Macroeconomic Impact of Covid-19 on the economy of Chhattisgarh & Development of Responsive Financing Models

Centre for Budget and Policy Studies

May 2021

Background

- The Covid-19 crisis has had a tremendous impact on economic growth across the world and in India. However, the impact of Covid-19 and the induced lockdowns is expected to be different across sectors, with construction, travel and tourism, manufacturing and trade expected to be the worst hit. Thus, the structure of an economy, defined by the relative presence of primary, secondary and tertiary sectors, is expected to be a determining factor in the extent of economic losses suffered by the state and has to be considered while assessing the economic impact of Covid-19.
- Contractions in economic activities are expected to have an enormous burden on fiscal health of the union government as well as that of the state governments. The negative impact on the revenues of the state government is, in turn, likely to affect the government's ability to incur expenditure on critical social sectors such as health, education, nutrition, and social protection.
- In the present study, we analyse the macro-economic impact of the pandemic on the economy of Chhattisgarh. We estimate the extent of revenue loss likely to be incurred by the Government of Chhattisgarh and the reduction in Gross State Domestic Product (GSDP) during the current year. We also study the expenditure trends and identify areas where the expenditure needs to be maintained or increased, especially from the perspective of social protection and enabling economic recovery.
- We suggest potential areas and ways for the state government to manage the shortfall (through additional revenue generation and prioritisation of expenditure) and to maintain expenditure in key social sectors while also giving an impetus to economic recovery.

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 2020-21[1]. 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) works, Godhan Nyay Yojana, and their impact on revenues of the state, including Goods and Services Tax (GST) collections[2]. Some evidence exists to establish that there is a need to understand the GST pattern in greater detail to connect it with the economic activities and consumption pattern[3]. 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 share[4], while the revised debt limit was available and it was used to estimate the total receipts[5], which was later mapped to sectors to estimate the GSDP.

Findings[6]

A. Revenue Receipts and estimated shortfalls

We analysed the trends in various components of revenue receipts from 2017-18 to 2019-20 and projected the estimated receipts and shortfalls for the current year (Table E.1). We saw reductions in both the share of taxes as well as the tax revenues during the fourth quarter (Q4) of Financial Year (FY) 2019-20 compared to the same period in FY 2018-19. However, there was an increase in the revenues from electricity duties, land revenue, excise duties, vehicle tax, and stamps and registration, over the same period. The cumulative tax revenues increased marginally by 3% for the year 2019-20 compared to 2018-19.

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[1] The data on crop production and prices for the last season/year was also not available to us.
[2] http://www.businessworld.in/article/Chhattisgarh-Andhra-record-highest-spike-in-October-s-GST-collection/02-11-2020-338390/, https://www.sify.com/finance/chhattisgarh-records-6-higher-gst-revenue-collection-news-news-ujcrkShgaighj.html.
[3] 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.
[4] http://www.cga.nic.in/MonthlyReport/Published/11/2020-2021.aspx
[5] https://www.prsindia.org/sites/default/files/parliament_or_policy_pdfs/State%20Finances_2020-21.pdf, p. 23
[6] 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 authors' calculations.

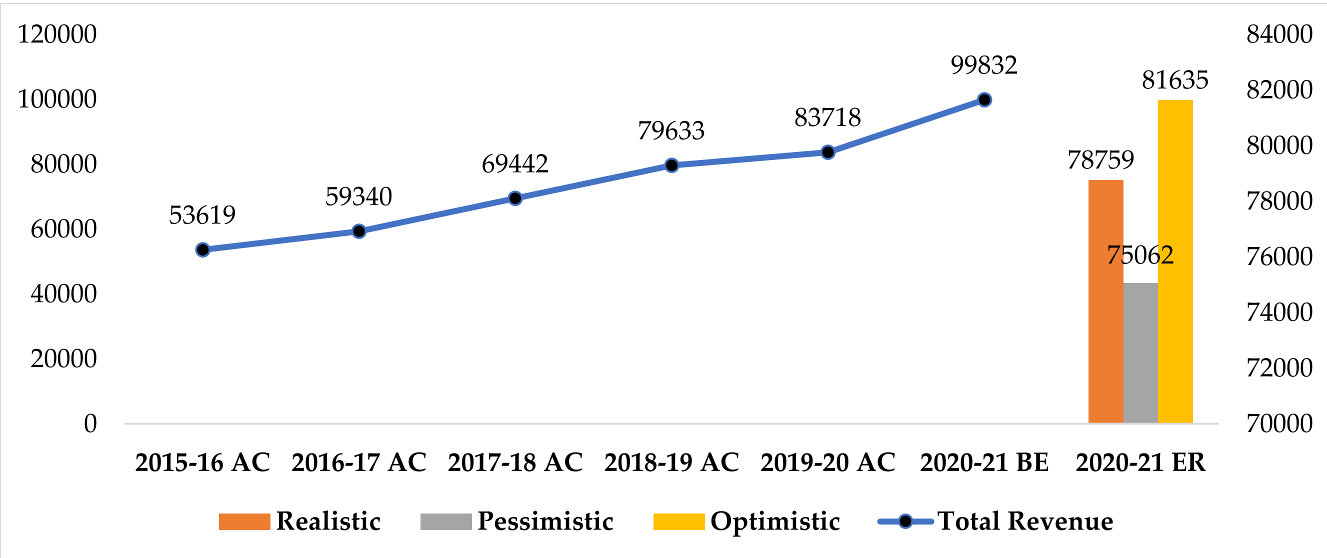
The policy tweaks relating to land revenue administration, stamps and registration fees, which include the registration of smaller plots along with reduction in guidance values with a slight increase in the registration charges, have contributed to the increase in the land revenue. The duties on electricity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

					Shortfall Scenario-wise (with respect to 2020-21 BE) (Rs in Crore)			**Shortfall Scenario-wise (with respect to 2020-21 BE, in %)**		
Components of Revenue	**2017-18 AC**	**2018-19 AC**	**2019-20 AC**	**2020-21 BE**	**Realistic**	**Pessimistic**	**Optimistic**	**Realistic**	**Pessimistic**	**Optimistic**
Tax Revenue	19,895	21,427	2,2118	26,155	21,442	19,898	20,606	-18%	-24%	-21%
Non-Tax Revenue	6,340	7,703	7,934	9,215	6,150	6,930	6,131	-33%	-25%	-33%
Tax Share	20,755	23,458	20,206	26,803	17,706	17,747	19,965	-34%	-34%	-26%
Grant-in-Aid (GIA) and Contributions	12,657	12,505	13,611	21,658	15,426	12,409	16,413	-29%	-43%	-24%
Non-Debt Capital Receipts	142	168	261	300	117	160	602	-61%	-47%	101%
Debt	9,652	14,370	19,588	15,701	17,918	17,918	17,918	14%	14%	14%
Total	69,442	79,633	83,718	99,832	78,759	75,062	81,635	-21%	-25%	-18%
Shortfall Receipts					21,051	24,749	18,175			
					21.1%	24.8%	18.2%			
Gross State Domestic Product (GSDP) Shortfall			3,12,87,805	3,44,26,865	2,83,96,825	2,76,14,499	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%			

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

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

For many of these revenue sources (land revenue, stamps and registration, vehicle tax, sales tax and state excise), we saw that while there was a significant decline compared to last year for the first two quarters of the year, the collection was significantly higher in the months of October–November 2020. 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, compared to April–November 2019 with no dent in revenues during 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 State GST (SGST) collections for the period April–November 2020 had declined by about Rs 800 crore. The 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. The total reduction in the state's own tax revenues for April–November 2020 was Rs 1400 crore, out 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.

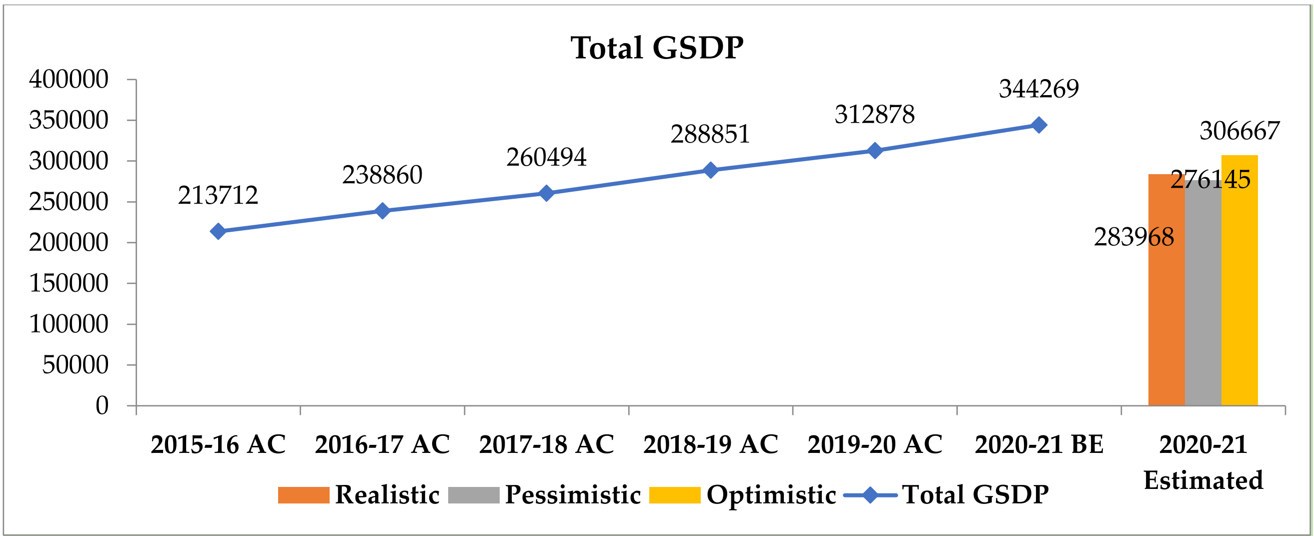
B. GSDP Trends and estimated shortfalls

We projected estimates for GSDP for the current financial year 2020-21 for three scenarios (realistic, optimistic and pessimistic). These estimates and projections were based on revenue trends, assumptions based on consultations, and assessment of performance of different sectors at national level. Our estimates for the three scenarios show a contraction of 9.2% (realistic), 2% (optimistic), and 11.7% (pessimistic). Some of the sectors for which we estimated positive growth included real estate, ownership of dwellings and professional services, electricity, gas, water supply, public administration, crops, livestock, fishing, 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 2020 and November 2020.

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) (Rs in Crore)

					Estimated GSDP 2020-21			Shortfall Scenario-wise (with respect to 2020-21 BE)			Shortfall Scenario-wise (with respect to 2019-20 AC)		
Sectors	2017-18 AC	2018-19 AC	2019-20 AC	2020-21 BE	Realistic	Pessimistic	Optimistic	Realistic	Pessimistic	Optimistic	Realistic	Pessimistic	Optimistic
Agriculture	53,197	61,589	69,043	73,551	69,450	668,78	75,817	-6%	-9%	3%	1%	-3%	10%
Industry	1,12,269	1,21,804	1,28,518	1,45,331	1,13,307	1,08,534	1,20,175	-22%	-25%	-17%	-12%	-16%	-6%
Services	95,027	1,05,458	1,15,317	1,25,387	1,01,211	1,00,734	1,10,676	-19%	-20%	-12%	-12%	-13%	-4%
Total GSDP	2,60,494	2,88,851	3,12,878	3,44,269	2,83,968	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 on 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)

Expenditure	2017-18 AC	2018-19 AC	2019-20 AC	2020-21 BE	2017-18 AC	2018-19 AC	2019-20 AC
Revenue Expenditure	56,230	64,411	73,473	81,400	17%	15%	14%

Expenditure	2017-18 AC	2018-19 AC	2019-20 AC	2020-21 BE	2017-18 AC	2018-19 AC	2019-20 AC
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%

Expenditure on critical sector hovered around 66% of the total expenditure. While the agriculture sector recorded a 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.

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

Sectors	2017-18 AC	2018-19 AC	2019-20 AC	2017-18 AC	2018-19 AC	2019-20 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%			

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)

Expenditure	2017-18 AC	2018-19 AC	2019-20 AC	2020-21 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 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.

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 fixed rates often work against the supplier states whose revenue do not go up despite an increase in demand. Lobbying for autonomy in fixing electricity tariffs or for even a marginal hike in the rate per unit would provide a much-needed increase in revenue income of the state, if successful.

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 Operational Funding Requirement (OFR) to the DISCOMS (electricity distribution companies). 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:** There is a need to enhance the effectiveness of GST governance on multiple fronts. Better scrutiny can be enabled through enhancement in features of the computerised system to prevent tax evasion. In case of e-commerce transactions, if the system can be modified to recognise the location of production and not the location of trading, there could be improvement in the tax collection figures for states such as Chhattisgarh where the production happens. Timely and full release of state dues, including compensation, would be critical. Also, an extension of the time-limit for compensation for revenue losses, from the proposed five years to seven years, should be argued for by states in view of the pandemic and revenue losses that the states are facing.

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 than the 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 and to collectives of tribal women, 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. 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 eco-tourism, diversification, and marketing of forest and agriculture products. The state can consider accessing several means to access resources for this. This could include accessing the union government's scheme for Special Assistance to States for Capital Expenditure, where the state is yet to get its full release or accessing National Bank for Agriculture and Rural Development's (NABARD) Rural Infrastructure Development Fund. 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 agencies.

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 uncertainty.[7] 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, 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.

vii. Using Public-Private Partnership (PPP) for selected sectors: Public-private partnership may be a good model for attracting investments to develop tourist circuits, thus leading to infrastructure development and also generating employment. Emphasis on road and air connectivity would be critical. There is some scope for using PPP in strengthening of

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

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.

Project Details

This policy brief has been prepared based on the findings of a research project titled ''Analysis of macro-economic impact of COVID-19 and development of responsive financing Model for the state of Chhattisgarh'. The study was undertaken by Centre for Budget and Policy Studies (CBPS), Bengaluru with financial support from the United Nations Children's Fund (UNICEF) office for Chhattisgarh. The idea for the study came from the State Planning Commission, Chhattisgarh. The study team included Achala Yareseeme, Archana Purohit, Atul Kumar, Madhusudhan B. V., Shiboni Sundar, Susmitha M. V., and Jyotsna Jha from CBPS (www.cbps.in). The study could not have been completed without active cooperation of the senior officials from a number of departments of the Government of Chhattisgarh.

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