List of Abbreviations

BLP Bank Linkage Programme

CAGR Compounded Annual Growth Rate

C-D Ratio Credit-Deposit Ratio

CDI Child Development Index

CMIE Centre for Monitoring of Indian Economy

CSO Central Statistical Office

CSS Centrally Sponsored Schemes

DAY Deen Dayal Antyodaya FC Finance Commission

FRBM Fiscal Responsibility and Budget Management

FY Financial Year

GDP Gross Domestic Product

GIA Grants-in-Aid

GoC Government of Chhattisgarh

GoI Government of India

GSDP Gross State Domestic Product

GST Goods and Services Tax

GVA Gross Value Added ICU Intensive Care Unit

IT Information Technology

ITeS Information Technology enabled Services

LMMH List of Major and Minor Heads

MGNREGA Mahatma Gandhi National Rural Employment Guarantee Act

MOSPI Ministry of Statistics and Programme Implementation

MSME Micro, Small and Medium Enterprises
NRLM National Rural Livelihoods Mission

OBC Other Backward Castes

PMMY Pradhan Mantri Mudra Yojana

PPP Public Private Partnership

RBI Reserve Bank of India

RF Revolving Funds

RGKNY Rajiv Gandhi Kisan Nyay Yojana

RR Revenue Receipts
SC Scheduled Castes

SGST State Goods and Services Tax

SHG Self Help Group

SME Small and Medium Enterprises

ST Scheduled Tribes

YoY Year on Year

Chapter 1: Introduction

1.1. Background

In addition to being a global public health crisis, Covid-19 has also severely affected the global economy at all levels, from national to sub-national. The crisis has also impacted the growth of world economy in most sectors and India is no exception. Significant reductions in income, rise in unemployment, and disruptions in transportation, and service and manufacturing industries are the consequences of the pandemic, and mitigation measures have been adopted in almost all countries across the world. Supply chain disruptions due to the ceasing/slowdown of economic activities will lead to further adverse impacts on economic growth in the near-term future.

The World Bank in its Global Economic Prospects report indicated that the Indian economy would contract by 3.2% in 2020-21 and would record a growth of 3.1% in the year 2021-22, which implies that the Gross Domestic Product (GDP) of 2021-22 would be less than that of 2019-2013. Rating agencies have downgraded their ratings for India. Moody has downgraded the investment rating from Baa2 to Baa314. Similarly, the Fitch ratings for the country was BBB-, owing to negative outlook stemming from expectations of increase of the debt to GDP ratio to 84% and contraction of economy (GDP) by 5% for 2020-21¹⁵. The first quarter GDP estimates for 2020-21, published by National Statistical Office (NSO), stood at Rs 25.53 lakh crore (2011-12 prices)¹⁶ as against the Rs 35.07 lakh crore in 2019-20 recording a severe contraction of 22.8%. In the same period, the economy had grown by 5.2% during the last year. The contractions were more severe in the sectors of construction, manufacture and trade, and hotel and transport at 50.3%, 39.3% and 47% respectively. The agriculture sector was the only exception, recording 3.4% growth.

_

¹³ https://www.hindustantimes.com/india-news/economic-impact-of-covid-19-pandemic-to-vary-in-sectors/story-DIWjwnBZoON7ZUvgSMSFOL.html.

¹⁴ https://www.firstpost.com/health/moodys-downgrades-indias-rating-to-baa3-outlook-remains-negative-says-move-not-driven-by-impact-of-covid-19-outbreak-8435081.html.

¹⁵ https://www.bloombergquint.com/economy-finance/what-fitch-says-can-entail-a-sovereign-ratings-downgrade-for-india.

¹⁶ https://indianexpress.com/article/business/economy/india-gdp-data-1st-quarter-live-updates-coronavirus-lockdown-6577361/.

The economic damage due to Covid-19 has seen bottoming out of all major economic indicators, such as the Purchasing Manager's Index (PMI), Index of Industrial Production (IIP), Goods and Services Tax (GST) collections across the states. These contractions in the economic activities has enormous burden on a fiscal health of the union government and all the state governments. A State Bank of India research estimated that all the states combined would bear a loss of Rs 30.3 lakh crore to their Gross State Domestic Product (GSDP), which would account for 13.5% of the overall GDP of the country. The top three states to have major losses in GSDP were Maharashtra, Tamil Nadu, and Gujarat at 15.4%, 14.9% and 15% respectively.

The pandemic and lockdown are also expected to have a differential impact on different sectors. The sectors that have been found to be most affected by the pandemic include textile, apparel, automotive, hospitality, chemicals, consumer durables, entertainment, and sports, while the impact on Information Technology (IT) and Information Technology enabled Services (ITeS) and e-commerce sectors are little ambiguous¹⁷. Thus, the structure (relative presence of agriculture, manufacturing, and service sectors) of the economy of a state will be one of the determining factors in the extent of economic losses suffered by the state.

With thousands of people at the brink of losing their jobs due to the economic breakdown, Small and Medium Enterprises (SMEs) limping, and profitable, viable units having mounting debts, prudent fiscal measures will have to be launched to ensure that jobs are protected; at the same time, social security systems should be established and improved too, to reduce the excruciating distress amongst the most vulnerable and marginalised population, specifically women and children. Ensuring social security to the most vulnerable segments of the population would entail additional expenditure on part of the government. The returns for investment being higher for the children makes it all the more important to focus on children in the process of addressing vulnerabilities due to the pandemic¹⁸.

The present study is an effort to especially look into these issues and analyse the macro-economic impact of the pandemic on the economy of Chhattisgarh, a land-locked Indian state. Chhattisgarh, a central Indian state bordering

¹⁷ https://pacindia.org/wp-content/uploads/COVID-19MM.pdf.

¹⁸ www.heckmanequation.org.

Madhya Pradesh, is the 10th largest state in terms of geographical area and the 16th largest by population. The state has a relatively high percentage of Below Poverty Line (BPL) and Scheduled Tribe (ST) population in comparison to the national average and other similar states of India and has one of the lowest urban population. The GSDP of the state was projected to be Rs 3.29 lakh core for the year 2019-20, with an estimated growth of 8.26% ¹⁹. The manufacturing sector contributes the highest share to Gross State Value Added (GSVA) at 37% followed by tertiary sector at 36% and primary sector at 27%. Along with GSDP losses for the year 2020-21, some predictions suggest that the economy of Chhattisgarh would shrink by 8.5%²⁰. The tax to GDP ratio was one of the lowest in the year 2018-19, at 6.88%. The dependency on the Government of India (GOI) revenues is slightly higher by way of share of taxes and grants, which is to the tune of 55% of the Revenue Receipts (RR). The literacy rates, life expectancy at birth, and Human Development Index (HDI) are below the national average level. Around 40% people live below the monetary poverty line, and 36% households are multidimensionally poor. The maternal mortality rates are higher than the national average. The child population of Chhattisgarh contributes to 40% of the overall population. The state stood at ninth among 16 major states in the Child Development Index (CDI)²¹ indicating the need for enhancing the strategic investments on children.

While Covid-19 has created a huge impact on sectors across Indian states, few states have managed to thrive and combat the sliding economy. The analysis by Centre for Monitoring Indian Economy (CMIE) indicated that unemployment in April 2020 was the lowest in Punjab and Chhattisgarh at 2.9% and 3.4%, respectively, while it was the highest in Tamil Nadu at 49.8% and the national rate of 23.5%²². The Government of Chhattisgarh (GoC) has taken steps to provide work to over 3 lakh returnee migrant labourers and implemented the Rajiv Gandhi Kisan Nyay Yojna (RGKNY) for augmenting

-

¹⁹ http://mospi.nic.in/data.

²⁰ https://www.businessinsider.in/policy/economy/news/these-indian-states-have-seen-the-worst-economic-impact-due-to-the-covid-19-pandemic/articleshow/75999085.cms.

²¹ http://cbps.in/wp-content/uploads/Public-Finance-for-Children-PF4C-across-16-Indian-States.pdf.

 $^{^{22} \, \}underline{https://timesofindia.indiatimes.com/city/raipur/unemployment-rate-decreases-in-chhattisgarh-amid-covid-19-lockdown/articleshow/75516747.cms \, .$

incomes of the poor²³. The vulnerability index for the management of and response to the Covid-19 was analysed by Acharya and Parwal (Lancet.com); the study shows that the state has relatively less vulnerability with an index value of 0.314 compared to the large nine states that were found to have an index value of over 0.75²⁴. The GST collections for the month of June 2020 improved over the previous year by 22%. Chhattisgarh is one of the states with a lower number of Covid-19 cases per million²⁵ and has managed to combat the pandemic in an effective manner.

Despite the green shoots in the economy and the state experiencing a lower level of vulnerability due to Covid-19 pandemic, the need for improving the human development indicators demands a priority. Owing to the impact of the pandemic on the country, as a whole, and the impact of GST collections, in particular, the shortfall in revenues of GOI would also impact the transfers to the state. In a year when the revenues of the government are likely to be affected due to an adverse impact on the economy, higher expenditures for social protection measures necessitates a reprioritisation of expenses and also innovation in the way of funding for social sector expenses is to be generated.

Considering these complex factors, there is a need to understand the implications of the pandemic with respect to revenue sources in greater detail and also formulate strategies for prioritising the expenditure. The study is based on a disaggregated analysis considering the impact of Covid-19 on the different sectors and subsectors of the economy. It aims to estimate the extent of revenue loss likely to be incurred by the GoC and extends this analysis using sectoral discussions to estimate the losses in GSDP during the current year. Then, it arrives at strategies for incurring expenditure in ensuring social protection for the vulnerable, especially women and children. In addition, based on literature review, data analysis and consultations, alternative mechanisms to finance these expenditures are also proposed.

⁻

²³https://www.firstpost.com/india/poorly-planned-lockdown-and-unlock-caused-covid-19-spike-in-chhattisgarh-says-cm-bhupesh-baghel-8483781.html.

²⁴ The index captured dimensions such as socio-economic, poor hygiene and housing, poor healthcare, and epidemiological vulnerability.

https://www.thelancet.com/action/showPdf?pii=S2214-109X%2820%2930300-4.

²⁵ https://media-publications.bcg.com/BCG-India-COVID-19-Perspective-6.0.pdf.

1.2. Objectives of the Study

The specific objectives of the study are as follows.

- 1. Undertaking a scenario analysis of various macroeconomic situations for the state and the likely impact of Covid-19 on each of the sectors and eventual total impact on the economy. This entails analysing the past performance of Chhattisgarh economy and making assumptions on the performance of various sectors considering their underpinnings and impact of Covid-19, leading to the estimates of GSDP; three possible scenarios (realistic, optimistic, and pessimistic) would be drawn to understand the progress of the economy.
- 2. Undertaking a revenue estimate analysis based on the estimated macroeconomic situation under various scenarios. This entails analysing all the revenue sources including state GST, Motor Vehicle Tax, Stamp Duty, Value-Added Tax (VAT) on diesel and petroleum products and state excise to understand the potential revenue receipts of the state. It also entails estimating the revenue share from the divisible pool of taxes and devolution (Grant in Aid [GIA]) from GOI considering the impact on mobilisation of revenue in the current economic downturn due to pandemic.
- 3. Assessing the fiscal space based on the potentiality to mobilise resources in the short, medium, and long term and forecast of expenditure. This also entails a focus on the potential resources that can be mobilised to enhance tax and non-tax receipts of the state.
- 4. Analysing the implications of macro-economic changes and fiscal stress on social sector (education, health, child protection, nutrition, etc.) and social protection for children and women.
- 5. Recommending strategies to mobilise additional resources by adopting innovative mechanisms including Public Private Partnerships (PPPs).

1.3. Methodology

The methodology for assessing the macro-economic impact of Covid-19 and forecasting diverse scenarios to be adopted for the study has multiple components as described below.

Literature review: We started with a literature review that focused on recent writings on the impact of Covid-19 on economy on different sectors in different geographical locations, with a specific reference to the Chhattisgarh

state. This helped us understand which sectors are likely to be the most impacted by the pandemic and the lockdown and to what extent. This also helped us in in understanding what methodologies have been adopted for assessing the impact of Covid-19 in other geographical contexts and identifying the datasets that could be useful to assess this in the Indian context.

Secondary data analysis: The study is largely dependent on the analysis of secondary data to assess the impact of Covid-19 on revenue estimates of Chhattisgarh government as well as on estimating the expenditure required. The secondary data comprised of budget documents of GoC, economic survey documents, estimates from planning departments of the state on the sectoral growth of the economy in addition to data from sources such as National Sample Survey Office (NSSO) (consumer expenditure, employment, and unemployment), Annual Survey of Industries (ASI), CMIE (States of India and Prowess), etc.

Analysis of time series data on sectoral growth, revenues, expenditures have been undertaken to explore the patterns/trends. This helped in identifying the priority sectors/subsectors for the state economy that could be supported for translating potential income from these sectors to RR. This also helped in prioritisation of expenditures in different sectors. Secondary data analysis also included a scenario analysis that includes projected revenues of the state government, expenditures based on various scenarios, and an assessment of the fiscal gap along with possible ways for filling the same. Similarly, this approach was extended for sectoral analysis for GSDP estimations and identifying the avenues for revival of the economy.

Stakeholder Consultations: Since the pandemic and the subsequent lockdown have been unprecedented situations, it has been difficult to assess the exact impact there would be on various sectors of the economy. Hence, we carried out consultations with stakeholders from various departments of the state government as well as economists and members of the State Planning Commission to identify the underpinnings and their possible impact on economic growth and RR of the state. While we had individual meetings with senior officials for all key departments, we created an advisory committee with a few identified economists and State Planning Commission members. This helped in generation and vetting of ideas and methods being adopted.

Assessment of Revenue Loss and of the sectoral challenges: The analysis emanating from all the above lead to an assessment of revenue loss and also an understanding of sectoral challenges both in the context of revenue generation and in terms of expenditure priorities.

Scenario Projections: Combined with the literature review, consultations on impact on different sectors, and the secondary data analysis based on the assessment of revenue-loss and sectoral challenges, a forecast of the revenue receipts of the government in Financial Year (FY) 2020–2021 and FY 2021-22 along with the expenditure requirement and the fiscal deficit have been attempted based on diverse scenarios.

1.4. Literature Review

1.4.1. Impact of Covid-19 on the Indian economy

We undertook a literature review for the impact on Indian economy with three objectives:

- to identify trends regarding the sectors of the economy that are impacted the most and to what extent so as to adapt those estimations in the context of Chhattisgarh;
- to estimate the impact on central governments grants to the state of Chhattisgarh; and
- to explore the impact on income and employment at a societal level.

The important points that emerged from our literature review are presented below.

The impact of Covid-19 and the lockdown has been severe with a contraction of 23.9% in Quarter 1 (Q1) and 7.5% in Quarter 2 (Q2) according to the figures released by the Ministry of Statistics. According to a report released by the Reserve Bank of India (RBI), the growth in GDP during the year is likely to turn positive in the third quarter but at a minimal level of $0.1\%^{26}$. While the impact on the GDP growth has been severe, the impact on poverty and inequality has also followed suit. Unemployment in India rose to significant levels of 22.89% in April 2020 and 23.14% in May 2020 when India was under complete lockdown. During the lockdown, an estimated 14 crore

 $^{{}^{26}\} https://www.business-standard.com/article/economy-policy/indian-economy-recovering-fast-growth-to-turn-positive-in-q3-rbi-article-120122400768\ 1.html.$

(140 million) people lost employment, while salaries were cut for many others. The rate started coming down from June 2020 when gradual unlocking (of the lockdowns in various states) began. However, it still stood at a high level of 9.15% in December 2020 according to data released by CMIE²⁷. In addition to job losses, income loss was also widely experienced; 80% of Indian households experienced loss of income during the lockdown²⁸.

Most of the industrial sectors also experienced losses. During the lockdown, the losses were primarily because of ceasing of business activities. However, after unlocking, business sectors have continued to experience losses because of supply chain disruptions, decline in industrial demand, and an overall decline in the global economy. The losses, while being experienced in almost all the sectors, except for agriculture, were especially significant in sectors such as travel and tourism, hospitality, and manufacturing. It was reported that 71.31% of businesses dealt with reduced cashflows during the lockdown with manufacturing sector being the worst hit²⁹. The tertiary sectors, which includes retail, education, consultancy, and financial services, were also significantly affected. Industry sectors such as pharmaceuticals were also impacted because of dependence on other countries for procurement of raw materials and marketing of their products.

Agricultural sector was the least impacted sector during the lockdown as agricultural and allied activities and agriculture marketing operations were exempted from lockdown restrictions. However, due to overlapping of lockdown period and mobility restrictions during harvest, farmers faced shortages of labour, machineries, cash and credit; millions of landless agricultural labourers also lost out on income. Farmers faced difficulties in transportation, cleaning, grading, packaging and loading of crops in *mandis* (wholesale markets) due to labour shortage. Blockades in transportation routes due to lockdown impeded small farmers' access to the market, preventing them from selling their marketable surplus. Inter-state movement of agricultural produce and inputs was also hampered.

²⁷ https://unemploymentinindia.cmie.com/.

²⁸ https://www.business-standard.com/article/economy-policy/more-than-80-indian-households-lost-income-during-lockdown-says-study-120051600071 1.html.

²⁹ https://economictimes.indiatimes.com/news/economy/indicators/how-have-indian-businesses-been-impacted-during-and-after-the-lockdown/articleshow/78382728.cms?from=mdr.

1.4.2. Impact of Covid-19 on the Chhattisgarh economy

While we tried to explore available literature on the impact of the lockdown on Chhattisgarh's economy, very few such studies/reports were found. We found some reports that looked at the impact on the economy through the impact on revenues of the central government and some other reports that pointed out the trends in certain sectors of the economy.

Impact on devolution from central government

Like the union government, states also rely on taxes for most of their revenue. Lower collections in the centre's taxes because of the lockdown will also impact states' share in them³⁰.

Impact of lower economic growth during the lockdown on devolution in 2020-21 (Rs in crore)

		-		
State/UT	Share in	Devolution	Impact of 1	Revenue
	divisible pool		percent point	impact as a
	(%)		drop in	percentage of
			national	state's revenue
			nominal GDP	receipts
			growth rate on	
			devolution	
Chhattisgarh	3.42	26,803	244	0.29%

Impact of lower Gross State Domestic Product (GSDP) growth during the lockdown on State Goods and Services Tax (GST) revenue in 2020-21 (Rs in crore)

State/UT	State GST revenue	Impact of 1 percent	Revenue impact as a
		point drop in	percentage of state's
		nominal GSDP	revenue receipts
		growth rate on State	•
		GST revenue	
Chhattisgarh	10,701	97	0.12%

Average monthly impact of the lockdown on state excise revenue in 2020-21 (Rs crore)

0 1			` /
State/Union	State excise revenue	Average monthly	Monthly revenue
Territory		impact on state	impact as a
		excise revenue	percentage of state's
			revenue receipts
Chhattisgarh	5,200	433	0.52%

Impact of lockdown on sales tax/Valued Added Tax (VAT) revenue in 2020-21 (Rs crore)

State/UT	Loss of sales tax/VAT revenue per	As a percentage of state's revenue
State/O1	lockdown month	receipts

³⁰ https://www.prsindia.org/theprsblog/government-chhattisgarh%E2%80%99s-response-covid-19-pandemic

Impact of Covid-19 on the state economy

Chhattisgarh also entered into a lockdown along with the rest of the nation, during which all offices, institutions, and other activities were to remain closed. Essential services such as medical shops, vegetable shops, petrol pumps, electricity, and water supply services were open. Some of the primary industries of the state such as the mining and manufacturing units resumed their operations soon after. However, their operations were still affected because the mobility and social distancing restrictions that were imposed caused labour shortages resulting into reduced productivity.

While there are no specific reports available for impact on economic sectors in Chhattisgarh, we assume that trends affecting industries will be more or less similar to the national trends. However, there are some positive reports that are specific to Chhattisgarh.

According to various reports, GST collection increased in Chhattisgarh during the current financial year as compared to last year³¹. According to the data released by the Ministry of Finance, GST collection in Chhattisgarh in October 2020 stood at Rs 1,974 crore, which is Rs 404 crore higher than October 2019. Explaining the reason for this strong economic growth, Chhattisgarh government officials said that even during the lockdown, economic activities in rural and forest states continued. The automobile industry, for instance, has experienced good sales even during this financial year in Chhattisgarh, reflecting that people had disposable income. Under RGKNY, 19 lakh farmers of the state have been receiving payment for paddy procurement at regular intervals. This has resulted in availability of purchasing power with the people of the state, thus resulting in reduced impact on the consumption demand. Many of the families were also provided employment through Mahatma Gandhi National Rural Employment Guarantee Act 2005 (MGNREGA) in the state. Of the total number of families getting employment of 100-days across the country, 41% are from Chhattisgarh alone³².

Chhatticgarh	40%	60%	80%	40%	60%	80%
Chhattisgarh	shortfall	shortfall	shortfall	shortfall	shortfall	shortfall
	138	207	276	0.16%	0.25%	0.33%

³¹ https://www.business-standard.com/article/economy-policy/chhattisgarh-sees-31-rise-in-cgst-collection-in-sept-as-compared-to-2019-120100200291_1.html.

³² https://www.newindianexpress.com/nation/2020/jun/03/mgnrega-chhattisgarh-secures-second-spot-in-providing-jobs-during-lockdown-2151737.html.

Sectors such as mining, agriculture, and forestry, which are major income earners for the state, were not as impacted as other industries because of the lockdown. Chhattisgarh had achieved its target for forest produce for the year within the first six months. While mining sector has been impacted due to labour shortage and decline in industrial demand, it has not been impacted as badly as the services sector. Hence, the impact on the state economy is likely to be relatively lesser as compared to states where the service sector plays a more dominant role.

1.4.3. Spread of Covid-19 in Chhattisgarh and links to education and nutrition

The spread of Covid-19 in the state started with the detection of a positive case on 20 March 2020. Figure 1 below shows the growth trend of number of cumulative cases in Chhattisgarh from the start to April 2021. While the growth in number of cases was more or less stable till August 2020, the number went up exponentially after that, as can be seen from the figure. While there was some plateauing in the months of January–March 2021, the number of cases again rose exponentially post that. The share of pandemic load in the state till December 2020 was slightly higher at 2.63% of India's total number of cases, while its population share is 2.11% of India's population. However, the pandemic load increased to 3.07% in April 2021, indicating a severe incidence of Covid-19 in the state.

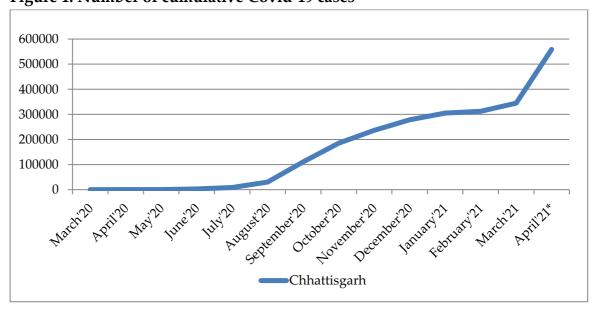


Figure 1: Number of cumulative Covid-19 cases

Source: https://www.thehinducentre.com/resources/article33218301.ece

On 23 March 2020, the GoC declared Corona Virus as a 'Notified Infectious Disease' under the Chhattisgarh Public Health Act, 1949. Further, it notified measures to be taken for prevention of spread of Covid-19 at industries and workplaces. These included restricting the number of employees at workplaces and ensuring sanitisation at workplaces. Guidelines regarding bio-medical waste in quarantine homes and camps were notified. These guidelines provide that all workers involved in waste collection should be provided with personal protective equipment. Further, vehicles carrying such waste should be sanitised with 1% hypochlorite after every trip. As of April 2020, the health minister of Chhattisgarh had stated that the state would start pool sample testing.

The Government of Chhattisgarh (GoC) made a decision to rope in private hospitals in June 2020; until then, Covid-19 treatment was provided by All India Institute of Medical Sciences (AIIMS) Raipur, a government hospital. The private hospitals offer dedicated Covid-19 wards and fixed Covid-19 packages. The packages range from Rs 2,200–Rs 6,750, depending upon the kind of treatment factoring general ward, Intensive Care Unit (ICU), and treatment with and without ventilators. Around 250 hospitals have been included. These private hospitals are those that are empanelled under the state's ambitious Dr Khubchand Baghel Health Assistance Yojana and Ayushman Bharat Yojana for treatment of Covid-19 in view of the rapid increase in Covid-19 patients in the state. The hospitals are to have fifty dedicated beds out of which ten percent of the beds would be for ICUs. As per the guidance of Indian Council for Medical Research (ICMR) only confirmed cases would be admitted and not suspects³³.

As of September 2020, Chhattisgarh had 29 dedicated Covid-19 hospitals and 221 care centres, which have the capacity of 29,111 beds that include 406 ICU beds and 370 High Dependency Unit (HDU) beds. For these facilities, the state's Health and Family Welfare Department had earlier sought Rs 821.93 crore from the centre, but only Rs 85.19 crore had been sanctioned³⁴.

-

³³ https://timesofindia.indiatimes.com/city/raipur/chhattisgarh-government-ropes-in-private-hospitals-in-covid-fight-fixes-tariff/articleshow/76476672.cms.

³⁴ https://www.thehindu.com/news/national/other-states/chhattisgarh-cm-baghel-asks-centre-for-over-700-crore-for-covid-19-hospitals/article32588294.ece.

The disease and lockdown also impacted education in the state, as elsewhere in the country, as all schools were shutdown. Chhattisgarh witnessed an increase in dropouts from schools³⁵. Since March 2020, Chhattisgarh has been facing a shortage of teachers in government schools owing to the lockdown and the nature of non-teaching work that is assigned to the teachers. As per the Department of Education, Chhattisgarh, information technology-based E-Class rooms and labs are being set up in 4,330 higher secondary and high schools in the state. Arrangements are being made in these schools of the state to provide high quality, advanced curriculum-based education with modern technology. According to officials of the school education department, first phase establishment of digital classrooms in 768 schools of seven districts (Raipur, Balod, Bemetara, Mahasamund, Rajnandgaon, Durg and Dhamtari³⁶) in the state has been completed.

The lockdown and children dropping out of schools have also been suspected to have impacted the nutritional status of children given that schools are not merely centres of learning but are also nourishing centres for a good number of children. According to a report, 115 million children are on the verge of malnourishment due to the interruption of mid-day meals, of which children from Dalit and Adivasi communities are most at risk, given their dependence on Mid-Day Meals (MDM) for nutrition.³⁷

1.5. Analytical Frame: Guiding Principles

There is almost total agreement among economists that during a recession, the most important macroeconomic intervention has to be measures that push generation of aggregate demand. This calls for expansionary public expenditure and given that the state is already facing revenue contraction, the challenge lies in gaining access to resources for funding public spending. A linked challenge for states or any sub-national entity is not only the lack of control over resources but also an absence of complete autonomy in terms of policy intervention. For instance, GOI controls both direct taxes and a bulk of indirect taxes in the post-GST regime, and states have no control over the

³⁵ https://www.indiatoday.in/education-today/news/story/school-drop-out-rate-increased-in-chhattisgarh-amid-covid-19-pandemic-1723876-2020-09-21.

³⁶ https://government.economictimes.indiatimes.com/news/education/over-4000-govt-schools-to-have-smart-classrooms-in-chhattisgarh/74022891.

³⁷ https://www.cbgaindia.org/wp-content/uploads/2020/09/Impact-of-COVID-19-on-School-Education-in-India.pdf.

rates of taxation. Similarly, a core-sector dependent state like Chhattisgarh is highly dependent on other states for generating demand for their goods, be it power, coal, or rice. This means in addition to heavy dependence on the union government for transfer of taxes and grants, the revival of the state is also linked with the revival of other states. Therefore, our suggestions here take note of these realities and include diverse action points, ranging from focusing on certain sectoral developments, asking for process reengineering, credit access, and subsidy to strengthening market linkages for small industries.

An additional concern has been that of pushing growth while also addressing the inequality issues. In other words, a strong push to inclusive growth is needed in a manner that the rights of all vulnerable segments are protected, and opportunities are created for all segments. Special attention needs to be paid to women, children, tribal, and Dalit population groups. We have also kept this in mind while arriving at and presenting our suggestions.

The economic shock caused by the pandemic has deepened the crisis of unorganised sector that started with demonetisation, but it has also created a space for certain policy and institutional reforms that the state needs to take cognisance of and act upon.

We have undertaken the revenue analysis and projected the revenue first, followed by the analysis of GSDP, including the projections. Certain reasons explain why we decided to do this. Sector-wise GSDP estimates were not available for the year 2020-21³⁸. Consultations with the departments indicated different patterns of performance in sectors of agriculture, forestry, minor irrigation, etc. owing to policy changes such as RGKNY, higher MGNREGA works, Godhan yojana, and their impact on revenues of the state, including on GST collections³⁹. Some evidence exists to establish that there is a need to understand the GST pattern in greater detail to connect it with the economic

³⁸ The data on crop production and prices for the last season/year was also not available to us.

 $[\]frac{39}{\rm http://www.businessworld.in/article/Chhattisgarh-Andhra-record-highest-spike-in-October-s-GST-collection/02-11-2020-338390/.}$

 $[\]underline{https://www.sify.com/finance/chhattisgarh-records-6-higher-gst-revenue-collection-news-news-ujcrkShgaighj.html.}\\$

activities and consumption pattern⁴⁰. Moreover, the policy tweaks relating to land revenue administration, stamps and registration fees, and also electricity and excise had implications for the GSDP. The revenue dent at the GOI level was about 20% and similar impact was estimated for the state with respect to tax share⁴¹. While the revised debt limit was available and used to estimate the total receipts⁴², it was later mapped to sectors to estimate the GSDP.

We have also undertaken a detailed examination of the financial sector with special reference to access to credit for cottage and small-scale initiatives. We also argue for linking diverse objectives and enabling equality goals, while also ensuring growth and infrastructure development.

1.6. Structure of the report

The rest of the report is divided into four main chapters. The second chapter discusses the trends and patterns in the revenue receipts and presents three scenarios of revenue estimates for 2021-22. The third chapter presents a sectoral and sub-sectoral analysis of the economy, leading to sectoral mapping of revenue receipts, and thereafter forecasting three scenarios (realistic, pessimistic, and optimistic) for the GSDP estimates for 2021-22. This is followed by a chapter on the analysis of expenditure patterns and identification of expenditures that need to be protected, especially from the perspective of social protection and protecting the rights of the vulnerable. The last chapter provides a set of recommendations for enhancing the revenue and revitalising the economy while taking note of existing policies and interventions.

42

https://www.prsindia.org/sites/default/files/parliament or policy pdfs/State%20Finances 20 20-21.pdf. p. 23.

⁴⁰ Analysing the Impact of GST on Tax Revenue in India: The Tax Buoyancy Approach.

https://www.researchgate.net/publication/338259747 Analysing the Impact of GST on Tax Revenue in India The Tax Buoyancy Approach.

 $^{^{41}\,\}underline{http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx.}$

Chapter 2: Revenue Receipts: Past trends and Forecast for the present year

2.1 Revenue receipts: past trends

The revenue analysis covers the period of ten years, starting from 2011-12 to 2020-21 Budgeted Estimates (BE) with 2019-20 Actuals. This section delves deep into the growth of revenues of the state over years. Important shifts that have happened during the period 2011-12 to 2020-21 include the implementation of 14 Finance Commission (FC) recommendations, which increased the tax share to states from 32% to 42% and reduced the share of GOI in the Centrally Sponsored Schemes (CSS) across sectors. The sharing formula has changed to 60: 40 (GOI: State) for all states, except for northeastern states where the share is 90:10. Some schemes have had higher components of GOI, which implied that states had to make up for the deficit created by the reduced GOI share. At the same time, the increased tax share had the potential of enabling the states to prudently invest according to the requirements of the state. The other important shift influencing the revenues of the state in this period was the implementation of GST from July 2017.

The analysis of the GST collection pattern for the period July 2017 to June 2017 shows that the relationship between tax buoyancy and the GST is not direct. After the introduction of GST, the tax revenue has become less responsive to the changes in GDP. The GST is less responsive to GDP and attempts to increase GDP through public expenditure may not translate into higher GST collections. Hence, there is a need to understand the GST pattern in greater detail to connect it with the economic activities and consumption pattern⁴³. This is the reason why we are undertaking the revenue analysis first and linking it the GSDP analysis later.

2.1.1. Analysis of Total Revenue

The total revenue of the state in nominal terms has grown from Rs 25,577 crore in 2011-12 to Rs 83,718 crore during 2019-20 at an annual average growth rate of 15%. The average share of the tax revenue, non-tax, and debt

⁴³ Analysing the Impact of GST on Tax Revenue in India: The Tax Buoyancy Approach. https://www.researchgate.net/publication/338259747 Analysing the Impact of GST on Tax Revenue in India The Tax Buoyancy Approach.

was 32%, 11% and 13%, respectively. The share of GIA and tax share stood at 26% and 17%, respectively 44 .

The share of own tax and non-tax revenues has declined over years from 54% to 35% (Figure 2). The share of GIA and tax share from GOI together has almost remained same at 40%, while the share of debt has increased significantly from 2% to 23% in 2019-20.

Table 1: Components of Revenue over years (Rs in Crore)

Sources of Revenue	201 1-12 AC	201 2-13 AC	201 3-14 AC	201 4-15 AC	201 5-16 AC	201 6-17 AC	201 7-18 AC	201 8-19 AC	201 9-20 AC	202 0- 21 BE
	10,7	13,0	14,3	15,7	17,0	18,9	19,8	21,4	22,1	26,1
Tax Revenue	12	34	43	07	75	45	95	27	18	55
Non-Tax	4,05	4,61	5,10	4,93	5,21	5,66	6,34	7,70	7,93	9,21
Revenue	8	6	1	0	5	9	0	3	4	5
	6,32	7,21	7,88	8,36	15,7	18,8	20,7	23,4	20,2	26,8
Tax Share	0	8	0	3	16	09	55	59	06	03
Grant in Aid										
(GIA) and	4,77	4,71	4,72	8,98	8,06	10,2	12,6	12,5	13,6	21,6
Contribution	6	0	6	8	2	62	57	06	11	58
s										
Non-Debt	1,28	1,54	1,65							
Capital	9	6	0	199	300	175	142	168	262	300
Receipts	9	O	U							
	421	2,05	3,93	6,44	7,25	5,48	9,65	14,3	19,5	15,7
Debt	441	8	2	0	1	0	2	70	88	01
	27,5	33,1	37,6	44,6	53,6	59,3	69,4	79,6	83,7	99,8
Total	77	82	32	27	19	40	42	33	18	32

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

⁴⁴ All tables and graphs in this chapter are based on the analyses of data from state budget documents unless otherwise mentioned.

40

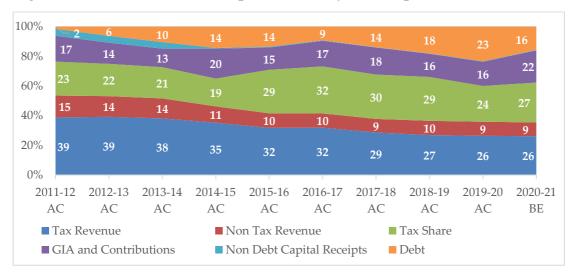


Figure 2: Share of revenue components over years (in percent)

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

The growth of tax revenues has declined over the years from 10% in 2013-14 to 3% in 2019-20. A similar trend was observed in the tax share, which peaked in 2015-16 (the impact of 14th FC) and reduced by 14% in 2019-20. The non-tax growth, which recorded a steady growth for the period 2015-16 to 2018-19, declined to 3% in 2019-20. The GIA saw a huge dip in 2015-16 (-10%) and again in 2018-19 before it grew by 9% in 2019-20 (Figure 3).



Figure 3: Year on Year Growth of Revenue Components over years

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

The growth of debt, which peaked in 2012-13 and then went on a decline till 2016-17, picked up significantly during 2017-18 and recorded a 36% growth in 2019-20. In the last three years since 2017-18, the growth of debt has been higher compared all the other sources of revenues of the state—this also coincides with the GST era.

2.1.2. Analysis of Tax Revenue

As discussed earlier, the tax revenues have grown modestly at 3% in the year 2019-20, while the average growth rate for the period 2011-12 to 2019-20 stood at 10% and the average growth rate for the period 2017-18 to 2019-20 stood at 5%. Of the own tax revenue, the important components are State GST (SGST) (35%), sales tax (21%), excise (21%), duties on electricity (8%), vehicle tax (6%), and stamps and registration (6%) (Table 2).

Table 2: Components of Own Tax over years (Rs in crore)

Tax Revenue	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	2020
	12	13	14	15	16	17	18	19	20	-21
	AC	AC	AC	AC	AC	AC	AC	AC	AC	BE
Goods and										
Passengers	826	953	945	982	1,039	1,338	478	55	41	3
tax										
Electricity	638	861	1,020	1,313	1,373	1,495	1,689	1,790	1,837	2,20
	030	001	1,020	1,313	1,373	1,493	1,009	1,790	1,007	0
Excise	1,597	2,486	2,549	2,892	3,338	3,444	4,051	4,489	4,952	5,20
	1,377	2,400	2,047	2,072	3,330	J, 111	4,001	4,407	4,732	0
Goods and										10,7
Services Tax	0	0	0	0	0	0	4,387	8,203	7,895	01
(GST)										UI
Hotel	3	4	5	6	7	9	4	1	1	1
Receipts Tax	3	T	3	U	,		н	1	1	1
Land	271	234	226	332	364	504	446	488	552	600
Revenue	271	234	220	332	504	504	110	100	332	000
Other Taxes	16	20	23	26	29	29	10	0	0	0
Professional	826	953	945	982	1,039	1,338	478	55	41	3
tax	020	755	743	702	1,007	1,556	470	3	41	3
Stamps and	638	861	1,020	1,313	1,373	1,495	1,689	1,790	1,837	2,20
Registration	030	001	1,020	1,515	1,575	1,470	1,007	1,7 70	1,007	0
Trade/Sales	1,597	2,486	2,549	2,892	3,338	3,444	4,051	4,489	4,952	5,20
	1,077	2,400	2,047	2,072	3,330	0,444	+,001	±,±0,7	1,702	0
Vehicle Tax	0	0	0	0	0	0	4,387	8,203	7,895	10,7
							±,007	0,200	7,070	01
Total	3	4	5	6	7	9	4	1	1	1

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

The growth of these important components of tax revenues over year is presented in the Table 3. The excise duties, duties on electricity as well as vehicle tax have grown significantly over the last three years. Land revenue and revenues from stamps and registration have recorded a higher growth during 2019-20 owing to the changes in the policies relating to land registration. The land guidance values were reduced by 30%, while the land registration charges were increased from 7.05% to 10.25% apart from allowing smaller plots to get registered⁴⁵. The excise duties were hiked during the current year as well, at 10% for foreign liquor and Rs 10/bottle for country made liquor, which increased the revenues for the state. The GST reduced by 4% during the year 2019-20 compared to previous year and has significant bearing on the revenues of the state.

Table 3: Growth of Own-Tax components over years

Tax Revenue	2012- 13 AC	2013- 14 AC	2014- 15 AC	2015- 16 AC	2016- 17 AC	2017- 18 AC	2018- 19 AC	2019- 20 AC
Goods and								
Passengers tax	15%	-1%	4%	6%	29%	-64%	-89%	-26%
Electricity	35%	19%	29%	5%	9%	13%	6%	3%
Excise	56%	3%	13%	15%	3%	18%	11%	10%
Goods and								
Services Tax								
(GST)								-4%
Hotel Receipts								
Tax	26%	28%	23%	12%	20%	-58%	-73%	-37%
Land Revenue	-13%	-3%	47%	10%	38%	-11%	9%	13%
Other Taxes	25%	18%	11%	11%	1%	-65%	-97%	3%
Professional tax	-65%	-14%	-71%	-1%	-11%	-72%	-4%	7%
Stamps and								
Registration	13%	3%	4%	16%	2%	-1%	-7%	47%
Trade/Sales	15%	15%	6%	6%	11%	-35%	-37%	-4%
Vehicle Tax	18%	10%	8%	18%	19%	19%	2%	6%
Total	21%	10%	10%	9%	11%	5%	8%	3%

 $\textbf{Source:} \ \textbf{Authors'} \ \textbf{calculations} \ \textbf{using Finance Department, Government of Chhattisgarh.}$

Note: AC stands for Actuals.

Though the revenues through the tax share from GOI has increased over years, their growth has reduced over years since 2015-16 (Tables 4 and 5). The growth of tax share was 20%, 10%, and 13% for the years 2016-17, 2017-18 and

 45 https://www.positiveindia.net.in/2019/07/24/cm-baghel-reduces-market-price-of-land-by-30-percent/.

44

2018-19, while it recorded a 14% reduction in the year 2019-20, at about Rs 3,500 crore.

Table 4: Components of Tax Share over years (Rs in Crore)

Tax share	2011-	2012	2013	2014	2015	2016	2017	2018	2019	2020
	12	-13	-14	-15	-16	-17	-18	-19	-20	-21
	AC	AC	AC	AC	AC	AC	AC	AC	AC	BE
Central	709	815	908	764	2,070	2,957	2,189	1,105	842	1,09
Excise										3
Corporati	2,488	2,593	2,650	2,920	4,950	6,020	6,353	8,157	6,261	8,24
on tax										5
Customs	1,096	1,199	1,286	1,353	2,504	2,589	2,094	1,663	1,308	1,67
										3
Goods	0	0	0	0	0	0	2,386	6,251	6,088	8,11
and										3
Services										
Tax										
(GST)										
Income	1,264	1,552	1,745	2,085	3,455	4,184	5,365	6,007	5,694	7,66
tax										6
Other	0	0	0	0	0	0	0	42	0	0
Taxes										
Service	754	1,054	1,284	1,233	2,736	3,046	2,369	230	14	14
Tax										
Wealth	709	815	908	764	2,070	2,957	2,189	1,105	842	1,09
Tax										3
Total Tax	2,488	2,593	2,650	2,920	4,950	6,020	6,353	8,157	6,261	8,24
Share										5

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

Table 5: Growth of components of Tax Share over years

Tax share	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-
	13	14	15	16	17 AC	18	19 AC	20
	AC	AC	AC	AC		AC		AC
Central	15%	11%	-16%	171%	43%	-26%	-50%	-24%
Excise								
Corporation	4%	2%	10%	69%	22%	6%	28%	-23%
tax								
Customs	9%	7%	5%	85%	3%	-19%	-21%	-21%
Goods and							162%	-3%
Services Tax								
(GST)								
Income tax	23%	12%	20%	66%	21%	28%	12%	-5%
Other Taxes								
Service Tax	40%	22%	-4%	122%	11%	-22%	-90%	-94%
Wealth Tax	-54%	66%	8%	-88%	1398%	-101%	-	-107%
							1668%	
Total Tax	14%	9%	6%	88%	20%	10%	13%	-14%
Share								

Source: Authors' calculations using data from Finance Department,

Government of Chhattisgarh.

Note: AC stands for Actuals.

2.1.3. Analysis of Non-Tax Revenue

Non-tax revenue forms an important source of revenue to the state. The revenue from mining accounts for about 71% of the revenues under this category followed by irrigation accounting for 12% (Table 6). The forestry sector and receipts from interests, dividend and profits account for about 4%. Non-tax revenues recorded a good growth during the years 2016-17, 2017-18 and 2018-19 at 9%, 12% and 21% over the previous year, respectively, largely driven by mining sector performance (Table 7). However, the growth for the period 2019-20 was lower at 3%. Mining recorded a growth of 1% in 2019-20, while the revenues from irrigation and forestry recorded 5% growth⁴⁶.

⁴⁶ Sudden floods at coalmines had affected production in 2019, which had also in turn impacted the power production in the state. This could be one reason for reduced growth rate for revenue in the mining sector.

Table 6: Components of Non-Tax revenue over years

Non-Tax Revenue	201 1-12 AC	201 2-13 AC	201 3-14 AC	201 4-15 AC	201 5-16 AC	201 6-17 AC	201 7-18 AC	201 8-19 AC	201 9-20 AC	202 0-21 BE	Ave Sha re (%)
Economic	3,70	4,04	4,49	1,15	4,80	5,22	5,85	7,12	7,24	8,55	91
Services	8	9	0	5	1	8	9	0	0	1	91
General Services	68	129	74	112	150	137	142	245	248	293	3
Interest Receipts, Dividends and Profits	217	245	395	118	114	158	185	191	235	196	4
Social Services	82	65	123	126	121	146	155	147	210	174	2
Total	407 4	448 8	508 2	151 0	518 6	566 9	634 0	770 3	793 4	921 5	
Forestry	342	364	406	349	389	405	291	237	249	700	6
Irrigation	529	431	756	545	622	624	589	697	730	1,09 5	12
Mining	2,74 5	3,01 0	3,23 6	208	3,71 0	4,14 2	4,91 1	6,11 0	6,19 6	6,67 0	71

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals and BE stands for Budgeted Estimates.

Table 7: Growth of components of Non-Tax revenue over years

Non-Tax Revenue	2012-13 AC	2013-14 AC	2014- 15 AC	2015- 16 AC	2016- 17 AC	2017- 18 AC	2018 -19 AC	AC
Economic								
Services	9%	11%	-74%	316%	9%	12%	22%	2%
General								
Services	90%	-43%	51%	34%	-9%	4%	73%	1%
Interest								
Receipts,								
Dividends and								
Profits	13%	61%	-70%	-3%	38%	17%	3%	23%
Social Services	-21%	90%	2%	-3%	20%	6%	-5%	43%
Total	10%	13%	-70%	243%	9%	12%	21%	3%
							-	
Forestry	7%	12%	-14%	12%	4%	-28%	19%	5%
Irrigation	-19%	76%	-28%	14%	0%	-6%	18%	5%
Mining	10%	7%	-94%	1681%	12%	19%	24%	1%

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals.

2.1.4. Past trends of revenue receipts: Key takeaways

- The tax revenue growth has been very modest at 5% in the last three years. This is largely due to the lower growth of GST (negative growth of 4% in 2019-20), while the increase in the rates of excise and electricity duties, coupled with policy changes in the registration of land, has led to growth in tax revenue which is likely to continue in 2020-21 as well.
- The key components of non-tax revenues, which include mining, irrigation and forestry, have recorded positive growth in 2019-20 and this is likely to continue in 2020-21 as well.
- The tax share from GOI, which was growing at over 10%, has recorded 14% reduction in 2019-20 and is likely to change in 2020-21. The period of 15th Finance Commission (FC) recommendations for the year 2020-21 have increased the share of taxes for the state from 1.29% to 1.4%. The estimates for the year 2020-21 was Rs 26,803 crore, recording an increase of 33% over the year 2019-20, which stood at Rs 20,206 crore⁴⁷.
- The GIA from GOI grew in the years 2016-17 and 2017-18, while it decreased by 1% in 2018-19 and again grew by 9% in 2019-20; GIA is also likely to record growth in the year 2020-21.

2.2. The impact of Covid-19 on revenue receipts2.2.1. Impact of Covid-19 on revenue: what we already know

The incidence of Covid-19 started in the early March 2020 followed by the imposition of lockdown on 24 March 2020. Sectors such as manufacturing, electricity, transportation, hotels and restaurants, and construction suffered severe setbacks and, in turn, impacted the revenues of the state in the year 2020-21. The sectoral impact is described in detail in the next chapter. Economic activities resumed gradually as restrictions for movement and business were eased by June 2020. With reduction in economic activities across the country, the GDP reduced by 22.6% for Q1 of 2020-21, and 4% for Q2 (- 23.9% and -7.5%) at constant prices⁴⁸. The GST collections in the country also reduced accordingly. The gross tax revenue collections of GOI for the year till November 2020 (April–November 2020) saw a reduction of 13%⁴⁹,

⁴⁷ https://www.prsindia.org/sites/default/files/budget_files/State%20Budget%20Analysis%20-%20Chhatisgarh%202020-21.pdf, p. 7.

⁴⁸ http://mospi.nic.in/data.

⁴⁹ http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx.

while the non-tax revenue saw a decrease of 47% and the tax assignment to states reduced by 21% (Rs 3.34 lakh crore against Rs 4.21 lakh crore in 2019-20 for the same period)⁵⁰.

In Chhattisgarh, good growth in agriculture along with local employment was created through the schemes like RGKNY, Godhan Yojna and extension of community rights on forests⁵¹ to families, which led to efficient resource use, apart from their contribution in securing forest boundaries and enabling consumption of nutritious food. The state has been one of the largest users of the MGNREGA scheme in the post-pandemic period. The GOI has accorded approval for increase of person days from 13.5 crore in the year 2019-20 to 15 crore person days this year⁵². The MGNREGA⁵³ provided work for 100 days and income to 1.21 lakh families in the state till November 2020. Growth in agriculture and enhanced MGNREGA activities have acted as a good cushion in the rural areas during the pandemic, have helped the state to recover quickly, and have helped usher consumer demand, which has a bearing on tax revenues of the state.

The GST collections in the state for June 2020 witnessed 22% growth over the previous year⁵⁴. Similar trend was observed for August 2020 (with 6% growth⁵⁵), September 2020 (with 24% growth⁵⁶), October⁵⁷ (with 26% growth),

⁵⁰ http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx.

⁵¹ The next chapter provides details of these schemes.

 $^{^{52}\} https://www.newindianexpress.com/nation/2020/aug/29/chhattisgarh-gets-in-principle-nod-for-upping-man-days-under-mgnrega-2189963.html.$

⁵³ https://www.deccanherald.com/national/north-and-central/over-121-lakh-families-in-chhattisgarh-got-work-under-mgnrega-amid-pandemic-920949.html.

⁵⁴ http://www.businessworld.in/article/Chhattisgarh-witnesses-22-per-cent-hike-in-GST-collection/02-07-2020-293390/.

⁵⁵https://www.gstsuvidhakendra.org/chhattisgarh-gst-collection-increased-by-6/#:~:text=In%20Chhattisgarh%2C%20there%20has%20been,Rs%201994%20crore%20in%20August.

⁵⁶ https://www.business-standard.com/article/economy-policy/chhattisgarh-sees-31-rise-in-cgst-collection-in-sept-as-compared-to-2019-

 $^{^{57}\} https://timesofindia.indiatimes.com/city/raipur/chhattisgarh-tops-in-gst-collection-shares-no-1-slot-with-$

andhra/articleshow/79015962.cms#:~:text=According%20to%20data%20released%20by,higher%20than%20October%20last%20year.

and November (with similar collections as previous year⁵⁸). The GST administration has improved with e-invoicing, which has led to better compliance and has had a positive impact on collections as well.

2.2.2. Revenue Receipts Forecast: Three Scenarios

Based on insights gained through consultations and the trend of revenues of the actual RR for the year 2019-20 and for the period April–November 2020 (http://finance.cg.gov.in/), the likely increase in the tax revenues for the fourmonth period December 2020 to March 2021 and the decrease in tax share and GIA receivables from GOI along with the likely debt increase were projected to arrive at three possible scenarios. These three scenarios are based on the detailed assumptions that have been framed using the analysis of revenue, insights gained through consultations, and the review of relevant literature (Table 8).

Table 8: Assumptions for Estimation of Revenue scenarios of the state

SL.	Components of	Rationale
No.	Revenue: assumptions	Kationale
1.		Given the growth in five months (July to November 2020),
	State Goods and	the trend is likely to continue, and GST tax collections would
	Services Tax (GST)	improve though not enough to offset the complete loss in the
		first quarter.
2.	Tax revenues from	Special corona tax at 10% for foreign liquor and Rs 10/bottle
	Excise will increase.	for country made liquor
3.	Tax revenues from	Duties have increased especially for non-
	electricity will increase.	domestic/commercial use
4.	Taxes on vehicles and	Rates have been increased (on petroleum products and
	sales will increase.	others)
5.	Minor irrigation	Ground water extraction for commercial purposes is hiked by
	revenues will increase.	50%
6	Mining revenues will	Sand mines are auctioned by policy decision
	increase.	Infrastructure and environment cess increased.
7.	Stamps and	30% reduction in guidance value increase in registration
	Registration revenues	charges and allowing registration of small plots.
	will increase.	Diversion rent increased

⁵⁸ https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1677332.

SL.	Components of	Rationale
No.	Revenue: assumptions	Kationale
8.	Tax share from	20.7% reduction in assignment of tax share to states.*
	Government of India	
	(GOI) will reduce.	
9.	Grant in Aid (GIA) will	Owing to the reduced tax collection, post November schemes
	also reduce.	would get reduced funding except for the health sector.
10	Debt (borrowings).	The credit limit has been increased from 3% of Gross State
		Domestic Product (GSDP) to 5% of GSDP under Fiscal
		Responsibility and Budget Management (FRBM) Act. By
		opting for option 1 of GOI, to receive loan to be paid from the
		compensation cess, the state has got an additional funding of
		Rs 3,852 crore for the current fiscal.
		The borrowing limit for 2020-21 has been increased to Rs
		17,918 crore.**

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

The revenue patterns of the months August–November 2020 were averaged and used as a ratio to the month of November 2020 to arrive at the component wise revenue factors on a monthly basis. This was used to project revenues for the months December 2020 to March 2021. This was used to project the realistic scenario. The ratio of total revenues for year 2019-20 to the total revenues for the period April–November 2019 was taken to arrive at a factor, and this was used to compile the pessimistic scenario. The factors for each of the components were also arrived at using the same method. The ratio of average total revenues/revenue components for the years 2017-18 and 2018-19 to the average total revenues/revenue components for the period April–November 2017 and 2018 were used to compile the optimistic scenario. The components of debt and non-debt capital receipts were assumed to be similar for all the scenarios

^{*} http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx

^{**}Unstarred Question No. 206, September 14, 2020, Lok Sabha; Ministry of Finance https://www.prsindia.org/sites/default/files/parliament_or_policy_pdfs/State%20 Finances_2020-21.pdf. p 23.

Table 9: Revenue Receipts: Three Scenarios for the State

SL.	Scenario Estimated (covering Tax revenues, Tax	Comments
No	share, Grant in Aid and Non-Tax revenue)	Comments
1.	The last four months of the year would behave	Realistic
	differently component wise and would grow at a	
	monthly average for last two to four months.	
2.	The last four months of the financial year would	Pessimistic
	behave as influenced by the performance of first eight	
	months (similar to 2019-20, which had lowest revenue	
	growth in last four years).	
3.	The last four months would behave as average of	Optimistic
	same period for the past three years.	

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: Debt and non-debt capital receipts are not considered for projections.

Scenario 1 (Realistic): Factor from monthly collections (averaged between previous two to eight months) of 2020-21 to arrive at monthly collections for next four months.

The collections for the period December 2020 to March 2021 across tax revenue, tax share, and non-tax revenue is likely to move up marginally (factor hovers over 1 marginally), while the tax share is expected to go up owing to changes in the tax share as per recommendations of 15th FC for the year 2020-21 (has a factor of 1.34). The overall revenue reduction would be 6% from the previous year, amounting to Rs 4,960 crore, which is 5% of the budgeted estimates made for this year.

Table 10: Factor estimate for the Scenario 1

Sources of Revenue	2020-21 BE	Up to Novembe r 2020	Monthly estimate	Average period for previous	Factor 2
Tax Revenue	26,132	12,568	2,009	2 months	1.040
Non-Tax Revenue	9,215	3,843	570	2 months	1.005
Tax Share	26,803	11,430	1,354	4 months	1.060
Grant in Aid (GIA) and Contributions	21,658	7,328	916	8 months	1.344
Non-Debt Capital Receipts	300	78	10	8 months	1.000
Debt	15,701	10,341	1,894		
	99,810	45,588	6,753		

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: BE stands for Budgeted Expenditure.

Table 11: Estimate of Revenues for the year 2020-21 under Scenario 1

Sources of Revenue	2020- 21 BE	Up to November 2020	December 2020	January 2021	February 2021	March 2021	2020-21	Change over previous year
Tax Revenue	26,132	12,568	2,090	2,173	2,260	2,351	21,442	-3%
Non-Tax	9,215	3,843	573	575	578	581	6,150	-29%
Revenue								
Tax Share	26,803	11,430	1,435	1,521	1,612	1,709	17,706	-14%
Grant in Aid	21,658	7,328	1,231	1,655	2,224	2,988	15,426	12%
(GIA) and								
Contributions								
Non-Debt	300	78	10	10	10	10	117	-123%
Capital								
Receipts								
Debt	15,701	10,341	1,894	1,894	1,895	1,894	17,918	-9%
	99,810	45,588	7,232	7,828	8,579	9,532	78,759	-6%

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

Scenario 2 (Pessimistic): Factor for last four months as a proportion of collections from first eight months of the year 2019-20.

This scenario envisages the likely impact of Covid-19 on the economy as a whole for the period from December 2019 on the overall tax collections on GOI and its impact on tax share and GIA.

Table 12: Revenues for 2019-20 (last four months and factor for Scenario 2)

Sources of Revenue	2019-20 AC	Up to Nov 2019	proportion	Factor 1
Tax Revenue	22,118	13,970	63%	1.58
Non-Tax Revenue	7,934	4,400	55%	1.80
Tax Share	20,206	13,014	64%	1.55
GIA and Contributions	13,611	8,038	59%	1.69
Non-Debt Capital Receipts	261	127	49%	2.05
Debt	19,588	7,948	41%	2.46
	83,718	47,498	57%	1.76

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

The estimated revenues show a decline of 10% in tax revenue, 13% reduction in non-tax revenue, 12% reduction in tax share, and a 9% reduction in GIA and contributions from GOI.

Table 13: Estimate of Revenues for the year 2020-21 for Scenario 2

Sources of Revenue	2020- 21BE	Up to Nov 2020	Factor 1	Estimate 1	Change over 2019-20
Tax Revenue	26,132	12,568	1.58	19,898	-10%
Non-Tax Revenue	9,215	3,843	1.80	6,930	-13%
Tax Share	26,803	11,430	1.55	17,747	-12%
GIA and	21,658	7,328	1.69	12,409	-9%
Contributions					
Non-Debt Capital	300	78	2.05	160	-39%
Receipts					
Debt	15,701	10,341	2.46	17,918	-9%
	99,810	45,588		75,061	-10%

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

Scenario 3 (Optimistic): Factor for last four months as a proportion of collections from the first eight months averaged for the years 2017-18 and 2018-19.

The scenario envisages the pattern of the receipts during the last four months. The tax revenue, non-tax revenue, and tax share would decrease by 7%. 29% and 1%, respectively, while the GIA could increase by 17%.

Table 14: Factor estimate for the Scenario 3

Sources of Revenue	Factor 1 (2017-18)	Factor 2 (2018-19)	Factor Average
Tax Revenue	1.682	1.597	1.640
Non-Tax Revenue	1.498	1.692	1.595
Tax Share	1.537	1.763	1.747
Grant in Aid (GIA) and			
Contributions	1.807	2.673	2.240
Non-Debt Capital Receipts	4.897	10.533	7.715

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

Table 15: Estimate of Revenues for the year 2020-21- under Scenario 3

Sources of Revenue	2020-21	Up to Nov	Factor	2020-21	%
Sources of Revenue	BE	2020	Average	2020-21	Change
Tax Revenue	26,132	12,568	1.640	20,606	-7%
Non-Tax Revenue	9,215	3,843	1.595	6,131	-29%
Tax Share	26,803	11,430	1.747	19,965	-1%
GIA and Contributions	21,658	7,328	2.240	16,413	17%
Non-Debt Capital	300	78		602	
Receipts	300	70	7.715	002	57%
Debt	15,701	10,341		17,918	-9%
	99,810	45,588		81,635	-3%

Source: Authors' calculations using data from Finance Department, Government of Chhattisgarh.

Of all the scenarios, Scenario 1, which estimates the own tax reduction by 3%, reduction in non-tax revenues and tax share by 29% and 14%, respectively, with an increase of GIA by 12% over the previous year 2019-20, is the most realistic and closer to the calculations from consultations.

2.3. Revenue potentials and debt possibilities

It is important to reiterate that the share of own tax and non-tax revenues has declined over years from 54% to 35%. The share of GIA and tax share from GOI together has almost remained same at 40%, while the share of debt has increased significantly from 2% to 23% in 2019-20, implying that the growth of debt has been higher compared all the other sources of revenue. Owing to shortfall in tax and non-tax revenues, debt is likely to increase and may exceed the revised limit of Rs 17,918 crore for the year 2020-21. As per the FRBM Act, the revenue deficit should be zero, the fiscal deficit should be less than or equal to 3% of GSDP, and the debt is to be less than or equal to 25% of GSDP.

The 14th FC recommended that the fiscal deficit can be relaxed by another 0.5% if the state adheres to the following two conditions⁵⁹:

1. If the state has a debt/GSDP ratio of less than 25% in the preceding year, a 0.25% fiscal deficit is allowed.

⁵⁹

2. The state is eligible for another 0.25% of fiscal deficit if the interest payments are less than or equal to 10% of revenue receipts in preceding year.

The fiscal deficit limit is now enhanced to 5% owing to pandemic. While the state needs to exercise caution in relying on excessive debt to avoid future interest burden, the state qualifies for this additional provision despite an increase in debt liabilities. Therefore, as we argue in subsequent sections, the state can think of additional debt with a concrete plan of action for productive expenditure with its growth as well as distributive potential.

Chapter 3: Gross State Domestic Product (GSDP): Past trends and Forecast for the present year

3.1 GSDP growth: past trends

The budgeted estimates of the GSDP of Chhattisgarh in 2020-21was Rs 3.62 trillion in current prices, which is a 10% growth over the previous year. In constant prices, the state GDP grew at a rate of 5.3% in 2019-20 over the previous year, and at a cumulated rate of 6.25% between 2015-16 and 2019-20. The sectoral share of the GSDP shows that the industrial sector contributed the maximum to GSDP, with a share of 41.1% in 2019-2020; this was followed by services at 36.9% and agriculture at 22.1% (Figure 4). However, there has been a steady decline in industry sector over the years, with an increase in the share of the services sector starting in 2016-17 and agriculture from 2017-18.

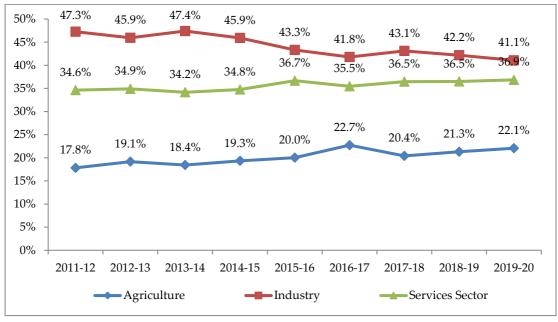


Figure 4: Share of subsectors in Gross State Domestic Product (GSDP)

Source: Chhattisgarh State Economic Survey and State Domestic Product Report.

When we look at the year-on-year growth rates across the sectors, we see a decline in growth rates starting in 2017-18—this is largely due to the effects of demonetisation. The growth rate in real terms in agriculture and industries in 2016-17 was 17.7% and 9.9%, respectively; in 2017-18, it declined to -6.8% and 2.9%, respectively. In 2019-20, the services sector grew the highest at 6.6%, whereas the industries sector grew by 4.9% and the agricultural sector grew by 3.3% (Figure 5).

3.2%

─Industry

2016-17

2017-1

-6.8%

Services

Figure 5: Year-on-year growth rate in Gross State Domestic Product (GSDP) of subsectors

1.9%

2015-16 -0.9%

Source: Chhattisgarh State Economic Survey and State Domestic Product Report.

Agriculture

2014-15

-1.6%

3.1.1. Agricultural Sector in the GSDP

2013-14

2.7%

5%

0%

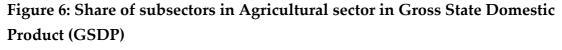
-5%

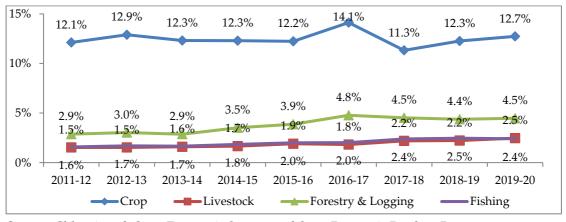
-10%

4.7%

2012-13

Chhattisgarh is one of the top ten agriculture states in India and is popularly known as the "rice bowl of India". The agriculture sector as a whole encapsulates agriculture, livestock, forestry, and fishing. The share of the agriculture sector in GSDP was 22.1% in 2019-20 in current prices, which was relatively high compared to many other states. When we further examine the share of the subsectors in the agricultural sector, we see that crops, and forestry and logging have the highest contribution to the share of GSDP, with 12.7% and 4.5%, respectively in 2019-20 in current prices. While the share of forestry has seen a steady increase since 2013-14, the share of the crop sector to the GSDP saw a decline in 2016-17 but since 2017-18, there has been consistent growth (Figure 6).





Source: Chhattisgarh State Economic Survey and State Domestic Product Report.

4.9%

3.3%

2019-20

2018-19

These sectors have been consistently growing in terms of the share due to initiatives taken by the GoC. The crop sector is one of the most important sectors in the state; its share in total GSDP at current prices is approximately 12% on average across the years. Moreover, there is an increasing trend in its share since 2017-18 (Figure 6). This has happened due to a lot of steps taken by the GoC to boost farming. For example, one of the recent schemes introduced by the government, which is an income support programme, is the RGKNY wherein the farmers in Chhattisgarh would get up to Rs 13,000 an acre a year. The state has also taken other measures to improve organic farming through supply of vermicompost manufactured in their rural industries called Gothans⁶⁰. Even the horticulture sector has shown an increasing growth with a four-time increase in acreage of horticulture and a five-time increase in the production of fruits, vegetables and flowers in 13 years till 2016. The horticulture crops include fruits, vegetables, flowers, spices, medicinal and scented plants⁶¹.

The share of forestry and logging in total GSDP at current prices is approximately 4% on average across the years in Chhattisgarh with an increasing trend since 2015-16 (Figure 6). Its share in 2019-20 was 4.5% in current prices in the year 2019-20. The government took some important measures during the lockdown and had purchased 98% of the country's total forest produce amid the lockdown restrictions imposed to contain the spread of Covid-19 outbreak⁶². The data released by the Tribal Cooperative Marketing Development Federation of India (TRIFED) showed that produce worth more than Rs 18.63 crore from small forests has been purchased by GoC from forest-dwellers and villagers. The state government claimed that 139 Van Vikas Kendras have been set up that have created jobs for 1,390 women. The state forest department is planning to engage 4,00,000 bamboo tree guards, involving tribal youth.

The share of livestock and fishing in total GSDP at current prices is approximately 2% each on average across the years in Chhattisgarh. The

60 https://thenewsindia.co.in/chhattisgarh-article-details.php?article=1858&article_title=24.

⁶¹ https://www.dailypioneer.com/2016/state-editions/fruits-vegetables-output-records-an-upsurge-in-chhattisgarh.html.

⁶² https://www.hindustantimes.com/india-news/chhattisgarh-purchased-98-of-the-total-forest-produce-amid-lockdown/story-IeNs3p88HiyG54OizMctZL.html.

share in GSDP for both these subsectors have been growing gradually since 2015-16, wherein the increase in share is slightly pronounced in fishing sector (Figure 6). Chhattisgarh launched the Godhan Nyay Yojana⁶³ in July 2020 for livestock owners, where the government will now buy cow dung from livestock owners as Rs 2 per kg and convert it to fertilisers, to make cattle rearing profitable. In fishing, the state government is planning to take an initiative to give the status of farming to fisheries—this will help provide interest-free loans from cooperative banks for fisheries and rebate in electricity rates⁶⁴.

3.1.2. Industrial Sector in the GSDP

Chhattisgarh is one of the mineral rich states in India with a high resource base. The mineral industry accounts for almost 80% of the total industrial units in the state. The state has a large presence of private industry players and some of the important sectors include steel and allied industries, cement, power, mining, aluminium (due to its rich bauxite presence), food processing industries, etc. After the creation of the state in 2000, the state implemented the industrial policy based on the five-year plan starting from 2001-2006. The state adopted the policy of development of the core sectors due to its abundant mineral resources such as bauxite, coal, limestone, and dolomite. After a successful development of the core sectors, the state adopted the policy of development of non-core sectors or the sunrise sectors in its industrial policy of 2014-2019, which are agriculture and food processing, automotive, new and renewable energy, Information Technology (IT), pharmaceuticals, healthcare, tourism, skill development, minor forest produce, textiles and apparels, etc. The policy envisions to promote the manufacturing sector on a priority basis.

More recently, the new industrial policy 2019-24 has focused its efforts on promoting industrial growth and economic activities in new regions, particularly in extremist-affected areas of the state⁶⁵. The non-core sectors of

⁶³ https://indianexpress.com/article/india/money-for-cow-dung-chhattisgarh-launches-scheme-for-livestock-owners-6476679/.

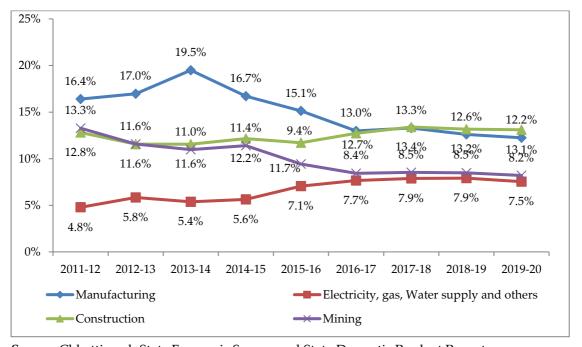
⁶⁴ https://www.thehindubusinessline.com/economy/policy/chhattisgarh-is-planning-to-give-farming-status-to-fisheries-cm-baghel/article33150551.ece.

⁶⁵ https://www.businesstoday.in/current/economy-politics/chhattisgarh-new-industrial-policy-focus-on-industries-in-naxal-hit-areas-cm-bhupesh-baghel--non-core-sectors/story/388142.html.

focus of this new industrial policy include aerospace engineering, aircraft repair food processing and Micro, Small and Medium Enterprises (MSMEs). Interestingly, the policy encourages industrial development in the most backward regions of the state with the highest incentives given to industries established in such areas. The policy has a clear focus on food processing and other agriculture-related industries, with top priority given to organic fuel from paddy, ethanol refinery, and horticulture product processing. A slew of incentives with respect to interest subsidy, electric duty exemption, transport subsidy, reduced rates of land were also announced. Hence, it becomes important to understand the trends in the domestic product in these sectors over the years.

The industries sector is the largest contributor to the GSDP of the state forming about 41.1% of the state GSDP in 2019-20 in current prices. This sector consists of the following subsectors: manufacturing, mining, electricity, gas and water supply, and construction. However, the share of the industries sector in current prices has seen a steady decline over the years, especially from 2017-18. When we further examine the share of the subsectors in the GSDP, we see that construction and manufacturing sectors have the highest contribution to the share of GSDP in 2019-20, with 13.1% and 12.2%, respectively (Figure 7).

Figure 7: Share of subsectors in the Industrial sector in Gross State Domestic Product (GSDP)



Source: Chhattisgarh State Economic Survey and State Domestic Product Report.

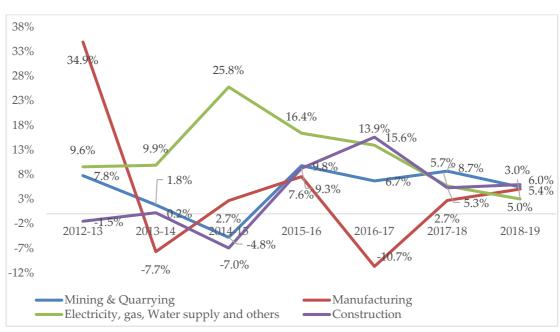


Figure 8: Year-on-year growth rate of Gross State Domestic Product (GSDP) in subsectors of the Industrial Sector in real terms

Source: Chhattisgarh State Economic Survey and State Domestic Product Report.

In current prices, the share of the manufacturing sector to the GSDP has seen a steady decline since 2017-18, while the share of mining has seen a steady increase since 2016-17. The electricity, gas, and water supply is another sector that has seen a steady increase in its share in the GSDP since 2011-12. This was mainly due to the Power for All policy, resulting in a rapid expansion of the electricity distribution system. Along with multiple other initiatives of the state government and development of the Korba region to improve electricity generation, this has resulted in the overall growth of the sector⁶⁶.

Tracing the Year-on-Year (YoY) growth in the industry subsectors, we see that although the share of mining and electricity, gas and water supply sector showed an increasing trend, there was a decline in the growth of the GVA, perhaps largely due to the effect of demonetisation starting from 2017-18. The manufacturing sector was also equally affected with a decline of 11% in 2017-18, while it slowly picked up pace starting 2018-19 in real terms (Figure 8).

Trends in the manufacturing sector

The manufacturing sector is one of the most important sectors in the state. We used the Annual Survey of Industries data which collects data on the

 $^{^{66}\} https://www.sundayguardianlive.com/news/6223-power-surplus-chhattisgarh-shining-example-other-states.$

organised sector for manufacturing sector to see which specific industries contributed to the output of the state. The top sectors in terms of the volume of output are manufacture of basic metals, manufacture of food products, manufacture of other non-metallic mineral products, manufacture of fabricated metal products (except machinery and equipment), manufacture of coke (calcined petroleum coke) and refined petroleum products, manufacture of rubber and plastics products, and manufacture of beverages. These sectors together contributed to 90% of the output in the state. Interestingly, as Chhattisgarh is a mineral rich state, the manufacture of basic metals accounts for 64% of the total output in the manufacturing sector in the state.

Table 16: Compounded Annual Growth Rate (CAGR) of the Gross Value Added (GVA) in Manufacturing

Sector of Manufacturing	CAGR (2012-13 to 2017-18)
Printing and reproduction of recorded media	120%
Repair and installation of machinery and equipment	85%
Manufacture of textiles	43%
Manufacture of other transport equipment	26%
Manufacture of paper and paper products	24%
Manufacture of beverages	18%
Manufacture of food products	14%
Other manufacturing	14%
Manufacture of basic metals	5%
Manufacture of leather and related product	4%
Manufacture of wood and products of wood and cork,	
except furniture;	3%
manufacture of articles of straw and plaiting materials	
Manufacture of electrical equipment	0%
Manufacture of machinery and equipment n.e.c	0%
Manufacture of rubber and plastics products	-1%
Waste collection, treatment and disposal activities;	-1%
materials recovery	-1 /0
Manufacture of fabricated metal products, except	-1%
machinery and equipment	-1 /0
Manufacture of tobacco products	-4%
Manufacture of coke and refined petroleum products	-4%
Manufacture of furniture	-14%
Manufacture of chemicals and chemical products	-15%

Sector of Manufacturing	CAGR (2012-13 to 2017-18)
Manufacture of other non-metallic mineral products	-15%
Manufacture of computer, electronic and optical products	-100%

Source: Annual Survey of Industries Data.

In terms of the GVA from that sector, we see similar trends as for output. When we look at trends in the Compounded Annual Growth Rate (CAGR) of the GVA, we see that some of the better growing sectors in terms of annual contribution to GSDP include repair and installation of machinery and equipment, manufacture of textiles, manufacture of other transport equipment, manufacture of paper and paper products, manufacture of beverages, manufacture of food products, and other manufacturing. Even in terms of profitability, these are the better performing sectors. This aligns with the industrial policy of the state, which focusses on sectors like food processing, textiles, automobiles, etc. Two sectors which also made an entry in the recent years and have shown promise in terms of growth include manufacture of wearing apparel and manufacture of motor vehicles, trailers, and semi-trailers. While some core sectors like manufacture of basic metals still contribute positively to the growth, some others like manufacture of tobacco products, manufacture of chemicals and chemical products, and manufacture of other non-metallic mineral products showed a negative growth rate over the last six years (Table 16).

There have been some new sectors like manufacture of wearing apparel, manufacture of pharmaceuticals, medicinal chemical and botanical products, manufacture of motor vehicles, trailers and semi-trailers, waste collection, treatment and disposal activities, and materials recovery that have also shown considerable profits over the previous years; hence, policies can be aligned to focus on promotion of these industries.

Trends in the Mining sector

Chhattisgarh has a vast area of dense forests, about 1,70,000 hectares, making it a mineral rich state. Mining is an important sector for Chhattisgarh forming about a tenth of the state's GSDP. Some of the major minerals produced in Chhattisgarh include coal and iron ore, with millions of metric tonnes of reserves. It also has a considerable production of limestone. Bauxite is another important mineral and there is a low production of tin and moulding sand. Due to vast forest reserves and also it being a state hit by left-wing extremism,

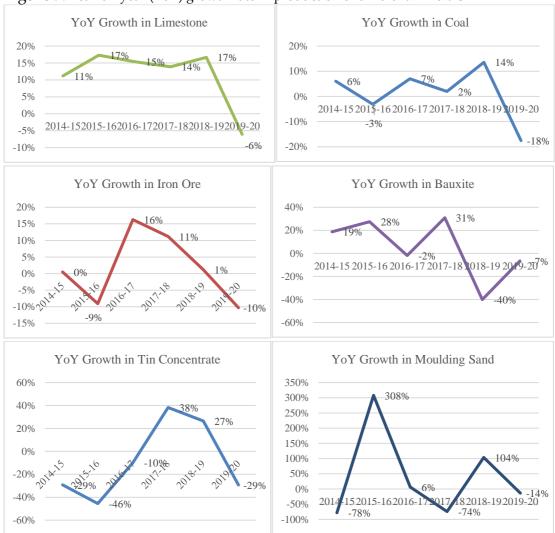
there is a constant conflict between the local villagers and environmentalists. Hence, it is important that there are proper rehabilitation policies in place.

Table 17: Quantity of major Minerals produced (in Lakh Tonnes)

Major Mineral	2013-14	2014-15	2015-16	2016-17	2017-	2018-19	2019-
Wiajor Willierar	2013-14				18	2010-19	20#
Coal	1,271	1,348	1,306	1,397	1,425	1,618	1,335
Iron Ore	293	294	267	311	345	349	313
Limestone	212	236	277	319	364	424	398
Bauxite	13	16	20	20	26	15	14
Dolomite	26	24	0	0	0		
Tin (Concentrate)**	34,862	24,685	13,451	12,120	16,758	21,212	14,987
Moulding Sand***	29,323	6,383	26,042	27,686	7,079	14,424	12,465

Source: Mineral Resources Department, Chhattisgarh and Indian Bureau of Mines.

Figure 9: Year-on-year (YoY) growth rate in production of different minerals



Source: Mineral Resources Department, Chhattisgarh and Indian Bureau of Mines.

^{**} In Kilogram, *** Tonne, # Data till Feb 2020.

Table 17 shows that there has been a major decline in the quantity of iron ore production starting 2016-17. Coal and limestone have seen a constant rise in volume of production except in 2019-20. This may be because the data for March 2020 was not available. Bauxite and tin have shown fluctuations in terms of the production.

Although there are fluctuations in the production of the different minerals, the royalty receipts of major minerals have all shown a positive growth over a period of five years except for tin (Table 18). Although, as a policy, the state has shifted its focus from the core sectors to the non-core sectors, the core sectors still contribute a sizeable amount to the state's GSDP. The state government has also, in 2020, put up about nine mines for commercial auctions—this is expected to create about 60,000 jobs and invite capital investments in the state and it is expected to generate an additional revenue of Rs 4,400 crore revenue and an additional premium at a minimum of Rs 2,000 crore⁶⁷.

Table 18: Royalty Receipt of Major Minerals

Major Mineral	Compounded Annual Growth Rate (2014-15 to 2018-19)
Coal	11%
Iron Ore	8%
Limestone	19%
Bauxite	4%
Tin (Concentrate)	-11%
Moulding Sand	0%

Source: Mineral Resources Department, Chhattisgarh.

Trends in the Electricity, Gas and Water Supply Sector

The electricity sector contributed about 9.1% of the total GSDP of the state as of 2019-20. Hence, it is one of the important sectors to understand in terms of its growth patterns and performance. Chhattisgarh being a state with one of the largest coal reserves, after Odisha and Jharkhand, has increased electricity access to 100% as of 2019. Apart from coal-based thermal power generation, Chhattisgarh is also focusing on developing renewable energy-based power generation and, hence, it is exploring hybrid power stations. Recently, as of

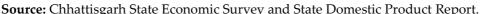
-

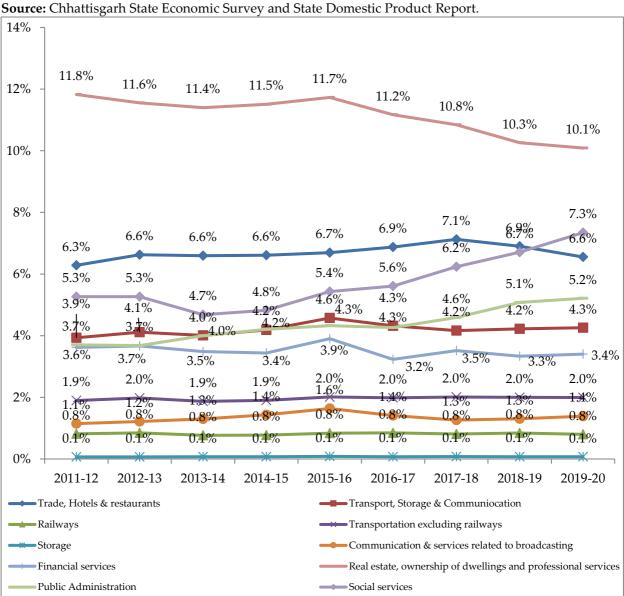
⁶⁷ https://theprint.in/india/centre-to-change-5-mines-in-chhattisgarh-for-commercial-coal-auctions-with-3-other-new-mines/472320/.

June 2020, Chhattisgarh came up with a policy of compensating consumers for prolonged power cuts, a first for any state in India⁶⁸. This reflects a positive initiative by a state that does not stop at just giving electricity access and wants to enhance the quality of its distribution infrastructure. Further, Chhattisgarh also charges one of the lowest electricity tariffs—this could be used as an opportunity to charge higher tariffs for excessive use of electricity to improve revenues.

3.1.3. Trends in the Services sector

Figure 10: Share of subsectors Gross State Domestic Product (GSDP) in the





⁶⁸ https://economictimes.indiatimes.com/industry/energy/power/chhattisgarh-consumers-toget-compensation-for-power-cuts/articleshow/76216352.cms?from=mdr.

67

Services sector

Services sector is the second most important sector in terms of contribution to GSDP in Chhattisgarh, followed by agriculture. This is a unique kind of trend in Chhattisgarh as for a number of states in India, services sector has the highest contribution in GSDP. As shown in Figure 4, the contribution of service sector in GSDP has been gradually increasing since 2016-17. When we look at the growth rates in current prices (Figure 5) we find that service sector is leading the growth on YoY growth basis.

When we look at the subsectors of service sector, in Figure 10, then we can see that real estate, ownership of dwelling and professional services (10.1%); other services (7.3%); trade, hotels, and restaurants (6.6%); and public administration (5.2%) are the major subsectors that contribute to the GSDP of the state. There has been gradual fall in the share of real estate and professional services sector to the GSDP, while public administration and other services have seen a gradual increase in its share in the GSDP starting 2017-18—this is mainly due to the implementation of the seventh pay commission in the state starting April 2017⁶⁹.

Overall, the tops sectors that contribute to the GSDP of the state include construction (13%), crops (12.7%), manufacturing (12.2%), real estate, dwelling and professional services (10.1%), mining and quarrying (8.2%), electricity, gas and water supply (7.5%), other services (7.3%), hotels and restaurants (6.6%), public administration (5.2%), and forestry and logging (4.5%).

3.2. Sector-wise distribution of Revenue

As discussed in the previous chapter, we have looked at the four major sources of revenue for the state. The revenues were broken up into each of their sub-components based on the major heads, and the estimated revenue was obtained for each of the individual components while estimating the revenue. In this section, we further breakup these components into the economic sectors which is as per the State GSDP (SGSDP) report. The objective behind this is to be able to understand the linkages between the revenue and the GSDP and see how the growth performance in specific

⁶⁹ https://www.newindianexpress.com/nation/2017/mar/29/chhattisgarh-government-announces-implementation-of-seventh-pay-commission-1587518.html.

sectors translates to revenues for the state. Many studies have tried to explore the relationship between revenue structures and GSDP of a state. For the case of Chhattisgarh, we have also looked at these relationships between revenues and GSDP. These relationships could be further broken up by components such as non-tax revenue, tax revenue and tax share as some sectors show a direct effect for a particular component of the revenue due to a direct effect of the growth. These patterns will be discussed further in the section on estimation below.

For distributing revenue estimates across the sectors and to arrive at the sectoral GDPs, we primarily used the List of Major and Minor Heads (LMMH) document, the Input-Output table for India 2007-08, and the Economic cum Purpose Classification documents as reference. The LMMH document has been prepared by the government for the list of major and minor heads wherein major heads correspond to the function of the government and minor heads that are subordinate to the major heads indicate the programme undertaken by the government to achieve the objectives of the function. Input-Output table is prepared by the Central Statistics Office (CSO), so that comparable information system exists for studying the input structures and final demand pattern. The Economic cum Purpose Classification is a document which is prepared by every state for the classification of budget.

We collected revenue data by the major head and minor heads from the Chhattisgarh state budget website. With the help of the descriptions of major and minor heads, we have tried to track the actual sector from where this revenue was generated. Here, sectors mean the subsectors of GSDP that states present in their economic survey. There is a total of 16 subsectors which we have considered to map in revenue. These sectors are communication and services related to broadcasting; construction; crops; electricity, gas, water supply and others; financial services; fishing; forestry and logging; livestock; manufacturing; mining and quarrying; real estate, ownership of dwellings and professional services; storage; trade, hotels and restaurants; and transportation. The rationale we have followed to make our revenue categorisation more sensible is that whatever revenue comes from GIA, we have put those major heads into the sectors where they were actually used. For tax and non-tax revenue, we have considered the source of the sectors from where the revenue is being generated. Using this rule, we looked in

detail for the description of every major head and minor head to finally conclude the revenues for the relevant sectors.

We encountered a few major heads that did not fit in any of the subsectors of GSDP and for that we had internal discussions; based on the suggestions and their relevance as per the literature, we have put them in the relevant subsectors. However, there were a few taxes, like corporate tax which has a contribution of about 10% to the total revenue, for which we could not find any mechanism to segregate them in subsectors as we do not have a break-up for the corporate taxes by sector, both at the all-India level and at the state level for Chhattisgarh. For the data on tax revenues, the break-up sectors or major heads was available prior to 2017-18, but since the introduction of GST, the sectors are not available in the RR accounts. However, based on our interaction with the state government officials in the Commercial Tax Department of Chhattisgarh, we have an item wise break up starting from April 2018, which we have categorised in the subsectors with the same logic followed in the previous categorisation and also consultations with the department of SGST. The item list in GST data included data for commodities such as agarbathi (incense), arms of all kinds, automobile, batteries of all kinds, bullion and jewellery, etc., which we kept in manufacturing sector; similarly, items like coal, non-ferrous metals were put under the mining & quarrying sector. This categorisation helped us to know the proportion of GST collection from each sector. We used this proportion as a reference and multiplied it with the total GST from revenue major heads and added them in relevant sectors.

After finalising the subsectors of revenue, we looked at the subsectors in detail to know which subsector generates the maximum revenue and which component of revenue has a major share in each sector. Combining all the components of revenue, i.e., tax revenue, non-tax revenue, tax share, and GIA, we got the total revenue for each subsectors. Given below is the analysis of revenue components by sectors to understand the trends for each of them and their prominence in a particular type of revenue.

3.2.1. Grants-in-Aid (GIA) and Contributions

The social sector services, which includes education, health, and other such subsectors, have the highest GIA and contributions from the union government, with 48% of the total share of GIA going to this sector in 2019-20.

This is largely due to the social welfare schemes of the union government and the grants for the Central Sector Schemes and CSS. Social services received a considerable share in the GIA and other sectors that received grants included construction (22%), public administration (18%), crops (7%), and electricity, gas and water supply (2%). Although, the share of GIA that these sectors received showed no consistent pattern, the top four sectors receiving a contribution remained the same (Figure 11).

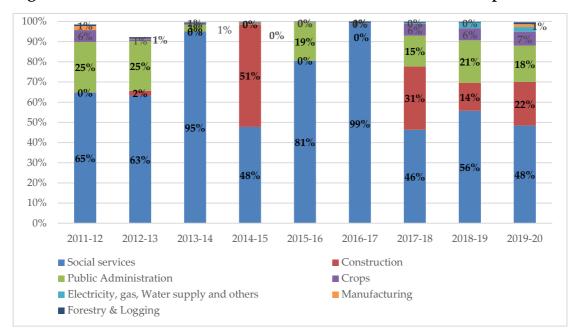


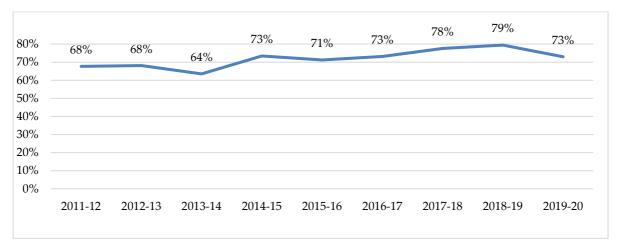
Figure 11: Share of subsectors in Grants-in-Aid Contributions (in percent)

Source: Authors' calculations.

3.2.2. Non-Tax Revenue

Among the different sources of revenue from non-tax sources, mining had a very large share, about 73%, in 2019-20 (Figure 12). This is largely because of the royalties paid on the extraction of minerals, and Chhattisgarh being a mineral rich state, this forms a major source of revenue. This is followed by electricity, gas, and water supply; forestry; and public administration, whose shares form 12%, 7% and 3% of the non-tax revenue, respectively (Figure 13). The revenues in the forestry sector are mainly due to activities relating to the sale of timber, bamboo and other forest products.

Figure 12: Share of Mining and Quarrying in Non-Tax Revenues (in percentage)



Source: Authors' calculations.

Figure 13: Share of subsectors in Non-Tax Revenues (in percentage)



Source: Authors' calculations.

3.2.3. Tax Revenue

The tax revenue includes components of state's own tax revenue, GST, and the tax share that is a part of the union taxes that has been allotted to the state based on the Finance Commission's devolution formula to the states (this increased from 32% as per the 13th FC to 42% based on recommendations of the 14th FC). The GST was included as it would not replace some of the state's own tax generating capacity and be collected in the form of GST instead. This could lead to a slight change in the patterns of tax revenue after 2017-18—this will be discussed in the estimation sections. We see that about half of the tax revenue to the state is coming from the manufacturing sector, forming 47% of

the total tax revenue for the state in 2019-20. This includes components of excise duty, and revenue from the industries, especially village and small-scale industries. Trade, hotels and restaurants, which had a high share starting in 2011-12, has continuously declined and now forms 11% of the total revenue for the state, being the second highest source of tax revenue for the state. Some of the other sectors that also have a high share of tax revenues include real estate, ownership of dwelling and professional services (8%); electricity, gas and water supply (6%); mining (6%); and transportation (5%) in 2019-20. There was a continuous decline in the transportation sector from about 10% in 2011-12 to 5% in 2019-20. The electricity sector showed a share of 5%-7% between 2011-12 and 2019-20 (Figure 14).

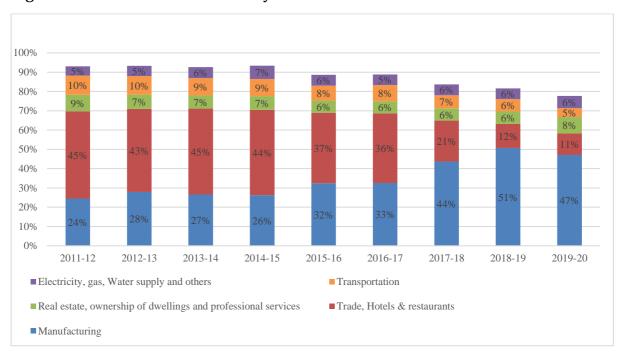


Figure 14: Share of Tax-revenues by subsectors

Source: Authors' calculations from Revenue Receipts of the state.

3.3. Estimation of GSDP for the current year

The estimation of GSDP for a state happens annually sometime in the month of February based on the data received at the state level and some of the estimates provided by the CSO at the national level. Government of India had estimated a 23.9% contraction in Q1 and 7.5% contraction in the economy in Q2 for 2020-2021, compared to the previous year. For the state of Chhattisgarh, we also undertook the task to estimate the trend or shortfall in GSDP due to the impact of lockdown and Covid-19.

To estimate the GSDP for the state, we found it more suitable and feasible to estimate the subsector wise GSDP as this would capture the essence of the impact based on the kind of economic activity and also the likely trends that we found in that sector. For example, the crop sector, although impacted due to Covid-19 induced lockdown, was less impacted compared to other sectors; an improvement in Kharif area sown, above normal rains in 2020-21, a quick recovery in supply chain disruptions because of an active Food Corporation of India (FCI) and supportive railways, price recovery in both consumer and wholesale markets, and the government's interventions for the future are believed to have sustained the growth momentum (Macroeconomic Report, DEA, May 2020). We also understood from discussions that the crop area sown for paddy, which is a major crop, has seen a major increase in Chhattisgarh.

Hence, for each of the subsectors, we looked at the various possible and most suitable methods for that sector based on its characteristics, and the most stable trends that it showed for the various components over a time period. Some of the broad methods used in the estimation of GSDP included the following.

- 1. Revenue performance and its linkages with GSDP: In this method, we looked at the relationship between different types of revenue that we have discussed above coming from each of the subsectors and its linkages with the GSDP for that particular sector. Quite a few studies have established the linkages between tax revenues and economic growth, and revenues and expenditure. Based on the sector and type of revenue wise computation, we looked at the major trends in the following: total revenue to GSDP collection, non-tax revenue collection to GSDP, tax revenue (including tax share and GST) to GSDP from 2011-12 to 2019-20, and thus understood the linkages. Using these trends, we estimated the GSDP based on the estimates of the revenue scenarios discussed in the previous section.
- **2. Sectoral performance in the state:** For some of the subsectors, we used the information we had based on consultations in the state to arrive at the possible scenario for those subsectors. This was also supported by some of the recent literature and ground reports from the state based on some data and thus, the estimates were obtained. For example, to compute the GVA for the public administration sector, we have the data on the actual wages paid till November 2020 and the past wage trends from the Comptroller

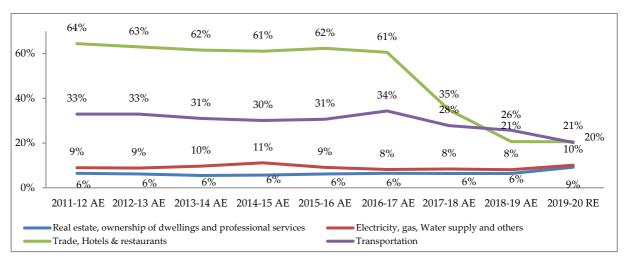
- and Auditor General of India (CAG)report. This information was used in order to predict the GSDP for that sector.
- 3. Overall sectoral performance in India: For some of the subsectors, we assumed that the trends for India were true for the state. For example, at the all-India level, the crops, livestock and fishing sector performed better with a positive growth rate of 3.4% in both Q1 and Q2. Based on discussions with the agricultural department, we understood that overall initiatives taken by the agricultural department such as the Minimum Support Price (MSP) for paddy being increased to Rs 2,500 through the RGKNY and other such schemes; rural industrial sites setup by the government, which provided employment to women from self-help groups even during the pandemic; and promotion of organic farming all resulted in a better performance of this sector. It was also noted that the crop area sown had shown a huge increase and many people returned to farming due to loss of jobs. Hence, keeping in mind the performance of this sector, scenarios have been designed accordingly.

3.3.1. Computation of subsector wise GSDP

The state government budget for 2020-2021 had predicted a GSDP for the state of Rs 3,62,21,400 lakhs. Although this is the overall GSDP, subsectorwise GSDP shares have not been provided. Hence, the first step was to break the GSDP across the subsectors. In order to do this, we looked at the last three- and five-year averages of the share of different subsectors to the overall GSDP in the state. We found that the share for the 16 subsectors had very minimal or no variation for most of the subsectors, with a maximum difference of one percentage point for agriculture; mining and quarrying; real estate, ownership of dwellings and professional services; and other services. Hence, we went with the data for the five-year averages and estimated the subsector-wise GSDP. This was used as a benchmark for comparison for the changes in GSDP that we went ahead and estimated, in addition to taking notes of the variations caused by the pandemic.

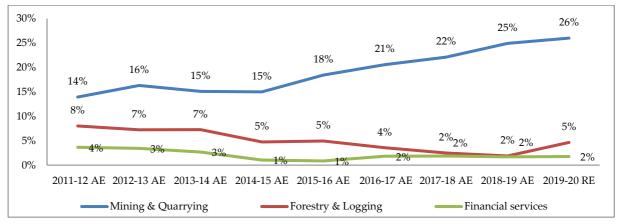
After the calculations of subsector-wise GSDP, we went ahead to estimate the GSDP for the state using different revenue trends that had already taken the likely impact of the pandemic into account. Based on the sectors, the different revenue trends are shown below. The figure shows the linkages between the revenue components (tax, non-tax, and total revenue) as a percentage of the GSDP of the state.

Figure 15: Tax Revenue to Gross State Domestic Product (GSDP) Ratio (2011-12 to 2019-20)



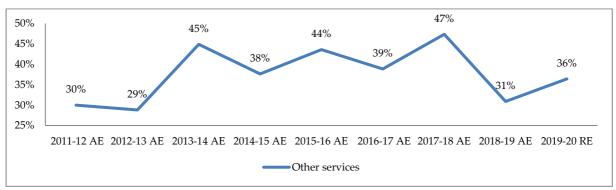
Source: Authors' calculations.

Figure 16: Non-Tax Revenue to Gross State Domestic Product (GSDP) Ratio (2011-12 to 2019-20)



Source: Authors' calculations.

Figure 17: Total Revenue to Gross State Domestic Product (GSDP) Ratio (2011-12 – 2019-20)



Source: Authors' calculations.

Using this information, we have further gone ahead and made assumptions (Table 19) that give us the final method we used for each of the subsectors for the estimation of GSDP for three scenarios: realistic, optimistic and pessimistic. It also discusses the assumptions and the reasons behind the selection of a particular method.

Table 19: Table of assumptions for different subsectors

Sector	Final Method	Average Ratio	Assumptions
Manufacturing		-12%, -6%, -9%	The tax to Gross State Domestic Product (GSDP) ratio for manufacturing did not show any consistent patterns, both pre- and post-Good and Services Tax (GST). The ratio increased substantially Year-on-Year (YoY) since the introduction of GST. Hence, for this, we used the all-India growth rates to come up with the three scenarios for Chhattisgarh.
Real estate, ownership of dwellings and professional services	Tax to GSDP Ratio	7%	Land tax forms one of the biggest sources of revenue for this sector. We took the ratios for this sector for the entire ten-year period due to stable trends in tax collections.
Electricity, gas, water supply and others		9%	For this sector, we took the ratios for the entire ten-year period due to stable trends in the taxes and duties on electricity.
Trade, Hotels and restaurants		21%	The pre-GST and post-GST trends have shown a large variation; hence, we took the ratios of tax collections to GSDP post GST.
Transportation		20%	Here, we took the ratio in 2019-20 as there has been a continuous declining trend in the tax to GSDP ratio since 2016-17.

Sector	Final Method	Average Ratio	Assumptions
Construction		-20%, -17%, - 14%	The data on tax collections for the construction sector is just between 2%–4% and it was available only post-GST; hence, we took the all-India growth rates for the construction sector for the realistic scenarios and assumed a +/- 3% decline for the other two scenarios.
Mining and quarrying		22%	This sector for the highest source of non-tax revenue for the state in the form of royalties collections. Hence, trends in non-tax revenue to the GSDP collection trends were studied to estimate GSDP.
Forestry and logging	Non-Tax to GSDP Ratio	3%	Forestry forms an important sector in Chhattisgarh due to high area under forest cover. The largest receipts are in the form of income due to sale of timber and bamboo. We took three-year averages here due to a declining trend in the ratios post-GST introduction.
Financial services		2%	This has shown stable trends in the past five years; hence, we looked at the average ratio in the last five years.
Other Services	Total revenue to GSDP	38%	This sector encompasses a whole array of services including medical and health, education, social welfare, etc. Due to the huge gamut of activities, they have revenue collections from all sectors including from Grants-in-Aid (GIA) from Centrally Sponsored Schemes for various

Sector	Final Method	Average Ratio	Assumptions
	Method		welfare programmes. Hence, we looked at the ten-year averages for these sectors.
Public Administration	Salaries/Wag es to GSDP Ratio	113%, 122%	This sector comprises activities of the public sector. The Gross Value Added (GVA) is mainly the wages and salaries paid to the government officials. Hence, we took the ratio of the salaries and wages to the GSDP to estimate the GSDP for this sector. One of the scenarios was a three-year average and the other was the ratio of 2019-20.
Crops		12%, 10%, 7%	For the sectors, crops, livestock, fishing and communication,
Livestock		20%, 18%, 21%	literature showed that they
Fishing		5%, 14%, 16%	performed better during the Covid-19-induced lockdown and
Communicatio n	YoY Growth Rate	15%, 8%, 9%	had positive growth rates even for all-India, especially for the agricultural sector. Hence, we took the growth rates of three types: the first one being the growth rate in 2019-20, the second being a three-year average growth rate, and the third being the five-year average growth rate
Storage	Zero Growth Rate	0%	As much information is not available about this sector, we assumed a zero growth rate for all the three scenarios

Source: Authors' notes.

Table 20: Gross State Domestic Product (GSDP) Estimates for 2020-2021

Sector	2019-20	2020 - 21 BE	Estimated 2020-21 GSDP - Realistic Scenario (Rs in Lakhs)	Estimated 2020-21 GSDP - Pessimisti c Scenario (Rs in Lakhs)	Estimated 2020-21 GSDP - Optimistic Scenario (Rs in Lakhs)	Increas e/Decli ne in GSDP - Realisti c Scenari	Increas e/Decli ne in GSDP - Pessim istic Scenari 0	Incre ase/D ecline in GSD P - Opti misti c Scena
Manufacturing	38,31,467	45,21,814	34,86,635	33,71,691	36,01,579	-9.0%	-12.0%	-6.0%
Real estate, ownership of dwellings and professional services	31,56,354	36,96,697	35,69,316	37,50,984	39,25,185	13.1%	18.8%	24.4%
Electricity, gas, Water supply and others	23,56,159	26,26,839	24,67,031	23,67,115	28,72,892	4.7%	0.5%	21.9%
Trade, Hotels and restaurants	20,50,727	23,49,574	14,71,669	15,59,283	15,31,409	-28.2%	-24.0%	- 25.3%
Transportation	8,74,664	9,73,500	4,96,961	4,77,080	6,03,766	-43.2%	-45.5%	31.0%
Construction	40,98,374	44,34,184	34,01,650	32,78,699	35,24,602	-17.0%	-20.0%	- 14.0%
Mining and Quarrying	25,65,798	29,50,290	19,75,363	18,35,850	20,18,388	-23.0%	-28.4%	21.3%
Forestry and Logging	13,99,765	15,20,804	7,71,414	7,41,204	12,97,086	-44.9%	-47.0%	-7.3%
Financial services	10,64,360	11,91,323	4,80,746	4,09,217	5,46,833	-54.8%	-61.6%	- 48.6%
Other Services	22,97,298	21,89,318	16,31,606	14,10,605	21,08,613	-29.0%	-38.6%	-8.2%
Public Administration	16,30,962	16,33,117	19,73,486	19,73,486	18,28,024	21.0%	21.0%	12.1%
Crops	39,82,184	43,10,844	43,85,411	42,47,226	44,74,921	10.1%	6.7%	12.4%
Livestock	7,72,737	7,40,522	9,30,002	9,08,780	9,38,143	20.4%	17.6%	21.4%
Fishing	7,49,621	7,82,917	8,58,170	7,90,541	8,71,518	14.5%	5.5%	16.3%
Communication and services related to broadcasting	4,34,725	4,78,564	4,74,755	4,70,129	5,01,137	9.2%	8.1%	15.3%
Storage	22,610	26,559	22,610	22,610	22,610	0.0%	0.0%	0.0%
Total GSDP	3,12,87,805	3,44,26,865	2,83,96,825	2,76,14,499	3,06,66,705	-9.2%	-11.7%	-2.0%

Source: Authors' calculations.

Note: BE stands for Budgeted Expenditure, and GSDP stands for Gross State Domestic Product.

Table 20 shows that in the most realistic scenario, there was a 9.2% contraction in the GSDP of the state with an estimated GSDP of Rs 2,83,96,825 lakhs. In the optimistic scenario, where the impact of the lockdown is lower, the GSDP of the state showed a contraction of just 2% and in the pessimistic scenario, we estimated a shrinkage of 11.7% over the year 2019-20. Some of the sectors for which we estimated a positive growth based on the revenue estimations and assumptions based on discussions and national performance included real estate, ownership of dwellings and professional services; electricity, gas, water supply; public administration, crops; livestock; fishing; and communication and services related to broadcasting. Sectors which projected huge contractions included transportation, forestry and logging, financial services, and social services. All these projections are based on the revenue trends that were observed for the sectors and also the revenue performance of the item wise break up of data we have from the GST collections between April–November 2020. Although the core sectors of the state were not strictly closed due to lockdown, the supply chain disruptions and low demand seems to have impacted them. However, with the re-starting of the economy, it is expected that these sectors will see a growth revival due to an increase in demand. Likewise, the service sector is also likely to see a revival due to high forward and backward linkages.

3.4. Total Outstanding Liabilities as a percentage of GSDP

The total outstanding liabilities is the accumulation of borrowings over the years. Chhattisgarh's total outstanding liabilities have seen a consistent increase over the years, and they were expected to be 21.6% of the GSDP in 2020-21 as per budget estimates, which is higher than the 20% cut off suggested by the FRBM review committee in 2017 for the cumulative debts of states. According to our GSDP estimates of 2020-21, the total outstanding liabilities for Chhattisgarh as a percentage of GSDP would be 25.5% in the optimistic scenario, 27.6% in the realistic scenario, and 28.3% in the pessimistic scenario. India's total outstanding liabilities as a percentage of GDP has increased significantly in 2020-21 budget estimates, the rise is approximately 8% and the rise will be more pronounced amidst Covid-19 when the actual estimates are announced. The outstanding liabilities for Chhattisgarh would also increase, so space has to be created for the increase in the total outstanding liabilities of the state (Figure 18).

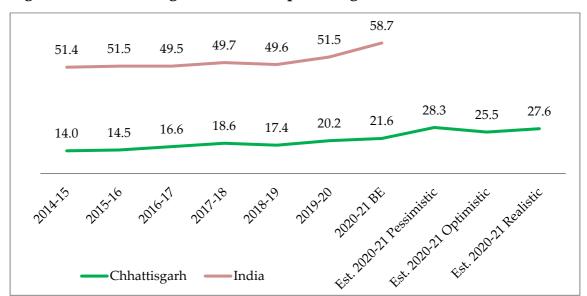


Figure 18: Outstanding liabilities as a percentage of GSDP

Source: Reserve Bank of India, and PRS India.

We are of the view that the state has a high potential to tide over the crisis given its policies that have resulted in providing income security in the rural areas and a push to demand for some industrial products as well; it can do so provided it further adopts a few innovative policies for revenue generation, carries out governance reforms leading to higher level of efficiencies without resorting to mindless expenditure cuts, and also promotes investments and income generation at the same time. Next, before discussing the suggestions for reviving the economy, we present our analysis of public expenditure to assess what aspects are non-negotiable, and, where, if any, the scope exists for expenditure cuts.

Chapter 4: Public Expenditure: Trends and patterns (2011-2020)

4.1. Total expenditure: Past Trends

The expenditure analysis covers the period 2011-12 to 2019-20 to understand the trends in expenditures across sectors and major heads. The analysis also focuses on the committed expenditures of the state in the last three years to understand the possible expansion of expenditures towards citizens' welfare. The expenditures have been increasing steadily over years and in the year 2019-20, it increased to about three times of the expenditure in 2011-12. The average annual growth rate of the expenditure for the period 2011-12 to 2019-20 stood at 14%. The growth rates for the revenue and capital expenditure for the same period were 16% and 11%, respectively. The average share of revenue expenditure for the period 2011-12 to 2019-20 was about 84% total expenditure, while capital expenditure and loan expenditure constituted for 14% and 2% of the total expenditure, respectively (Figure 19).

Table 21: Expenditures of the State (Rs in crore)

E 13t	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-
Expenditure	12 AC	13 AC	14 AC	15 AC	16 AC	17 AC	18 AC	19 AC	20 AC
Revenue	22,628	26,972	32,859	39,561	43,701	48,165	56,230	64,411	,73,473
Expenditure									
Capital	4,056	4,919	4,574	6,544	7,945	9,471	10,001	8,903	,8,566
Expenditure									
Loans and	1,273	1,888	1,324	90	165	273	369	240	56
Advances									
Total	27,957	33,779	38,757	46,195	51,811	57,909	66,600	73,554	82,095
Expenditure									

Source: Authors' calculations from the Budget Documents, Department of Finance,

Government of Chhattisgarh. **Note:** AC stands for Actuals.

Table 22: Growth rates of Expenditures

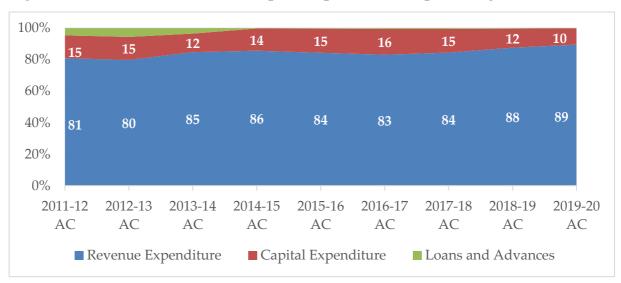
Expenditure	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Expenditure	AC							
Revenue	19%	22%	20%	10%	10%	17%	15%	14%
Expenditure	19/0	ZZ /0	20 /6	10 /0	1070	17 /0	1370	14 /0
Capital	21%	-7%	43%	21%	19%	60/	110/	10/
Expenditure	21 /0	-7 /0	43 /0	21%	19/0	6%	-11%	-4%
Loans and	100/	200/	029/	920/	6E9/	250/	250/	770/
Advances	48%	-30%	-93%	83%	65%	35%	-35%	-77%

Expenditure	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
	AC							
Total Expenditure	21%	15%	19%	12%	12%	15%	10%	12%

Source: Authors' calculations from the Budget Documents, Department of Finance,

Government of Chhattisgarh. **Note:** AC stands for Actuals.

Figure 19: Share of Revenue and Capital Expenditure (in percentage)



Source: Authors' calculations from the Budget Documents, Department of Finance,

Government of Chhattisgarh. **Note:** AC stands for Actuals.

4.1.1. Expenditure on Critical sectors

Expenditure on critical sectors of the economy with the welfare objective was analysed to understand the pattern over years (Table 23). The expenditure on the critical sectors hovered around 66% of the total expenditure of the state.

Table 23: Trends in the Critical Sectoral expenditures

Sectors	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-20
Sectors	12 AC	13 AC	14 AC	15 AC	16 AC	17 AC	18 AC	19 AC	AC
Agriculture and Allied Activities	2,360	3,363	5,241	7,784	8,388	6,861	8,865	18,112	15,289
Education, Sports, Art and Culture	5,047	5,563	7,044	9,464	9,726	11,490	12,417	12,919	16,215
Energy	1,221	1,700	507	958	2,828	1,730	2,874	2,209	4,733
Health and Family Welfare	1,104	1,293	1,556	2,333	2,709	3,292	4,008	3,757	4,671
Industry and Minerals	229	262	286	440	249	484	487	202	180
Irrigation and Flood Control	1,518	1,983	2,045	1,929	2,161	2,318	2,132	2,040	1,607
Rural Development	1,686	2,061	2,090	3,588	2,966	4,299	3,695	2,433	4,362
Social Welfare and Nutrition	2,193	2,109	3,478	1,937	2,007	2,148	2,222	1,999	2,714
Water Supply, Sanitation, Housing and Urban Development	1,472	1,929	1,526	2,281	2,115	5,372	7,087	5,243	3,616

Sectors	2011-	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-20
Sectors	12 AC	13 AC	14 AC	15 AC	16 AC	17 AC	18 AC	19 AC	AC
Welfare of Scheduled Castes, Scheduled	1,352	1.369	797	400	414	563	564	482	437
Tribes and Other Backward Classes	1,332	1,507	171	400	414	303	304	402	437
Sectoral Total	18,181	21,632	24,569	31,114	33,564	38,557	44,351	49,396	53,824
Total Exp	27,957	33,779	38,757	46,195	51,811	57,909	66,600	73,554	82,095
Proportion of Critical sectoral total	65%	64%	63%	67%	65%	67%	67%	67%	66%

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals.

The growth of public expenditure on key sectors over the years has been very impressive. The overall growth of critical sectors stood at 15% for the period 2011-12 to 2019-20 (Table 24). The highest growth was recorded in the energy sector at 46%, followed by agriculture at 32%, water supply and sanitation at 23%, and health and family welfare at 21%.

Table 24: Annual Growth rates of Expenditures across Critical Sectors

Sectors	2012-	2013-	2014-	2015-	2016-	2017-	2018-	2019-	Avera
Sectors	13 AC	14 AC	15 AC	16 AC	17 AC	18 AC	19 AC	20AC	ge
Agriculture and Allied									
Activities	43%	56%	49%	8%	-18%	29%	104%	-16%	32%
Education, Sports, Art									
and Culture	10%	27%	34%	3%	18%	8%	4%	26%	16%
Energy	39%	-70%	89%	195%	-39%	66%	-23%	114%	46%
Health and Family									
Welfare	17%	20%	50%	16%	22%	22%	-6%	24%	21%
Industry and Minerals	15%	9%	54%	-43%	94%	1%	-58%	-11%	7%
Irrigation and Flood									
Control	31%	3%	-6%	12%	7%	-8%	-4%	-21%	2%
Rural Development	22%	1%	72%	-17%	45%	-14%	-34%	79%	19%
Social Welfare and									
Nutrition	-4%	65%	-44%	4%	7%	3%	-10%	36%	7%
Water Supply, Sanitation,									
Housing and Urban									
Development	31%	-21%	49%	-7%	154%	32%	-26%	-31%	23%
Welfare of Scheduled									
Castes, Scheduled Tribes									
and Other Backward									
Classes	1%	-42%	-50%	3%	36%	0%	-15%	-9%	-9%
Grand Total	19%	14%	27%	8%	15%	15%	11%	9%	15%

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

Note: AC stands for Actuals.

The growth rates of agriculture recorded 104% in 2018-19 owing to paddy procurement and loan waiver; hence, the growth rate in 2019-20 for agriculture sector was less despite a higher expenditure, excluding the loan waiver. Energy recorded a whopping 114% growth in 2019-20. Health and family welfare expenditure grew significantly in 2019-20, which recorded a 24% growth. Education was given a priority and it recorded a 26% growth in 2019-20. Similarly, rural development and social welfare and nutrition also recorded good growth in 2019-20. Reduction in growth of the expenditures on welfare of Scheduled Caste (SC)/Scheduled Tribe (ST) and Other Backward Classes (OBC), water supply, and urban development is a cause for concern.

4.1.2. Spending on Social Services in the State

The social services spending over the period 2011-12 to 2019-20 (revised estimates) as a proportion of GSDP had been increasing in a consistent manner till 2017-18, after which it decreased in 2018-19 before increasing again in 2019-20 (Figure 20). The social services spending as a proportion of RR had increased to 66% in 2014-15 (owing to a big increase in education expenditure) and again decreased to 39% in 2018-19.

The share of social services expenditure in the total expenditure showed a decline from 41% in 2016-17 to 33% in 2018-19 indicating the need for increasing the same.

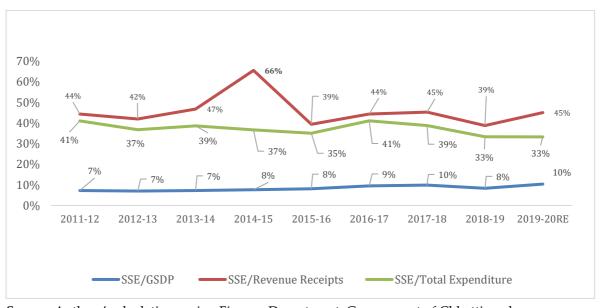


Figure 20: Share of Social Services Expenditure (SSE)

Source: Authors' calculations using Finance Department, Government of Chhattisgarh. **Note:** GSDP stands for Gross State Domestic Product.

Social services consist of expenditures relating to education, health, water supply, sanitation, urban development, welfare of SC/ST and others as well as social welfare and nutrition. The share of education in the total social service expenditure was highest at 51%, followed by water supply, sanitation and urban development together at 17%, and health and family welfare at 14% (Table 25).

Table 25: Sectoral share in total Social Services Expenditure (in percentage)

Row Labels	Average (2011-12 to 2019-20) Rs in Crore	% Share
	•	
Education, Sports, Art and Culture	10,064	51%
Health and Family Welfare	2,747	14%
Information and Broadcasting	114	1%
Labour and Labour Welfare	187	1%
Other Social Services	40	0%
Others	18	0%
Social Welfare and Nutrition	2,650	13%
Water Supply, Sanitation, Housing and Urban Development	3,309	17%
Welfare of Scheduled Castes, Scheduled Tribes and Other		
Backward Classes	709	4%
Grand Total	19,837	100%

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

4.1.3. Analysis of Committed expenditures of the state

The committed expenditures include the salaries, wages, pensions, and interest payments that need to be borne by the state, irrespective of the level of output/revenues to state exchequer (Table 25). A lower level of committed expenditure indicates a higher fiscal discipline and the possible scope for capital investment leading to growth and employment. The last three years average from 2016-17 to 2018-19 (2019-20 is yet to be finalised) indicated a healthy proportion at 45% of expenditure or 50% of the RR of the state, which gives ample scope for the state to expand the investment expenditure. The committed expenditure has increased to 50% of the total expenditure in 2019-20. This is still lower than this proportion in a few other Indian states⁷⁰.

http://www.agkar.cag.gov.in/docs/State%20Finance%20Audit%20Report%20for%20the%20year%20March%202019%20English.pdf, p. 28.

 $^{^{70}}$ For instance, in Karnataka it hovers around 80% of revenue receipts as against 50% for Chhattisgarh.

Table 26: Committed expenditures (CE) of the state

Components	2016-17	2017-18	2018-19	Average
Salaries & Wages	11,424	13,184	17,808	14,139
Salaries paid through Grants-in-Aid	2,868	3,447	1,593	2,636
Interest Payments	2,687	3,098	3,653	3,146
Pensions	3,487	3,898	5,429	4,271
Subsidies	4,189	5,005	8,323	5,839
Total Committed expenditure (CE)	24,655	28,632	36,806	30,031
Total Expenditure (TE)	57,909	66,600	73,554	73,554
Revenue Receipts (RR)	53,685	59,647	65,095	59,476
CE as percentage of TE (Total	43%	43%	50%	45%
Expenditure)				
CE as percentage of RR (Revenue	46%	48%	57%	50%
Receipts)				

Source: Authors' calculations using Finance Department, Government of Chhattisgarh.

4.1.4. Analysis of scheme expenditures of the state

The expenditures on CSS and state schemes have been very significant. The details of the GOI schemes and state schemes are provided in the Annexure. The state schemes increased significantly in 2018-19 owing to the increase in incentive for acreage under various crops, along with a loan waiver. However, there was a reduction in the expenditure under GOI schemes by 23% in 2018-19, over the previous year, while the expenditure under state schemes increased by 33% for the same period (For details please refer Annexure 1 and 2).

Table 27: Scheme expenditures in last 3 years (in Rs Crore)

Scheme expenditures	2016-17	2017-18	2018-19
GOI Schemes	12,228 (50)	14,630 (40)	11,229 (28)
State Schemes	12,015 (50)	21,570 (60)	28,676 (72)
Total	24,242 (100)	36,200 (100)	39,905 (100)
Scheme Expenditure/Total expenditure (%)	42	54	54

Source: Authors' calculations using Finance Department, Government of Chhattisgarh. **Note:** Figures in parenthesis show percentage distribution between GoI and State schemes in respective years.

4.2. Key takeaways from expenditure analysis

1. Expenditure grew significantly in the decade (period 2011-12 to 2019-20) recording a three-fold increase.

- 2. The lower share of committed expenditure compared to states like Karnataka (which has the share of committed expenditure hovering around 80% of total expenditure) indicates a good fiscal space available for programmatic expenditure. However, this is not to undermine the importance of personnel expenditure in the sectors of health and education, which are human intensive.
- 3. The capital expenditure has reduced in the years 2018-19 and 2019-20 and this needs to pick up further. Social infrastructure such as anganwadis, schools, hostels, and rural roads can be improved by increasing the capital expenditure and this can be coupled with higher expenditure under MGNREGA. The state has been fiscally prudent, and the deficits have been managed very well except for the year 2019-20.
- 4. The state has contained interest payments within the stipulated 10% of the RR, and total liabilities within the stipulated 25% of the GSDP consistently over the years. A sudden expansion in the debt will have a bearing on increased interest payments as well as the higher repayment of principal amount for some years. However, with a proper debt management plan/repayment schedule, the state can manage to use the additional debt to increase the capital expenditure significantly.
- 5. Expenditures on water supply, sanitation and welfare of SC/ST and OBC needs to be increased as they recorded a negative growth in 2019-20.

Chapter 5: Financial Development and Access to Credit

The role of financial development, or more widespread access to finance in generating economic growth has been much studied (Bittencourt, 2012). The importance of finance for growth and development of an economy was first highlighted by Schumpeter (1912). The idea underlying this relationship is that access to finance enables entrepreneurs to invest in productive and innovative activities thus leading to economic growth. Empirical estimation conducted by Bittencourt (2012) in Latin American countries found the argument to be valid and also found that rather than financial development as measured by presence of formal financial institutions, the liquid liability in the financial system in form of credit access for SMEs played a more definitive role.

5.1. Access to credit: Analysis of the present situation

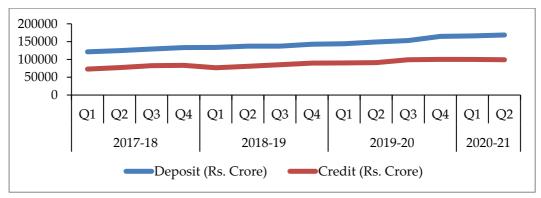
We explored access to credit in the context of Chhattisgarh with a focus on whether it acts as a constraint towards promotion of economic growth in the state. The approach to planning for Chhattisgarh also encapsulates the three goals of economic growth, social inclusion and environmental sustainability as outlined in the ruling party's election manifesto (Mahajan, 2020). We tried to analyse whether access to and utilization of credit could be a factor in achieving these goals in this section. The presence of formal financial institutions is the most basic requirement for availability of financial services at non-exploitative terms in a consistent and reliable manner. While the presence of bank branches is in no way a sufficient condition to ensure reliable and cost-effective access to credit, it can be easily thought of as a necessary condition.

When we explore the presence of formal banks in the state, there are a total of 2,941 bank branches in the state. Out of these, 1,143 are in rural areas, 8,17 are in semi-urban, 611 in urban, and 370 in metropolitan areas. The number of people who access a single bank branch on an average in the state is 10,949, which is higher than the all-India average of 9,280.

When we analyse the quarterly trends in credit and deposits in scheduled commercial banks in Chhattisgarh from 2017-18 onwards (Figure 21), we see a consistent increase in deposits over this period. During this period, the deposits grew grown from Rs 1,21,386 crore to Rs 1,68,663 Crore (a growth of ~39%). The deposits showed an increase even during the first two quarters of

2020-21. The corresponding increase of credit disbursed through scheduled commercial banks in the state from Q1 of 2017-18 to the Q2 of 2020-21 was 35.71%. The amount of credit disbursed however, while increasing consistently till the last quarter of 2019-20, underwent a decline in the first two quarters of 2020-21. The first two quarters of 2020-21 saw a decline in the credit disbursed from Rs 1,00,131 crore in the last quarter of 2019-20 to Rs 98,934 crore in the second quarter of 2020-21 (a decline of ~1.2%). This might indicate a decline in the demand for credit due to decline in industrial and commercial activity as an impact of the pandemic and lockdown.

Figure 21: Quarterly trends in deposit and credit with scheduled commercial banks in Chhattisgarh



Source: Authors' calculations using data from Quarterly Bank Statistics, Reserve Bank of India.

We also analysed the Credit-Deposit Ratio (C-D Ratio) for the state as a whole against the same figure for all-India over the period of 2017-18 to 2020-21 (first two quarters). A high C-D ratio, of over 75%, indicates pressure on the banks and might lead to a solvency crisis in the financial system in case of non-performing assets. A low C-D ratio on the other hand indicates that the banks are not utilizing the financial resources they have and deposits available with the banks are idle instead of circulating in the system and leading to economic growth. From Figure 22, we can see that the C-D ratio for India was between 75% to 80% from 2018-19 onwards until the first two quarters of 2020-21 when it went down to 72-73%. The data for Chhattisgarh however shows that the C-D ratio for the state is around 60% for the whole period, going as low as 57% in one quarter and reaching a maximum of 64% in another. This indicates that there is a need to improve utilization of deposits available with banks in Chhattisgarh.

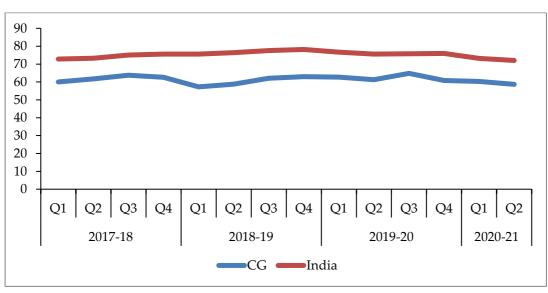


Figure 22: Comparison of Credit-Deposit Ratio for Chhattisgarh (CG) and India

Source: Authors' calculations using data from Reserve Bank of India.

A low C-D ratio can primarily indicate two things: i) there is not enough demand for credit due to less than optimal industrial and commercial activity in the state, or ii) there is an increased risk aversion in the banking system in the state. The lack of growth in demand might also be because of the high cost of access to credit, either through high interest costs or through high transaction costs of meeting the requirements of getting the credit facility (need of providing the collateral, red-tapism, etc).

Thus, the analysis of C-D ratio across the banking sector in the state and the trend of growth in deposit and credit facilities indicate a need towards increasing the access to credit facilities. In such a scenario, considering the fact that the credit disbursement in Chhattisgarh clearly has a scope for improvement, a partial credit guarantee scheme by the government might be useful. We analyse the credit availability across industry sectors (Figure 23), geographical areas (Table 28), and communities as a next step to identify areas the partial guarantee scheme might be useful in.

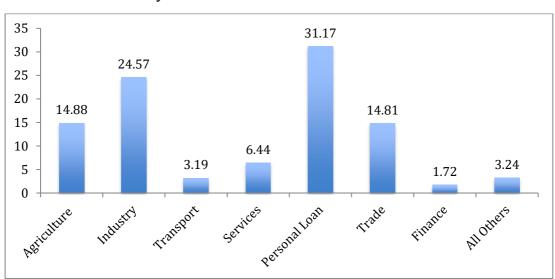


Figure 23: Proportion of outstanding credit by Scheduled Commercial Banks across industry sectors as on 31 March 2020

Source: Authors' calculations using data from quarterly banking statistics, Reserve Bank of India.

Data available from the RBI has a disaggregation of the outstanding amount of credit disbursed across industrial sectors in the state. We analysed the data to see which industry sectors are availing most of the credit facilities disbursed at present in the state. The highest proportion of credit disbursed in the state is in the personal loan category (housing loans, vehicle loans, consumption finance. etc). While this is not contradictory to the trend seen in the all-India averages (28.31% personal loans), the average for Chhattisgarh is slightly higher. The next largest proportion of the credit is availed by the industrial sector. The Chhattisgarh economy being largely comprised of mining and manufacturing activities, this is easily explained. We also see that services sectors and finance sectors avail only 6.5% and 1.72% of the credit disbursed in the state and thus are not major consumers of credit in the state. Within the industry sector, the subsectors where most of the credit facilities go are basic metals (8.43%); food processing (5.42%); construction (3.55%); electricity, gas and water (1.94%); and mining and quarrying (1.45%).

While the new industrial policy of the state emphasises the importance of primary sectors in the state economy and many of the policies are oriented towards harnessing the natural strength of the state in these sectors, the policy also identifies many other sectors as "sunrise" sectors, where growth is to be promoted. Some of these sectors are gems and jewellery, textile, pharmaceuticals, forest produce, biotechnology, non-conventional energy

generation, IT and ITeS, etc. In order to facilitate growth in these sectors, it is important to facilitate access to adequate credit facilities in these sectors. Social inclusion is one of the explicitly stated goals of the state and its ruling party. The new industrial policy also lists facilitating economic empowerment of entrepreneurs belonging to the weaker sections and in the far-flung areas of the state as one of its major objective. The priority sector disbursements for the current year (Table 27) show that the highest proportion of disbursements under the scheme are for MSMEs. The average proportion for credit to MSMEs in the state is far higher than the averages for both the central region (comprising of Chhattisgarh, Madhya Pradesh, Uttar Pradesh and Uttarakhand) as well as for all-India. However, the disbursement to agriculture sector in the state under the scheme is also significantly lower.

Table 28: Disaggregation of Priority Sector Advances

	Agric ultur e	MS ME	Exp ort	Educa tion	Hous ing	Renew able	Soci al infra	Oth er	Wea ker secti ons
Chhattisg	26.74	54.87		1.41	16.27	0.01	0.04	0.66	18.88
arh									
Central	42.56	42.27	0.07	1.39	13.18	0.02	0.05	0.46	32.85
India	40.78	42.72	1.05	1.56	13.97	0.04	0.03	0.62	29.69

Source: Authors' calculations using data from Reserve Bank of India.

The disbursement to weaker sections in the state stands at close to 19%. This is also lower than both the averages for central region as well as for all-India. More significantly, it is disproportionate to the state population proportions as Chhattisgarh is a state with one of the highest tribal populations in the country (~37%). Spatial disparity in credit disbursement is clearly visible from the data for the first two quarters in the current year and we can see that most of the credit disbursement is concentrated in a few districts, especially Raipur. When we examine the disbursements to the top five districts of the total 28 (Table 28), we see that around 75% of credit disbursement in the state is concentrated in these five districts. The districts most deprived of credit facilities appear to be Balrampur, Bijapur, Narayanpur, Sukma, etc. (Annexure 3).

While it is to be expected that credit disbursements will be more in the areas where industrial and commercial development is higher, the extent of spatial

disparity evident from the data above is noticeable and indicates a need for efforts towards promoting credit access across the state.

Table 29: Spatial Concentration in disbursement of credit across districts in Chhattisgarh in the first two quarters of Financial Year 2020-21

Top five districts in credit	Proportion of Credit (2020-21)			
disbursement	Q2 (Second Quarter)	Q1 (First Quarter)		
Bilaspur	7.96	8.69		
Durg	9.94	9.52		
Korba	3.46	3.36		
Raigarh	4.16	3.83		
Raipur	49.20	50.56		
Total	74.75	75.99		

Source: Authors' calculations using data from Reserve Bank of India.

5.2. Priorities for Government Assisted Non-Banking Finance Programmes

There are many other governmental interventions which make finance available at subsidised rates and often accompanied with technical support. For many of the deprived communities, especially for women, such financial support can be more accessible and useful. We analysed the utilization of few such schemes in the state in the recent years including the SHG Bank Linkage Programme (SHG-BLP) of National Bank for Agriculture and Rural Development's (NABARD), Deen Dayal Antyodaya-National Rural Livelihoods Mission (DAY-NRLM), Pradhan Mantri Mudra Yojana (PMMY), and Mahila Kisan Sashaktikaran Pariyojana (MKSP). Detailed findings of the analysis is presented as Annexure 4. Some key recommendations emerging from the analysis are summarised here.

- SHG Bank Linkage Programme: There is a need to increase the linkage of SHGs with banks in the state as only 16.6% of the SHGs in the state are linked vis-à-vis 63.8% in the state of Telangana. This will facilitate credit linkage of SHGs in the state.
- DAY-NRLM: Funds under associated programmes such as National Rural Livelihoods Project (NRLP), and National Rural Economic Transformation Project (NRETP) are not being utilized in the state. There is a need for better integration for utilization of such funds.

- **Pradhan Mantri Mudra Yojana (PMMY):** The state has been able to have a satisfactory growth rate in both the number of accounts and amount disbursed under the scheme.
- Mahila Kisan Sashaktikaran Pariyojana (MKSP): The programme offers 75% funding support by central government for women farmers setting up projects in areas promoting sustainable agriculture and non-timber forest produce. At present only the states of Andhra Pradesh, Telangana and Kerala have been able to utilize the funds under this scheme. Chhattisgarh has unique advantages in both these areas as mentioned in our report earlier and can take advantage of this to generate benefits for women farmers.

Chapter 6: Revival of the economy: potential mechanisms for higher revenue and ensuring growth with equality

6.1. Revenue and GSDP Forecasts: A Recap

States have seen a number of major shifts in recent years including a decline in GIA from the union government coupled with a hike in state share of central taxes, the implementation of GST, and demonetisation. These shifts are major in nature, and it takes time to adjust to these measures; in the meanwhile, these may lead to upheavals, which is what a number of states have been dealing with. Chhattisgarh is no exception to this and before states could have time to address and redress these comprehensively, the Covid-19 pandemic struck, leading to serious financial and economic distress. This has obvious implications, as discussed earlier, for revenue receipts and GSDP.

Based on the analyses of past trends, the Covid-19 situation and response in Chhattisgarh as well as at national levels, we have worked out three scenarios for revenue receipts and GSDP for this financial year.

Table 30: Revenue and Gross State Domestic Product (GSDP) forecasts for Chhattisgarh (2020-2021)

	Scenario 1:	Scenario 2	Scenario 3
	realistic	Pessimistic	Optimistic
Revenue	78,759 (-6% as	75,061 (-10% as	81,635 (-3% as
receipts (Rs	compared to 2019-	compared to 2019-	compared to 2019-
crore)	20 actuals)	20 actuals)	20 actuals)
GSDP (Rs	2,83,96,825 (-9.2	2,76,14,499 (-11.7	3,06,66,705 (-2.0
crore)	decline as	decline as compared to 2019-20 GSDP)	decline as
	compared to 2019-		compared to 2019-
	20 GSDP)		20 GSDP)

Source: Authors' projections.

Of all the revenue receipt scenarios, Scenario 1, which estimates the own tax reduction by 3%, reduction in non-tax revenues and tax share by 29% and 14%, respectively with an increase of GIA by 12% over the previous year 2019-20, is the most realistic and closer to the calculations from consultations. For GSDP, the most realistic scenario shows 9.2% contraction with an estimated GSDP of Rs 2,83,96,825 crore. Our estimations follow a robust

methodology of considering multiple factors as explained earlier; hence, they are likely to be close to the reality.

6.2. Enhancing revenue receipts: potential measures 6.2.1. Own Source Tax Revenue

The State GST (SGST-35%), sales tax (21%), excise (21%), duties on electricity (8%), vehicle tax (6%), and stamps and registration (6%) are the important sources of own tax revenue. The excise duties and duties on electricity as well as the vehicle tax have grown significantly over the last three years. As mentioned earlier, a few rationalisation measures including the reduction of the land guidance values, increase in the land registration charges and allowing smaller plots to get registered have resulted in a significant hike in collections. Therefore, the state does not need to initiate any new measures with respect to excise duties and land revenue as these may prove counterproductive. The vehicles tax collection has gone up due to higher demand and it is better to focus on that rather than tinkering with the rates in either direction.

The Central Electricity Regulatory Commission⁷¹ fixes the rates to be charged per unit of power for the supply of power across the states. The latest one provides regulatory framework for 2019-24. The fixed rates often work against the supplier states despite higher demand and even a marginal hike at 10 paise or 15 paise per unit would provide much needed revenues to the state⁷².

The GST reduced by 4% during the year 2019-20 compared to previous year, but the collection has seen an improvement in the current year. The overall collection for the state including SGST till the month of September 2020 was 24% higher than the corresponding figure for last year⁷³. The rise in collection can be attributed partly to improved collection from tax evaders and partly to collection of tax pending due to various relaxations given with regard to GST payment till the month of September 2020 due to Covid-19. The increased GST collection post-lockdown (June 2020 onwards) would mean GST collection for the year 2020-21 may almost equal to previous year.

⁷¹ http://www.cercind.gov.in/2019/regulation/Tariff%20Regulations-2019.pdf.

⁷² In consultation with the finance department personnel, Government of Chhattisgarh.

⁷³ https://www.business-standard.com/article/economy-policy/chhattisgarh-sees-31-rise-in-cgst-collection-in-sept-as-compared-to-2019-120100200291 1.html.

While efforts have been taken to control tax evasion and increase the tax base through registration drives and e-filing, there are still various measures needed, mostly at the level of central taxation implementation regime, to enhance the tax collection performance. The state government needs to argue for these with the GST Council and the union government. Some of these are outlined below.

- The present GST implementation system tracks only up to one level of the forward/backward linkages. So, while a particular assessee's transactions with their supplier/customer can be tracked through the system, the supplier/customers further transactions cannot be tracked. This hinders the detection of circular trading and creates potential for tax evasion.
- There is a lack of actionable information that can be generated online through the tax payment system. Scrutiny through the system is still basic. Efforts at detection of tax evasion are still carried out manually by field personnel, which was hampered by the Covid-19 lockdown. If the features of scrutiny in the computerised system were enhanced, the tax collection performance can be enhanced.
- Inter-state transactions: It is difficult to capture the forward/backward linkages because respective states have access only to the data for their own state. Thus, when many inter-state transactions happen, it becomes difficult to collect information on these transactions, thus increasing the potential for tax evasion.
- E-commerce and tax revenues: Since e-commerce companies are often based out of a few, particular large locations, all the trading that happens through these websites (even though sellers might be located in many states), accrue to the states where these companies are located. Thus, states like Chhattisgarh lose out on tax revenues that should accrue to them. If the system can be modified to recognise the location of production, there could be an improvement in the tax collection figures for the state.
- Timely and full release of state dues, including compensation, rather than suggesting borrowing would be critical for state.
- An extension of the time-limit for compensation for revenue losses from
 the currently committed period of five years since the introduction of the
 GST to seven years should also be argued for by states in view of the
 pandemic and serious revenue losses that the states are facing. This will

give the state a cushion to work towards revival of the economy without taking massive expenditure cuts.

6.2.2. Own Source Non-Tax Revenue

The non-tax revenue forms an important source of revenue to the natural resource-rich Chhattisgarh. Mining (71%), irrigation (12%), and forestry (4%) are the major sectors for the non-tax revenue in the state. These have recorded positive and healthy growth with minor hiccups till 2019-20 and the trend is likely to continue in 2020-21 as well.

Non-tax revenue from mining has taken a hit because of Covid-19 and is likely to impact the revenues significantly. The revenue that showed only 3% growth in 2019-20 is likely to show a higher negative growth in the range of 20%-28%. This is despite the quicker revival of mining sector in the state as well as the lowered demand outside the state for mining products as the demand chain is yet to pick up. In case the economies of other states, which are the consumer for these mining products, revive quickly leading to an upward trend in the demand, the negative growth may go down.

The revenue from irrigation is linked to the growth and performance of agriculture and crop sector. Agriculture is one of the most important sectors contributing to the state's economy. As discussed earlier, the income support programme, the RGKNY wherein the farmers in Chhattisgarh would get up to Rs 13,000 an acre a year (rate variable by crops) seems to have given a boost to farming, and it needs to be continued for its positive linkages.

Diversification of agriculture and crops may be a good future direction for which certain steps are already visible, but it needs to be strengthened through a right mix of policy and institutional measures. Signs of promoting organic farming and horticulture are visible and also yielding results but sustaining those would call for strengthening of storage and marketing linkages. While there could be some scope for PPPs in this respect, it would be important to build adequate measures for farmers security and growth while preventing any kind of exploitation in these endeavours. The option of using programmes such as Jeevika and mechanisms such as farmers' cooperative should be the first choice.

The Minor Forest Produce (MFP) in Chhattisgarh provides major revenue potential for the state. The GoC has actively taken steps to improve the trade

of MFP, which has resulted in improvement in the process of collection. The government purchased 98% of the state's total forest produce amidst the lockdown restrictions, which provided major relief to those communities. Opening of E-Portal for purchasing MFP and establishment of Van Dhan Vikas Kendra, etc., have increased the procurement by the government. The extension of community rights on forests to families has led to more efficient resource use and also played a role in securing forest boundaries⁷⁴. From the conservation and sustainable use point of view, the government has given Community Forest Resource Right (CFRR) to the weaker sections of the society. Through this MFP ownerships, fishing and water body produce rights are given.

The efficacy of this initiative could be increased if these communities are supported by Van Vikas Kendras in providing them with the requisite information, timely distribution of the seeds, and other kinds of technical support. Minimum Support Price (MSP) exists for 52 MFP products, and this includes Non-Timber Forest Products (NTFP)75. For strengthening market linkages, producers of the MFP could be organised into trading groups or marketing cooperatives—this will lead to an increase in their bargaining power. Profitable market locations could be informed to the producers in advance by notifying them with the prevailing prices of other markets. For reducing producers input cost, bulk shipments could be arranged to reduce the transportation cost or by developing infrastructure or services for transport. Through our consultation with the forest department, we got to know that SHG women are actively taking part in the processing of MFP, so this could help in transforming the existing SHG groups into co-operatives that could be engaged in processing herbal plants, medicinal and aromatic plants leading to promotion of agribusiness. Credit guarantees for starting businesses could be given to these SHGs to improve their entrepreneurial capabilities⁷⁶.

⁷⁴ During consultation, we were informed that 139 Van Vikas Kendras have been set up that have created jobs for 1,390 women. The state forest department is planning to engage 4,00,000 bamboo tree guards, involving tribal youth.

⁷⁵ Based on consultations with the Department.

⁷⁶ https://www.irjet.net/archives/V2/i8/IRJET-V2I8251.pdf, and consultation notes with the forest department.

Chhattisgarh launched the Godhan Nyay Yojana in July 2020 for livestock owners, where the government will now buy cow dung from livestock owners as Rs 2 per kg and convert it to fertilisers, to make cattle rearing profitable. In fishing, the state government is planning to take an initiative to give the status of farming to fisheries—this will help provide interest-free loans from cooperative banks for fisheries and rebate in electricity rates. These are steps in right direction.

6.3. Public expenditure: ensuring social security and turning expenditure into investments

We saw earlier that public expenditure has grown significantly in the decade recording a three-fold increase and the lower share of committed expenditure indicates a good fiscal space available for the programmatic expenditure including on human resources in case of education and health. The capital expenditure reduced in the years 2018-19 and 2019-20 and this needs to pick up further. Certain areas, such as storage facility for agriculture sector, have seen a major growth in capital expenditure and that may have helped during Covid-19. However, there is also a need to pay attention to other important infrastructure aspects. In this section we talk of priority areas for expenditure, while paying attention to social security, protection, and inequality issues.

6.3.1. Infrastructure

Infrastructure development has been found to be positively related with economic growth and decline in economic inequality (Calderon and Serven, 2004). Increased availability and quality of infrastructure results in accelerated growth as well as reduction in inequality because of the multiplier effects induced. For a relatively newly established state such as Chhattisgarh, investment in infrastructure is essential to encourage economic growth. And the state has performed especially well in this. An article published in Sunday Guardian in 2018 reports that the state saw massive development of infrastructure between 2006 and 2018 including rapid expansion in road, railway, aviation, and telecom infrastructure⁷⁷. Even recently, in October 2020, Business Standard reported that Chhattisgarh has attracted the most

102

⁷⁷ https://www.sundayguardianlive.com/news/development-infrastructure-driving-chhattisgarhs-growth.

investment of Rs 35,771.3 crore, among all the states during the quarter July–September, 2020⁷⁸.

One of the priority sectors for infrastructural investment could be roads. The total density of national highways in the state was 26.7 km per 1,000 km² as against the national average of 40.2 km per 1000 km² on 31 March 2019⁷⁹.

Both rural and urban road development is necessary to enable mobility for accessing employment opportunities, education, and health services and to promote industrial growth in both urban and rural areas. The state has also decided to focus more on core sectors that have been its major strength in the past. This is also a result of limited success that the state had in diversifying its development efforts towards certain emerging sectors. The New Industrial Policy 2019-24 focused its efforts on promoting industrial growth and economic activities in new regions, particularly in extremist-affected areas of the state, with high incentives linked with interest subsidy, electric duty exemption, transport subsidy, and reduced rates of land. The state has signed several Memorandums of Understandings (MoUs) for various sectors but what percentage of these would realise into real investment by private sector is also dependent on infrastructural facilities being available, with connectivity playing an important role. Investment on roads will play an important role in realising these goals as well.

The use of PPP mode has been common for development of roads. However, the experience also shows that the use of PPP in developing countries has been a mixed experience, and there are ways to ensure that cost and time overruns do not lead to higher burden on state coffers. Available literature suggests that the careful drafting of contracts, especially in the context of responsibilities assigned for delays and quality compromise, size of the project and nature of contract in terms of tasks and responsibilities, play a major role in determining whether it is an efficient investment or not. It would be advisable for the state to pay attention to this literature while going for PPP as a mode for development of roads⁸⁰.

80

https://www.researchgate.net/publication/303911755 Delays and Cost Overruns in Roads and Railways Infrastructure Projects.

⁷⁸ https://www.business-standard.com/article/economy-policy/chhattisgarh-and-tamil-nadu-top-projecx-new-investment-table-in-q2fy21-120101000259 1.html.

⁷⁹ https://morth.nic.in/sites/default/files/Density_1.pdf.

6.3.2. Tourism

Another sector that has linkages with roads and mobility is tourism, and the state has potential for developing this as well for augmenting its revenue. Over the years, India has emerged as one of the top destinations when it comes to tourism. As per the World Travel and Tourism Council's Economic Impact 2019, India's tourism GDP contribution grew by 4.9% and also showed the strongest growth in jobs among all the countries in 2014-19. Chhattisgarh is one the states with diverse, rich flora and fauna with places of immense natural beauty. About 44% of Chhattisgarh is covered by forests and it also boasts of some beautiful falls as well as wildlife sanctuaries. However, even with its diverse places of natural beauty, it does not fall in the top ten most visited states by foreign tourists or domestic tourists⁸¹. The places to visit in Chhattisgarh are as beautiful as sites in Madhya Pradesh or Karnataka, which are the top 10 most visited states.

The state set up the Chhattisgarh Tourism Board in 2002 as a nodal agency for infrastructural and institutional development, investment in facilities & hotels, wayside amenities and marketing and promotion activities. This has resulted in them developing theme-based circuits like arts and crafts, tiger reserves, tribes etc. However, more efforts need to be channelised towards marketing activities as it is still not a preferred tourist destination. Also, travel connectivity, including road and air connectivity needs to be focused on. Attracting investments from private players to develop tourist circuits can help in overall infrastructure development generating employment.

The pandemic and the lockdown have provided an opportunity to the tourism sector with a higher number of people waiting to step out and increased domestic savings. The state in its tourism policy of 2020, focused on promoting the state as a centre for sustainable tourist destination, using the policy of *Satat Chhattisgarh*, to provide experiences based on tribal and eco-

PPPs and Project Overruns: Evidence from Road Projects in India | Journal of Construction Engineering and Management | Vol 140, No 5 (ascelibrary.org). 693-Article Text-1062-1-10-20200805.pdf.

⁸¹ https://tripnxt.com/blog/top-10-most-visited-states-of-india-by-foreign-tourists/.
https://www.dnaindia.com/india/report-uttar-pradesh-emerged-as-top-destination-in-2019-attracting-over-53-crore-tourists-list-of-other-states-2851206.

friendly tourism⁸². There is a potential of developing tribal circuits by promising experiences to people of unique tribal cultures like the eco-tourism model followed in Myanmar starting in 2015, which also aims to promote sustainable tourism in the country. The various tribal arts and crafts must be promoted more actively and obtain more Geographical Indication (GI) tags for the local products to improve its face value. The market linkages for tribal products, especially the value-added products coming from the forests including organic goods and high-priced products, provide great potential for the state to generate revenues from tourism. This product could also be linked to the rural industries that is envisioned by the government and is successful functioning in areas like Serikhedi where linkages have been so well established that they procure the raw materials to prepare areca nut-based products from Tumkur in Karnataka and are exported all over the world. All these efforts could only be successful if the state goes for an aggressive marketing policy, along with the development of allied sectors. In addition, the state should build adequate mechanisms for preventing any kind of trafficking and environmental degradation in tribal and forest areas by encouraging responsible tourism.

6.3.3. Social infrastructure and employment

Social infrastructure such as anganwadis, schools, hostels, rural roads can be improved by increasing the capital expenditure and this can be coupled with higher expenditure under MGNREGA. The state has been fiscally prudent, and the deficits have been managed very well except for the year 2019-20. With a proper debt management plan state can manage to increase the capital expenditure significantly.

Chhattisgarh has also emerged as one of the best performing states when it comes to provision of employment through MGNREGA during the lockdown period. Chhattisgarh provides employment of 150 days against the 100 days mandated under the MGNREGA scheme across the country⁸³. A total of 1,21,740 families in the state were provided work of more than 100 days till November 2020 in the financial year 2020-21 under the MGNREGA⁸⁴. The

⁸² https://travel.economictimes.indiatimes.com/news/destination/states/chhattisgarh-hopes- $\underline{to\text{-}draw\text{-}travellers\text{-}with\text{-}tribal\text{-}and\text{-}ecotourism\text{-}opportunities/} 77238756.$

⁸³ http://mgnrega.cg.gov.in/.

⁸⁴ https://www.newindianexpress.com/nation/2020/nov/28/over-121-lakh-families-inchhattisgarh-got-work-under-mgnrega-amid-covid-pandemic-2229246.html.

state accounted for almost 41% of the employment generated under the scheme across the country during this period. However, continual availability of funds from the central government is uncertain as almost 63% of the increased allocation of around Rs 1.01 trillion for the financial year was spent in the first five months of 2020-21. In some big states such as Chhattisgarh, the negative balance (the difference between the funds available and expenditure) is almost Rs 3,200 crore⁸⁵. This needs to be immediately addressed as the state is under a constitutional guarantee to receive this fund.

While efforts should be made to ensure continued availability of funds to sustain the MGNREGA implementation, infrastructure development and the work under MGNREGA might be linked to ensure effective investment. Further, while MGNREGA in its present form ensures availability of employment in rural areas to a certain limited extent, no such schemes exist in urban areas. The experience during the lockdown brought to the fore the vulnerability of existence the poor in urban areas experience. There have been calls for a "National Urban Employment Guarantee Programme" in recent years in recognition of this vulnerability and the time is opportune for such an intervention.

Investment in such a scheme at present would enable consumption power and thus result in generating demand in the economy. It will result in enhanced well-being of a large segment of the disadvantaged population. Further, investment under the scheme can carefully be channelled in areas which are most needed. For instance, urban sanitation, solid waste management, construction and repair of common infrastructure such as roads, drainage infrastructure, shelters, and public parks are immediate concern areas in many of our urban areas. If employment is provided in these areas through an urban employment scheme, it will certainly be a productive investment. While the central government is reportedly considering such a programme, several states have already taken the first steps in this direction. Kerala, Odisha and Himachal Pradesh run urban employment programmes⁸⁶. Others are thinking along similar lines. The state can also consider the implementation of such an intervention taking advantage of its efficiency in

_

⁸⁵ https://www.business-standard.com/article/economy-policy/mgnregs-funds-fast-drying-up-as-demand-surges-amid-covid-19-pandemic-120091100035_1.html.

⁸⁶ https://www.downtoearth.org.in/blog/governance/wanted-an-urban-equivalent-of-mgnrega-72230.

implementation of MGNREGA scheme and with a careful consideration of areas of concern in urban areas which need improvement and primary investment in manpower.

6.3.4. Construction Cess

The Ministry of Labour and Employment, GOI, under the Building and Other Construction Workers (BOCW) Act, 1996, came up with Cess Fund which is 1-2% of the cost of construction for the welfare of construction workers. In March 2020, the ministry issued notification⁸⁷ for use of this cess to provide relief to the unorganised workers who may have lost jobs due to Covid-19 induced lockdown. This would have provided great relief to such workers who lost jobs overnight and had to vacate their houses and move back to their villages and towns. However, reports in June 2020 suggested that the Chhattisgarh government did not transfer any of the funds to the workers⁸⁸. The loss of the workers during the pandemic was immeasurable; hence, the government should take additional measures to ensure that the money reaches these workers. This kind of income support will have multiplier effects and mitigate the immediate income loss faced by workers.

The state government can also think of increasing the cess by 0.5% to deal with such unpredictable economic challenges.

6.3.5. Education and Health

The impact on Covid-19 on children's lives has been significantly harsh, especially those coming from marginalised backgrounds. In most parts of the country, the school still remains closed and only recently it has been opened for higher classes. Most studies emanating from this period from different parts of India⁸⁹ indicate towards the following.

1. A good section of boys and also girls, though to a lesser extent, have started working for wages. Girls are spending a lot of time in household chores and care work. Almost close to half the children above ten years of

⁸⁷ https://pib.gov.in/newsite/PrintRelease.aspx?relid=200636.

 $^{{}^{88}\}underline{https://theprint.in/india/bihar-jharkhand-chhattisgarh-did-not-release-a-rupee-for-} \underline{construction-workers-during-lockdown/447349/}.$

⁸⁹ http://cbps.in/wp-content/uploads/Report-Final-1.pdf. https://thewire.in/education/online-school-education

age are not sure of returning to school—this being true for both boys and girls. A majority of school-going children miss school because this was often the only opportunity for going out for girls in many areas, and this provided opportunity to make friends in addition to being the only place for learning.

- 2. The uncertainty about returning to school is higher among those who were earlier enrolled in private schools. This is due to the economic distress caused by parental livelihood and income losses, but also triggered by the fear of use of public transport in some cases.
- 3. The fear of child marriage of girls in early adolescence is also being reported from certain parts.
- 4. The fear of learning loss is high because of the prolonged school closure and absence of literate environment and materials at home. This could be really severe for poorer children.
- 5. The reach of technology enabled learning has been low; majority of the poor do not have ready access to smart phones or other Internet-enabled tools. The uptake of television (TV) educational telecasts has also been low. A number of studies have reported that only 10-11% children watched educational programmes even when more than half of these households had TVs. The reach was also gendered as a lower proportion of girls had access to technology enabled learning than boys.
- 6. Anganwadis have remained closed and regular health services have been disrupted. National Health Mission data has indicated that institutional deliveries fell by 35% between March 2020 and April 2020. Infant and maternal mortality have gone up, child immunisation sessions have gone down, and a 50% drop has been reported in in Bacillus Calmette–Guérin (BCG) vaccinations and oral polio vaccinations between January 2020 and April 2020.⁹⁰
- 7. Mental health issues caused by isolation, distress and lack of any support system is also being reported.

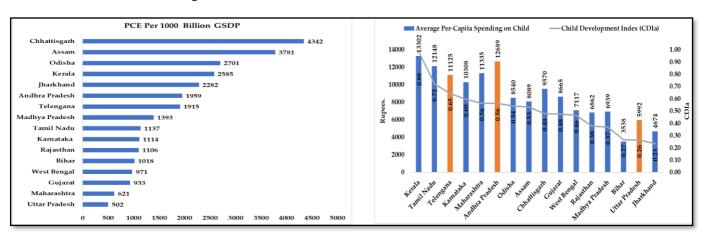
A number of these, if not all, are likely to be true for Chhattisgarh as well. Considering that the state is not performing well in case of nutrition, this

-

 $^{^{90} \, \}underline{\text{https://www.cnbctv18.com/healthcare/covid-19-effect-massive-disruption-in-routine-health-services-child-immunisation-treatment-for-critical-ailments-worst-hit-6760031.htm.} \, \underline{\text{https://www.thehindu.com/news/national/a-million-fewer-outpatient-visits-dip-in-child-immunisation-by-64-in-april-data/article32480908.ece}.$

needs to be a high priority for the coming year. Also, it is important to note that although Chhattisgarh spends a higher amount of per child expenditure, its CDI (based on education, health and nutrition indicators) is not commensurately high. (Figure 17). This means that the state needs to prioritise not only higher spending but also process reforms to make the spending more efficient.

Figure 24: Per Child Expenditure vs Gross State Domestic Product (GSDP) and Child Development Index (CDI)



Source: Finance Department of Chhattisgarh-Budget Books (developed by the Centre for Budget and Policy Studies (CBPS) team for another report on public spending on children).

Here are some suggestions for prioritising public expenditure on children.

- 1. Clearing the backlog of immunisation and ensuring that the increased health expenditure is not consumed entirely by Covid-19 vaccination.
- Making anganwadis and schools functional not only for education but also for ensuring nutrition through supplementary programmes and midday plan support.
- 3. The state has a food surplus, and it needs to spend energies in understanding why there is such a severe malnutritional status among children. If needed, a mobilisation strategy or a pathway for connecting food to children's nutrition could be developed and funded.
- 4. Social mobilisation for preventing dropouts may be the need of the hour. Considering that the state has performed better in terms of ensuring income and livelihood (agriculture has performed well and the uptake of MGNREGA has been high), the state may like to have a special mobilisation programme that connects both education and nutrition.
- 5. Retraining teachers at all stages for dealing with learning loss and mental health issues both sensitively and comprehensively. Certain policy

measures to redesign the school sessions to allow for these interventions would also be important.

While it is important to enhance spending on health, it is also important not to do so at expense of other sectors including school education, higher education, or other children and women related programmes. A higher allocation on health should not only be on Covid-19 vaccination as there are other pressing health issues too that need addressing. It would be important to build primary public health infrastructure and also fill all the vacancies at all levels to make the facilities really functional and to enhance the public confidence on public health facilities. Given that the state's committed expenditure is still not exceeding 50% of total expenditure, the scope for increased expenditure on salaries exists. It is also important to note that the universal health coverage works effectively only when public health services are at par with the private health services.

6.3.6. Proposal for Partial Credit Guarantee Intervention

Government backed partial credit guarantee schemes have emerged as a choice intervention to promote financial access for small enterprises.

According to Green (2003), well over 2,000 such schemes existed in almost 100 countries (Honohan, 2008). Typically, such interventions have been used to channel finances to some sectors, regions, or communities that are thought to be underserved by the formal financial sector. To address market failure in financial access to the underserved communities, partial credit guarantee schemes offer a particular advantage over direct lending or cash transfer schemes as the risk in this case is shared between the government and a forprofit intermediary such as a bank which has systems and processes in place to ensure creditworthiness of a venture. Such an intervention also helps alleviate the risk aversion of formal financial institutions to some extent as the partial guarantee acts as a collateral.

The data analysis conducted in the earlier sections clearly show that weaker sections and remote areas are under-served in the state. Additionally, many of the industry sectors that are identified as sunrise sectors in the state's new industrial policy are also under-financed. Hence, partial credit guarantee schemes by the government to channel bank finance to these communities/sectors can be a good intervention. This will promote/facilitate emergence of entrepreneurship in these areas and might have a long-term positive impact on economic growth as well as diversification of the economic

activities in the state. However, availability of finance is only one aspect, and it has to be interlinked with availability of technical advisory, supply chain improvement, and market linkages.

Based on this preliminary analysis, it emerges that the partial credit guarantee scheme is needed in and can be made available to the following.

- Industry sectors such as value addition in minor forest produce, ecotourism, etc. While other sectors have been identified earlier on in the report where credit disbursement at present is very low, we believe that value-added forest produce, organic farming, and ecotourism are areas in which Chhattisgarh has inherent potential and if these sectors could be facilitated to grow, they have the potential to contribute significantly to the state economy in the long term.
- Geographical areas where credit availability at present is low such as the districts of Bijapur, Narayanpur, Sukma and Balrampur.
- Weaker section of the community, especially the tribal sections of the population.
- Farmer Producer Groups and SHGs that are being promoted in Chhattisgarh through the Ministry of Agriculture by Directorate of Horticulture and Farm Forestry. If linked with initiatives such as Gothan, landless farmers and weaker sections can also benefit through this scheme.

While these seem to be the needed areas of intervention, these recommendations are based on a very rudimentary analysis. In order to really identify whether the credit disbursement is on the lower side in certain sectors/areas due to a lack in the formal financial system or due to other systemic issues in the sectors/areas themselves, a much deeper analysis is required, which is beyond the scope of this study. If the government decided to establish a partial credit guarantee scheme, it would be prudent to base such a scheme on a focused analysis of industry sectors and areas where financial access is really the constraining factor. Additionally, even if financial access is a constraining factor, it is only one of the factors needed for economic growth. In order to fuel economic growth in these sectors, it would be essential to ensure technical support, supply chain efficiency, market linkages, sufficient infrastructure, and effective law and order situation. Investment on rural roads will be a good step towards this.

References

Papers/Articles:

Bittencourt, M. (2012). Financial development and economic growth in Latin America: Is Schumpeter right? *Journal of Policy Modeling*, 34(3), 341-355.

Department of Economic Affairs, Ministry of Finance, Government of India (2020). Macroeconomic Report, May 2020

Dilasha Seth (2020). India GDP growth slows to 3.1% in Q4 as Covid-19 lockdown hits economy. https://www.business-standard.com/article/economy-policy/india-gdp-growth-slips-to-44-quarter-low-of-3-2-in-q4-11-yr-low-in-fy20-120052901552_1.html. (Accessed on Jan 15, 2021)

Dwivedi, P. S., & Jain, K (Jun 2016). Positioning Chhattisgarh State as a Tourist Destination. Shodhaytan – AISECT University Journal Vol III/Issue V

Global Economic Prospects, World Bank

Green, Anke. 2003. "Credit Guarantee Schemes for Small Enterprises: An Effective Instrument to Promote Private Sector-Led Growth?" SME

Technical Working Paper No. 10. Vienna: UNIDO. http://www.unido.org/file-storage/download/?file_id=18223

Honohan, P. (2008). Cross-country variation in household access to financial services. *Journal of Banking & Finance*, 32(11), 2493-2500. http://cgclimatechange.com/transport/#

https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.170.9339&rep=rep 1&type=pdf

https://repository.up.ac.za/bitstream/handle/2263/18934/Bittencourt_Financial %282012%29.pdf?sequence=1

https://www.csis.org/analysis/engaging-indias-electrification-agenda-powering-chhattisgarh

India Brand Equity Foundation (2020). Indian Tourism and Hospitality Industry Analysis. https://www.ibef.org/industry/indian-tourism-and-hospitality-industry-analysis-presentation.

Jhajharia, A et al. (October 2020). Covid-19 lockdown and Indian Agriculture: Options to reduce the impact. National Institute of Agricultural Economics and Policy Research.

Ministry of Statistics and Programme Implementation, Government of India (2020). Input Output Transactions Table 2007-08 (access on 20th November 2020).

Paliwal, U. L., Saxena, N. K., & Pandey, A. (2019). Analysing the impact of GST on tax revenue in India: the tax buoyancy Approach.

Patnaik, I., & Sengupta, R. (2020). Impact of Covid-19 on Indian economy: An Analysis of fiscal scenarios (No. 2020-026). Indira Gandhi Institute of Development Research, Mumbai, India.

Prithviraj Singh (2020). With 70% skilled labour gone, Chhattisgarh industries will struggle to resume work. https://theprint.in/economy/with-70-skilled-labour-gone-chhattisgarh-industries-will-struggle-to-resume-work/419159/

R Krishna Das (2020). Chhattisgarh's economy to grow at 5.32% in FY20: Economic Survey. https://www.business-standard.com/article/economy-policy/chhattisgarh-s-economy-to-grow-at-5-32-in-fy20-economic-survey-120030201238 1.html

Shantanu Guha Ray (2020). Big crisis brewing in Chhattisgarh mines. https://www.sundayguardianlive.com/news/big-crisis-brewing-chhattisgarh-mines (accessed on 26 December 2020)

Shukla, N., & Pandey, S. (2015). A Study on Marketing of Forest Produce of Chhattisgarh State. IRJET, 2(8), 1665-1671.

Stephen Naimoli and Dr. Kartikeya Singh (2019). Engaging with India's Electrification Agenda - Powering Chhattisgarh. Centre for Strategic and International Studies.

Sushim Banerjee (2020). Role of construction sector for a growing economy. https://www.financialexpress.com/economy/role-of-construction-sector-for-a-growing-economy/2128467/ (accessed on 15 January 2021)

The Financial Express (2020). Chhattisgarh turns 18: The state is fiscally responsible, but GDP growth has been indifferent.

https://www.financialexpress.com/opinion/chhattisgarh-turns-18-the-state-is-fiscally-responsible-but-gdp-growth-has-been-indifferent/1379819/.

Vijay Singh Thakur (2020). Unemployment rate decreases in Chhattisgarh amid Covid-19 lockdown.

https://timesofindia.indiatimes.com/city/raipur/unemployment-rate-decreases-in-chhattisgarh-amid-covid-19-lockdown/articleshow/75516747.cms.

Data sources:

- (2018) India Annual Survey of Industries 2012-13 to 2017-18, Central Statistics Office (Industrial Statistics Wing) - Ministry of Statistics and Programme Implementation, Government of India
- (2020) Monthly Statistics of Mineral Production, Indian Bureau of Mines
- (2020) Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks, Reserve Bank of India
- (2020) Industry wise gross bank credit of scheduled commercial banks, Database of Indian Economy, Reserve Bank of India
- Budget List of Major and Minor Heads (LMMH) Documents
- Comptroller and Auditor General of India, State Finances, Monthly Key Indicators, Chhattisgarh.

Chhattisgarh Government Departments:

Finance Department, Government of Chhattisgarh

• Major Head Wise Receipt and Expenditure

Mineral Resources Department, Government of Chhattisgarh

- At a Glance
- Production of Major Minerals

Department of Economics and Statistics, Government of Chhattisgarh

- Estimates of State Domestic Product of Chhattisgarh, 2011-12 to 2018-19
- Economic Survey of Chhattisgarh, 2019-20

Department of Commerce and Industries, Government of Chhattisgarh Chhattisgarh State Industrial Development Corporation (CSIDC)

- New Industrial Policy 2019-2024
- Industrial Policy 2014-2019

Chhattisgarh Tourism Board

Annexure 1: GoI Schemes (Rs in lakhs)

Schemes	2016-17	2017-18	2018-19
Pradhan Mantri Awas Yojana (PMAY)	1,22,553	3,38,311	2,52,434
National Education Mission (NEM)	2,28,493	2,16,540	1,35,265
Mahatma Gandhi National Rural	2 22 004	164.000	76,414
Employment Guarantee Programme	2,32,904	164,082	
National Health Mission (NHM)	1,06,350	133,314	1,41,547
Integrated Child Development Services	89,451	90,469	81,367
(ICDS)	09,431	30, 4 03	01,307
Swachh Bharat Mission	52,057	1,25,511	57,936
Pradhan Mantri Gram Sadak Yojna	74,023	57,682	96,200
(PMGSY) (CSS)	74,023	37,002	70,200
Green Revolution (Krishi Unnati Schemes	59,557	55,823	41,982
and Rashtriya Krishi Vikas Yojana)	39,337	33,623	41,702
Urban Rejuvenation Mission (AMRUT and	45,374	42,780	61,500
Smart Cities Mission)	43,374	42,700	01,300
Mid-Day- Meal Programme	47,962	44,358	41,386
Umbrella Scheme for Development of	28,408	49,975	32,027
Scheduled Tribes	20,400	49,973	32,027
National Social Assistance Programme	25,475	27,676	25,311
(NSAP)	23,473	27,070	25,511
National Livelihood Mission (NLM)	29,159	26,111	19,831
Rashtriya Swasthya Suraksha Yojana	21,487	30,590	10,878
(erstwhile RSBY)	21,407	30,370	10,070
Pradhan Mantri Krishi Sinchai Yojana	17,215	11,237	13,422
National	13,907	11,302	7,693
Rural Drinking Water Mission	10,507	11,002	7,000
Environment, Forestry and Wildlife (EFWL)	5,710	5,848	2,776
Shyama	763	7,920	5,453
Prasad Mukherjee Rurban Mission	700	7,520	0,100
Umbrella			
Scheme for Develop- ment of Backward	9,484	3,648	48
Classes, Differently abled and other	7,101	0,040	
Vulnerable Groups			
Umbrella Scheme for Development of	2,252	5,304	2,713
Scheduled Castes	_,	2,201	_,. 10
Jobs and Skill Development	3,037	3,648	3,113
White Revolution (Animal Husbandry and	1,531	4,018	3,223
Dairying)	_,-,-,-	_, -,	J,U

Schemes	2016-17	2017-18	2018-19
Green Revolution (Krishi Unnati Schemes			
and Rashtriya Krishi Vikas Yojana)	729	1,948	3,801
EM			
Blue Revolution (Integrated Develop			
ment of	1,616	2,034	1,382
Fisheries)			
Modernisation of Police Forces (Including			
Security Related	2,401	1,360	1,270
Expenditure)			
Mission for Protection and Empowerment	101	1,018	2,475
for Women	101	1,016	2,473
Infrastructure			
Facilities for Judiciary (Including Nyayalas	765	499	1,453
and e-Courts			
Grand Total	12,22,762	14,63,008	11,22,899
Grand Total (Rs in Crore)	12,228	14,630	11,229

Source: Authors' calculations.

Annexure 2: Expenditure of State Schemes (Rs in Lakhs)

Sector	2016-17	2017-18	2018-19
Agriculture	97,853	4,71,507	13,33,522
Education	3,61,205	6,84,821	7,16,827
Energy	91,071	1,25,459	36,314
Forestry	10,148	11,136	
Health	62,101	1,37,128	1,34,762
Industry and Minerals	35,913	40,175	10,416
Infrastructure	26,581	60,567	67,348
Irrigation and Flood Control	72,878	57,273	61,655
others	31,140	75,249	81,345
Social Security and Nutrition	2,21,934	2,98,004	2,66,918
Transport	1,53,025	1,69,501	1,41,804
urban development	37,617	26,218	16,673
Grand Total	12,01,465	21,57,039	28,67,585

Source: Authors' calculations.

Annexure 3: District wise credit disbursement in Financial Year 2020-21 (first two quarters)

	2020-21			
	Q2 (second quarter)		Q1 (fir	st quarter)
District	Credit (Rs in Crore)	Proportion of credit in Chhattisgarh	Credit (Rs in Crore)	Proportion of Credit in Chhattisgarh
Balod	865	0.87	829	0.83
Balodabazar	2,187	2.21	2,179	2.18
Balrampur	446	0.45	422	0.42
Bastar	1,964	1.99	1,873	1.87
Bemetara	844	0.85	792	0.79
Bijapur	214	0.22	202	0.20
Bilaspur	7,885	7.97	8,708	8.70
Dakshin Bastar Dantewada	728	0.74	796	0.79
Dhamtari	1,848	1.87	1,772	1.77
Durg	9,841	9.95	9,539	9.53
Gariyaband	520	0.53	503	0.50
Gaurela-Pendra- Marwahi	311	0.31	293	0.29
Janjgir-Champa	2,118	2.14	2,056	2.05
Jashpur	924	0.93	875	0.87
Kabeerdham	1,008	1.02	973	0.97
Kondagaon	589	0.59	549	0.55
Korba	3,433	3.47	3,368	3.37
Koriya	1,112	1.12	1,065	1.06
Mahasamund	1,894	1.91	1,810	1.81
Mungeli	681	0.69	649	0.65
Narayanpur	145	0.15	138	0.14
Raigarh	4,124	4.17	3,838	3.83
Raipur	48,676	49.20	50,619	50.57
Rajnandgaon	2,542	2.57	2,420	2.42

	2020-21				
	Q2 (second quarter)		Q1 (first quarter)		
District	Credit (Rs in Crore)	Proportion of credit in Chhattisgarh	Credit (Rs in Crore)	Proportion of Credit in Chhattisgarh	
Sukma	191	0.19	180	0.18	
Surajpur	913	0.92	889	0.89	
Surguja	1,937	1.96	1,836	1.83	
Uttar Bastar Kanker	993	1.00	927	0.93	
	98,934		1,00,099		

Source: Authors' calculations using data from Reserve Bank of India.

Annexure 4: Detailed Analysis of Government Assisted Non-Banking Finance Programmes

Self Help Group – Bank Linkage Programme (SHG-BLP) of National Bank for Agriculture and Rural Development (NABARD): The SHG-BLP of NABARD is one of the most successful interventions where credit has been made available to self-help groups of women by linking them to banks. According to the Status of Microfinance report released by NABARD in 2019-20, only 16.6% of SHGs in Chhattisgarh have been credit-linked to banks. The best performing states in credit linkage of SHGs under the scheme are Telangana (63.8%), West Bengal (63.3%), Andhra Pradesh (61.9%) and Karnataka (51.7%). Neighbouring states like Odisha (20.3%), Jharkhand (21.6%), and Bihar (33.3%) have all outperformed Chhattisgarh. The average amount of loan disbursed to a group in 2019-20 is Rs 1.8 lakh. Non-Performing Assets (NPAs) as a percentage of outstanding loans is one of the lowest in the state at 6.32%, against the national average of 17.35%. Hence, it can be surmised that there is definite scope for improvement in credit linkage of SHGs in the state.

Deendayal Antyodaya Yojana – National Rural Livelihood Mission (DAY-**NRLM):** Under the programme, Revolving Funds (**RF**) at the rate of Rs 10,000-15,000 per SHG and Community Investment Fund (CIF) to the extent of Rs 2,50,000 per SHG is provided to Self Help Groups (SHGs) and their federations to take up self-employment for income generation and livelihoods activities. National Rural Livelihoods Project (NRLP) is a subset of NRLM, which aims to make intensive livelihood investments in 13 poverty states including Chhattisgarh. Under the DAY-NRLM programme in Chhattisgarh, 1,94,047 (2.8% of the national statistics) SHGs have been formed; out of these, 86% of the groups are linked to banks. An amount of Rs 2,781.45 lakh has been lent to these groups as RF. However, all of this fund comes from NRLM⁹¹ and the state has not availed of funds available from NRLP, National Rural Economic Transformation Project (NRETP) and the state's Externally Aided Project fund. Hence, it appears that there is a need for better integration of DAY-NRLM programmes with other programmes under the same umbrella.

⁹¹ https://nrlm.gov.in/shgOuterReports.do?methodName=showShgreport.

Pradhan Mantri Mudra Yojana (PMMY): The scheme offers credit guarantee and refinance in addition to technology and promotional support for microentrepreneurs and Micro, Small, and Medium Enterprises (MSMEs). The table below shows the performance of the scheme between the years of 2015-16 and 2019-20. As we can see, the growth in the number of accounts and the amount disbursed under the scheme has been more than the national growth rates. The proportion of accounts and amount disbursed in Chhattisgarh has also grown as a proportion of the national figures. Hence, it appears that the performance of banks under the scheme is comparatively better. It is also reinforced by the fact that, in Chhattisgarh, lending to MSMEs by banks under the priority sector lending norms has been better compared to the national average as shown earlier.

Performance of Pradhan Mantri Mudra Yojana (PMMY) in state of Chhattisgarh

	2	2015-16 2019-20		2019-20		Growth
	No. of Accounts	Amount Disbursed (In Rs Crore)	No. of Accounts	Amount Disbursed (In Rs Crore)	Growth (No. of Accounts)	(Disbursement Amount)
Chhattisgarh	6,39,711	2,156.14	12,61,018	6,691.69	97.12	210.36
India	3,48,80,924	1,32,954.73	6,22,47,606	3,29,715.03	78.46	147.99
Proportion (%)	1.83	1.62	2.03	2.03		

Source: Authors' calculations using data available on https://www.mudra.org.in/

Mahila Kisan Sashaktikaran Pariyojana (MKSP): A particular subprogramme under the NRLM is the MKSP, under which the Ministry of Rural Development provides funding support of up to 75% of the project cost for interventions aimed at benefitting women farmers. The programme has a special focus on sustainable agriculture practices and non-timber forest produce. Both of these are strong areas for the state of Chhattisgarh as mentioned earlier. Additionally, for the state government, contribution of 25%, contribution in kind (manpower, infrastructure) is allowed by the central government. Combined with Chhattisgarh government's initiatives in providing community rights in forest areas, this scheme could be utilized much more in the state. However, at present, only states like Andhra Pradesh, Telangana, and Kerala have been able to successfully utilize the scheme⁹². This scheme should be utilized much more to improve funding support for women in tribal areas.

-

⁹² https://factly.in/explainer-what-is-the-mahila-kisan-sashaktikaran-pariyojana-mksp/#:~:text=Few%20of%20the%20important%20outcomes,of%20women%2C%20develop%20entrepreneurship%20etc.

unicef for every child

UNICEF Chhattisgarh Office

Katora Talab, Civil Lines,

Raipur, Chhattisgarh- 492001

Website: www.unicef.org

☐☐ Centre for Budget☐☐ and Policy Studies

Maitri Bhavan, Number 4, M.N. Krishna Rao Road,

Basavangudi, Bangalore – 560004

Tel: +91 2656 0735 Fax: +91 2656 0735 Email: <u>info@cbps.in</u> Website: <u>www.cbps.in</u>