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EVALUATION
OF STATE FINANCES

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Executive Summary

Introduction: The report titled **'Outcome Evaluation of State Finances in the context of recommendations of the 14th Finance Commission'** analyses the state finances for Jharkhand keeping the 14th Finance Commission recommendations as the benchmark. Since the 14th Finance Commission report, the economy has gone through a lot of change. India was hit by the demonetisation and Goods and Services Tax wave. Apart from that, other macroeconomic indicators have witnessed quite a change due to other changes in the economy. This report comprises 13 chapters, each covering a different issue of equal importance to the development of the state.

Data for preparing the report was gathered from various sources including different Departments of the Government of Jharkhand, Reserve Bank of India database, Jharkhand Economic Survey. The methodology used in most chapters is mostly analysis of ratios and other simple calculations to calculate the value of certain public finance indicators. The last chapter includes a projection to forecast a debt roadmap for the state. At the end of each chapter, policy prescriptions and recommendations for the state have also been provided based on our analysis and calculations. The summary for each chapter is given below.

Chapter 1 starts with the estimation of the tax revenue of the state of Jharkhand. It is seen that the tax revenue as a proportion to total revenue has seen a dip as compared to its peak in 2013-14. However, the tax to GSDP ratio has improved not only in absolute terms, but also in comparison to other states. Furthermore, the tax buoyancy, which is defined as the rate of growth of tax revenues to rate of growth in income, shows that Jharkhand has high tax buoyancy as compared to its neighbouring states. The chapter then goes on to discuss the introduction of the Goods and Services Tax (GST) regime on the income of the state. It points out the fact that there has been an increase in the number of registrations as compared to the VAT regime. However, Jharkhand is dominantly a producing state, there seems to be some amount of revenue loss for the state, as GST primarily favours consumer rich states. It is seen that Jharkhand has been continuously receiving compensation due to the loss in income post the implementation of GST. However, the concern is to increase revenues in the long term as the compensation is available only for five years. A major source of revenues for the state of Jharkhand comes from industries, mining, and manufacturing. However, it was studied that post the implementation of GST, most taxes accrued to inter-state GST, rather than GST. The chapter finally ends with some major reasons for the downfall in tax revenues accompanied by recommendation and future suggestions. It also discusses the measures taken up by the state, such as facilitation of training etc., to boost revenue generation.

Chapter 2 starts with an analysis of how non-tax revenue to total revenue is a fairly constant proportion. It then compares the relative position of Jharkhand as compared to other states on the non-tax revenue as a percentage of GSDP parameter. It has been seen that Jharkhand's rank has been increasing steadily over the years. A further analysis of non-tax revenues into General Services, Economic Services, and Social Services reveals that economic services contributes 80% of the total non-tax revenues. Furthermore, metallurgical industries, tourism, and roads and bridges are the top contributors to economic services. The chapter proposes that the government should

give more importance to the tourism sector as the share to economic services has been falling over the years. Next, the recovery rate for different sectors has been calculated, which is the revenue receipts by revenue expenditures. The recovery rates for different services tells us that economic services has seen the highest recovery rate (50%), followed by general services (5%), and social services (2%). The last section discusses the profitability of the different enterprises, and proposes that there should be reconstruction of these enterprises in various sectors to increase profits.

Chapter 3 discusses the various heads of expenditures for the state. In the analysis of expenditure, the revenue expenditure accounts for a major part of the total expenditure. The disturbing trend is that the expenditure in the less-developed states is much less when compared to the developed states. This holds good both for revenue and capital expenditures. The other sub-head that we looked into is the efficiency of expenditure. It was seen that the state's revenue non-plan expenditure was growing at a rate greater than the plan expenditure, which is considered as inefficient. The third sub-head was 'committed expenditure'. The state's committed expenditure has come down marginally and this is a good sign.

Chapter 4 discusses the various kinds of deficits faced by a state. In particular, it assesses the revenue, fiscal, and primary deficits of Jharkhand over a period of time. It is analysed that Jharkhand is complying with the FRBM act of 2003 with respect to the deficits. For instance, Jharkhand posits a positive revenue surplus from 2011-12, along with an increasing revenue surplus to GSDP ratio. The revenue receipts have been growing at a rate faster than the revenue expenditure. In case of the fiscal deficit, Jharkhand has a positive fiscal deficit of around 3.5%, mainly due to the incessant increase in capital expenditure throughout. Finally, with regard to the primary deficit, it is defined as fiscal deficit less interest payments. Primary deficit as a ratio to GSDP has been decreasing and is currently below 1%. On this count, Jharkhand fails to comply with the FRBM Act, which states that all states should have a primary surplus of 3% with regard to GSDP. An interesting fact is that the growth rate of interest payments has well been below the growth rate of revenue receipts, and the ratio of interest payments to revenue receipts is within the band of 18-25%.

Chapter 5 goes on to discuss the status of debt for the state of Jharkhand. Two ways to define debt sustainability is through interest payments to revenue receipts, and the debt to GSDP ratio. While it is seen that the debt to GSDP ratio is above the threshold limit of 20%, the interest payments to revenue receipts is below the specified target. On comparing the compounded annual growth rate, it is seen that the CAGR of annual borrowings is 26%, while cumulative debt, and interest payments have grown at about 16% and 12% respectively. The chapter also analyses the composition of debt for the state. Internal debt, loans and advances, public accounts, and contingency funds are the four major compositions of the debt accumulated by the state. The public account comprises the major proportion of state debt and has always been in excess of 60% since 2011-12. On the other hand, internal debt has only one-third contribution and has now gone even below 30%. Overall, this chapter analyses the debt sustainability of the state, and ways to achieve higher efficiency.

Chapter 6 discusses the evolution of the FRBM Act and the change that is has brought about over time. The FRBM Act was first introduced in the year 2003. The main features were to limit fiscal deficit up to 3% of GDP and debt to around 60% of GDP. In 2007, the Jharkhand FRBM Act was enacted. The aim was to remove revenue deficit and to maintain fiscal deficit to GDP at 3% by the end of 2009. Other important targets were to reduce the proportion of interest payments to revenue receipts to around 18-25% and to reduce the ratio of salary to state's own revenue to 80%. There were two other amendments – 2010 and 2015. The final targets are -3.25% fiscal deficit to GSDP, primary surplus of 3% of GSDP, debt at 20% of GSDP, interest payments at 18-25% to revenue receipts, and salary paid to revenue receipts at 80%. The second half of the chapter maps the status of Jharkhand to check whether it complies with the FRBM norms. The chapter reveals that while fiscal and revenue deficits are well within target, the primary deficit does not comply with the target, and is forecasted to be away from the target in the near future too. With regard to debt, it is seen that while the state is unable to meet the 20% debt to GSDP target, it is able to meet the overall target of 300% of debt to revenue receipts. Finally, with regard to interest payments, salary paid and non-committed expenditures, it is seen that all three parameters are well below the regulated limit and are doing consistently well.

Chapter 7 talks about the state's transfers to urban and rural local bodies. The first part of the chapter talks about the devolution of grants to panchayats and municipalities. It also discusses the difference between the basic grant and performance grant. It addresses the procedure for the division of grants for both basic as well as performance grant. The chapter then analyses the disaggregated data looking at gram panchayats having the highest and lowest allocation of grants Next, the devolution of finances into various departments is analysed. Animal Husbandry, Food Development, Water Resource Department are some of the departments that are discussed in depth. The power and the functions of the urban local bodies, a discussion on the grants received, and tax and non-tax revenues of the urban local bodies are also discussed. The last part of the chapter deals with the physical and financial progress of the various urban development schemes. Schemes such as the mechanization of abattoirs, housing and slum development program, and basic services for the urban poor are discussed. The trend for the past five years is analysed, and various suggestions and recommendations to improve upon certain schemes are listed.

Chapter 8 deals with the analysis of the Public Sector Units. Of the few PSUs that we briefly studied, there is the Jharkhand State Mineral Development Corporation, which, according to the CAG report of 2015, has made a profit, but, according to the Annual reports of the COMPANY, it has not been operational as yet, and so it is suggested that it should not be in existence. The Jharkhand Forest Development and The Jharkhand Beverages Corporation are running with the objective of "social" interest and earning a profit, and therefore should continue under the umbrella of the State government. The JSEB is, however, running huge losses but most of these are due to "implementational" problems which, with effort, can be corrected.

Chapter 9 deals with the power sector reforms of the state. Jharkhand has witnessed a massive change in its power sector with the unbundling of companies. This chapter touches upon the Memorandum of Understanding that was signed between the Government and the distribution companies. Major initiatives of the reforms such as loss reduction, electrification schemes, IT reforms, and improvement of supply side phenomenon has been discussed. The chapter then discusses the UDAY scheme in detail. It further analyses how Jharkhand as a state has been performing with respect to the parameters suggested under the UDAY scheme. Last, the chapter ends with discussing how two major companies (JSEB and JBVNL) in the state of Jharkhand have performed financially. While the revenue from operations under JBVNL has been increasing year-on-year, the income from operations has seen a dip for JSEB.

Chapter 10 discusses the contingent liabilities of the state. It begins with eliciting the difference between Explicit contingent liabilities, including the outstanding guarantees of the state. It is seen that Jharkhand had no outstanding guarantees till 2013-14. Implicit contingent liabilities on the other hand take place when there is a specific event such as natural calamity or financial failure of a firm. The chapter discusses the state bailing out the power sector from its outstanding debt along with the expenditure on the relief on account of natural calamities.

Chapter 11 discusses the expenditures in the form of subsidies undertaken by the state. The chapter starts by providing an overview of subsidy expenditures in India. It shows that the subsidies have seen an erratic trend from 2005 onwards. To understand this better, the different sub-heads under subsidies have been carefully studied. The top three have been seed exchange, capital investment, and agricultural development. Under the animal husbandry scheme, it is seen that almost all the targets have been fulfilled. Improvements are still required for use of artificial intelligence, mil production etc. With regard to the seed exchange program, information on financial achievement and beneficiaries has been provided for each of the districts. Surprisingly, there is not much of a difference among districts with regard to financial achievement per beneficiary. Finally, the progress of the horticulture department is analysed and the production per area for various fruits and vegetables is measured. It was seen that there has been an increasing trend for the production per area for both fruits and vegetables, and it was suggested that the government should be pumping in more subsidies into these promising areas.

Chapter 12 discusses the outcomes evaluation of state finances in light of the recommendations made by the 14th Finance Commission. It further discusses assessments made on revenues, expenditures, fiscal deficit, debt, and grants to urban and rural bodies. Non-tax revenues have been performing better than tax revenues in terms of realization. On the other hand, while fiscal deficit is within control, the debt has been increasing and touching the upper limit as prescribed by the 14th Finance Commission. Finally, in terms of grants, revenue generation has not been started for gram panchayats due to the fact that there have been no recommendations made by the Commission. The chapter ends with discussing the success of the unbundling of the power sector and other disinvestments by public sector units.

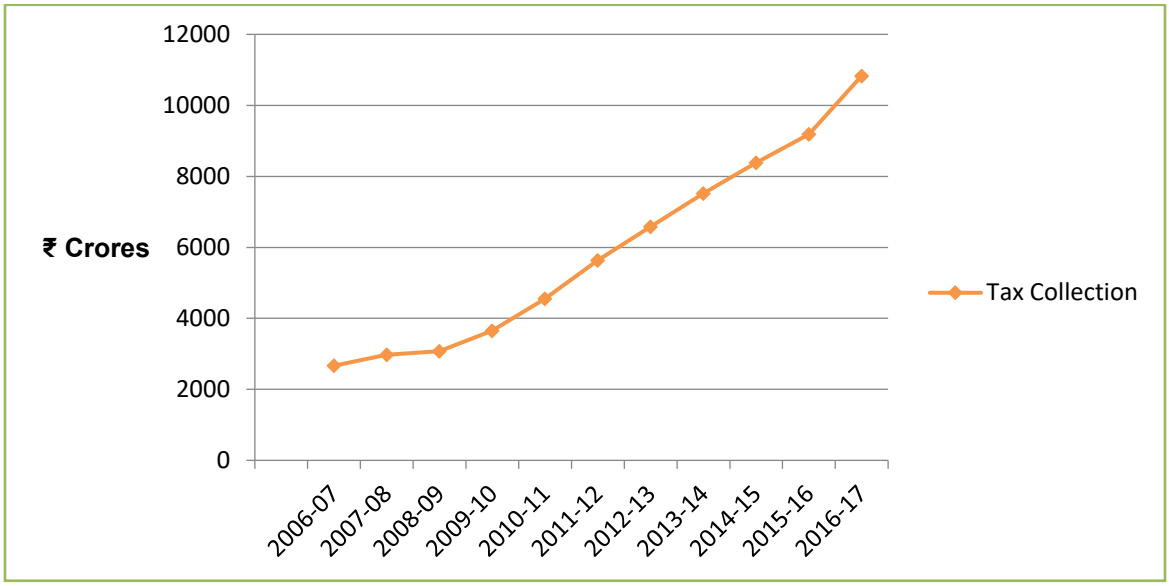
Chapter 13, the final chapter of this report, chalks out a sustainable debt road map for the state of Jharkhand, by making projections from the years 2020-2025. Keeping the recommendations made by the 14th Finance Commission as the benchmark, projections were made on the sustainable level of deficit and debt for the state for the upcoming years. The chapter also discusses the impact of the Goods and Services Tax on the debt and other macroeconomic indicators of the state.

Chapter 1: Estimation of the Tax Revenue Capacity of the State

Introduction

Tax revenues consist of a major proportion of the revenues for any state and contribute largely to the state's public finance. Jharkhand is a state that was formed in the year 2000; however, as of today it has grown rapidly. Figure 1.1 depicts the growth in own-tax revenues for the state for a decade (2006-2017).

Figure 1.1: Tax Collection of Jharkhand from 2006-2017



Source: Ministry of Finance, Government of Jharkhand

From Figure 1.1, it is seen that the tax collection for Jharkhand has seen an upward trend throughout the decade. However, it has started picking up growth rapidly from 2010-11 onwards. The average increase in tax collection has been around 15% throughout the period. In 2006-07, the tax collection amounted to ₹ 2666.31 Crores, which has increased to around ₹ 10832 Crores in 2016-17.

Of the total revenues that accrue to any Indian state, a part of it comes from Tax Revenues, Non-Tax Revenues and Grants from the Central Government. For the state of Jharkhand, it has consistently provided for more than 50% of the state's revenues. Table 1.1 provides for tax revenue as a percentage of the state's total revenues from 2006-07 to 2018-19.

Table 1.1: Total Tax Revenue as a Percentage of Total Revenue Receipts

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Tax Rev	7240	8584	9145	10047	11870	14123	16411	18319	19836	27447	32441	33497
Total Rev	10010	12027	13213	15118	18781	22420	24770	26137	31565	40638	47054	52576
TR/Tot Rev (%)	72.3	71.3	69.21	66.4	63.2	62.99	66.2	70.08	62.8	67.54	68.9	63.7

Source: CAG Report on State Finances in Jharkhand; Jharkhand Economic Survey, 2018-19 Figures in ₹Crores

It is clear that in the last 10 years starting from 2006-07, it was at an all-time high at 70.08% (2013-14), and it has slipped down to 68.9% in 2016-17. The capacity of any state to raise tax revenues depends on its Gross State Domestic Product (GSDP), therefore the total tax/GSDP ratio is also of some interest. The GSDP is calculated in current prices. GSDP is calculated in current prices using 2011-12 as the base year. The back-series of the GSDP (2006-2011) has been calculated using the 'splicing method' keeping 2011-12 as the common overlapping year. Please refer to the appendix at the end of the document.

Table 1.2: Total Own-Tax Revenue as a Percentage of GSDP (Current)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
O.T.R	3189	3474	3753	4500	5717	6954	8224	9380	10350	11479	13299	12353
GSDP	74486	93420	97698	111972	141640	150918	174724	188567	218525	231294	253536	259664
OTR/GSDP (%)	4.28	3.71	3.84	4.01	4.03	4.6	4.7	4.97	4.73	4.96	5.2	4.75

Source: CAG reports of State Finances of Jharkhand; Jharkhand Economic Survey 2018-19; Figures in ₹ Crores

It is nice to note that there has been a steady rise in the tax revenues as a percentage of GSDP. It should be noted that tax revenues consist of own-tax revenues and a share of tax proceeds from centre/state of net tax proceeds assigned to the state. It will be interesting to see how the state's own-tax revenues as a percentage of GSDP fares with the other states.

Table 1.3: Own-Tax Revenues as a Percentage of GSDP

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Minimum	3.9	3.7	3.84	4.01	4.03	4.6	4.7	4.93	4.73	4.9	5.0
Maximum	13.1	12.9	13.1	12.2	13.4	14	14.5	13.8	8.1	7.4	7
State with Max	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Chhattisgarh
State with Min	Bihar	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Jharkhand	Delhi
Jharkhand	4.28	3.71	3.84	4.01	4.03	4.6	4.7	4.97	4.73	4.96	5.2
All India Avg.	6.4	6.2	6.02	5.96	0.063	6.7	6.9	6.71	6.43	6.38	6.18

Source: Author's Calculation

Jharkhand has very low own-tax revenue to GSDP. In fact, it ranks the lowest as compared to all other states. However, the ratio started to improve from 2015 onwards.

Tax Buoyancy

Tax buoyancy is defined as the responsiveness of tax revenue to income. In other words, the ratio of a percentage change in tax revenue to a percentage change in income is defined as tax buoyancy. It is expected that as the economy grows and does well, the revenues from taxes should increase. It is to be noted here that in our calculation, we have defined tax buoyancy as the change in own-tax revenue to the change in GSDP.

Table 1.4: Tax Buoyancy for Jharkhand Compared to other States

	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Minimum	0.35	0.01	0.36	0.97	0.89	0.64	0.26	-2.5	-0.44	-0.43
Maximum	2.03	1.75	3.21	2.73	3.3	2.31	1.85	2.89	2.92	8.59
State with Max	Bihar	Jharkhand	Chhattisgarh	Punjab	Jharkhand	West Bengal	Bihar	Odisha	Bihar	Jharkhand
State with Min	Jharkhand	Haryana	Andhra Pradesh	Rajasthan	Punjab	Madhya Pradesh	Tamil Nadu	Andhra Pradesh	Maharashtra	Bihar
Jharkhand	0.35	1.75	1.36	1.02	3.3	1.15	1.78	0.65	1.86	8.59
All India Avg.	0.84	0.85	1.07	1.41	1.58	1.30	0.78	0.87	1.08	1.09

Source: Author's Calculation

Over the last ten years, Jharkhand has had the highest tax buoyancy for three years (2008-09; 2011-12, and 2016-17). In the year 2010-11, Jharkhand recorded the lowest tax buoyancy of 0.35. On an average, the tax buoyancy for Jharkhand has been above the national average for most part of the period, and hence it can be said that the growth in economy is generating substantial revenues for the state.

Impact of GST on Own-Tax Revenue Collection

The year 2017 was a significant year to the Indian economy because of the introduction of the Goods and Services Tax (GST) system. The GST was long due, and finally got implemented in July 2017. Primarily, GST is a reform to revive the indirect tax system of the economy and to subsume most of the taxes into one system. While certain taxes such as luxury tax, entertainment tax (other than those levied by local bodies), central excise duty, service tax, etc., are subsumed under the GST, royalty on minerals, professional tax, excise on alcoholic beverages, excise duty on petroleum etc., are not included.

The current GST tax slab is divided into 4 layers. Zero rate (0%) for essential commodities, 5% for daily use products such as sugar, tea, coffee, kerosene, and other such products. The 12% slab

is for processed food and computers, 18% for toiletries and other capital intermediary goods, and lastly 28% for highly luxurious goods such as cars, refrigerators, air conditioners etc.

What is interesting to see is how the tax revenue has changed, specifically for Jharkhand, pre and post the implementation of GST. There has been a series of tax reforms right from the Electricity Tax (1948), Central Sales Tax (1956), Value Added Tax (2005), Luxury Tax (2011), Professional Tax (2011), and Entertainment and Advertisement Tax (2011). Table 1.5 lists out the difference in registrations under VAT and GST.

Table 1.5: Number of Registrations Under VAT and GST Regime

No. Of Registrations (VAT 2016 July)	Number of registrations (VAT 2016 Aug)	Number of registrations (GST 2017 July)	Number of registrations (GST 2017 Aug)
3288	3324	12332	15103

Source: 1000 days Report by Chief Minister of Jharkhand

From Table 1.5, it is seen that there has been a massive increase in the registrations under the GST structure, as compared to the VAT structure. From 3324 in August 2016, the number has increased to 15103 in August 2017. As of 5thSeptember 2017, total registration under GST was 1,05,888.

Since implementation of GST could lead to some loss of income for the state, the Centre has decided to provide a fixed compensation to each state post the implementation of GST. This is done according to the GST Compensation Act of 2017. To calculate the compensation, the Centre takes 2015-16 as the base year with an estimated growth rate of 14%. Keeping 2015-16 as the base year, it is estimated that the protected revenue for Jharkhand per month comes up to ₹ 694 Crores. It has also been estimated that the average revenue per month is ₹ 490 Crores, causing a 30% shortfall.[1]

Table 1.6: GST and non-GST Collections for the year 2017-18 (₹ Crores)

Month	Non-GST Collection	GST Collection
April	341.36	
May	599.10	
June	819.84	
July	252.11	592.4
August	315.81	483.21
September	303.89	401.05
October	293.96	498.44
November	304.99	505.84
December	327.29	507.29
January	351.80	500
February	338.5	520.24
March	1083.5	559.02

[1] Report of the 15th Finance Commission prepared by the Commercial Tax Department, Government of Jharkhand

Source: Ministry of Finance, Government of Jharkhand

To understand whether GST had an upward or downward effect on the total revenue generation of the state, we now compare the collections in 2016-17 to 2017-18. This comparison will allow us to determine the economic effects of GST, and then analyse the reasons behind the divergence in revenue collection for Jharkhand between the years. Table 1.7 depicts the revenue collection comparison pre and post the GST regime.

Table 1.7: Revenue collection for FY 2016-17 and 2017-18 (₹ Crores)

Months	Collection in 2016-17	Collection in 2017-18	Compensation
April	281.26	341.36	-
May	623.86	599.10	-
June	728.89	819.84	-
July (GST)	757.13	844.51	-
August	765.70	777.01	313
September	748.82	668.8	-
October	781.23	767.2	489
November	842.85	795.3	-
December	846.63	821.9	375
January	922.79	841.4	-
February	935.90	828.1	369
March	2596.95	1642.5	-

Source: Ministry of Finance, Government of Jharkhand

It was analysed by the report that there has been a 30% shortfall in revenue post the implementation of GST. It would be interesting to see the constituents of this change. As we know that there are some taxes subsumed under GST, while others are not. The taxes not subsumed under GST are:

- Royalty on minerals
- Property tax (0030)
- State Excise on Alcoholic Beverage (0039)
- Entertainment Tax (0045)
- Electricity Tax (0043)
- Professional Tax
- Basic customs duty

We now analyse the growth in tax collection for all these above heads from 2010-11 till 2017-18 (Table 1.8). In addition, we also analyse the proportion of the revenue generated from these heads to the overall own-tax revenue.

Table 1.8: Revenue of heads not subsumed under GST from 2010-2018 (₹ Crores)

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
OTR	5716.6	6953.8	8223.5	9379.7	10349.8	11478.9	13299.2	18400.5
0030	328.3	401.1	492.3	502.6	530.6	531.6	607.0	900
0035	0	0	0	0	0	0	0	0
0039	388.3	457.0	577.9	627.9	740.1	912.4	961.6	1600
0043	53.49	72.7	110.7	145.7	175.3	125.6	151.8	300
0045	8.91	15.04	15.19	22.7	32.5	30.22	39.94	50
Total	779.09	946.05	1196.2	1299.08	1478.7	1600.00	1760.51	2850
Growth	13.6	13.6	14.5	13.8	14.28	13.93	13.23	15.48
Contr. to Revenue		21.4	26.4	8.59	13.8	8.19	10.03	61.88

Source: Author's Calculation

If we look at the table, a few important points can be concluded. First, the average growth of revenue of the heads not subsumed under GST is seen to grow at approximately 13% annually. Second, the overall contribution of the revenue of these heads to the own tax revenue is varying from 10% to approximately 60%.

At this point, it is interesting to note that there has been an overall shortfall of around 30% after the implementation of GST, while there has been an increase in 15% in the revenue of non-GST items (2017-18). GST tax revenues forms roughly 50% of own-tax revenues as in 2017-18. Much of the revenue accrued comes from three major sectors – industries, manufacturing, and mining. Under the Value Added Tax regime, it was seen that revenue generation came primarily from these three sectors. However, a comprehensive study of the tax generated from top 200 companies in Jharkhand shows that during the period from July to September 2017, there was a fall in the tax collection and the state has lost ₹ 978.5 Crores. It was also analysed that given the business structures of these top 200 contributors, maximum GST revenue comes from inter-state liability (IGST), while a minor proportion comes from intra-state liability (SGST). This was primarily in the proportion of 75:25.

On analyzing the top 200 companies, it is seen that there is a considerable difference between the amount under the tax regime during July-September 2016 as compared to the period July-September 2017. For instance, in the former regime, there were primarily two heads for which tax liabilities existed for companies: Value added tax (VAT) and Central Sales Tax (CST). The total tax liability, hence, is a sum of the VAT and CST Tax liability. Input tax credit (ITC) is essentially a credit given to the manufacturer at the end when he/she shows the receipt of the input tax. Hence, Net tax payable becomes VAT+CST-ITC.

Under the GST regime, it was seen that for almost all companies, the total State Goods and Services Tax (SGST) liability was lower than the total SGST ITC. Thus, the final SGST payable turns out to be negative. It is interesting to see the difference between both tax regimes which is captured by (SGST Payable – Net Tax payable under [VAT+CST]). Apart from large companies

such as Tata Motors, Central Coalfields Limited, Bharat Cooking Coal Limited, Tata Steel, Tinplate and a few others, the average differences were minimal for the rest.

It is interesting to note here that the average shortfall of revenue generation due to the implementation of GST has been quite high (above the average of other states) for Jharkhand. It is reported that the average shortfall has been around 20%. The states that have a higher shortfall than Jharkhand are Punjab (41%), Bihar (40%), Chhattisgarh (35%) and Odisha (32%). On the other hand, states such as Maharashtra (6%), Andhra Pradesh (6%), Tamil Nadu (8%) and Delhi (10%) have reported to have a considerably lower shortfall percentage.

Some reasons for the shortfall of revenue on the implementation of GST

1. ***Demography of the State**:* GST is primarily a consumption-based tax. In other words, the states that have the highest consumption would primarily benefit the maximum from the implementation of the GST. This is because, under the Value Added Tax System, the excise duty is levied at the manufacturing point, however, with the implementation of GST, the excise duty is levied upon by the centre and the state at the retail level. This is important, as now, those states where the consumption power is the maximum will accrue the maximum revenue from GST as compared to states that are primarily production oriented with a low purchasing power. Also, richer states (in terms of income) tend to purchase more luxury goods, whose GST rates are the highest, thereby gaining even more revenue. The per capita national income is a good indicator to judge the purchasing power of the state. At its time of performance, the GSDP of the state was 1.6% of that of the whole country (2000-01). As of 2015-16, the share of the state income to the national income is 1.84%. Similarly, the per capita income of the state, which was 62% of the per capita income of the nation in 2001-02, is now 70% in 2015-16. 2005-06 till 2011-12 was a bad phase for Jharkhand where the income growth rate was lower than the nation.[2]

   Jharkhand comprises of 24 districts in total. However, there exists huge inter and intra district disparity. According to a recent study by NITI Aayog, it was estimated that 19 districts among these 24 districts are backward. Based on a composite measure, it was seen that only 5% of the total blocks are highly developed. The sectoral imbalance in income and employment in the state is one of the major reasons for low consumption power, and hence low GST revenue. Approximately 10% of the workers have 34% of state income, while 50% of the workers have 15% of the income.[3]

2. ***The structure of the GST**:* While manufacturing, mining, and the industry were the major contributors to the revenue generation under the VAT regime, there was a loss of ₹ 978.5 Crores during the GST regime. An analysis was done taking the top 200 contributors (contributing around 75% of the total revenue to the state).[4]It was seen that most of the business for these top 200 contributors were inter-state, while only 25% was intra-state. It has been concluded that forfeited ITC in case of stock transfer has led to a permanent loss in revenue.

[2] Jharkhand Economic Survey 2017-18
[3] National Sample Survey 68th round, 2011-12
[4] Final Report for the 15th Finance Commission by Government of Jharkhand

Additionally, forfeited ITC on account of non-availability of ITC on consumable in VAT regime is also a permanent loss in revenue.

3. ***Reduction in cess for major items:*** There was a major reduction in the tax rate for certain commodities that brought down the revenue. Table 1.9 depicts the fall in rates from the VAT regime to the GST regime, and the accompanied loss in revenue.

Table 1.9: Reduction in the rate of tax under GST regime

Commodity	Rate under VAT	Revenue (2016-17) (₹ Crores)	Rate under SGST
Coal	5%	800	2.5%
Cigarette	22%	148.07	14%
Edible Oil	5.5%	99.71	2.5%
Readymade	5.5%	57.83	2.5%

Source: Ministry of Finance, Government of Jharkhand

As seen in Table 1.9, there was a 50% cut in the tax rates for most products that have a huge base in Jharkhand. For instance, Jharkhand has a vast reserve for coal, which is a primary input for steel, cement and electricity generation. Being a producer heavy state, this would have a 'revenue-loss' effect for the state. Additionally, the coal cess has been reducing since the implementation of GST, and the proceeds are being used by the Centre as compensation to other states. This is reducing the size of the divisible pool of the state. Other reasons include: no matching of sales and purchase invoice date, non-compliance of e-bill generation, and lack of other enforcement processes allegedly makes manipulation of bills under the GST regime easier.

However, having put forth these points, GST has also had positive effects on the consumer side by bringing down prices of goods and services. It is expected that the five-year transition period provided by the Centre (against which it is compensating the states) will be a good buffer to neutralise these effects and stabilise the system for future growth.

Recommendations and the way forward to improve revenue capacity

According to a recent government report (April 2018), it was seen that the tax buoyancy (increase in tax revenue to increase in growth) is around 1.2. Also, as of April 2018, there was a revenue growth of 12% as compared to the pre-GST regime. Also, the compensation should be reducing, and it is noted that the net consuming states such as Uttar Pradesh, West Bengal and Kerala have witnessed an increase in their post-GST shares. However, there is still a lot of debate in the policy circle regarding the plight of the producing states.

First, there should be a reduction in the sectoral imbalance of the state. As mentioned, only 10% in the employed sector hold around 35% of the state income. This reduction in inequality among the sectors will lead to more equitable distribution of resources and increase the propensity to spend and consume, which will thereby increase the tax revenue for the state. Second, measures must be taken to also reduce inter and intra district disparity. As noted by the Jharkhand Economic Survey 2017-18, there is high level of inequality among the districts with only 5 districts being

termed as developed districts. Reducing this inequality by investing more in education and health can increase the consumption prosperity of the individuals, thereby increasing the long-term revenue capacity of the state. Other measures to increase revenue capacity are to try to speed up the dues and disposal of cases and try to support the new registration of dealers. Last, the anti-profiteering initiative by the government, accompanied by the reduction in tax rates, will hopefully spur the demand for goods and services, and increase the revenue for the state in the long run.

According to the '1000 days report' by Chief Minster Raghubar Das, extensive training has been given to all the businessmen, traders, and ministers regarding the implementation of GST. Additionally, all check posts have been removed. Approximately 850 training sessions in different areas in Jharkhand have been organized in Ranchi, Dhanbad, Jamshedpur, Hazaribagh, and South Parganas. These initiatives will definitely help improve the revenue capacity of the state. However, given the fact that Jharkhand is primarily a producing state, and is currently getting compensation for the shortfall, it needs to be self-sustainable so as to have a sustainable growth rate of tax revenue once the compensation is stopped.

Chapter 2: Analysis of State's Own Non-Tax Revenues

Introduction

The Non-Tax Revenues as a percentage of total revenues have been fairly constant at 14% in Jharkhand. Table 2.1 provides the non-tax revenue receipts as its percentage contribution to total revenues from 2006-07 to 2016-17.

Table 2.1: Non-Tax Revenue to Total Revenue for Jharkhand

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
N.T.R (₹ Crores)	1250	1601	1952	2254	2803	3038	3536	3753	4335	5853	5351
Total Rev (₹ Crores)	10010	12027	13213	15118	18781	22420	24770	26137	31565	40638	47054
NTR/Tot Rev (%)	12.4	13.3	14.7	14.9	14.9	13.55	14.27	14.35	13.73	14.40	11.37

Source: CAG Reports on State Finances of Jharkhand; Figures in ₹ Crores

It is interesting to see that Jharkhand's relative non-tax revenues as a percentage of GSDP ratio steadily increased from 8th in 2011-12 to 2nd in 2016-17. The components of Non-Tax Revenues consist of revenues from fiscal services, interest payments and other non-tax revenues. Since 2010-11, other non-tax revenues have constituted more than 96% of the revenues so the components of non-tax revenues are of particular interest. It is interesting to note that while the share of Non-Tax Revenue to total revenue was around 14% throughout, there was a sudden slump to 11% in 2016-17. As mentioned earlier, Non-Tax Revenues comprise of General, Economic, and Social Services. Out of this, General services fell by 25%, social services by 10% and economic services by 6%. On analyzing the general services, we see that the revenue from the sub-head 'elections' under Administrative Services saw a huge decline from ₹ 32.16 Crores to ₹ 0.46 Crores in 2016-17. It is primarily due to this that there was a decrease in the share of Non-Tax Revenue to Total Revenue. Table 2.2 reports Non-Tax Revenue as a percentage of GSDP from 2006-07 to 2016-17, and comparisons with the best and worst performing states.

Table 2.2: Non-Tax Revenues as a Percentage of GSDP

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Minimum	0.48	0.45	0.66	0.62	0.47	0.13	0.16	0.14	0.12	0.09	0.06
Maximum	3.94	4.79	3.88	3.29	3.18	3.08	3.8	3.3	2.5	3.4	2.3
State with Min Value	West Bengal	Bihar	Kerala	West Bengal	Bihar	Delhi	Delhi	Delhi	Delhi	Delhi	Delhi
State with Max value	Andhra Pradesh	Haryana	Andhra Pradesh	Chhattisgarh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Andhra Pradesh	Odisha	Odisha	Uttar Pradesh
Jharkhand	1.92	1.71	2.24	2.68	2.20	2.03	2.02	1.98	1.96	2.53	2.27
All India Avg.	1.86	1.89	1.88	1.77	1.55	1.47	1.49	1.48	1.34	1.30	1.29

Source: Annual Financial Statements, Government of Jharkhand

It is interesting to note that Jharkhand's rank in Non-Tax Revenues as a percentage of GSDP climbed from 8th in 2006-07 to 2nd in 2016-17. The components of Non-Tax Revenues are Interest Receipts and Other Non-Tax Revenue, and Other Non-Tax Revenue has been contributing more than 96% in all years since 2010-11. So, it is the components of Other Non-Tax Revenues which are more of a concern. Table 2.3 gives the figures for Other Non-Tax Revenues and its components since 2010-11 to 2017-18.

Table 2.3: Other Non-Tax Revenues and its Composition

	ACTUALS							RE
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Other Non-Tax Revenues ONTR (₹ Crores)	2703.7	2992.8	3448.4	3665.2	4192.0	5730.1	5230.0	10897.3
General Services/ONTR (%)	11.44	1.75	1.14	2.57	2.40	10.87	8.91	9.20
Social Services/ONTR (%)	4.69	4.18	3.05	3.27	4.34	7.09	7.04	5.47
Economic Services/ONTR (%)	83.87	94.07	95.81	94.16	93.26	82.04	84.05	85.33

Source: Annual Financial Statements, Government of Jharkhand

Since Economic Services contribute more than 80% of the Other Non-Tax Revenues, Table 2.4 reports the top three contributing sectors for Non-Tax Revenues from 2010-11 to 2017-18.

Table 2.4: Revenues from Economic Services and the Top Three Contributing Sectors

ITEMS	ACTUALS							RE
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Economic Services (₹ Crores)	**2267.59**	**2815.46**	**3303.80**	**3451.31**	**3909.36**	**4701.08**	**4395.78**	**9298.36**
Top Three Contributing Sectors	MI	MI	MI	MI	MI	MI	MI	MI
	(90.6%)	(94.6%)	(95.1%)	(93.6%)	(88.8%)	(93.3%)	(93.1%)	(91.5%)
	T	R&B	R&B	MaI	MaI	R&B	MaI	MaI
	(3.5%)	(0.95%)	(1.3%)	(1.4%)	(4.99%)	(1.4%)	(4.99%)	(2.96%)
	I	ORD	MeI	R&B	ORD	ORD	ORD	R&B
	(1.5%)	(0.93%)	(0.75%)	(1.3%)	(2.5%)	(0.93%)	(2.48%)	(1.2%)
MI: Metallurgical Industries, T: Tourism, R&B: Roads and Bridges, I: Industries, MaI: Major Irrigation, MeI: Medium Irrigation, ORD: Other Rural Development								

Source: Annual Financial Statements, Government of Jharkhand

It is of some concern that Metallurgical Industries have contributed more than 90% in almost all the years. Tourism, which was the second contributing segment to Economic Services in 2010-11, slipped down to the 14th rank in 2017-18. Thus, there should be some efforts to boost the revenues from Tourism. Roads and Bridges have consistently been amongst the top three contributing sectors in most of the years. Agriculture has contributed substantially with Medium Irrigation, Major Irrigation and Other Rural Development being the top three contributors in many years. It is also of concern that Industries, which was amongst the top three contributors in 2010-11, is 19th in rank in 2017-18. In Metallurgical Industries, Royalty has accounted for almost 100% of the contributions and for Roads and Bridges, Tolls account for the major contribution.

Table 2.5: Revenues from General Services and the Top Three Contributing Sectors

	ACTUALS							RE
YEAR	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
General Services (₹ Crores)	309.27	52.39	39.30	94.15	100.64	622.99	466.10	1002.56
Top Three Contributing Sectors	MGS	OAS	P	OAS	OAS	OAS	OAS	OAS
	85.90%	32.46%	41.07%	64.20%	50.30%	89.60%	68.10%	89.80%
	OAS	MGS	OAS	P	MGS	MGS	MGS	P
	6.95%	28.40%	36.70%	14.60%	22.96%	6.30%	18.30%	4.98%
	P	P	P&R	PSC	P	P	PW	J
	3.88%	20.10%	8.90%	7.67%	14.10%	1.40%	5.50%	1.50%

MGS: Miscellaneous General Services, OAS: Other Administrative Services, P: Police, PW: Public Works, PSC: Public Service Commission, P&R: Contributions and Recoveries towards Pension and Other Retirement Benefits, J: Jails

Source: Annual Financial Statements, Government of Jharkhand

In sharp contrast to Economic Services, the contributions coming from General Services reported in Table 2.4 have been shifting over the years. In 2010-11, 85.9% of the revenues came from Miscellaneous General Services, but its contribution steadily fell over the years and was not even amongst the top three contributors in 2011. The contributions of Other Administrative Services steadily increased over the years from 6.95% in 2010-11 to 89.8% in 2017-18. Apart from these two sectors, Police have been a major contributor and so is Jails. Public Works, Public Service Commission, and Contributions and Recoveries towards Pension and Other Retirement Benefits have also been top three contributors in some of the years.

Table 2.6: Revenues from Social Services and the Top Three Contributing Sectors

	ACTUALS							RE
YEAR	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Social Services (₹ Crores)	126.89	125.05	105.29	119.78	182.02	406.05	368.19	596.40
Top Three Contributing Sectors	OSS	M&P	L&E	L&E	L&E	UD	UD	UD
	32.10%	28.07%	32.20%	35.65%	29.19%	65.96%	39.16%	58.66%
	SSW	ESAC	SSW	ESAC	ESAC	L&E	L&E	L&E
	18.70%	22.54%	19.45%	19.96%	23.21%	20.42%	23.29%	20.12%
	L&E	L&E	WSS	M&P	UD	ESAC	SSW	ESAC
	15.10%	22.35%	17.76%	16.58%	20.25%	4.92%	9.99%	8.38%

OSS: Other Social Services, SSW: Social Security and Welfare, L&E: Labour and Employment, M&P: Medical and Public Health, ESAC: Education, Sports, Art and Culture, WSS: Water Supply and Sanitation, UD: Urban Development

Source: Annual Financial Statements, Government of Jharkhand

Finally, the top contributions from Social Services have been changing over the years. In 2010-11 the top contributor was Other Social Services, followed by Medical and Public Health in 2011-12. From 2012-13 to 2014-15, Labour and Employment has been the top contributor. Since 2015-16 to 2017-18, Urban Development has been the highest contributor. Other sectors, which have been amongst the top three contributors, are Social Security and Welfare, Education, Sports, Art and Culture and Water Supply and Sanitation.

Recovery Rates in Different Sectors

Given that the expenditure on public services is immense, and also that public services are very important, and that tax revenues may not be adequate to fund all important public services, it becomes necessary to raise additional funds through user charges. More so, we also need to have an idea of the amount of cost each service entails and the amount of revenues recovered as user charges. The recovery rate, which is the revenue receipts to revenue expenditures for each sector, gives a good idea of the recovery rate in different sectors.

As seen in Table 2.7, the recovery rate for Economic Services has been around 50% over the years, for General Services, it has been around 5% over the year, but fluctuating, while that for Social Services has increased from around 1.8% to 2% over the years. In half the years, the recovery rates are lower for General Services than for Social Services, in half the years it is better.

Table 2.7: Recovery Rates for Other Non-Tax Revenues

Items	ACTUALS							RE
	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Economic Services	0.5340	0.4805	0.5419	0.6169	0.4224	0.4843	0.3707	0.5142
General Services	0.0442	0.0067	0.0045	0.0095	0.0095	0.0519	0.0358	0.0591
Social Services	0.0187	0.0170	0.0125	0.0144	0.0152	0.0272	0.0197	0.0255

Source: Annual Financial Statements, Government of Jharkhand

Table 2.8: Recovery Rates for Economic Services

	ACTUALS							RE
YEAR	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Top Three Recovery Rates	MI	MI	MI	MI	MI	MI	MI	MI
	119.6	153.4	178.1	184.3	172.8	189.1	150.3	115.1
	T	OGS	OGS	OGS	OGS	OGS	OGS	CA
	25.3	2.8	1.8	2.5	2.2	4.4	2.4	5.2
	OGS	MeI	T	MaI	MaI	CA	R&B	OGS
	2.9	0.2	1.2	0.4	1.5	3.3	0.5	3.4

MI: Metallurgical Industries, T: Tourism, OGS: Other General Services, MeI: Medium Irrigation, MaI: Major Irrigation, CA: Civil Aviation, R&B: Roads and Bridges

Source: Annual Financial Statements, Government of Jharkhand

Within Economic Services, the recovery rates for Metallurgical Industries varies between 100 and 185 over the years. It is again unfortunate to see that Tourism, which had a recovery rate as high as 25.3 in 2010-11 is nowhere amongst the top 10 industries in successive years. Other general services have been amongst the top three recovery rates over the years. Of late, Civil Aviation has started appearing in the top three recovery rates in recent years. Other sectors that have been having the top three recovery rates in the last few years have been Major Irrigation, Minor Irrigation, and Roads and Bridges.

Table 2.9: Recovery Rates for General Services

	ACTUALS							RE
YEAR	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Top Three Recovery Rates	PSC	PSC	PSC	PSC	MGS	MGS	MGS	OAS
	0.41	0.66	0.18	1.15	8.27	3.96	27.48	4.79
	OAS	OAS	OAS	OAS	OAS	OAS	OAS	PSC
	0.36	0.19	0.15	0.65	0.39	3.87	2.07	0.45
	S&P	J	PW	S&P	PSC	PSC	PSC	MGS
	0.06	0.03	0.03	0.16	0.08	0.50	0.32	0.24

MGS: Miscellaneous General Services, OAS: Other Administrative Services, P: Police, PW: Public Works, PSC: Public Service Commission, J: Jails, S&P: Stationary and Printing

Source: Annual Financial Statements, Government of Jharkhand

Within General Services, from 2010-11 to 2013-14, Public Service Commission has been having the top recovery rate, but Miscellaneous General Services had the top recovery rate in the following years till 2016-17. It is unfortunate to see its recovery rate drop from 27.48 in 2016-17 to 0.24 in 2017-18. Other Administrative Services has had the top recovery rate in 2017-18.

Table 2.10: Recovery Rates for Social Services

	ACTUALS							RE
YEAR	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Top Three Recovery Rates	OSS	OSS	OSS	OSS	OSS	OSS	OSS	OSS
	304.60	13.28	20.98	11.07	15.80	2.83	31.88	4.09
	L&E	L&E	L&E	L&E	L&E	L&E	L&E	L&E
	0.14	0.22	0.23	0.33	0.58	0.73	0.65	0.73
	M&P	WSS	H	H	UD	UD	H	UD
	0.043104	0.046402	0.0545	0.050796	0.095492	0.198153	0.528915	0.121502
OSS: Other Social Services, SWW: Social Security and Welfare, L&E: Labour and Employment, M&P: Medical and Public Health, WSS: Water Supply and Sanitation, UD: Urban Development								

Source: Annual Financial Statements, Government of Jharkhand

Finally, for Social Services, the recovery rates for other Social Services have been the highest but has been fluctuating immensely. Labour and Employment has had the second recovery rate and the value has been steadily increasing over the years. Machinery and Printing, Water Supply and Sanitation, Housing and Urban Development have had the top three recovery rates in many of the years.

Profits from departmental enterprises, dividends from non-departmental commercial enterprises, and suggestions for improving revenue through user-charges

A matter of concern is that profits and dividends from departmental enterprises have been zero ever since 2010-11 till date. Therefore, it is necessary to completely restructure these enterprises to ensure that at least some of them become profitable again. The major share of the non-tax revenues is coming from Economic Services and in that, 95% of the revenues are coming from Metallurgical Industries and in that, almost all the amount comes as Royalty from the extraction of minerals.

Table 2.11: Major Royalty Revenues

YEAR		2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Coal	Revenue (₹ Crores)	1562.52	1706.98	2207.74	2305.87	2331.48	2718.01	2875.2	2277.75
	%	78.94	73.52	76.59	78.85	73.91	70.15	81.30	68.31
Iron Ore and Manganese Ore	Revenue (₹ Crores)	379.5	577.14	639.09	582.43	792.69	1070.47	610.07	954.87
	%	19.17	24.86	22.17	19.92	25.13	27.63	17.25	28.64
Bauxite	Revenue (₹ Crores)	21.24	23.66	21.51	23.46	24.61	56.59	40.29	90.54
	%	1.07	1.02	0.75	0.80	0.78	0.71	1.14	2.72

Source: Ministry of Finance, Government of Jharkhand

Given that royalty forms the largest share of Economic Services, it is a matter of concern that royalties declined for Coal to ₹ 2277.75 Crores in 2017-18 from the previous ₹ 2718.01 Crores in 2017-18. The royalty revenues from Iron Ore and Manganese Ore fell sharply from ₹ 1070.47 Crores in 2015-16 to ₹ 610.07 Crores. This was despite there being no change in the royalty rates of Iron Ore and Manganese Ore. The percentage revenue shares from the three major minerals have more or less remained the same. For other Economic services, it is of concern that Revenues from Tourism have not been maintained. Since a lot of revenue is now coming from tolls, improvement in infrastructure will bring in a lot more revenues from tolls. Extension of irrigation facilities will bring about an increase in revenues, and both major irrigation and minor irrigation have been top three contributors for Economic Services in many years.

Chapter 3: Analysis of Expenditure

Introduction

The total expenditure of the state government for the years 2006-07, 2011-12, and 2017-18 was ₹ 10,525 Crores, ₹ 24,368.00 Crores, and ₹ 71,134.92 Crores. Expenditure consists of two types: Revenue and Capital Expenditure. The Compounded Annual Growth Rate over the last 6 years has been 19.56%. The share of the revenue expenditure in the total expenditure hovered around 80%. The share of capital expenditure to total expenditure has increased from 12% in 2010-11 to 18% presently.

Revenue Expenditure

The overall trend of Revenue Expenditure and the proportion of Revenue Expenditure to GSDP (2006 – 2017) is enlisted in Table 3.1 below. It is seen that while revenue expenditure has been consistently increasing, the share of revenue expenditure to GSDP has been fairly stagnant till 2015. It has then increased to 20% in 2016-17.

Table 3.1: Revenue Expenditure (₹ Crores)& Revenue Expenditure as a % of GSDP

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Revenue Expenditure	9064	10831	12869	15128	17945	20992	23400	23472	31795	36552	45089	50952
GSDP	74486	93420	97698	111972	141640	150918	174724	188567	218525	231294	235560	259664
RE/GSDP (%)	13.43	12.87	13.51	13.50	13.25	14.85	14.17	13.86	14.44	17.56	19.97	19.62

Source: CAG Report of State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Under the heads of revenue expenditure in the less developed states like Jharkhand, Chhattisgarh, Bihar and Odisha, Social Services has to have the highest priority for obvious reasons. But it is disturbing to note that Jharkhand has a disappointingly low percentage on Social Services. In 2014-15, it was 37% of the total revenue expenditure, while it was around 43% in Bihar, 40% in Chhattisgarh, and 57% in Odisha. But in the years 2015-16 and 2016-17, it increases to around 41%, however, it still lags behind other lesser developed states.

Table 3.2: Revenue Expenditure for Less Developed States for the Year 2014-15 (₹ Crores)

Particulars	Jharkhand	Bihar	Chhattisgarh	Orissa
Economic Services	9256.05	14445.0	8978.5	14825.3
(% of total)	29%	20%	23%	30%
General Services	10623.45	26408.1	14076.1	14522.8
(% of total)	33%	36%	36%	28%
Social Services	11915.34	31712.7	15388.8	20964.1
(% of total)	37%	44%	40%	42%

Source: CAG Report on State Finances for respective States

Table 3.3: Revenue Expenditure for Less Developed States for the Year 2015-16 (₹ Crores)

Particulars	Jharkhand	Bihar	Chhattisgarh	Orissa
Economic Services	9706.59	19697	16052.54	18188
(% of total)	26.5%	25%	39%	30%
General Services	12002.4	27972	10408.76	15059
(% of total)	32.8%	33%	19%	30%
Social Services	14843.81	35943	16339.35	24643
(% of total)	40.6%	42%	40%	40%

Source: CAG Report on State Finances for respective States

Table 3.4: Revenue Expenditure for Less Developed States for the Year 2016-17 (₹ Crores)

Particulars	Jharkhand	Bihar	Chhattisgarh	Orissa
Economic Services	13507.91	266,045.3	14176.2	19714
(% of total)	30%	24%	31%	28%
General Services	13023.7	361,846.8	11496.23	16715
(% of total)	28.8%	33%	24%	29%
Social Services	18557.37	471,465.9	21341.6	27600
(% of total)	41.15%	43%	43%	41%

Source: CAG Report on State Finances for respective States

While it is worrying for a less developed economy like Jharkhand to be spending around 80% on revenue expenditure, there seems a glimmer of relief in the fact that, of the revenue expenditure, Economic Services went up to about 30% and Social Services went up to around 41%.

Capital Expenditure

It is recommended that while revenue expenditure will increase in absolute amounts, Capital expenditure should increase by relatively greater amounts, leading to a higher percentage increase in capital expenditure. Table 3.5 enlists the trend of capital expenditure over time (2006-18) and the proportion of capital expenditure to GSDP. The proportion of capital expenditure to GSDP has been consistently rising since 2011-12.

Table 3.5: Capital Expenditure (₹ Crores) & Capital Expenditure as a % of GSDP

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Capital Expenditure	1461	2584	3051	2703	2664	3159	4218	4722	5543	8159	10861	16753
GSDP	74486	93420	97698	111972	141640	150918	174724	188567	218525	231294	235560	259664
Capex/GSDP (%)	1.96	2.76	3.12	2.41	1.88	2.09	2.41	2.50	2.53	3.52	4.61	6.45

Source: CAG Report of State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Looking at the Capital expenditure across states, the following points were observed:

- The less developed states spend a little more (around 80%) ***on Economic Services*** when compared to developed states (67%), probably because the developed states need that much less.
- The absolute amount spent on Economic Services in developed states is much more when compared to less developed states.

Table 3.6: Capital Expenditure for Less Developed States (₹ Crores)

Particulars	2014-15	2015-16	2016-17
	Jharkhand		
Economic Services	4307.1	6564	8739
(% of total)	77%	75%	78%
General Services	326.3	571	590
(% of total)	6%	8%	6%
Social Services	909.5	1024	1532
(% of total)	16%	17%	20%
	Chhattisgarh		
Economic Services	4802.8	5776	6822
(% of total)	73%	64%	75%
General Services	257.7	362	188
(% of total)	4%	5%	3%
Social Services	1559.9	1807	2461
(% of total)	23%	31%	2%
	Bihar		
Economic Services	14728.1	17609	232,231.3
(% of total)	81%	71%	77%
General Services	1748.6	3617	29,598.4
(% of total)	9.6%	16%	10%
Social Services	1673.5	2740	39,240.7
(% of total)	9%	13%	10%
	Orissa		
Economic Services	8396.4	13737	15096
(% of total)	76%	80%	80%
General Services	389.8	425	374
(% of total)	4%	2%	2%
Social Services	2288.3	2929	3001
(% of total)	21%	18%	20%

Source: CAG Report on State Finances for respective states

Table 3.7: Capital Expenditure for Developed States (₹ Crores)

Particulars	2014-15	2015-16	2016-17
	Andhra Pradesh		
Economic Services	8539.7	11577	12417
(% of total)	75%	85%	66%
General Services	2382.0	2414	2431
(% of total)	21%	1%	3%
Social Services	483.3	180	295
(% of total)	4%	14%	30%
	Maharashtra		
Economic Services	16700.34	18949.6	20734.5
(% of total)	86%	79%	79%
General Services	805.3	1259.28	1548.23
(% of total)	4%	7%	6%
Social Services	1957.8	2584.2	3266.51
(% of total)	10%	14%	20%
	Gujarat		
Economic Services	16084	16944	15517.5
(% of total)	67%	67%	64%
General Services	888.02	808	622.89
(% of total)	4%	4%	4%
Social Services	7185.7	6417	6215.0
(% of total)	30%	29%	30%

Source: CAG Report on State Finances for respective states

Efficiency of Public Expenditure in Jharkhand

Efficiency of public expenditure is judged by the translation of the "input" into "output". State's total revenue is the first step in the process since it is the "input". Ideally, the "output" are the actual schemes that are the results of the state's total expenditure. But since we do not have access to the exact mapping of the expenditure to each scheme, we have used state's total expenditure as a proxy for the "output".

If we assume that expenditure is a proxy for output, then Total Expenditure/Total Receipts is the indicator for efficiency in expenditure. The higher this ratio, the more efficient total expenditure

is. However, of the total expenditure, we should prefer a ***high plan*** expenditure to a high ***non-plan*** expenditure because "plan expenditure" is almost synonymous with development.

Table 3.8: Jharkhand's Efficiency of Expenditure (₹ Crores)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Own Tax Revenue	3188	3473	3746	4500	5716	6953	8180	9379	10349	11478	13299	12353
Plan Revenue Expenditure	2431	2979	3813	3758	6003	7646	7743	6287	12435	15793	22193	22248
Non Plan Revenue Expenditure	6632	7852	9063	11369	11940	13345	15656	17184	19358	20759	22895	28703
Plan Rev. Exp/ OTR	0.76	1.20	1.01	0.83	1.05	1.09	0.94	0.67	1.20	1.37	1.66	1.80
Non Plan Rev. Exp/OTR	2.08	2.26	2.41	2.52	2.08	1.91	1.91	1.83	1.87	1.80	1.72	2.32
Total Receipts	11772	14760	17209	19341	22216	26082	30502	30463	40041	54437	59362	67705
Total Expenditure	11772	14760	17209	19341	22216	26082	30502	30463	40041	54437	59362	67705

Source: Jharkhand Economic Survey 2018-19

These ratios confirm that the State's Total Expenditure/State's Total Receipts are efficient and has been consistently increasing since 2011.However, it is the state's revenue-non-plan expenditure is increasing and greater than the Plan rev exp/rev receipts, which is not a good sign.

Committed Expenditure

Since a committed expenditure (CE) has to be expended, the state government has to tighten its belt before it commits itself to an expense head. There are three heads of expenditure which we think ***are committed***– interest payments, pensions, and salary.

These three heads have marginally come down from 42% in 2014-15 to 37% in 2017-18 of the total rev exp.

- The interest payment of the total revenue expenditure has actually come down from 9.1% in 2014-15 to 8.05% in 2017-18– a welcome sign!
- Pensions and other retirement benefits has remained a little over 10% from 2014 to 2018.
- Salary of the state government has marginally come down from 23.25% in 2014 to 18.74% in 2018.

Table 3.9: Jharkhand's Committed Expenditure

Particulars	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Salaries	2744	2985	3948	5342	5642	6352	6446	6934	7381	8177	8888	11220
Interest Payments	1613	1758	1887	2307	2228	2267	2391	2614	2929	3330	4172	4661
Pensions	679	818	988	1681	2081	2297	2931	3484	3462	3990	4135	5913
Total CE	5036	4824	6823	9330	9951	10916	11768	13032	13772	15497	17195	21794
Revenue Expenditure	9064	10832	12877	15128	17945	20992	23400	23472	31795	36553	45089	50952

Source: CAG Report on State Finances, Government of Jharkhand

A study of Expenditure alone gives half the picture. The next two chapters will give the analysis of Deficits, which is Revenue minus Expenditure.

Chapter 4: Analysis of Deficits – Fiscal and Revenue

Introduction

There are three kind of deficits that any government must take into consideration. These are revenue deficit, fiscal deficit, and primary deficit. In the subsequent paragraphs we will discuss in detail about each of them and how the state is performing in relation to them.

Revenue Deficit

It is defined as the difference between revenue expenditure and revenue receipt. It arises when there is a mismatch between expected revenue and actual expenditure. In other words, revenue deficit (RD) occurs when either the government's actual net receipts are lower than the expected net receipts or when the actual expenditure is higher than the budgeted expenditure, or both. In a way, it defines the extent to which a state can borrow to cover the revenue expenditure.

Similarly, we can define revenue surplus as a condition when revenue receipts are in excess of revenue expenditure, i.e., a negative revenue deficit. The revenue deficit position of the state indicates that Jharkhand has eliminated the same, which is in accordance with the Fiscal Responsibility and Budget Management (FRBM) Act, 2003, that mandated the states to eliminate revenue deficits. Rather, Jharkhand is a revenue surplus state. It is also to be noted that the state has maintained revenue surplus since 2006-07 with the only exception being the fiscal year 2014-15 when it had marginally become positive. As of 2016-17, the revenue surplus of the state has grown to more than ₹ 1965 Crores which is 0.83% of GSDP (at current prices, 2011-12 base). The revenue surplus as a ratio of GSDP has also been increasing. The revenue surplus for the state has a CAGR of 6% since 2011-12. It is also to be noted, that both revenue receipts as well as revenue expenditures for the state have also been increasing since 2011-12; the revenue receipts is showing a CAGR of 15.93% while revenue expenditures is showing a CAGR of 16.52%. Since the rate of growth of revenue receipts is higher than that of revenue expenditures, the state is showing a growth towards revenue surplus.

Fiscal Deficit

It is defined as the difference between the government's total expenditure and the revenue generated by it excluding the money received through borrowings. A positive fiscal deficit (FD) indicates that the government's total expenditure exceeds the total revenue it is able to collect. It is a situation when a government has to rely on debt to finance the state expenditure. It mainly occurs either when there is a revenue deficit or when the capital expenditure of the government is more or both. A negative fiscal deficit on the other hand reflects a fiscal surplus. As far as the ratio of fiscal deficit to Gross State Domestic Product (GSDP) of Jharkhand is concerned, it can be seen that it has remained well within 3.5% (as mandated by the FRBM Act) since 2011-12, with the only exception being the fiscal year 2015-16 and 2016-17 due to the borrowing of ₹ 5553 Crores under Ujjwal DISCOM Assurance Yojana (UDAY). It is to be noted that while the revenue receipts are increasing faster than revenue expenditure on a year-on-year basis, an increasing trend in the state's fiscal deficit is primarily due to the increase in capital expenditure, which is helping the state increase its own GSDP. In fact, the capital expenditure has increased three times since 2011-12. As a result, the ratio of fiscal deficit to GSDP is showing a stability of around 3%. Moreover, the current fiscal deficit is projected to be below the projected revenue surplus, which indicates

that the state will have more funds for capital expenditure. Further, the fiscal deficit has shown a CAGR of 40% since 2011-12. Again, while comparing fiscal deficit as a part of revenue receipts, we could also see that it has significantly come down since 2012-13, but again increased since 2015. This is again attributed to the sudden increase in fiscal deficit in 2015-16 due to the borrowings for the UDAY scheme.

Primary Deficit

It is defined as the difference between fiscal deficit and interest payments (including debt servicing) resulted from past borrowings. In other words, primary deficit (PD) is a part of the fiscal deficit without considering the interest payments. A lower primary deficit can either indicate a better fiscal health or an increase in the overall interest payment. A look at the current position of the state's primary deficit figures indicate that it is sometimes getting higher and sometimes getting lower as compared to the previous years. A better indicator is the ratio of primary deficit to GSDP, which has been decreasing since 2015-16 and currently below 1%. However, as per the FRBM Act, where the states are mandated to reach a target of maintaining a primary surplus of 3% of GSDP, Jharkhand has a primary deficit.

Since Primary Deficit = Fiscal Deficit – Interest Payment, we can also examine the position of interest payments by the state over these years. From the table below, we can see that the interest payments for the state has gradually increased but when compared with GSDP, the ratio has remained stable over the past few years at around 1.5%. Further, as per the FRBM Act of 2003, states are required to maintain interest payments as a percentage of revenue receipts to 18%. Again, we can see from the tables below, that over the years, this ratio for Jharkhand is consistently below the ceiling of 18-25% and is likely to remain below the limits as the rate of growth of interest payments is lower than the rate of growth of revenue receipts.

Table 4.1: Deficit Position of the State (₹ Crores)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Revenue Deficit	-946	-1195	-336	10	-836	-1427.9	-1369.7	-2664.9	230.34	-4085.5	-1965	-1803.9
Fiscal Deficit	910	1943	3114	3011	2112	1924	3406	2256	6564	11521.9	10,192	11958
Primary Deficit	-703	185	1227	704	-116	-343	1015	-358	3634.85	8201.86	6020	7296.33

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19. (-) under deficit implies a surplus

Table 4.2: Indicators of Deficits as a Percentage of GSDP

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
GSDP (₹ Crores)	74486	93420	97698	111972	141640	150918	174724	188567	218525	231294	253536	259664
RD/GSDP (%)	-1.27	-1.27	-0.34	0	0.6	-0.94	-0.78	-1.41	0.11	-1.77	-0.7	-0.69
FD/GSDP (%)	1.22	2.07	3.18	2.68	1.49	1.27	1.94	1.19	3.00	4.98	4.32	4.61
PD/GSDP (%)	-0.94	0.19	1.2	0.62	-0.08	-0.22	0.58	-0.18	1.66	3.55	2.5	2.81

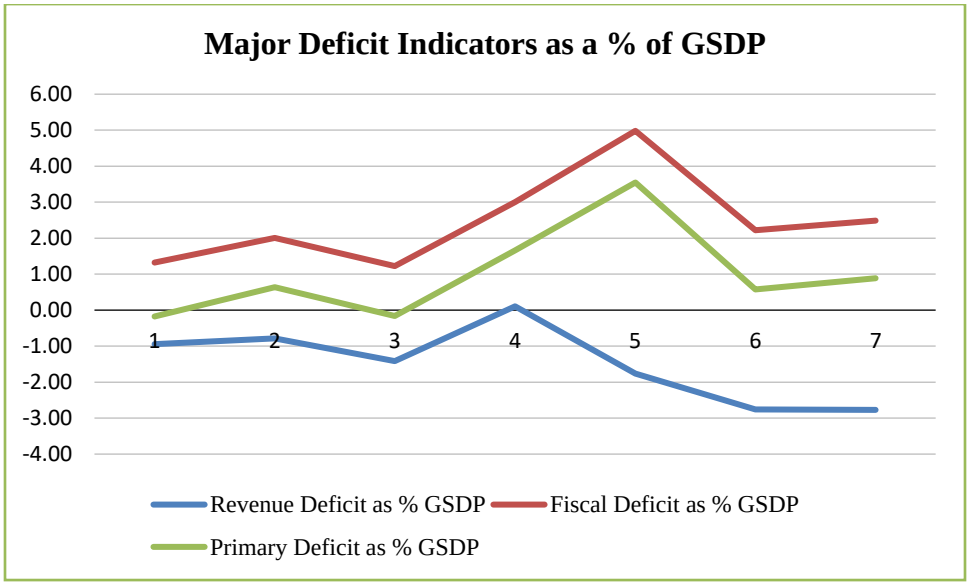
Source: CAG Reports, Government of Jharkhand; Jharkhand Economic Survey 2018-19 (-) denotes surplus

Table 4.3: Other Deficit Indicators

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Revenue Receipts (₹ Crores)	10010	12027	13213	15118	18781	22419.5	24769.6	26136.8	31564.6	40638.4	47053.9	52756
% Growth		20.14	9.86	14.56	24.22	31.88	10.482	5.519	20.76	28.74	15.78	12.1
Revenue Deficit as % of Revenue Receipts	-9.45	-9.9	-2.54	0.00	-4.45	-6.3689	-5.5297	-10.196	0.72974	-10.053	-4.17	-3.41
Revenue Expenditure (₹ Crores)	9064	10832	12877	15128	17945	20991.6	23399.9	23471.9	31794.9	36552.8	45089	50952
% Growth		19.50	18.88	17.48	18.62	16.97	11.47	0.307	35.45	14.96	23.35	13
Capital Receipts(₹ Crores)	1762.36	2734.20	4003.88	4223.01	3434.91	3663.02	5732.61	4325.43	8476.94	13798.9	12851.7	14949
% Growth		55.16	46.41	5.47	-18.66	6.66	56.4996	-24.547	95.9791	62.7819	-10.799	16.3
Capital Expenditure (₹ Crores)	1461	2584	3051	2703	2664	3314.08	4356.95	4861.25	8246.6	17884.4	14190.7	16753
% Growth		76.86	18.07	-11.40	-1.44	24.39	31.46	11.57	69.63	116.87	-20.19	18.06
Fiscal Deficit as a % of Revenue Receipts	9.09	16.15	23.56	19.91	11.24	8.92	14.16	8.82	20.80	28.35	21.6	22.6
Interest Payment and Servicing of Debt (₹ Crores)	1613	1758	1887	2307	2228	2267.08	2391.25	2614.44	2929.15	3320.08	4172	4661.68
% Growth		8.98	7.33	22,25	-3.42	1.75	5.48	9.33	12.04	13.35	25.6	11.7
Interest Payment and Servicing of Debt as % of Rev Receipt	16.11	14.61	14.28	15.25	11.86	10.11	9.65	10.00	9.28	8.17	8.88	8.88
Interest Payment and Servicing of Debt as % GSDP	2.16	1.88	2.06	1.57	1.69	1.50	1.37	1.39	1.34	1.44	1.65	1.79

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Figure 4.1: Major Deficit Indicators as a percentage of GSDP



Source: Author's Own

Table 4.4: Comparison of Deficits across States

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Highest RD/GSDP	-3.46	-2.96	-4.76	-5.87	-3.74	-2.63	-2.49	-2.49	-2.14	-2.18	-2.4
Highest FD/GSDP	-4.75	-4.15	-4.38	-6.79	-4.23	-4.2	-3.64	-3.66	-3.59	-9.4	-11
Highest PD/GSDP	-0.49	-1.1	-1.4	-2.92	-1.49	-2.1	-1.01	-1.1	-1.66	-7.6	-8.28
Lowest RD/GSDP	3.54	4.06	3.14	3.48	4.21	3.25	2.27	2.44	2.65	3.28	2.47
Lowest FD/GSDP	3.08	3.86	4.98	3.8	2.68	2.72	2.32	2.28	2.12	2.34	2.57
Lowest PD/GSDP	4.29	4.2	1.88	1.9	1.31	1.49	1.09	1.11	1.06	0.76	1.41
Jharkhand RD/GSDP	1.27	1.27	0.34	0	0.5	0.94	-0.78	1.4	0.10	1.76	0.83
Jharkhand FD/GSDP	-1.22	-2.07	-3.18	-2.68	-1.4	-1.27	-1.94	-1.19	-3	-4.98	-4.32
Jharkhand PD/GSDP	0.94	-0.19	-1.25	-0.62	0.08	0.22	-0.58	0.18	-1.66	-3.54	-2.55

Source: CAG Reports of States over different years. A positive number denotes a surplus and hence the corresponding lowest deficit

While comparing the performance of the state with respect to three ratios, i.e., revenue deficit to GSDP (RD/GSDP), gross fiscal deficit to GSDP (GFD/GSDP) and primary deficit to GSDP (PD/GSDP) with other non-special category states, we can see that Jharkhand is consistently performing well in terms of RD/GSDP and is projected to be top of the list in 2017-18. Further, its performance with respect to GFD/GSDP and PD/GSDP has also improved significantly since 2015-16 and currently, it is projected to be in the top 5 states in terms of lowering these deficits with respect to own GSDP.

Chapter 5: Level and Composition of Public Debt

Introduction

A state has to finance the expenditure through debt when it fails to meet the same through its own revenue. The debt is termed efficient if it is accumulated for capital expenditures. Else, if debt is left accumulating in an uncontrolled way, it could lead to macroeconomic instability. A key question that arises is how outstanding debt can affect an economy or in other words, does continued debt accumulation lead to a situation of financial bankruptcy. It is thus, required by the government to constantly monitor both the level of accumulated debt and the rate of growth of the same so as to endure its sustainability. International Monetary Fund (IMF) defines debt sustainability as "*a situation in which a borrower is expected to be able to continue servicing its debts without an unrealistically large future correction to the balance of income and expenditure*". In other words, it shows the debt servicing capacity of any state.

Measures of Debt Sustainability

One of the metrics indicating debt sustainability is the debt to GSDP ratio. A low debt to GSDP ratio shows that the state sells more goods and services than the debt taken to finance the state's expenditure. As per the Jharkhand Economic Survey Report 2017-18, an indicator of debt sustainability is the ratio of total debt to GSDP should be less than 35%. Another indicator used for assessing debt sustainability is the ratio of interest payments to revenue receipts. According to Kaur et al. (2014), the tolerable limit of the ratio of interest payments to revenue receipts is 20%. A look at the same in Table 5.2 indicates the ratio of interest payments to revenue receipts is below the requisite tolerance limit by a significant margin thus, indicating that the state is performing well in terms of the overall debt taken. However, while comparing the debt sustainability metrics as against the targets specified under FRBM, we could see while the cumulative debt to GSDP ratio is higher than the specified limit of 20%, the ratio of interest payment to revenue receipts is well below the specified target of 18%.

As far as the Annual Gross Borrowings is concerned, the level of annual gross borrowings has shown a CAGR of 26.04% over a period of 6 years since 2011-12 while the cumulative debt has grown at a CAGR of 16.93% during the same period. The interest payments on the other hand have grown with a CAGR of 12.97% over the same period. Comparing them with the CAGR of GSDP and Revenue receipts for the same period, we get 9.31% and 15.98% respectively, thereby indicating the rate of growth of debt is higher than the growth of GSDP while the rate of growth of interest payments is lower than that of revenue receipts. We can thus conclude that for the two metrics of debt sustainability (cumulative debt to GSDP ratio and interest payment to revenue receipts ratio), while the former runs a risk of surpassing the upper tolerable limit, the later one is well within control.

Table 5.1: Debt to GSDP Ratio

Year	GSDP (₹ Crores)	Gross Borrowings (₹ Crores)	% of Gross Borrowing of GSDP	Net Borrowings (₹ Crores)	% of Net Borrowing of GSDP	Cumulative Debt (₹ Crores)	Total Debt /GSDP Ratio
2006-07	66934	4156.60	6.21	2054.87	3.07	19417	29.09%
2007-08	83949	5884.84	7.01	2199.46	2.62	21615	25.74%
2008-09	87793	7207.80	8.21	2466.98	2.81	24084	27.43%
2009-10	100620	8623.13	8.57	3078.97	3.06	27165	26.99%
2010-11	127281	6580.42	5.17	1489.18	1.17	28655	22.51%
2011-12	150918	8561.46	5.67	2008.71	1.33	30663.77	23.50%
2012-13	174724	14717.8	8.42	4205.22	2.41	34868.99	21.45%
2013-14	188567	12840.7	6.81	2724.86	1.45	37593.85	20.19%
2014-15	218525	19808.6	9.06	5975.25	2.73	43569.1	22.06%
2015-16	231294	33843.3	14.63	12961.4	6.27	56530.5	24.97%
2016-17	253536	19192	8.15	10298.5	4.37	66826	26.37%
2017-18	259664	25205	9.71	10268.1	3.95	77095	29.74%

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19
Note: GSDP figures for 06-07 to 10-11 are taken from source mentioned and are in actuals

Table 5.2: Interest Payment to Revenue Receipts

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Interest Payment (₹ Crores)	1613	1758	1887	2307	2228	2267.08	2391.25	2614.44	2929.15	3320.08	4172.25	4661.68
Interest Payment as % of total revenue receipts	16.11	14.61	14.28	15.25	11.86	10.11	9.65	10.00	9.28	8.17	8.88	8.88

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Uses of Debt

As mentioned previously, a state has to finance the deficit through debt. However, debt accumulation is not all that bad unless it is being used to fund revenue deficit. A look at the following table indicates that since revenue deficits have been largely eliminated, indication is that debt is being used largely for capital expenditure. Further, we can see that the net borrowings for the state has been projected to come down since 2015-16 significantly. But a worrisome aspect is that borrowings still form an excess of 99% of total capital receipts for the state. However, since the growth rate for revenue receipts has galloped higher than the rate of growth of revenue expenditure, in the near future, the state's annual borrowings will be used for financing capital expenditure only, thereby making the debt more efficient and thus will also help the state increase its GSDP.

Table 5.3: Uses of Debt (₹ Crores)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Net Borrowings	2054	2199	2466	3078	1489	2008	4205	2724	5975	12961	10298	8139
Revenue Receipts	10010	12027	13213	15118	18781	22420	24770	26137	31565	40638	47054	52756
% Growth		20.1	9.7	14.4	24.2	19.3	10.4	5.5	20.7	28.7	15.7	12.1
Revenue Expenditure	9064	10831	12869	15128	17945	20992	23400	23472	31795	36552	45089	50952
% Growth		19.5	18.8	17.5	18.6	16.9	11.4	0.3	35.4	14.9	23.3	13
Revenue Deficit	-946	-1195	-336	10	-836	-1427.9	-1369.7	-2664.9	230.34	-4085.5	-1965	-1803.9
Capital Receipts	1762.36	2734.20	4003.88	4223.01	3434.91	3663.02	5732.61	4325.43	8476.94	13798.9	12851.7	14949
Capital Expenditure	1461	2584	3051	2703	2664	3159	4218	4722	5543	8159	10861	16753
% Growth		76.8	18.0	-11.4	-1.4	18.5	33.5	11.9	17.3	47.1	33.1	54.2
Fiscal Deficit	910	1943	3114	3011	2112	1924	3406	2256	6564	11521	10192	11958

Source:CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Composition of State's Debt

State's outstanding liabilities can be classified as internal debt, loans and advances from centre, public account and contingency funds. In the subsequent subsections, we will analyse each of them in details along with explaining the position of Jharkhand with respect to each of the heads.

Table 5.4: The Composition of Annual Public Debt by Type (₹ Crores)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
GOI (1)	16.9	14	3	-10	132	32	238	106	153	165	234	231.6
Borrowing form RBI (2)	401	1193	1486	1844	500	1254	3600	2950	4950	5350	5154	5999.65
Power Bond (3)										5553		
Negotiated Loan (4)	193	618	770	672	587	873	770	1031	814	1044	1693	1905.59
Ways & Means Advances (5)	230	0	0	0	0	229	368	315	0	0	0	0
NSSF Fund (6)	1256	198	178	863	1228	281	221	299	772	1131	0	0
GPF Provident Fund (7)	453	479	584	687	572	613	667	760	842	830	872	1016.42
Reserve Fund (8)			13	489	0	138	279	293	307	521	452	401
Deposits (9)	1608	3379	4175	4075	3558	5138	8571	7084	11968	19246	10785.7	15651.3
Gross Borrowing (10--- 1 to 9)	4157	5881	7210	8621	6577	8561	14717	12840	19808	33843	19192	25205
Repayment (11)	2100	3684	4740	5540	5087	6552	10512	10115	13833	20881	8896.15	14937.4
Net Borrowing (12(10)-(11))	2057	2197	2469	3081	1490	2008	4205	2724	5975	12961	1029	10268
Borrowing Ceiling (13)	2008	2518	2634	3019	3466	3915	4876	5586	6393	6360	7993	8383
Cumulative Debt (14)	19417	21615	24084	27165	28655	30663	34868	37593	43569	56530	66828	77095

Source: Jharkhand Economic Survey 2018-19, 2017-18, 2013-14

a. Internal Debt

Internal debt comprises of market loans (borrowings from RBI), loans from National Small Savings Fund (NSSF) funds and loans from banking and other financial institutions like Life Insurance Corporation of India (LICI), General Insurance Corporation of India (GICI), National Bank for Agricultural and Rural Development (NABARD), State Bank of India and other banks, National Co-operative Development Corporation (NCDC) and some other institutions. Further, it also comprises of ways and means advances from RBI and any other

compensation like power bonds. The table below presents in detail regarding the internal loans on a year-on-year basis.

Table 5.5: Composition of Internal Debt (₹ Crores)

Internal Loans (1 to 5)	11-12	12-13	13-14	14-15	15-16	16-17 (RE)[5]	17-18 (BE)
	2638.7	4960.35	4596.75	6536.91	13079.63	6847.13	9500
Market Loans (1)	1254.05	3600	2950	4950	5350	5154	7000
Loans from NSSF (2)	281.48	221.23	299.62	772.68	1131.55	0	285.00
Loans from banks and other FIs or Negotiated Loans (3) (a to f)	873.98	770.33	1031.55	814.23	1044.71	1693.13	2215
of which (a) Loans from LICI	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(b) Loans from GICI	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(c) Loans from NABARD	650.99	750.00	750.00	790.00	900.00	1416.46	1600.00
(d) Loans from SBI and other financial institutions	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(e) Loans from NCDC	8.33	1.83	36.51	7.93	0.00	24.56	15.00
(f) Loans from Other institutions	214.66	18.50	245.04	16.30	144.71	252.11	600.00
Ways & Means Advances from RBI (4)	229.19	368.79	315.58	0	0	0	0
Compensation & Other Bonds including Power Bonds (5)	0	0	0	0	5553.37	0	0

Source: Jharkhand Economic Survey 2017-18

b. Loans and advances from centre

Loans and advances from the Central government comprises of loans for central plan schemes, loans and advances for assistance for relief on account of natural calamities etc. From the table below, we can see that the loans from the centre are very small in proportion to the internal loans, even though its magnitude is rising on a year-on-year basis, its proportion in the overall debt has always remained at around 1%.

c. Public account

Public account comprises of state provident fund, reserve funds and deposits and advances. A look at the table below indicates that over the years, all these components within Public account are increasing rapidly. Public continues to form the bulk of all the loans taken by the state on an annual basis. Again, within the Public Account debt, deposits and advances form the bulk with over 90% contribution.

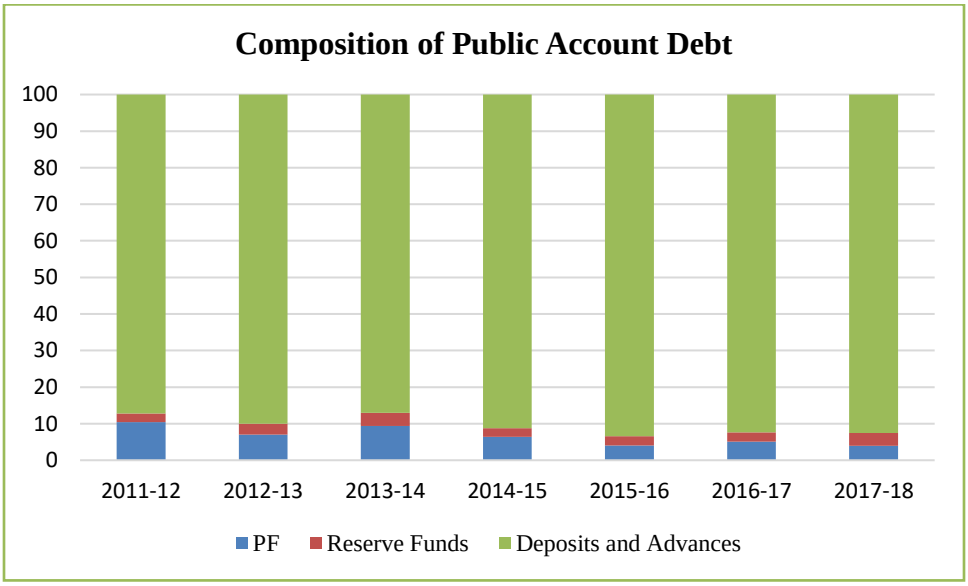
[5] Estimates are provided for 16-17 and 17-18 as they are reported in the same way in Jharkhand Economic Survey, 2017-18. No updated data on the same has been provided.

Table 5.6: Composition of Public Account Debt (₹ Crores)

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Public Account	2061.09	3858	4772.98	5251.28	4130.04	5890.23	9518.81	8137.76	13118.45	20598.69	18887.9
State PF	453.05	478.77	584.46	686.66	571.73	613.38	667.69	760.2	842.56	830.1	988.95
Reserve Funds	-	-	13.20	489.35	0.31	138.58	279.81	293.19	307.85	521.68	512.01
Deposits & Advances	1608.04	3379.33	4175.32	4075.38	3558.07	5138.27	8571.31	7084.37	11968.04	19246.91	17387.52

Source: Jharkhand Economic Survey (2017-18), Government of Jharkhand

Figure 5.1: Composition of Public Account Debt



Source: Author's Own

Summarizing the various types of debt, we get the following table.

Table 5.7: Composition of Outstanding Debt (₹ Crores)

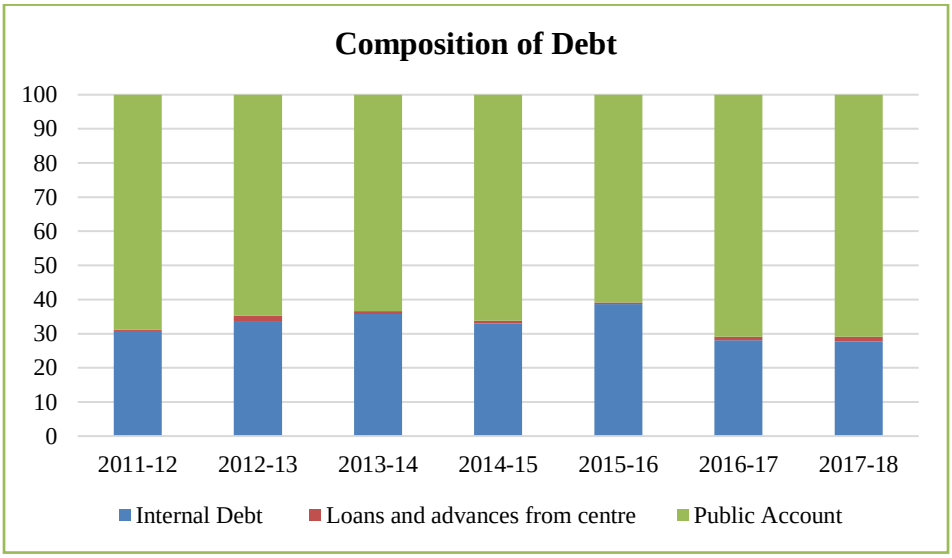
	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17
Liabilities	6159	9068	10775	11601	10168	12624	19324	18662	26879	42281	29133
In. Debt	1849	2009	2437	3369	2315	2409	4591	4281	6537	13079.63	6847.13
Loans and Advances	17	14	3	-10	132	32.53	238.65	106.15	153.21	165.02	234.29
Public Acc	4293	7013	8335	8242	7721	10813	14495	14275	20189	29037	22052
Cont. Fund	0	32	0	0	0	0	0	0	0	0	0

Source: CAG Report on State Finances, Government of Jharkhand

A deeper analysis of debt as per the type indicates, that Public account continues to be the biggest source of State's debt, followed by internal debt, and then loans from Centre.

The contribution of Public accounts towards overall debt has always been in excess of 60% since 2011-12 and now has crossed 70%. On the other hand, the contribution of internal debt towards total debt has always been around one-third but has shrunk to below the 30% mark. The contribution of centre towards debt has always remained miniscule at around 1% level.

Figure 5.2: Composition of State's Debt



Source: Author's Own

Chapter 6: Implementation of FRBM Act

Introduction to Fiscal Responsibility and Budget Management (FRBM) Act, 2003

The Fiscal Responsibility and Budget Management (FRBM) Act, 2003 was enacted by the Indian Parliament and aimed at setting targets for the government for inducing fiscal discipline by reducing fiscal deficits in order to ensure long-term macroeconomic stability. Further, it also aimed at restricting Central Government Borrowings in order to achieve prudential debt management consistent with fiscal sustainability. Further, the central government should reduce the fiscal deficit by an amount equivalent to 0.1% or more of GDP annually, starting from the financial year 2018-19 so that the above specified target is achieved. It was stated that the Government of India should take appropriate measures to limit the fiscal deficit up to 3% of GDP by the end of 31st March 2021. It also directs the government to limit debt up to 60% of GDP out of which 40% should be Central government debt and the rest 20% should be state government debt. Further, on the issue of consolidated funds, it directs the government not to provide additional guarantees with respect to any loan on security of the same if it exceeds 1.5% of GDP.

a. Jharkhand FRBM Act 2007

Jharkhand Fiscal Responsibility and Budget Management (JFRBM) Act, 2007 was enacted based on the recommendations of the Twelfth Finance Commission (TFC). Its primary aim was to bring fiscal discipline in the state. As per the act, the State Government of Jharkhand was to take appropriate measures to eliminate the revenue deficit by the end of March 2009 and reduce the fiscal deficit at sustainable levels (to not more than 3% of the estimated Gross State Domestic Product (GSDP)) by March 2009. It also aimed at maintaining government debt to prudent levels by reducing the interest payment as a percentage of revenue receipt to 18-25% while maintaining a primary surplus of over 3% of GSDP by the end of 31st March 2008. The other important fiscal targets laid down in this act include to reduce the ratio of salary to state's own revenue to 80% and to reduce the ratio of non-interest committed revenue expenditure to state's own and mandated revenue to 55% by the end of 31st March 2008. Further, the total debt stock should be limited to 300% of the total revenue receipts of the state by the end of 2007-08.

b. Jharkhand FRBM Act 2010 (Amendment to the 2007 Act)

The JFRBM Act of 2010 is an amendment to the earlier JFRBM Act of 2007. According to the same, the state aimed to reduce the fiscal deficit to 3% of the estimated GSDP by the end of March 2011. The amendment was carried out in pursuance of the sanction of Government debt up to 4% of GSDP. In the subsequent amendment of 2011, the deadline for achieving the target fiscal deficit as proposed in the amendment of 2010 was extended to 31st March 2012. Further, a clause related to year wise ratio of outstanding debt to GSDP was inserted where the state was supposed to gradually decrease the ratio every year and finally get it reduced to 26.9% by the end of fiscal year 2014-15.

c. Jharkhand FRBM Act 2015 (Amendment to the 2007 Act)

The JFRBM Act of 2015 is an amendment to the earlier JFRBM Act of 2007. According to the same, it is stated that for the financial years 2015-16 and 2016-17, the target fiscal deficit for the state should be limited to 3.5% of the GSDP, whereas for the financial years 2017-18, 2018-19 and 2019-20, the target fiscal deficit is revised to 3.25% of the GSDP. Further, the revenue received by the state's electricity distribution company (DISCOM) in the form of market loans for the financial years 2015-16 and 2016-17 for its own financial rehabilitation and upgradation under the government sponsored scheme of UDAY is subjected to the fulfillment of the above-mentioned condition of meeting the fiscal deficit targets.[6]

On summarizing the salient features and objectives as laid down under the FRBM Act 2003, Jharkhand FRBM Act of 2007 and the subsequent amendments to the JFRBM Act of 2007 of 2010, 2011, 2012 and 2015 respectively, we get the following table of specified targets that needed to be fulfilled.

Table 6.1: Current Targets as specified under FRBM 2003, JFRBM 2007 and Subsequent Amendments

Particulars	Targets
Revenue Deficit	Nil
Fiscal Deficit	3.5% of GSDP for 2015-16 and 2016-17 3.25% of GSDP for 2017-18, 2018-19, 2019-20
Primary Surplus	3% of GSDP
Debt	26.9% of GSDP by 2014-15 20% GSDP eventually
Interest Payment	18-25% of revenue receipts
Salary Paid	80% of State's own revenue
Non-interest committed revenue expenditure	55% of State's own and mandated revenue
Total debt stock	300% of the total revenue receipts

Sources: FRBM Act 2003, JFRBM Act 2007, JFRBM Act 2015, Evaluation of State Finances Report for 14th Finance Commission

Performance of Jharkhand and Commitment Towards Targets

In the subsequent sections, we will analyse the performance of Jharkhand with respect to the targets mandated under the FRBM Act 2003, JFRBM Act 2007 and the subsequent amendments as mentioned in Table 6.1.

[6] Accessed from http://www.jharkhand.gov.in/documents/10179/54472/Jharkhand%20FRBM%20Act%202015?version=1.0&t=1456907795000

Revenue Deficit Position

As per the FRBM Act, every state is required to eliminate revenue deficit. On the revenue deficit part, Jharkhand has already eliminated the revenue deficit and has now become a revenue surplus state with current revenue surplus projected to exceed ₹ 7700 Crores. Further, the state has shown an increase in the revenue surplus year-on-year since 2014-15, which is projected to be at 2.77% of GSDP. Thus, Jharkhand has well achieved the target of eliminating revenue deficit.

Table 6.2: Revenue Deficit Position of the State

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Revenue Deficit (₹ Crores)	-946	-1195	-336	10	-836	-1427.9	-1369.7	-2664.9	230.34	-4085.5	-1965	-1803.9
Revenue Deficit as % GSDP	-1.27	-1.27	-0.33	0.00	-0.6	-0.95	-0.78	-1.41	0.11	-1.77	-0.83	-0.69

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Fiscal Deficit Position

The deficit position of the state indicates that the fiscal deficit as a percentage of the GSDP is 2.49%, which is within the target of 3.5% set as a part of Jharkhand FRBM Act Amendment of 2015 and is also projected to be less than 3.25% of GSDP (as stated in JFRBM 2015) for the financial year 2017-18. A year-on-year analysis also shows that the deficit position has remained well within the specified limits over the past few years with the only exception happening in the financial year 2015-16 due to the borrowings of ₹ 5553 Crores under the UDAY scheme.

Table 6.3: Fiscal Deficit Position of the State

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Fiscal Deficit (₹ Crores)	910	1943	3114	3011	2112	1924	3406	2256	6564	11521.9	10,192	11958
Fiscal Deficit as % GSDP	1.22	2.07	3.18	2.68	1.49	1.27	1.94	1.19	3.00	4.98	4.32	4.61

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Primary Deficit Position

The states are required to have a primary surplus of 3% of GSDP. However, on this front, Jharkhand is falling behind and rather is expected to have a primary deficit of 0.89% of GSDP. From the previous chapter on deficits, we have seen that the rate of growth of fiscal deficit being higher than the rate of growth of interest payments, the primary deficit is set to grow bigger in the future and hence it seems unlikely that the state will be able to meet the primary surplus target in the near future. However, with GSDP also growing, the ratio of primary deficit to GSDP will be stabilized at around 1%.

Table 6.4: Primary Deficit Position of the State

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Primary Deficit (₹ Crores)	-703	185	1227	704	-116	-343	1015	-358	3634.85	8201.86	6020	7296.33
Primary Deficit as % GSDP	-0.94	0.19	1.25	0.62	-0.08	-0.22	0.58	-0.18	1.66	3.55	2.55	2.81

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Debt Position

On the front of debt, states are required to maintain a debt to GSDP ratio of 20% for achieving prudential debt management consistent with fiscal sustainability. In case of Jharkhand, the debt to GSDP ratio is rising and is substantially above the stipulated limit of 20%. Currently, cumulative debt is projected to stand at 26.4% of GSDP which is substantially higher than the set target. Moreover, states are also required to have an upper limit of debt to revenue receipt of 300%. Again, from the table below we could see that the same ratio has remained well below 150% since 2011-12 and is currently projected to be at 113.5%. Hence, we could state that even though the state has failed to maintain the required target of 20% of debt to GSDP, but it is able to meet the target of 300% of debt to revenue receipts.

Table 6.5: Debt Position of the State

	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	16-17	17-18
Debt (₹ Crores)	19417.3	21614.5	24083.9	27165.02	28655	30663.07	34848.9	37593.8	43569	53560.4	66826	77095
Debt/GSDP	26.06	23.13	24.65	24.26	20.23	20.31	19.94	19.93	19.93	23.15	26.39	29.74

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Interest Payments

Under the FRBM Act, states are supposed to maintain the interest payments as a percentage of total revenue receipts at 18-25%. On this aspect, the table presented below shows that the performance of the state is excellent as this ratio is currently projected to be at 6.81%. Not only that, since 2011-12, the state is able to restrict the ratio close to 10%.

Table 6.6: Interest Payments of the State

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Interest Payment (₹ Crores)	1613	1758	1887	2307	2228	2267.08	2391.25	2614.44	2929.15	3320.08	4172.25	4661.68
Interest Payment as % of total revenue receipts	16.11	14.61	14.28	15.25	11.86	10.11	9.65	10.00	9.28	8.17	8.88	8.88

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Salary Paid and Non-interest committed expenditure

As far as the payments of salary is concerned, FRBM Act mandated the states to maintain the same at 80% of state's own revenue (i.e., sum of state's own tax and state's own non-tax revenue) and also keep the non-interest committed expenditure (sum of salary and pensions) at 55% of the sum of state's own revenue and mandated revenue (i.e., centre's transfer to states of the taxes). An analysis of the ratio of salary to state's own revenue indicates that the state of Jharkhand is doing well, and the ratio stands way below than the required ceiling. Further, the ratio of salary to state's own revenue is showing a decline since 2011-12 and also is projected to decline by more than a third currently. Again, in case of non-interest committed revenue expenditure as a ratio of state's own and mandated revenue, we can see that the same is also well within the limits as stipulated under the FRBM Act. Further, the ratio is also showing a decline since 2011-12 and is projected to decline by more than a third currently. Hence under these two objectives related to revenue expenditure, the state is doing very well by keeping the required ratios significantly below the targets.

Table 6.7: Salary Paid and Non-interest committed expenditure of the State

	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18
Salary (₹ Crores)	2744	2985	3948	5342	5642	6352	6446	6934	7417	8218	8927	11220
State Own Revenue	4439	5075	5705	6754	8520	9992	11760	13133	14685	17332	18650	20199
Salary/Revenue (%)	61.8	58.8	69.20	79.09	66.22	61.56	54.81	52.72	50.50	47.41	47.86	55.54
Committed Rev Exp (Salary+ Pension)	3423	3803	4936	7023	7723	8649	9377	10418	10880	12208	13062	17133
State's Own Revenue + Mandated Revenue (State's Share of Central Taxes) (₹ Crores)	8490	10185	11097	12301	14674	17162	19948	22072	24172	33301	37792	41342
Comm Rev/ State Own + Mandated Rev	40.31	30.27	44.48	57.09	52.6	50.3	47	47.20	45.01	36.54	34.56	

Source: CAG Report on State Finances, Government of Jharkhand, Jharkhand Economic Survey 2018-19

Mid Term Fiscal Policy of Various Departments and Aggregates

It is clear from the above discussions that the ability of Jharkhand towards adherence to the proposed objectives of the FRBM Acts largely is due to the fact that the state has improved its position to raise own revenues (both tax and non-tax) and not on the contraction of expenditure. We can state the fiscal policy of the state in the future could be heading toward the following characteristics:

1. The revenue surplus will be maintained at around 3% of GSDP primarily due to the increase in own tax and non-tax revenues. The growth of tax revenues is attributed to the fact of broadening of tax base and higher tax buoyancy.
2. The fiscal deficit of the state as a percentage of GSDP is likely to remain well within the specified limit as mandated by the FRBM Act. With state's revenue showing an increase at a rate higher than the revenue expenditures, a part of the same could be used for capital expenditures at an increasing rate, thus will be able to increase the GSDP. As a result of the same, the fiscal deficit as a ratio of the GSDP will remain stabilized and also lower than the set target.
3. The cumulative debt as a part of GSDP will also remain at around 27%, which is significantly below the ceiling of 35%, considered as sustainable debt.
4. The interest payment which forms a significant part of revenue expenditure, when compared against revenue receipts, is likely to remain stable and below the target set under the FRBM Act. Further, the salary to state's own revenue is likely to decrease in the future along with a decrease in state's non-interest committed revenue to state's own and mandated revenue. This

also indicates that a larger part of the revenue will be available for non-committed and capital expenditure.

The Mid Term Fiscal Policy and Fiscal Policy Strategy Statement along with the rolling targets is presented in the table below.

Table 6.8: Mid Term Fiscal Policy and Fiscal Policy Strategy Statement

Fiscal Indicators --- Rolling Targets (in %)	2016-17	2017-18 (BE)	Targets	
			2018-19	2019-20
Fiscal Deficit as percentage of GDP	4.32	2.49	3.25	3.25
Revenue Deficit as percentage of GDP	-0.83	-2.77	0	0
Primary Deficit as percentage of GDP	2.55	0.89	-3	-3
Tax Revenue as percentage of GDP	5.2	14.65	14.98	15.67
Non-tax Revenue as percentage of GDP	2.4	3.96	2.92	2.62
Total Government debt as percentage of GDP	26.36	26.65	27%	27%

Source: Jharkhand Economic Survey, 2017-18

Chapter 7: Analysis of State Analysis of Transfers to Urban and Rural Local Bodies

Introduction

The 14th Finance Commission constituted in the year 2013 to give specified suggestions and recommendations on Centre-State relations and recommended assured transfers to Local Bodies for delivering of basic services in a smooth and effective manner. The objective is to increase the quality of basic services to enhance the overall welfare of the citizens. It was advised that the expenditures be made only after a draft of the plan is prepared by the panchayats and municipalities.

The size of the grant as decided by the 14th Finance Commission is ₹ 2,87,436 Crores from 2015-20. Of this, ₹ 2,00,292 Crores is to be given to panchayats and ₹ 87,143.80 Crores is to be given to municipalities. The grant is divided into two basic components – general basic grant and a performance grant. However, the important point to note is that for Gram Panchayat, 90% of the grant will be in the form of basic grant and 10% in the form of performance grant. On the other hand, for municipalities, 80% of the grant will be basic, and 20% in the form of performance grant.

Basic Grant

Basic grant is the grant given for basic services such as solid waste management, water management, septic management, street lighting, footpath and other basic services. The 14th Finance Commission has not distinguished between operation and maintenance services and capital expenditure. However, it has been mentioned that no more than 10% of the funds allocated towards basic grants should be utilized for technical support towards O&M and capital expenditure.

The basic grant for gram panchayat from the 14th Finance Commission amounted to ₹ 1,80,262.96 Crores. For municipalities, the allocation towards basic grants amounted to ₹ 69,715.03 Crores. For the distribution of the basic grant fund for gram panchayats, respective state finance commission formulas are to be used. In case that is not present, distribution will be done based on population (90%) and area (10%). In case of municipalities, distribution must be done across three levels: Municipal corporations, Municipal councils, and Nagar Panchayats. Across these three tiers, further distribution of funds is according to the respective formula of the State Finance Commission. In case no formula as such exists, the distribution will be done according to population and area in the ratio of 90:10.

Performance Grant (PG)

Unlike basic grants, which are allocated for basic services, the performance grants to gram panchayats and municipalities are conditional. Primarily, the performance grant is designed to check and ensure reliable audited accounts, reports of the revenue and expenditure and the improvement of its own revenues. This is done to increase and enhance the accountability of the local self-governments to the public.

The PG as according to the 14th Finance Commission amounted to ₹ 20,029.22 Crores for Gram Panchayats and ₹ 17,428.68 Crores for municipalities for the period 2015-20. The performance grant is given based on:

1. Making available reliable data on local bodies revenue and expenditures through audited accounts
2. Improvement in own revenues

The eligibility of these performance grants differs for gram panchayats as compared to municipalities. For both gram panchayats and municipalities, they need to submit the audited accounts or revenues and expenditures from year to year, not earlier than two years from the year they wish to claim the grant. They also need to show an increase in revenues over the preceding years as reflected in the accounts.

However, there is an additional eligibility for municipal bodies. Municipalities need to measure and publish the Service Level Benchmarks related to basic urban services for the period of the award and make it publicly available.

Release of Grants

The grants would be released in two installments: July and October. While 50% of the basic grant is to be released in the first installment, the remaining basic grant as well as the performance grant is to be released in the second installment. Additionally, the states should release the grants within 15 days of receiving it from the Centre, failing which they would have to pay interest at the Bank rate according to the Reserve Bank of India. The performance grant will be released only in 2016-17 (with the first payment in October 2016). For the year 2015-16, the performance grant will be released by the Department of Expenditure in October 2016 based on the certification by the MoPR/MoUD. For the subsequent years, the performance grant will be released alongside the second installment of the basic grant.

Monitoring and Evaluation

No other conditions or directions are to be indicated by the Centre or the State, other than those indicated by the 14th Finance Commission. However, the state governments may develop state-specific time bound plans to address the issues highlighted by the Finance Commission and work closely with the MoPR/MoUD. At the level of the Union Government, there might be two Committees, one under the Panchayati Raj and the other under the Urban Development, to provide guidance and support to State Governments for the implementation of the recommendations under the 14th Finance Commission. This Committee will look into matters such as:

- Improving revenues from own sources of local bodies
- Ensuring proper tax reforms, adjusting to inflation levels, increasing the efficiency of tax collection
- Empowering local bodies to levy betterment tax and advertisement tax
- Rationalizing service charges to cover operational and maintenance costs

- Empowering local bodies to cover tax and non-tax receipts through necessary legislations
- Exploring the issuance of municipal bonds as a source of finance

Decentralization in Rural Areas

Decentralization in rural areas of the country are done via the Panchayati Raj institutions, governed by the Panchayat Raj Act of 2001. The gram panchayats are responsible for local administration at the village level; at the block level, responsibilities lie with the Panchayat Samiti; and at the district level, responsibilities are vested with the ZillaParishad. Panchayats receive funds from three sources: local body grants as recommended by Central Finance Commission, funds for implementation of centrally sponsored schemes, and funds released by the state government on the recommendations of the State Finance Commissions. According to a report by Participatory Research in Asia (PRIA)[7], there is a lack of clarity of the taxation powers of the Gram Panchayats and that has so far inhibited their setting and collection of taxes. Though Jharkhand has constituted its third State Finance Commission (SFC), only the first state finance commission has submitted their report. This has also aggravated their problem. The only source of revenue then is the general grants obtained from the state government, which is disbursed according to the formula specified in the 14th Finance Commission. The State Government disburses the grants to the ZillaParishads, which then disburses to the Panchayat Samitis, and then it is disbursed to the Panchayats. Our interviews with officials in the Panchayati Raj department revealed that decentralization has meant not autonomy to raise finances by Gram Panchayats, but delegation of powers to undertake specific functions. Table 7.1 reports the receipts and expenditures of various PRIs from 2011 to 2016.

[7]Own sources of revenue of Panchayati Raj Institutions in Jharkhand downloaded from the website www.pria.org

Table 7.1: Position of Receipts and Expenditures of PRIs

Years	PRI Tier	Opening Balance (₹ Cr)	Plan (₹ Cr)	Non Plan (₹ Cr)	Others (₹ Cr)	Total Receipts(₹ Cr)	Plan (₹ Cr)	Non Plan (₹ Cr)	Total Expenditures (₹Cr)
11-12	ZP	234	203	2	11	450	214	4	218
11-12	PS	3	15	3	0	21	13	3	16
11-12	GP	0	4	0	0	5	3	0	3
12-13	ZP	233	317	3	4	557	199	5	204
12-13	PS	6	25	3	0	34	19	4	23
12-13	GP	1	4	0	0	6	4	0	4
13-14	ZP	354	274	1	4	634	307	3	310
13-14	PS	11	32	4	0	48	29	5	34
13-14	GP	1	4	0	0	6	4	0	4
14-15	ZP	323	423	3	11	761	333	3	336
14-15	PS	15	18	5	0	38	18	5	23
14-15	GP	1	4	0	0	6	3	0	3
15-16	ZP	424	102	3	9	537	228	8	235
15-16	PS	15	16	5	0	36	18	5	23
15-16	GP	2	6	0	0	8	5	0	5

Source: CAG Report on Annual Technical Inspection Report on Local Bodies, 2016

For Zilla Parishads, the total receipts have seen an increase from ₹ 450 Crores in 2011-12 to ₹ 760 Crores in 2014-15. However, there was a slight dip to ₹ 537 Crores in 2015-16. The same can is reported for Gram Panchayats, with a total revenue of ₹ 21 Crores in 2011-12 to ₹ 36 Crores in 2015-16. The total revenue for Panchayat Samiti has been more or less consistent. In terms of total expenditure, it is seen that the total expenditure for ZillaParishads from ₹ 218 Crores (2011-12) to ₹ 336 Crores (2014-15), and finally decreasing to ₹ 235 Crores in 2015-16. Gram Panchayats show the same trend with an increase in total expenditure from 2011-12 to 2013-14, and then falling to ₹ 23 Crores from 2014-15 onwards. Thus, it can be said that the revenue and expenditures for the ZillaParishads and the Panchayat Samiti's have been erratic, however, the for Gram Panchayats it has been constant over the same time period.

Table 7.2 reports the name of the districts with the corresponding number of gram panchayats and panchayat samitis. The growth in total allocation in 2016-17 was 38.47% and that over 2017-18 was 15.54%.

Table 7.2: Overview of Number of Samiti's and Gram Panchayats District-Wise

Name of District	No. of Panchayat Samiti	No. of Gram Panchayat	Name of District	No. of Panchayat Samiti	No. of Gram Panchayat
Garhwa	20	189	Jamtara	6	118
Palamu	21	283	Dhanbad	10	256
Latehar	9	115	Bokaro	9	249
Chatra	12	154	Ramgarh	6	125
Hazaribagh	16	257	Lohardaga	7	66
Koderma	109	6	Gumla	12	159
Giridih	13	358	Khunti	6	86
Deogarh	10	194	Ranchi	18	305
Godda	9	201	Simdega	10	94
Sahebganj	9	166	W.Singbhum	18	217
Pakur	6	128	Saraikela	9	132
Dumka	10	206	E. Singbhum	11	231

Source: Department of Panchayat Raj, Government of Jharkhand

Table 7.3 gives us the GPs with the highest and lowest allocation for the years 2016-17 (1st and 2nd installments), and 2017-18 (1st and 2ndinstallments).

Table 7.3: Gram Panchayat Allocation for Lowest and Highest Allocation 2016-18

District	GP with highest value	GP with lowest value	2016-17 (₹)	2016-17 (₹)	2017-18 (₹)	2017-18 (₹)
Garhwa	Bijka	Sarang	4023710	1231330	4649060	1422698
Palamu	Taal	Dhakcha	2972570	1221274	3434554	1411078
Latehar	Bageya	Baresand	3362690	902788	3885306	1043098
Chatra	Chope	Rampur	3097628	1386354	3579050	1601816
Hazaribagh	Churchu	Dandighagar	3196034	1177954	3692754	1361026
Koderma	Meghatri	Nawadih	2052602	496025	2990262	1056752
Giridih	Aura	Maulatand	3924860	1221110	4534846	1410892
Deogarh	Satrakhorpas	Nawadih	2553892	1521218	2950808	1757642
Godda	Amarpur	Barahsindi	2684996	1203310	3102288	1390326
Sahebganj	Rampurushtit	DaminBhiti	3523632	787906	4071262	910360
Pakur	Jhikrahti	Chandpur	3814650	1374820	4407510	1588490
Dumka	Purana Dumka	Ranga	3022800	1557624	3492592	1799706
Jamtara	Chengyadih	Gadjodi	2530888	1328080	2924230	1534490
Dhanbad	Palani	Hariyajam	2740570	817994	3166500	945124
Bokaro	Satanpur	Govindpur	3343910	682378	3863808	788432
Ramgarh	Baraghutu	Koto	3309766	719580	3824158	831416
Lohardaga	Hesag	Chiri	2887554	1363840	3336326	1575802
Gumla	Vishnupur	Rampur	3835854	1058434	4432006	1222930
Khunti	Ladump	Torpa	4094650	1309384	4731024	1512842
Ranchi	Dumardaga	Jilingsereng	3271198	701272	3779596	810262
Simdega	Pakartar	Bambalkera	3170628	1449728	3663396	1675040
W.Singbhum	Rengrahatu	Meghahatubur	4249974	1306264	4910448	1509280
Saraikela	Jagganathpur	Upardungi	3472536	972152	4012226	1123328
E. Singbhum	Forest Block	Maubhandar	3096225	1028918	3173820	1175100

Source: Department of Panchayat Raj, Government of Jharkhand

Table 7.4 enlists the overall district allocation from the years 2015-16 to 2017-18. It is seen that the average district allocation has been increasing year on year, and Giridih and Lohardaga have been the two districts having the highest and lowest allocation for all three years respectively.

Table 7.4: Overview of District Allocation over the Years

Year	2015-16 (₹)	2016-17 (₹)	2017-18 (₹)
Total Allocation	652,83,00,000	9,03,96,00,000	10,44,45,00,000
District Average Allocation	13,60,06,250	188325000	217593750
District with total Max All	Giridih	Giridih	Giridih
Corresponding value	54,65,42,045	75,79,01,016	87,56,91,086
District with total Min All	Lohardaga	Lohardaga	Lohardaga
Corresponding value	10,00,99,894	13,88,00,378	8,01,86,100

Source: Department of Panchayati Raj, Government of Jharkhand

Table 7.5: Overview of the average amount received, planned and utilised by the PRI

Values	Average Amount Received(₹)	Average Amount Planned(₹)	Average Difference (₹)	Average Utilisation Rate
	1128313750	8687451244	2595686256	76.9
District with the highest	Giridih	Giridih	Ranchi	Khunti
District with the lowest	Lohardaga	Simdega	Khunti	Simdega

Source: Panchayati Raj Department, Government of Jharkhand

These allocations as mentioned in Table 7.3, 7.4, and 7.5 are based on the allocation rule made by the 14th Finance Commission (page 111), which is to be made by the Centre to the State, further given to gram panchayats and municipalities. Section 75, 76 and 77 of the Panchayat Act of 2001 outline the functions of the Gram Panchayat, Panchayat Samiti and the ZillaParishad.

Devolution of functions to Panchayati Raj Institutions

There are 29 functions devolved to the PRIs.[8] The following are the list of functions:

Agriculture, Land development, minor irrigation, pisciculture, animal husbandry, social forestry, minor forest produce, small industry, khadi, rural housing, drinking water, fuel and fodder, roads and bridges, rural electrification, poverty alleviation, non-conventional sources of energy, education, technical training, adult education, library, cultural activities, market and fairs, health and hygiene, family welfare, women and child development, social welfare, welfare of weaker society, public distribution system, maintenance of community assets.

We will now discuss the devolution of functions in the various departments, namely Animal Husbandry and Fisheries Department, Agriculture and Sugarcane Development Department, Food, Public Distribution and Consumer Department, Revenue and Land Reform Department, Rural Development Department and Water Resources Department.

Animal Husbandry and Fisheries Department

Annual Plans and the treatment and raising of animals have been kept centralized at the ZillaParishad Level. Plans at the Panchayat Samiti level deal with medicines for treatment of animals, artificial insemination, animal vaccination plans and treatment camp for animals. Gram Panchayats are assigned the responsibility of maintenance and renovation of animal husbandry centres, disposal of animal carcasses, finding the beneficiaries and distribution of services. In the case of fisheries, ZillaParishads are responsible for the upkeep of the places for breeding of fish and construction and upkeep of ponds, and survey of the beneficiaries of the project. Funds for fish cultivation will be disbursed at the ZillaParishad level and the Gram Panchayat will choose the beneficiaries for training and maintenance of fish farms. The ZillaParishads will be in charge of disbursement of bank loans but identification of bank loan beneficiaries will be done by Gram Panchayats. Monitoring and development work will be done at ZillaParishad Level.

Food, Public Distribution and Consumer Department

This department looks into the monitoring and supervision of food grain distribution under the public distribution system, work related to distribution of ration cards and procurement at minimum price. Detailed instructions are provided about responsibilities at each level of government, with respect to the Annapurna Project and Antyodaya Grain Project, the Gram Panchayat's main responsibility is to identify beneficiaries for the scheme from the BPL list, and the Panchayat Samiti and ZillaParishad must oversee the operations. The control of workers in these projects will be under the ZillaParishad. The duration of the officials and the gender composition of the Committees are also specified.

[8] Annual Technical Inspection Report on Local Bodies 2016, Government of Jharkhand

Rural Development Department

Under the MNREGA plan, for implementation of the plan, the financial burden to be borne between Central and State Government in accordance with the given responsibilities, is in the ratio of 90:10. Flow of Fund is from Central Government to State Government, from State Government to Zilla and from Zilla to Gram Panchayat. For implementation of Indira Awaas Plan, 75% of the fund is made available from Central Government and 25% from State Government. On the basis of communicated goal, tangible goal is determined block-wise by Zillas. Under the light of guidance of this project, beneficiaries are chosen through Gram Sabha on the basis of wait-list. The selection made by Gram Sabha is considered final. Funds are transferred in the register by blocks to the selected beneficiaries, which is now being transferred directly in the registers of the beneficiaries from Zillas. Houses are constructed by the beneficiaries themselves. If there is any problem in the release of plan funds in any Zilla, then after departmental approval, state level capable officer will issue instructions for release grant/other fund for the concerned Zilla, so that progress in implementation of plans is not hindered.

Revenue and Land Reform Department

Gram Sabhas are responsible for maintenance and protection from encroachment of non-farmed common land, public pasture land, maintenance of community assets, home for homeless, and land made available for village connectivity. For settlement of ponds, gram panchayat can spend up to ₹ 25000, Panchayat Samiti from ₹ 50000 to 100000, and ZillaParishad above ₹ 1 lakh. Under Gram Panchayat, 25% will be spent on maintenance and strengthening the ponds and remaining for developmental work in agreement with Gram Sabha.50% of the funds received in the jurisdiction of Panchayat Samiti will be handed over to Gram Panchayat, which will use it in accordance with above mentioned manual 1. 50% of the funds received in jurisdiction of ZillaParishad will be handed over to Gram Panchayat and 25% to Panchayat Samiti. Gram Panchayat will use it in accordance with above mentioned manual 1.

Water Resources Department

Gram Panchayat's consent will be taken by Executive engineer in selecting the mini irrigation plans. ZillaParishad will supervise the plans. Maintenance and management of mini irrigation plans will be done by strategically constituted Water Consumer Samiti. ZillaParishad will give administrative acceptance of ₹ 10 lakhs per plan for maintenance and repair of mini irrigation plans. Funds for work costing up to ₹ 10 lakhs, the concerned Executive engineer will be made available to ZillaParishad through the mini irrigation division. Its implementation, with the cooperation of officers of the division, will be done by Panchayati Raj institutions under the control of ZillaParishad. If any problem arises in releasing of funds in any Zilla, then after the divisional acceptance, the capable officer at the State level will give instructions so that there is no obstruction in the progress of the plan's implementation.

Lists of Power and Functions to be performed by the Urban Local Bodies

The ULBs are required to perform 18 functions enumerated in the 12th Schedule to the Constitution inserted by the 74th Constitutional Amendment Act, 1992.[9] The list of power and functions to be performed by the ULB are: Urban Planning, Regulation of Land Use, Planning for economic and social development, roads and bridges, water supply, public health and sanitation, fire services, urban forestry, safeguarding the interest of the weaker society, slum improvement, urban poverty alleviation, provision of urban amenities, promotion of cultural and aesthetic aspects, burial grounds, prevention of cruelty to animals, registration of births and deaths, public amenities, and regulation of slaughter house.

Decentralization in Urban Areas

The 74th Amendment of the in the Indian Constitution introduced the Nagarpalika Act, which came into force on June 1, 1993. Municipalities have now been given constitutional status, and they can be of three types:

a. Nagar Panchayats are those that are transitioning from rural to urban areas
b. Municipal Councils for the small urban areas
c. Municipal Corporations for the larger urban areas

[9] Annual Technical Inspection Report on Local Bodies 2016, Government of Jharkhand

Table 7.6: Number of Census Towns, Nagar Panchayats, and Municipal Corporation in Jharkhand

District Name	No. of Census Towns	No. of Nagar Panchayats	No. of Municipal Corporation
Garwah	1	2	
Palamu	5	3	
Lothar	3	2	
Chatra	1	1	
Hazaribagh	16	1	
Kodarma	3	2	
Giridih	10	1	
Devgarah	0	1	1
Godda	2	1	
Sahebganj		1	
Pakur	3	1	
Dumka	2	2	
Jamtara	1	2	
Dhanbad	37	2	
Bokaro	21	2	
Ramgarh	21		
Lohardaga	0	1	
Gumla	2	1	
Khunti	1	1	
Ranchi	13	1	1
Simdega		1	
W. Singbhum	9	2	
Saraikela	5	1	
East Singbhum	11	1	1

Source: http://www.citypopulation.de/php/india-jharkhand.php

Municipalities are divided into smaller territorial constituencies wards for the purpose of election of ward members. Ward Committees are constituted with one or more wards. The duration of a municipality is five years from the date of its first meeting. The 12th schedule of the constitution gives the list of function of the municipalities, which includes all essential functions such as urban planning, water supply for domestic, industrial and commercial purposes and public health, sanitation conservancy and solid waste management. There exists a District Planning Committee to consolidate the plans prepared by the municipalities and to draft a development plan for the district as a whole. For a population of ₹ 10 lakhs or more, a Metropolitan Planning Committee needs to be constituted for preparing a draft plan of the metropolitan area. For undertaking these plan programs, the municipalities receive grants from the state government, as well as raise their own tax and non-tax revenues. Table 7.7 gives profile of the grants received by districts for the metropolitan areas.

Table 7.7: Profile of grants received by districts (₹ Crores)

Summary Statistics	2015-16	2016-17	2017-18
Total Amount	171,41,82,271	292,90,44,686	237,92,75,840
Growth (%)		70.87	-18.76
Average Amount	489,76,636	836,86,991	679,79,310
District with maximum amount	Dhanbad Nigam	Dhanbad Nigam	Dhanbad Nigam
Corresponding value	45,09,99,091	79,25,75,185	61,17,99,674
District with minimum amount	Saraikela Panchayat	Saraikela Panchayat	Saraikela Panchayat
Corresponding value	63,27,614	81,66,479	85,54,540

Source: Jharkhand Government, Urban Development and Housing Development

Apart from the grants, unlike in the case of panchayats, metropolitan cities have been raising both tax as well as non-tax revenues. Table 7.8 gives us the total tax and non-tax revenues raised in municipalities in Jharkhand in 2015-2016 and that in 2016-17. Dhanbad Nigam was the district with the maximum basic grant in both years, while Saraikela Panchayat is the district with the minimum basic grant in both years. Dhanbad Nigam is also receiving the highest performance grant in 2016-17, while Chakulia Panchayat receives the minimum performance grant. Table 7.9 gives the total tax and non-tax revenues raised from top ten metropolitan cities with the highest collections. It is interesting to note that Ranchi Municipal Corporation's revenues are more than four times the next best one in both years, and given that ranks are fluctuating, it is an indication that there is a scope for improvement in revenue collections. It is also of concern that revenue collections in metropolitan cities are stagnating or have fallen. Apart from tax and non-tax revenues, the metropolitan cities receive grants on account of various central government projects and the next section discusses the progress in these schemes.

Table 7.8: Total Tax and Non-Tax Revenue Collections in Jharkhand (₹ Crores)

Year	Tax Revenue	Non-Tax	Total
2016-17	105.68	73.09	178.77
2017-18	123.87	84.55	208.42

Source: Jharkhand Government, Urban Development and Housing Development

Table 7.9: Revenue Collections from Top 10 Metropolitan Cities (₹ Crores)

		2016-17		
Name of ULB	**District**	**Tax Revenue**	**Non-Tax**	**Total**
Ranchi Municipal Corporation	Ranchi	48.12	32.11	80.23
Dhanbad Municipal Corporation	Dhanbad	16.37	2.44	18.81
Hazaribagh Nagar Nigam	Hazaribagh	4.17	5.3	9.47
Deogarh Municipal Corporation	Deoghar	3.74	5.66	9.4
Jamshedpur	E. Singbhum	0.11	7.02	7.13
Mango NAC	E. Singbhum	2.63	2.65	5.28
Adityapur Municipal Corporation	Saraikela	3.55	1.44	4.99
Chas Municipal Corporation	Bokaro	4.24	0.68	4.92
Giridih Nagar Nigam	Giridih	2.81	0.89	3.7
Medidinagar Nagar Parishad	Palamu	1.72	0.95	2.67
		2017-18		
Name of ULB	**District**	**Tax Revenue**	**Non-Tax**	**Total**
Ranchi Municipal Corporation	Ranchi	50.6	32.5	83.1
Deogarh Municipal Corporation	Deoghar	9.73	3.13	12.86
Dhanbad Municipal Corporation	Dhanbad	10.8	1.44	12.24
Hazaribagh Nagar Nigam	Hazaribagh	4.9	5.37	10.27
Giridih Nagar Nigam	Giridih	3.66	5.52	9.18
Chas Municipal Corporation	Bokaro	4.03	4.87	8.9
Mango NAC	E. Singbhum	4.17	1.57	5.74
Medidinagar Nagar Parishad	Palamu	2.26	3.1	5.36
Adityapur Municipal Corporation	Saraikela	2.9	2.02	4.92
Pakur Nagar Parishad	Pakur	1.43	3	4.43

Source: Jharkhand Government, Urban Development and Housing Development

ULB Tax Revenue, Non-Tax Revenue, Revenue and Capital Expenditure

The ULBs have a tax generating capacity, and also incur revenue and capital expenditure for their functioning. Using data from 2014-15 to 2016-17, we see (Table 7.10) that the average tax revenue for all ULBs was ₹95.73 lakhs in 2014-15, which increased to ₹ 125 lakhs in 2015-16 and ₹ 333.88 lakhs in 2016-17. With regard to the non-tax revenue, the average was around ₹ 94 lakhs in 2014-15, which slightly increased to ₹ 117 lakhs in 2015-16 and finally saw a dip to ₹ 109 lakhs in 2016-17. Thus, the ULB's needs to tighten and strengthen the non-tax revenues so as to prevent it from any further deterioration. With respect to the transfers received, the ULBs have seen an increase in transfers from 2014 to 2016, at a growth rate of approximately 150%.

On the other hand, with regard to the expenditures, while the revenue expenditures have seen a modest growth increase over the years, the capital expenditure has grown immensely. With an average revenue expenditure of ₹ 350 lakhs in 2014-15, the revenue expenditure increased to about ₹ 368 lakhs. The capital expenditure had witnessed an increase in growth rate of about 50% from ₹ 1350 lakhs in 2015-16 to ₹ 2006.75 lakhs in 2016-17.

Table 7.10: Overview of the average tax and non-tax revenue along with expenditures

	2014-15	2015-16	2016-17
Average Tax Revenue	95.73	125.00	333.88
Average Non-Tax Revenue	94.71	117.9	109.5
Average Transfers	473.66	404.2	1032.7
Average Revenue Exp	349.64	319.61	368
Average Cap Exp	1188.71	1350.66	2006.75

Source: Urban Department, Government of Jharkhand

Composition of Revenue and Expenditures

It is of interest to see the sources of these revenues and expenditures. By analysing the sources, corrective measures to enhance the revenue capacity and efficiency of expenditures can be looked upon. Under tax revenue, the major proportion comes from property taxes. On an average, 90-95% of the tax revenue is obtained from property taxes. The rest comes under the head of 'other taxes' which is levied and collected by the municipal body. Under non-tax revenue, we have user charges, fees and fines, and other non-tax revenues. In general, the head 'user charges' contributes the least to non-tax revenues, whereas the head 'other non-tax revenues' contribute the maximum. In some ULBs, the proportion under all three heads are more or less equal. Lastly, under grants, the only component that contributes to transfers is the grant from the central finance commission. All other components such as Octroi compensation, state finance commission devolution, state assigned revenue is virtually absent.

Under the expenditure head, we have two broad classifications – revenue and capital expenditure. Revenue Expenditure is broken up into – Administrative Expenses, Establishment and Salaries, Operation and Maintenance, and Loan Repayment. Under Capital expenditure, the divisions are development works, loan repayments, and other capital expenditures. Under Revenue Expenditure, 90% of the expenditure is apportioned to administrative expenses, establishments and salaries for all the ULBs. With regard to capital expenditures, the major proportion of expenditure comes from development works, or other capital expenditures. Based on the nature of the ULBs, either revenue expenditure is greater than capital expenditure or otherwise.

Schemes for Urban Renewal

1. Integrated Housing and Slum Development Program (IHSDP)

The IHSDP scheme was inaugurated in the year 2005 by combining the existing schemes Valmiki AmbedkarAwasYojana (VAMBA) and the National Slum Development Program (NSDP). As of 2015-16, 4,04,575 construction of houses has been completed under the scheme with the centre share of funds being ₹ 6301 Crores. The major objective of this scheme is to provide basic infrastructure to the urban slum dwellers, who do not possess adequate shelter. The funds for the program from the centre to the state are distributed on the basis of the state's urban slum population to the total slum population in the country.

It is interesting to see the status of Jharkhand as compared to other states when it comes to the proportion of slum dwellers on a PAN India level. States such as Uttarakhand, Jharkhand, Assam, Himachal Pradesh, Chandigarh, and other north eastern states have a state slum population of less than 1%.[10] However, the growth of the slum population in Jharkhand has been growing. Table 7.10 depicts the growth of the slum population in the state from 2012-2018. The compounded average growth rate of the slum population is 41%.

Table 7.11: Year wise slum population in Jharkhand since 2011-12

Year	Slum Population
2011-12	931912
2012-13	948949
2013-14	966239
2014-15	983530
2015-16	1001202
2016-17	1019382
2017-18	1036673

Source: Ministry of Housing and Poverty Alleviation

The total urban population residing in urban slums is 3,72,999, and the total slum households is 72,554. What is striking to note is that 72.38% of the total slum population resides in Class 1 Cities. For instance, Ranchi has a slum population of around 20%, followed by Jamshedpur (12%), and Giridih (9.3%). As of 2015-16, ten cities of Jharkhand were beneficiaries of the IHSDP scheme with one operational project each. Table 7.12 shows the physical progress of IHSDP in ten cities for the year 2015-16.

[10] Primary Census Abstract for Slum (2011). Office of the Registrar General and Census Commissioner, India

Table 7.12: City/Town wise physical progress of IHSDP in Jharkhand, 2015-16

Cities	DUs sanctioned	In Progress	Construction Completed	Occupied
Chaibasa	380	4	276	270
Chatra	897	684	213	213
Medininagar	420	9	411	411
Giridih	1132	126	1006	1006
Gumla	863	503	360	360
Hazaribagh	947	262	685	685
Lohardaga	1623	611	1012	1012
Mihijam	816	609	207	207
Phusro	204	86	118	118
Saraikela	331	296	35	35
Total	**7613**	**2449**	**5164**	**5058**

Source: Indiastat

From the table, we see that out of the total dwelling units sanctioned, in most of the cities, the rate of completion of construction is high. However, in cities such as Chatra, Gumla, Mihijham, and Saraikela, the ratio of construction completed to DUs sanctioned is abysmally low.

2. Basic Services for the Urban Poor (BSUP)

The BSUP scheme is a central housing scheme under the Ministry of Housing and Poverty Alleviation for the construction of houses and infrastructure. Currently, it is operative in two cities of Jharkhand – Ranchi and Dhanbad. A total of 2490 dwelling units have been allotted under the BSUP schemes in these two cities, out of which 1825 dwelling units have been completed as of December 2015.

3. ShahariRojgaryojana

The Swarna Jayanti ShahariRojgayYojana (SJSRY) is a scheme primarily to provide gainful employment to the urban unemployed or underemployed by setting up employment ventures or the provision of wage employment. Table 7.13 depicts the financial progress of the SJSRY scheme from 2011-12 to 2013-14.

Table 7.13: Financial Progress of SJSRY from 2011-12 (₹ Lakhs)

Years	2011-12	2011-12	2011-12		2012-13	2012-13	2012-13		2013-14	2013-14	2013-14	
	Allocated	Released	Utilized	%	Allocated	Released	Utilized	%	Allocated	Released	Utilized	%
Jharkhand	1627.99	814.00	814.00	100	1782.29	1782.29	229.99	12.90	2360.75	218.26	218.26	100

Source: Indiastat

It is seen that apart from 2012-12 where only 12 % of the funds were utilized for the scheme, for the remaining two years, full utilization of the funds was achieved. Having analysed the financial progress, we now look at the physical progress of the SJSRY scheme. Since the scheme mostly deals with providing institutions and workplace for the urban unemployed, the physical progress will be evaluated on the basis of three major parameters: number of beneficiaries assisted for setting up individual/group enterprises, number of beneficiaries provided with skill training and number of self-help groups formed. Data from 2014 till 2017 is shown in Table 7.14.

Table 7.14: Physical Progress of SJSRY from 2014-15

Years	2014-15			2015-16			2016-17		
	Beneficiaries assisted with enterprises	Beneficiaries with skill training	Number of SHG formed	Beneficiaries assisted with enterprises	Beneficiaries with skill training	Number of SHG formed	Beneficiaries assisted with enterprises	Beneficiaries with skill training	Number of SHG formed
Jharkhand	0	0	1019	510	2279	608	356	35318	1707
National Average	1012.8	5201	1364.9	1686.4	7259.2	1662.4	892.9	10137.9	1352.05

Source: Indiastat

From Table 7.13, it is seen while no beneficiaries were assisted with skill training or setting up of enterprises in 2014-15, high importance was given to the formation of self-help groups which was close to the national average. However, in the following two years, the beneficiaries assisted with enterprises and skill training increased. In 2016-17, it was seen that there was a rapid increase in the beneficiaries assisted with skill training.

Most of these schemes have targets that are to be achieved. The success or failure of the scheme is seen by the ratio of achievements to targets for each of the scheme. Table 7.15is an overview for the targets and achievements for setting up enterprises and skill training under the SJSRY scheme for the year 2015-16.

Table 7.15: Progress of the SJSRY Scheme

Heads	Setting up Micro Enterprises		Skill Training	
	Target	Achievement	Target	Achievement
Jharkhand	591	331	5915	1091

Source: Indiastat

It is seen that for setting up micro and small enterprises, just above 50% of the target has been achieved, however, for skill training, the success rate is quite low for Jharkhand for the year 2015-16.

4. Mechanization of Abattoirs

This year, Jharkhand has used its first mechanized abattoir which was unused since a year, and costed the government around ₹ 15 Crores. The Ranchi Municipal Corporation (RMC) has handed over the functioning of the abattoir to Micro Transmission System (MTS), wherein MTS has to pay a commission of 20% of daily earnings. The abattoir is jointly developed by the Urban Development and the Union Ministry for Food Development. It consists of a slaughter house, a modern lab, freezer, vet room, separate store rooms and a plant to recycle animal waste. Built in 2012, it has the capacity to handle 1000 goats per day. Table 7.16 depicts the financial structure of the abattoirs when it was initiated in the year 2012.

Table 7.16: Financial Structure of Mechanization of Abattoirs (₹ Lakhs)

	Executors	Total Project Cost	Total Amount Sanctioned	Total Amount Disbursed
Jharkhand	Ranchi Municipal Corp	1867	864.5	86.46

Source: Indiastat Year 2012

5. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

The major aim of UIDSSMT is to improve the infrastructure in small towns and cities in a planned manner. UIDSSMT will subsume the plans under the Integrated Development of Small and Medium Towns. Table 7.17 shows the project sanctioned cost for cities and towns having substantial minor population under the UIDSSMT scheme.

Table 7.17: Projected cost for the UIDSSMT scheme (₹ Crores)

State	2011-12	2012-13	2013-14
Jharkhand	2.36	5.69	2.36

Source: Indiastat

It is seen that the sanctioned amount started at ₹ 2.36 Crores in the year 2011-12 and almost doubled in the next year reaching ₹ 5.69 Crores, and finally falling back to ₹ 2.36 Crores in the year ending 2014. Throughout the years, various schemes like water management and solid waste management are implemented under the umbrella scheme of UIDSSMT. Additionally, no money was sanctioned for sewerage projects from 2009-10. Table 7.18 gives us a nutshell of the physical and financial progress of the UIDSSMT till 2010.

Table 7.18: Physical and Financial Progress of UIDSSMT (₹ Lakhs)

State	No. of Towns	No. of Projects	Approved Cost	Eligible Central Share	Incentive	Total ACA Released	Total Commitment
Jharkhand	4	5	9646.55	7717.24	144.70	4003.32	7861.94

Source: Indiastat Year 2010

6. National River Conservation Program (NRCP)

The National River and Lake Conservation Program comes under the Ministry of Forest, Environment, and Climate Change. NRCP is a centrally funded scheme which was launched in 1995 aimed at preventing the pollution of rivers. This scheme includes river front development, low cost sanitation, and afforestation etc. This is an important program as the pollution of rivers and lakes have increased over the years due to massive industrialization and globalization. The Central Pollution Control Board as well as the State Pollution Control Board monitor the status from time to time.

As of 2018, for the state of Jharkhand, 8 stretches have been identified that need to be cleaned up. This includes, Bokaro, Koel, Damodar, Jumar, Karo, Sankh, Subarnarekha, and Koel. As compared to other states, Jharkhand has a lower number of such identified stretches. A total of ₹ 4.26 Crores has been released for Subarnarekha.[11] Table 7.19 gives a greater detailed picture of the present status of the scheme.

[11] Government of India Report, Questions asked in the Lok Sabha. URL: http://www.indiaenvironmentportal.org.in/files/file/Conservation%20of%20Lakes%20and%20Rivers.pdf

Table 7.19: Present Status of NRCP scheme (₹ Lakhs)

Sanctioned Cost	₹ 314.16 Lakhs
Number of Schemes Sanctioned	7
Number of Schemes Completed	7
Funds Released by GOI	₹ 425.60 Lakhs
Expenditure (Including State Government Share)	₹ 97.65 Lakhs

City	Rivers	Sanctioned Cost	Expenditure
Ghatsila	Subarnarekha	65.43	23.71
Jamshedpur	Subarnarekha	174.52	37.83
Ranchi	Subarnarekha	74.21	36.11

Source: National River Conservation Directorate Ministry of Environment, Forest and Climate Change

7. National Urban Information System (NUIS)

The NUIS scheme started in the year 2006 primarily for the generation of multi-scale hierarchical urban geospatial database. In the first phase, out of 152 towns representing all states/UTs in India, five cities in Jharkhand were selected. They were Bokaro, Dhanbad, Jamshedpur, Mango, and Ranchi. There has been a plan to adopt the scheme for other towns/cities in Jharkhand in the coming years.

Prevailing mechanism of auditing of accounts of ULB and PRI

Auditing mechanism and accountability of PRI

In total there are 4689 units of the PRI, which includes 24 ZillaParishads (ZP), 263 Panchayat Samitis (PS), and 4402 Gram Panchayats (GP). The power and the functions given to the PRIs are to implement schemes for economic development and social justice, and the power to impose taxes and constitute funds.

The primary auditor for the PRI is the Comptroller and Auditor General (CAG) to check the accounts and to supplement the report. Accordingly, the Accountant General conducts audits of the PRI under the Technical Guidance and Supervision module. The audit report prepared by the Directorate of Local Funds Authority (DLFA) and CAG is then placed before the State Legislature. The DLFA was appointed as the primary auditor to audit the accounts of the PRI.

During the year 2015-16, there were 13 ZP, 36 PS, and 70 GPs audited. The procedure for auditing the PRIs is as follows:

1. The Local fund auditor prepares an annual plan for the next financial year.
2. The audit methodology and the procedure for audits of PRI by the DLFA shall be as per various acts and statutes.
3. The Accountant General then conducts some test checks in order to provide some technical guidance.
4. DLFA sets up a system of internal control in consultation with the AG.
5. The AG also undertakes training and capacity.

The DLFA was appointed in November 2014 for the primary audit. Three Deputy Comptroller of Accounts and 14 Auditors were appointed in August 2016. But the audit by the DLFA commenced only in September 2016. 35 ULBs were audited under eight different audit parties and the inspection report (IR) was then generated. The table below depicts the list of IR and the money value with regard to the audit of the PRI from 2011-2016

Table 7.20: Status of Inspection Reports and money value based on the audits of PRI

Years	IR	Number of Paragraphs	Money value (₹ Crores)
2011-12	55	304	49.87
2012-13	231	1674	111.64
2013-14	88	610	6.62
2014-15	60	565	107.83
2015-16	100	570	12.90
Total	534	3723	288.86

Source: Annual Technical Inspection Report on Local Bodies

Accountability Mechanisms

The accountability mechanisms in general consist of an ombudsman, social audit, submission of utilities certificate, and an internal audit and internal control system. With regard to the ombudsman, the 13th Finance Commission provides for constituting a separate ombudsman for local bodies. However, the JPR Act of 2001does not provide for the constitution of the ombudsman. The Social Audit Unit established in May 2016, is primarily responsible for the auditing of the various government schemes to check for corruption and strengthen accountability. During the year 2015-16, 49 social audits in GP's were conducted in the state. In case of grants given, a utilities certificate is to be furnished to the AG within one year of the sanction of the grant. As of February 2017, grants amounting to ₹ 1295.76 Crores were paid during 2011-12 to 2014-15. However, utilities certificates amounting to ₹ 564 Crores were only submitted. The certificate for the remaining funds has not yet been submitted.

Devolution of functions, Auditing mechanism and accountability of ULB

Similar to the auditing mechanism of the PRI, the ULB auditing is performed by the CAG, generally done by the AG under the TGS module. During the year 2015-16 12 MC, 4 NP and 1 NAC were audited. Additionally, inspection reports for the year 2012-13, 2013-14 and Audit

reports on local bodies has been placed before the state legislative. The parameters of the TGS for the ULB are similar to that of the PRI.

The ULB's are primarily classified into three categories – larger urban areas, smaller urban areas, and transitional areas based on the population. The Act governing the ULBs enacts the State Government with powers for the monitoring of the ULB. Some of the powers are – power to conduct enquiry, power to dissolve, power to call for records, power to suspend resolution. Furthermore, there has been some transfer of powers as well. 18 functions envisaged in the 12th schedule have been inserted into Section 70, and to be performed by the ULB. However, ULBs revealed that only 8-17 functions have been executed. In accordance to the execution of these functions, the State Government releases certain amount of funds to be transferred to the ULBs for specific functions such as water supply, roads, public health.

A separate fund called the Basic Services to the Urban Poor Fund was to be created where a minimum of 25% of the funds within the municipality's budget shall be earmarked and credited to the said fun on a yearly basis.

The JM Act 2011, empowers the ULB to exercise powers and functions for the delivery of services. A Standing Committee shall be formed which will look into various functions such as – reducing the amount of holding tax, recommend for increase, decrease, transfer for an additional budget grant, framing of regulation for the market and slaughterhouse. The DLFA was appointed in November 2014, and the State Government created 22 posts. Table 7.21 depicts the status of the inspection reports for the period 2011-16.

Table 7.21: Status of Inspection Reports and money value based on the audits of ULB

Year	IR	Number of paragraphs	Money value (₹ Crores)
2011-12	25	156	40.47
2012-13	40	91	5.52
2013-14	34	480	378.59
2014-15	13	210	338.63
2015-16	26	200	608.28
Total	**138**	**1137**	**1371.49**

Source: Annual Technical Inspection Report on Local Bodies

Recoveries of ₹ 7.6 lakhs were made from persons concerned in three ULBs in the course of audit conducted during 2015-16. With regard to the accountability of the ULB, an ombudsman is appointed, just as in the case for the PRI. Apart from the social audits for the various schemes of the government, in the case of the ULB, a property tax board is also set up. According to the 13th Finance Commission, a State Level Property Tax Board was asked to be set up to assist the ULB's in putting up a transparent and independent system to assess property tax. However, as of November 2016, this was not set up. Next, as per the 13th Finance Commission grant, all municipal corporations having more than 10 lakhs population, must put in place a fire response and mitigation team. Jamshedpur, Dhanbad, and Ranchi were the three places where the fire response and mitigation team was to be set up. With regard to the submission of utilities certificate, as on

February 2017, against grants paid during 2011-15 amounting to ₹ 733.93 Crores, certificates of around ₹ 242.38 Crores was received in the office of the AG. There was a failure of submission of the utilities certificate amounting to ₹491.55 Crores.

Property Tax Structure of the States: Facts and Figures[12]

Property Tax for Jharkhand is an important source of Tax revenue. The property tax is based on the Annual Rental Value of the Property (ARV). The ARV is further based on the estimated carpet area of the land. The tax is collected by the local bodies of the state. However, collection of tax was considered to be a tedious and cumbersome task, which led to a lot of inefficiency in the process. For instance, the limited manpower, the archaic legal framework, the collusion by households, and the non-compliance by the government led to the mounting inefficiency. The table below depicts the present ARV rates for a few ULBs.

Table 7.22: ARV Rates in the state of Jharkhand

Name of ULB	Present ARV rates
Ranchi	12
Jamshedpur	8.5
Pakur	10
Simdega	8
Garhwa	6.67
Khunti	6
Saraikela	4

Source: Urban Department, Government of Jharkhand 2018-19

In the year 2013, the Property Tax rule initiated some reforms in the collection of taxes. The Property taxes were reformed by having a 'self-assessment system' based on trust and verify. Also, a scientific method of ARV was introduced. In 2017, the Property Tax Recovery and Collection Rule, certain recovery rules were framed to deal with defaulters. In addition, incentives in terms of payments were given to people who paid through the digital mode.

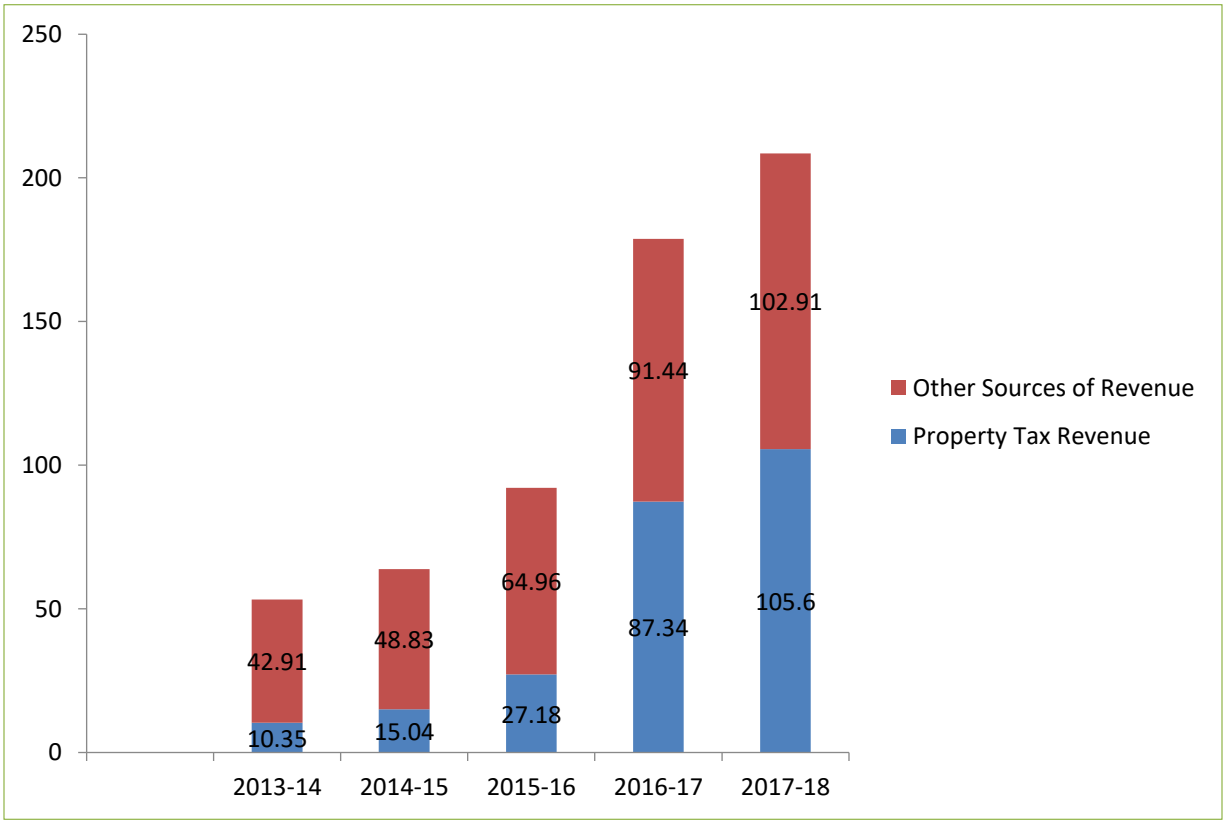
A Public Private Model was then initiated for the collection of taxes and the appointment of tax collection agencies. Three tax collection agencies (TCA) were appointed for the State with more than 500 tax collectors working towards collection of taxes. The tax collection agency came with a cost of ₹24 Crores but had an intended benefit of ₹193 Crores. Second, there was a project management unit (PMU) set up for effective monitoring and advising on best practices. One agency with a staff of 21 members covering 41 ULBs was appointed. The estimated cost was ₹2 Crores per annum. The PMU was to check for any collusion among households, and for any sort of misappropriation. To reduce the number of unassessed households, a cross mapping mechanism was used with the help of household IDs.

[12] Municipal Finance – Resource Management: Issues and Options, Shri Arun Singh, IAS.

Comparison of revenue over 5 years

From the Graph we notice that the share of property tax to overall tax revenue has been increasing steadily from 2013-14 (₹10.35 Crores) to 2017-18 (₹105.6 Crores). From a share of 19% in 2013-14, the share of property tax revenue to total tax revenue increased to 51% which is commendable. For instance, in Ranchi, the property tax revenue increased from ₹5.69 Crores in 2013-14 to ₹42.92 Crores in 2017-18.

Figure 7.1: Share of Property Tax revenue to total revenue (2013-14 to 2017-18)



Source: Author, Comparison of the cost-benefit analysis of the PPP

In the year 2013-14, property tax revenue amounted to ₹ 10.35 Crores, which increased by 10 times to ₹ 105.6 Crores. In addition, the collection ratio increased from 48% in 2016-17 to 67.5% in 2017-18. If we look at the number of households covered, we see that there has been an increase in assessed properties from ₹ 4.37 Lakhs in 2016-17 to ₹ 6.40 Lakhs till October 2018. Unassessed households decreased by 35%. Furthermore, to increase and strengthen assessment, innovation centers were deployed. In terms of physical progress, the holding cover increased from 1,89,354 in October 2017 to 2.64,100 in October 2018. Furthermore, the self-assessment forms increased from 5,15,204 to 6,40,359.

In short, the property tax structure and the reforms have greatly improved the revenue collection for the state. The Jharkhand per capita Property Tax increased from ₹ 99.25 per household to ₹ 1006 per household. This was possible only because of the implementation of the PMU and TCA.

Chapter 8: Performance of Public Sector Undertakings

Introduction: Broad Overview

The state has 24 PSU's out of which 3 are non-functional. 10 PSU's have registered accounts with a turnover of ₹ 4052.92 Crores. Five PSU's have earned a profit of ₹ 22.98 Crores and 5 have incurred a loss of ₹ 1700.73 Crores. The thrust of investment has been in the power sector, which accounted for 97.8% of the total investment as of 31st March 2017. The government contributed ₹ 2659 Crores towards equity loans and grants/subsidies to 12 working PSUs in 2016-17 (CAG Report 2016-17), out of which ₹ 208.22 Crores was extended to 6 working PSU whose accounts were in arrears for more than 3 years. Table 8.1 and 8.2 discuss the support given by the Government to different PSUs along with their turnovers.

Table 8.1: Special Support by the State Government (₹ Crores)

SI. No		2013-14		2014-15		2015-16		2016-17	
		No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount	No. of PSUs	Amount
1	Equity capital outgo from budget	4	20.65	5	9.25	2	18.14	9	78.25
2	Loans given from budget	1	175.34	3	782.54	3	802.72	4	1273.80
3	Grants/subsidy received	2	972.80	2	2112.00	1	8.14	3	1307.51
	Total outgo		1168.79		2903.79		829.00		2659.95

Source: CAG Report on Public Sector Undertakings 2017-18, 2016-17, 2015-16

Table 8.2: PSU Turnover vis-à-vis State GDP (₹ Crores)

Particulars	2011-12	2012-13	2013-14	2014-15	2015-16	2016-2017
Turnover	2139.72	2563.86	3065.85	3205.87	1865.69	4052.92
State GSDP	150918	174724	188567	218525	231294	253536
Percentage of Turnover to State GSDP	1.42	1.47	1.63	1.48	0.80	1.59

Source: CAG Report on Public Sector Undertakings 2016-17, 2015-16

The values for the turnover from 2011-2016 are taken from the CAG Report on Public Sector Undertakings (March, 2016; page 7; Table 1.5) while the value for 2016-17 has been taken from the CAG Report on Public Sector Undertakings (March, 2017; Section: Overview; Sub-section: 1. Functioning of State PSUs).

The major contributors to Profits: Jharkhand State Beverages Corporation Limited (₹ 11.95 Crores); Jharkhand Police Housing Corporation Ltd. (₹ 6.02 Crores). The ROI of these companies

ranged from 21.02 to 249.47. Conversely, the PSUs that incurred losses were Jharkhand Bijli Vitran Nigam Ltd. (₹ 1598.83 Crores) and Jharkhand Urja Sancharan Nigam Ltd. (₹ 97.24 Crores).

Table 8.3: Some Key Parameters of PSUs

Particulars	2014-15	2015-16	2016-17
Profit Making PSU	-	-	-
ROCE	46.90	10.26	22.21
ROI	46.90	10.26	22.21
ROE	18.55	6.97	15.35
Loss Making PSU			
ROCE	(-)69.93	(-)26.31	
ROI	(-)69.93	(-)26.31	
ROE	(-)8227.0		

Source: CAG Report on Public Sector Undertakings2016-17

Table 8.3 lists out a few important key parameters of the state PSUs. It is to be noted that the Return on Capital Employed (ROCE) has witnessed a fall from 46.90 (2014-15) to 22.21 (2016-17). The Return on Equity has also seen a slight dip. It is also reported that the State Government had not formulated any dividend policy under which PSUs are required to pay a minimum return on the paid-up share capital contributed by the State Government. So even the 5 PSUs earned an aggregate profit of ₹ 22.98 Crores but did not declare any dividend.

Some Major PSUs in Jharkhand

Jharkhand Police Housing Corporation Limited:

- The company was awarded the construction work for the Central Reserve Police Force Headquarter at Latehar and the construction of residences at Khunti Police Station. There were minor audit problems with both of these projects – one regarding a mandated work experience (which could not be provided when asked for), and second was regarding a forged bank balance statement.
- In December 2012, the company was also awarded the construction of Chaibasa lines. However, in this case too, the project was handed over to ineligible bidders.
- The company should look deeply into the projects being handed over by tenders to the various bidders. Also, routine checks for quality maintenance should be done.

Jharkhand Urja Utpadan Nigam Limited:

- JUUNL has a hydel power plant at Sikidri in Ranchi District
- The company failed to perform any Tan Delta Test (TDT) on the bushings which was to be done every 5 years

- Owing to a lack of sense of proportion and urgency, the company had to shut down for 24 months (June ’15 to June ’17)
- This led to a loss of electricity generation of 75.73 million units valued at ₹ 22.79 Crores

Jharkhand State Mineral Development Corporation:

- It was in 2012 that JSMDCL was acquired as a JV; it started by owning 40% of equity
- It started with a loss and continued to show a loss of ₹ 0.31 lakhs (₹31,968) in 2016 and in 2017, it showed a loss of ₹ 0.99 lakhs (₹99,393)
- There have been neither fixed assets nor any inventory
- There have been no loans and no borrowings as of 2017
- The company is yet to start commercial operations as of March 2017

(Source: Annual reports of the company)

But as per the CAG report 2015-16, this company has shown a profit of about ₹ 13 Crores in 2015-16.

Directors Report for the Year 2016-17 of JSMDCL

Financial Highlights:

- The company is yet to commence commercial operations. During 2016-17, it incurred a net loss of ₹ 0.99 lakhs as compared to ₹ 0.31 lakhs in the year 2015-16.
- The authorized and paid up equity share capital is ₹ 1 Crore and ₹ 1 lakh respectively. There has been no change in the paid-up equity share capital for the year 2016-17.
- Deposits: The Company has neither accepted nor renewed any deposits during the year 2016-17.
- Internal financial controls: The company has in place the internal financial controls.
- Transfer of reserves: The Company has not proposed to carry any amount to reserves for the year 2016-17.
- Dividend: The board has not recommended any dividend for the year 2016-17.
- Loans, Investments: There were no loans, guarantees or investments made by the company under 2016-17.

Disclosures – Auditors Report – JSMDC Jharkhand State Mineral Development Corporation Limited:

The company does not have fixed assets and does not have inventory. The company does not have any loans, borrowings from any financial institutions, banks etc.

Table 8.4: Balance Sheet

Assets	2017	2016	2015
Cash & Cash equivalents	14,590	18,268	3,48,128
Total Assets	14,590	18,268	3,48,128
Liabilities			
Equity	-3,85,431	-2,86,038	-2,54,070
Liabilities	4,00,021	3,04,306	6,02,198
Total equity & liabilities	14,590	18,268	3,48,128

Source: Annual Report 2017-18, JSMDC

Table 8.5: Profit & Loss

	2016-17	2015-16
Total Income	0	0
Expenses		
Other Expenses	99,393	31,968
Total Expenses	99,393	31,968
Total profit before tax	-99,393	-31,968
Total profit(loss) for the period	-99,393	-31,968

Source: Annual Report 2017-18, JSMDC

The Jharkhand State Forest Development Corporation

After the creation of the state of Jharkhand, the state government realized that there should be an independent company for procurement of Kendu leaves and minor Forest Produce so that the tribal have a source of income. So, the Company was incorporated in 2002.

The Company has been successful in achieving its objective and has been growing its activities: i) Nakshatra Van, ii) Sidhu Kanu Park, iii) Marketing of timber on exclusive right provided by the State government, iv) National Bamboo Mission Project.

The JSFDL has shown a profit of ₹ 661.59 lakhs in the year 2012. When we procured Annual Financial Reports in 2018, the annual reports we got were only up to 2012. So, assuming the trend continued, the Company should have seen profits even in 2018.

Jharkhand State Beverages Corporation

The Jharkhand State Beverages Corporation was incorporated in the year 2010. The main objective was to carry on business as distillers, manufacturers, procurers, importers, exporters, agents, brokers and wholesalers of all types of liquors (Country Made IMFL) in the state of Jharkhand. In 2013, it made a profit after tax, after setting of the previous year's loss of ₹ 6.98 lakhs, of ₹ 33.29 lakhs. We are assuming the trend is continuing for the later years.

A note on Unbundling of JSEB is reproduced in Evaluation of State Finances 2014 March, which in turn, was written in the Financial Resources Brief 2012-13, Planning Commission Govt of India 2012-13. The commercial loss of the Board was, without subsidy, ₹ 2270.38 Crores. We presume that the trend is continuing.

JharkhandBidyutVitran Nigam - JBVNL (Vitran)

The JSEB was responsible for generation, transmission and distribution as per the Electricity supply act 1948. In 2014, it was unbundled into 4 companies, one of which was JVNL. The details of electricity sold to High Tension consumers and revenue realisation for the period 2011-16 are given below.

Table 8.6: Details of Electricity Sold, Revenue Realised and Arrears During 2011-12 to 2015-16

SI No	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Total electricity sold (MUs)	6063	6786	6973	7563	9059
2	Revenue billed against all consumers (₹ Crores)	2350	2773	2850	3044	3197
3	Number of HT consumers	1358	1420	1429	1472	1526
4	Electricity sold to HT consumers (MUs)	2187	2498	2285	2292	3454
5	Percentage of electricity sold to HT consumers	36	37	33	30	38
6	Revenue billed against HT consumers (₹ Crores)	1296	1406	1038	1440	1540
7	Arrear against HT consumers (in Crores)	1890	2096	2192	1914	2127
8	Total Demand against HT consumers (₹ Crores) = (6+7)	3186	3502	3230	3354	3667
9	Revenue realisation (₹ Crores)/ (*per cent)*	1090 (34)	1310 (37)	1316 (41)	1227 (37)	1425 (39)
10	Balance at the end of the year (₹ Crores) = (8-9)	2096	2192	1914	2127	2242

Source: CAG Report 2015-16

The audit report concluded that:

1. Some high-tension consumers were misusing the load.
2. Some high-tension consumers had failed to provide new connections.
3. The company had failed to collect additional security deposits against the consumers' actual billing.
4. The company incurred avoidable expenses of ₹ 31.19 Crores towards transmission charges in the absence of a dedicated transmission system.
5. JVNL failed to deduct income tax and works contract from the running bills, and so deposited the same from their own funds, thereby causing a loss of ₹ 15.31 Crores.

There were many such "operational" failures too.

Tenughat Vidyut Nigam Limited (TVNL): The TVNL has performed poorly for the following reasons:

1. Failure to achieve the projected output against the installed capacity (Plant Load Factor).
2. Failure of lower actual operation (79.42% as against 85%) hours of the plant against the maximum hours available (plant availability factor).
3. Consumption of excess auxiliary power.
4. Excess consumption of coal and oil etc.

As of March 2016, the company had accumulated losses of ₹ 824.53 Crores and outstanding energy dues of ₹ 3,082.72 Crores from JUVNL. The company failed to exercise the payment security mechanisms available in the PPA. The revenues increased from ₹ 612.60 Crores in 2013-14, to ₹ 741.38 Crores in 2014-15, ₹ 815.03 Crores in 2015-16. Thus, annual revenues increased, though not consistently.

In conclusion, we suggest the following:

- The JSMDCL can be privatised (since the company has not started operations as per the Annual reports).
- The JSFDCL and the JSBDCL are doing well with a broader "social" objective and can therefore remain with the government.
- The unbundled JSEB is ridden with "implementation" problems. While these problems must be mitigated, the company should remain with the government because electricity is a "priority" sector and given that Jharkhand is in "infant" stage.

Ways to improve the financial performance of the Public Sector Undertakings in Jharkhand

As seen, while there are some public sector undertakings that are profitable, the others are incurring losses. It is of interest to study and analyse how the financial performance of the loss making public sector undertakings can be boosted and improved. The two main loss making public sector undertaking units are Jharkhand BijliVitran Nigam Limited (JBVNL) and Jharkhand Tenughat Vidyut Nigam Limited.

For JBVNL, it was seen that there was no segregation the load among their High Tension Service and High Tension Special Service (HTSS). Second, there was irregular reduction in load by the consumer side without proper checking from the regulator. This benefits the customer. Third, there were issues in delayed connection too. In monetary perspective, if cheques given by customers are dishonoured (bounced), then the connection should be cut and no cheques should be accepted for the next one year. However, on auditing, it was seen that cheques amounting to ₹ 27 Crores were dishonoured repeatedly, however, cheques were continuously being accepted. Furthermore, there was a delay in billing due to replacement and rectification of metres.

Due to all these inefficiencies, it was recommended that in order to improve financial performance, JBVNL should give priority in segregating the load into HTS and HTSS customers. It should also

provide new connections of load within a stipulated time, and review the contract demand as and when required. Lastly, it should increase the efficiency of collection of security deposit, and take additional steps in recovering outstanding dues. These measures, if put in place, will improve the financial performance.

Regarding Tenughat Vidyut Nigam Limited, it was seen that while the company earned a profit of ₹ 4 and ₹ 87 Crores in the years 2011-12 and 2012-13, there were losses of approximately ₹ 100 Crores in the next few years. On analyzing the financial statements, it was seen that repair and maintenance, depreciation, and interest and finance charges together constitute together constitute 20 to 55% of total expenditure from 2011-2016. Additionally, it was seen that the Company was unable to reach its targets with respect to its Plant Load Factor and Plant Load Availability. Another major issue was the auxiliary power consumption (which is the power consumption for the generation of power at the source itself). The norm set by the regulator was around 9%; however, the auxiliary power consumption went up to around 12%. Lastly, there were major issues in excessive consumption of coal (due to unburnt carbon in ash), and excessive consumption of fuel oil. The Company also did not have sufficient technical manpower leading to operational inefficiencies.

To counter this, and improve the financial performance, the recommendations made are:

1. The Company should first try its best to realise its outstanding dues, it should assess the quality of coal to reduce losses and disputes.
2. The Company should also focus on expanding as the existing facility is already 20 years old.
3. The Government can look into realizing the Memorandum of Understanding suggested by the Government of India so that the operational and financial targets.
4. Since transportation is also a major problem for the company, it should ensure procurement of the required number of wagons for the network within a stipulated time frame.

These measures if undertaken at a slow but consistent pace, will help remove and ease the financial burden of these companies. The Government should also take active interest in safeguarding the interest of the Company so as to provide economical and quality power supply to the state.

Chapter 9: Impact of Power Sector Reforms on State's Fiscal Health

Introduction

The Indian Power Sector is undergoing a major change. With the increase in industry demand and outlook, the demand for electricity is growing at a fast rate. Sources of power generation are widespread and range from coal, natural gas, oil, hydro and nuclear power to other sources like solar, wind, and domestic waste. The total installed capacity of power stations in India stood at 344.69 Gigawatt (GW) as of August 2018.[13] The industry sector consumes the maximum power (39%), followed by the domestic household (24%), and agriculture sector (19%). On the other hand, coal is the maximum used input (54%), followed by diesel (21%), and then gas (11%).

In the year January 2014, the state of Jharkhand had unbundled the Jharkhand State Electricity Board (JSEB) into four different units – Jharkhand Urja Vikas Nigam Limited (JUVNL – Holding Company), Jharkhand Urja Utpadan Nigam Limited (JUUNL, State Genco), Jharkhand Urja Sancharan Nigam Limited (JUSNL –State Transco), and Jharkhand Bijli Vitaran Nigam Limited (JUVNL – State DISCOM).

Currently, Jharkhand is being served by multiple distribution licenses – JBVNL, DVC, Tata Steel, JUSCO, SAIL, and Bokaro. Currently, the existing capacity tied up of JBVNL is 2331 MW including the 960 MW capacity from JUUNL and TVNL. As of 2018, Jharkhand has a total installed power generation capacity of 1762.02 MW primarily comprising of 554.05 MW under state utilities, 753.27 MW under private sector, and 454.74 MW under central utilities. Owing to the large coal reserve that Jharkhand possesses, 87.5% of its electricity (1543 MW) is generated from coal-based thermal power plant. Hydropower generates around 191 MW and approximately 24.42 MW is generated through renewable sources. As of 2017, around 2349 villages had been electrified by the state, which is 93% of the target. The remaining 176 villages are expected to be electrified under various other state and central government schemes.[14] We now look into the various power sector reforms by the state of Jharkhand.

The Government of India, Government of Jharkhand, and the Jharkhand distribution committees (DISCOM's) entered into a tripartite Memorandum of Understanding (MoU) to improve operational and financial efficiency. According to the MoU, the DISCOM's will have to take various initiatives with respect to tariff regulation, demand side management, loss reduction.

Major Reforms Undertaken in the Power Sector

There have been a lot of reforms recently undertaken by the different power units in Jharkhand. They have tried to reduce losses as much as possible, leveraging the advent of technology. Mentioned below are some of these reforms that have been undertaken

a) **AT&C Loss reduction**: JBVNL is taking various steps to meet the targets given by Honourable Commission and mandated under the UDAY MoU. JBVNL has already completed 100% Feeder Metering and is in process of ensuring 100% metering for its Distribution Transformers (DTs) and consumers to cover the entire distribution value chain. These include

[13] https://www.ibef.org/industry/power-sector-india.aspx
[14] https://www.energysector.in/power/power-scenario-in-jharkhand

Installation of AB Cables, Undergrounding of LT network, Name and Shame Campaign, preparation of MIS for performance monitoring and management, Feeder Improvement Program for network strengthening, Physical segregation of feeders, Installation of AMR meters, Implementation of ERP systems, tying up with Bank and Post Offices, Feeder Segregation, Revenue Intelligence Cell Formation, etc. Also, to enhance collection efficiency, consumers are facilitated with multiple collection avenues such as Mobile App (ezy-bzly), online payment, E-wallet (through UM), Mobile wallet (BBPS), 4,500 PragyaKendras, 440 post offices, 194 ATP machines etc.

Table 9.1: Aggregate Technical and Commercial Losses for Jharkhand 2012-18

Years	FY12	FY13	FY14	FY15	FY16	FY17	FY18
AT&C Losses (%)	42.8	47.5	42.2	39.5	36.2	32	27.7

Source: Deloitte Report, Power for All

It is seen that there has been a fall in the AT&C losses over the years from 42.8% in Financial year 2012 to 27.7% in the financial year 2018. With a good amount of investment in the distribution infrastructure, the AT&C losses are expected to reduce. The expansion in consumer base, increased energy requirement, and the Power for All (PFA) program has helped in reducing the losses. On a disaggregated level, we see that the Garhwa and Daltonganj Circle has witnessed the highest AT&C loss reduction (70%), followed by Koderma and Gumla Circle. Higher investment in major central and state government schemes will be required to bring down these losses even further and to improve the financial viability of the power sectors.

Further, in order to improvise upon the metering, billing and collection (MBC), taking measures like ensuring 100% consumer metering by December 2018, Energy Accounting and Auditing, installation of boundary meters, root-cause analysis of defective meters, meter vendor specific analysis, standardization of the meter specification, Mass Meter Replacement (MMR) drives etc.

b) **Household and Village electrification scheme**: JBVNL is committed to provide electricity to all consumers, even in the far-flung villages and has made significant achievements in the last 3 years, with electrification of all 29,376 inhabited villages. The focus now has been on the intensive electrification of electrified villages and saturation of electricity connection to all households. A total of 16,022 villages have been intensively electrified as on 31stMay 2018, while the remaining 13,354 villages are targeted to be electrified by December 2018

c) **Customer-Centric and human resource reforms**: Various reforms have been undertaken to reduce the customer's inconvenience for various grievances, bill payments etc. SASHAKT is an integrated centralized complaint monitoring mechanism of JBVNL. It will provide single window platform for more than 10 avenues of consumer complaint registration and redressal. On the other hand, SUVIDHA is a web-based online portal for various customer services like new electric connection, load enhancement, ownership change, conversion of service, etc.

SAKSHAM delas with training and capacity building of its human resources aimed at transforming JBVNL into a learning organization. Lastly, SARAL SAMIKSHA deals with robust internal processes like inventory management, transformer management etc.

d) **Information Technology Interventions**: Due to the advent of digitalization and the era of Information Technology (IT), the Power Department (JBVNL) has initiated a lot of IT initiatives for integrating and streamlining the business process. For instance, 4 ERP models have been initiated and set to start from September 1, 2018. Geo-Information System (GIS) has been implemented in more than 30 towns and cities. Supervisory Control and Data Acquisition (SCADA) has been implemented in Ranchi, Jamshedpur, and Dhanbad. Lastly, there has been 'smart metering' for consumers having more than 10Kw of load. A smart grid DPR for Ranchi has already been prepared, and preparations for other towns have started.

e) **Improvement of Supply**: In order to improve the quality of supply, the issue of burnt distribution transformers was taken up on mission mode and within a period of 10 months, under the Jyoti Mission launched on 7th September 2016, a record number of over 8,412 DTs have been replaced with higher capacity DTs in the State against the total target of 10,991 DTs.

After discussing the various reforms taken by the state, it is of interest to now see the impact that the power sector has had on the state finances. Table 9.2 discusses the power generation, power purchase, and power consumption level in Jharkhand since 2010-11.

Table 9.2: Power Generation, Purchase, and Consumption Level in Jharkhand (2010-18)

Year	State Sector Generation (MUs)	Power Purchase from outside Jharkhand (MUs)	Energy Sales (MUs)
FY 10-11	597	8505	6,713
FY 11-12	635	9988	6,498
FY 12-13	765	10,912	7,260
FY 13-14	1,354	11,640	7,629
FY 14-15	2,770	11,499	7,545
FY 15-16	2,761	12,380	9,059
FY 16-17	1,573	12,489	8,721
FY 17-18*	1,618	12,883	9,223

Source: Ministry of Finance, Government of Jharkhand

The Compound Average Growth Rate for the state sector generation of power has been around 2.17%. The highest growth was witnessed in the year 2013-14 to 2014-15 where the state sector generation had increased from 1354 million units to 2770 million units. On the other hand, energy sales had clocked a compounded average growth rate of 2.6% with the highest growth 2014-15 to 2015-16.

It is also worth understanding the transmission and distribution losses in Jharkhand. With regard to the power sector, transmission and distribution (T&D) losses is a very common phenomenon. Many states and enterprises are working towards reducing the T&D losses. Table 9.3 shows a snapshot of the T&D losses from 2010 till 2017-18.

Table 9.3: T&D Loss Levels since 2010-11

Year	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18*
T&D Loss (%)	34.92%	35.00%	33.00%	33.00%	34.39%	26.82%	24.00%	21.18%

Source: Ministry of Finance, Government of Jharkhand

JBVNL is currently undertaking several measures to curb the T&D losses along with the technical measures such as metering of un-metered consumers, focusing on billing efficiency through appointment of dedicated agencies. JBVNL is committed to reduce the T&D losses and all efforts are being made to reduce losses to normative levels. From the high T&D losses to the tune of 34% in FY 10-11, JBVNL has been able to achieve the 21.18% T&D loss (provisional figures) in FY 17-18.

To cover these losses to an extent, the state government has spent a considerable amount of expenditure in the form of subsidies (Table 9.4).

Table 9.4: Subsidies Received from the Government (2010-18)

Year	FY 10-11	FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
Grant/Subsidy received (₹ Crores)	450	750	1100	1500	2107	1600	1200	2500

Source: Ministry of Finance, Government of Jharkhand

Table 9.3 enlists the subsidies/grants paid by the state government of Jharkhand since 2010-11. The subsidies reached a peak at about 2014-15 (₹ 2107 Crores), and then slowly and gradually began to dip. However, again in the year 2017-18 the subsidies increased to around ₹ 2500 Crores.

Impact of private players in the power sector in Jharkhand

Jharkhand, owing to its mineral reserves, has a high enormous potential for generating power. Additionally, there is enough potential for the private players to engage in the market. Independent Power Providers (IPP) have a high stake in the generation of power for the state. Presently, the Government of Jharkhand has 13 Memorandum of Understanding with private developers with a total capacity of 16,081 MW. Three additional private players are commissioned to start operations from FY 19 - Matriti Usha (Phase 1), Matriti Usha (Phase 2), and Tori Project. While the former two have a capacity of 540 MW, Tori Project has a capacity of 1200 MW.

Private Participation is encouraged by the government, especially in electrifying the rural villages. Another area where the private players are sought after is the strengthening of the solar power and the strengthening of the transmission network. The Adani Group has signed an MoU with the state to set up 1600 MW in Godda. The table below gives a brief description of the generation capacity tied up comparing the private players with the state sector and other players

Table 9.5: Generation Capacity of State and Private players

Players	FY15	FY16	FY17	FY18
State Sector	960	960	875	875
Private	200	200	200	200
Private Solar	16	16	16	16
DVC	765	765	765	765
Central Coal	315	315	315	315
Central Hydro	71	71	71	71

Source: Deloitte Report, Power for All

The Ujwal DISCOM Assurance Yojana (UDAY) Scheme

The UDAY scheme, implemented in November 2015, was introduced to lower the burden of debt from state owned power distribution companies. Financial revival and monetary sustainability of electric distribution companies were two major important goals of this scheme. The accumulated losses had increased from ₹ 2.5 to 3.8 lakh Crores from financial year 2013 to 2015. On the other hand, debt had increased from ₹ 3 lakh Crores to ₹ 4.1 lakh Crores.

To reduce the debt burden on these companies, the idea was to have the state government takeover 75% of these debts. Out of this 75 %, 50% was to be absorbed in 2015-16 and the rest 25% in the year 2016-17. The remaining 25% of the debt was to be absorbed by Distribution Companies (DISCOM) bonds. The bonds were a mix of equity, grants, and loans. Since its launch, 27 states have signed Memorandum of Understandings (MoU) with the Union Government. The UDAY scheme comprises of four financial parameters and ten operational efficiency parameters.

It is of interest to see how the state of Jharkhand has been performing with its neighbouring states on certain parameters. It is also worth noting that Jharkhand is one of the few states along with Madhya Pradesh, Chhattisgarh, Bihar, and Jammu and Kashmir to issue 100% bonds. The bonds for Jharkhand are worth ₹ 6136 Crores. The national average is around 86%.

With regard to Aggregate technical and commercial losses, the combined average for all states is 19.93%. Jharkhand has an average AT&C loss of around 37%. States that have a similar percentage of AT&C loss are Haryana (25.6%), Uttar Pradesh (30.21%), Bihar (41%). On the other hand, states such as Maharashtra (18.3), Tamil Nadu (14.53%), and Karnataka (15.29%) have loss percentages lower than the national average.[15]

The next parameter for financial viability is the difference between average cost (AC) and average revenue (AR). Reducing the AC-AR difference is one of the important milestones under the

[15] Source: Government of India, UDAY Portal

UDAY scheme. The overall average gap is currently around 0.45 per unit. In other words, states having an AC-AR gap below 0.5 are commercially viable, whereas states having a gap higher than 0.5 need to be thoroughly reformed. Jharkhand has an average AC-AR gap on the higher side (1.48) sharing its position with states such as Madhya Pradesh, Rajasthan, Punjab, Kerala to name a few.

Given that Jharkhand has not been performing well in terms on financial viability, we now look at the operational efficiency of Jharkhand. The operational efficiency, as explained, is based on 10 parameters. We shall analyse a few of these important parameters in the light of Jharkhand.

Feeder Metering and DT Metering: The Feeder Metering for Urban and rural areas has increased from 296 to 436 (pre to post UDAY) and 100 to 761 respectively. These figures are as of 2017.

Electricity Access to Unconnected Households: This is another important parameter to judge the operational efficiency. The electricity access to unconnected households is just 54% (the third lowest) among all other states, and has a big way to catch up. However, there has been an improvement from 25.78 lakh households in March 2016 to 31.64 lakh households as of June 2018.

Feeder Segregation: Feeder Segregation is primarily used to identify utilities/feeders making losses and to take necessary actions to improve their health. However, Jharkhand has 0% progress in state-wise feeder segregation, sharing its plight with states such as Tamil Nadu, Bihar, Jammu and Kashmir.

Distribution of LEDs: Under this objective, superior quality LED bulbs are distributed to consumers at a cost lower than the market price. The main reason is to promote energy conservation and create awareness about energy saving technologies. In this aspect, Jharkhand has achieved its targeted level along with states such as Uttar Pradesh, Bihar, Chhattisgarh, Andhra Pradesh etc.

Financial Health of the State DISCOMs

In this section, we analyse the income and loss statements of two power sector companies of Jharkhand – JSEB, entrusted with the generation and distribution of electric power in the state of Jharkhand, and JBVNL, which is a DISCOM utility of the state. Data for the income and loss statement for JSEB is available from 2011-12 to 2013-14.

It is seen that the total revenue had seen an increase from ₹ 3,19,027 to ₹ 3,99,379 in 2012-13. However, there was a slump in the revenue back to ₹ 3,29,724 in the year 2013-14. While the revenue grant from the government had gone up, there was a massive decrease in the revenue grant from operations. Under the expenses of JSEB, purchase of power contributes to around 70% of the expenses, followed by employee cost (8-9%), and generation of power (5%). Generation and purchase of power has witnessed the highest increase under the expenditure head along with interest and financial charges for the years 2011-12 to 2012-13. However, there was a slight dip in the expenditures too in the year 2013-14. Comparing the revenues and the expenditures, it was seen that JSEB was in loss for all the three years with an increase of 10% in losses in the first year,

and approximately 30% in the second year. Thus, JSEB has not been performing very well financially.

When it comes to JBVNL, from the annual income and loss statement from 2013-14 to 2016-17, the revenue generation is just the opposite of what it was for JSEB. It is seen that the revenue generation from operations has been increasing year-on-year; however, the revenue generation from government grants has seen a drop. The revenue from operations is around 62%, while the revenue from grants is around 32%. Under the expenses head, the purchase of power and transmission charge has the maximum contribution (90%) followed by employee benefit expenses, and depreciation and amortization. In terms of profit and loss, JBVNL, is in the same state as that of JSEB, with losses increasing at a rate of approximately 50% from 2015-16 to 2016-17.

However, everything is not bleak. Under the UDAY scheme, Jharkhand has committed to increase the billing efficiency from 73% in 2015-16 to 85% in 2018-19, and collection efficiencies from 89% in 2015-16 to 100% in 2018-19. If this target is achieved, then Jharkhand should be able to reduce its debts slowly, thereby increasing the efficiency of the power sector. Additionally, to improve efficiency, the DISCOMs will also have to minimize their AT&C losses to 15% by 2018-19 and ACC-ARR difference to 0%. It has however been estimated that after the implementation of the UDAY scheme, Jharkhand is one of those states where the target has not been met. While the target for AT&C losses is 24.9%, the latest AT&C losses amounted to 36.28%. Jharkhand should also be careful that while improving the debt liability of the DISCOMs by issuing power bonds, the state's fiscal health does not get hampered. As of the financial year 2017, Jharkhand has a fiscal deficit of ₹ 10,106 Crores, which is approximately 4% of the GSDP.

It has been estimated that within a year of implementation of UDAY in Jharkhand, the state piled up ₹ 1300 Crores in fresh dues to Damodar Valley Corporation (DVC) and ₹ 783 Crores to Coal India.[16] However, social experts claim that UDAY will improve the affordability of the DISCOMs in the short and medium run, and apprehensive whether it will bring in any long-term solutions.

[16] https://www.thehindubusinessline.com/economy/policy/jharkhands-default-raises-questions-over-uday-impact/article9485612.ece

Impact of UDAY on the fiscal indicators of the State

The UDAY scheme was the offer given to the State government to take loans through power bonds for the years 2015-16 and 2016-17 to pay off its debts owed to different power suppliers. In the year 2015-16, the Government of Jharkhand, through power bonds, raised a revenue of ₹ 5553.37 Crores.[17] The money was used for paying the dues of DVC, Coal India etc. However, this money raised was not accounted for considering the borrowing of the State. Therefore, when fiscal deficit is calculated for the state, this amount is deducted while keeping the fiscal deficit under check. In the year 2015-16, the fiscal deficit of the state shot up due to the borrowings from the UDAY scheme. However, while checking for the sustainability of the fiscal deficit of the state, UDAY scheme borrowings should be left out.

[17] UDAY portal, Government of India

Chapter 10: Contingent Liabilities of the State

Introduction

Contingent liabilities are fiscal obligations that the state governments have to meet on the occurrence of a discrete event. Unlike non-contingent liabilities where the nominal amount and the timing of the payment is fixed, for contingent liabilities, both these aspects are uncertain.

Explicit Contingent Liabilities

Explicit contingent liabilities is recognized by law or contract and the state government guarantees on behalf of some of the public sector undertakings of the state that lack credit worthiness or the track record to raise capital or contract a loan on its own. The state therefore has obligations to provide for any eventuality or default to the borrower on either the principal amount borrowed or interest payment on such amount or both. State government guarantees also include those from state insurance schemes such as, for deposits, crops, floods and minimum returns from pension funds. Table 10.1 reports the outstanding guarantees of Jharkhand. It is interesting to observe that Jharkhand experienced outstanding guarantees only from 2013-14 onwards. In 2015-16, eleven other states had positive outstanding guarantees and that too by a very large amount, this number reduced to five in the revised estimates of 2016-17. The budget estimates of 2017-18 reports only two other states (Gujarat and Karnataka) having positive outstanding guarantees. The guarantee details are however not reported in the budget documents.

Table 10.1: Outstanding Guarantees of Jharkhand (₹ Crores)

2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (RE)	2017-18 (BE)
0	0	0	160	160	160	160	160

Source: RBI Bulletin 2017-18

Implicit Contingent Liabilities

For implicit contingent liabilities, the liability on the government is not recognized until the event occurs. At the state level, there is an expectation of government intervention with financial aid, if a large section of the population is under stress from a calamity, natural or financial. Sometimes, financial failure of large public sector enterprises leads to implicit contingent liabilities and the state finances are under duress. Since power is one of the major sectors where state governments have been forced to bail out, it is of interest to investigate the contingent liabilities emerging from the power sector. In an MoU signed between the Ministry of Power, Government of Jharkhand and Jharkhand Bijli Vitran Nigam Limited, in order to bail out the ailing Distribution Company, the Jharkhand Government was to take over 50% of the debt amounting to ₹ 583 Crores and 100% of the total outstanding dues of the undertaking amounting to ₹ 6050 Crores as on September 30, 2015. In the year 2016-17, 25% of the total debt was taken over by the Jharkhand Government, and this amounted to ₹ 292 Crores.

Natural calamities such as floods and droughts are other important discrete events, where government financial aid is sought to control the situation. Table 10.2 gives the government expenditure on natural calamities, of which of which floods and droughts are a part.

Table 10.2: Outstanding Guarantees of Jharkhand (₹ Crores)

Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18 (RE)
Relief on account of Natural Calamities	42.96	-24.35	280.92	292.55	291.88	522.12	453.32	789.52
of which Drought	166.82	72.93	0.24	4.91	6.22	491.72	43.41	223.68
of which Floods, Cyclones etc.	2.32	4.28	3.58	8.06	7.86	8.52	3.81	60.25

Source: Annual Financial Statements of Jharkhand Government

Total expenditure on relief on account of natural calamities has been increasing over the years. This has to happen and the state should step in when needed in case of natural calamities. As for droughts, the expenditure on this head was very low in 2012-13, 2013-14 and 2014-15. We presume that these were years of normal weather in most parts of the state. It is interesting to see that expenditure on floods and cyclones have been rising slowly and steadily till 2015-16, and there was a sharp drop in 2016-17. However, there has been a huge jump in 2017-18, presumably on account of the occurrence of floods. It is also interesting to note that there has been a ₹ 1 Crore expenditure on flood control, and ₹ 0.25 Crores have been proposed to be spent in 2018-19, but this expenditure not only should be increased, it needs to be also seen whether we are better able to manage the calamities with the start of such expenditures.

Chapter 11: Targeting and Evaluation of Subsidies by Jharkhand

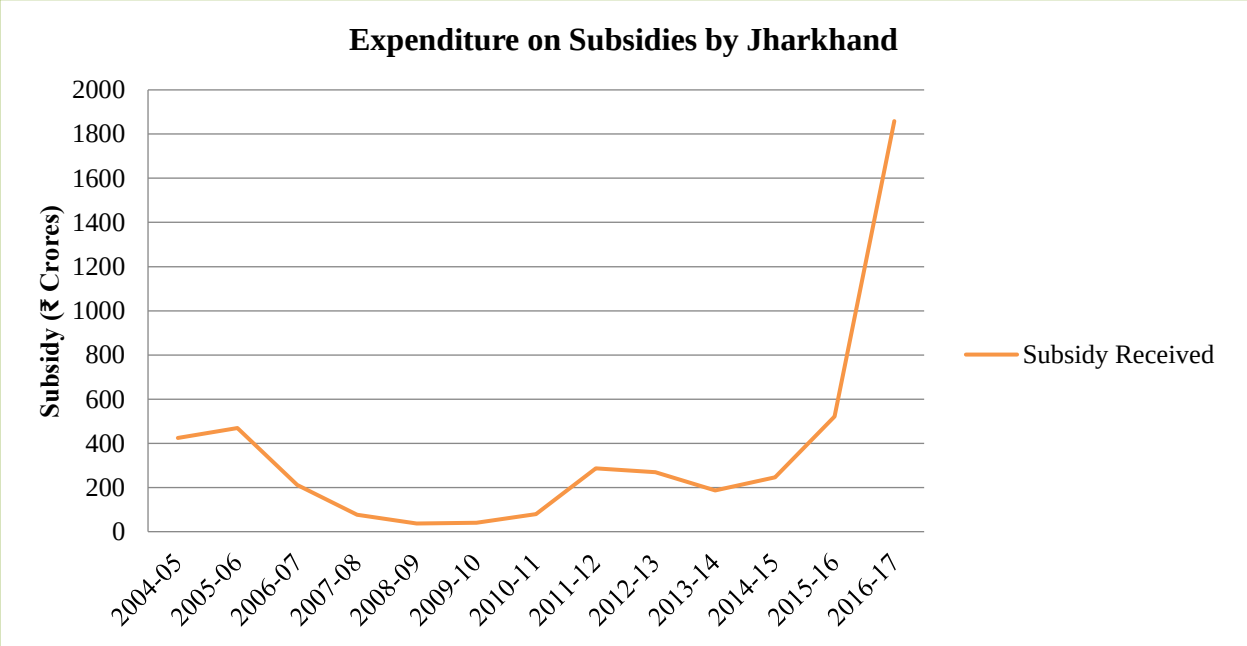
Introduction

Subsidies form an integral part of a state's financial expenditure. In general, subsidies are given to sectors that provide social welfare to the state and contribute to the overall development of the state as a whole. Subsidies are either provided out of taxation or borrowing. However, one must be careful while providing subsidies to certain sectors, and a cost-benefit analysis of the subsidies is inevitable. From the centre, the major subsidies are food, petroleum, and fertilizers. However, different state governments have differential needs, and hence targeting of subsidies varies from state to state.

Overview of Subsidy over Time for Jharkhand

Before we analyse the sector wise representation of subsidies, it is of interest to have an overview of the expenditures in the form of subsidies by Jharkhand over a period of time. Figure 11.1 presents an overview of the expenditures in the form of subsidies by the Jharkhand government over more than a decade.

Figure 11.1: Timeline of Expenditures on Subsidies by Jharkhand



Source: Ministry of Finance, Government of Jharkhand

If we look at the graph for the expenditure in the form of subsidies, we see an interesting and unusual trend. There was a sudden drop in expenditure on subsidies from around ₹ 500 Crores in 2004-05 to around ₹ 50 Crores in 2010. Thereafter, there was a gradual increase in expenditure on subsidies, which eventually rapidly increased since 2014. This graph, however, just paints half the picture. For instance, in the years, 2006 to 2008, expenditure on subsidies of ₹ 469, 211, and ₹ 77.27 Crores was given only to the power sector. Additionally, in 2008-09 entire subsidy was given to agricultural and allied activities, and industries and minerals respectively. During these years, no subsidy was given to the food sector.[18]

[18] Finance Accounts, Volume II, 2011-12

Evaluation of Subsidy under Different Heads

If we look at Jharkhand, there are few sectors that have received immense subsidies over time, while other sectors have received them much later on. Table 11.1 depicts the analysis of the subsidies provided by the state government to the various sectors over the years.

Table 11.1: Subsidies Provided to Different Heads over the Years

Heads	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19
Seed Exchange	5639.07	17680.5	17824.2	15296.8	18456.06	32590.5	55560.5	100285.0	99000
Capital Investment	88.89	5428.06	5637.2	1701.6	3254.2	9739.49	8961.99	7025.18	7500
Agricultural Development	1762.05	1601.81	2044.6	474.6	1665.3	6784.4	8438.9	6838	5790.04
Civil Supplies	0.00	0.00	0.00	0.00	0.00	0.00	104492.8	101548.1	113732
Soil and Water	0.00	0.00	0.00	0.00	0.00	1140	4784.1	10000	10000
Goat Breeding	515.97	1097.5	1285.75	1267.77	1193.22	1443.13	3331.41	220	12555

Source: Finance Accounts, Volume ii, Government of Jharkhand. (Figures in ₹ Lakhs)

From Table 11.2, we see that seed exchange and distribution program has received the highest subsidy throughout the years from 2010-11 till 2016. However, from 2017 onwards there was a shift in the subsidies received with Civil Supplies getting the maximum share as compared to the other heads. On the other hand, Goat Breeding has been receiving relatively very little subsidy as compared to other sectors. Power has not received any subsidy for the past 8 years; however, it is estimated that in 2018-19, ₹ 20,000 Lakhs will be spent as subsidy to the power sector for various reforms.

Table 11.2: Growth Rates for Various Subsidy Expenditures

Heads	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Seed Exchange	213.5	0.8	-14	20.6	76.5	70.4	80.4
Capital Investment	6068	3.8	-69	91.2	199	-7.9	-21.6
Agricultural Development	-9.1	27.6	-76	251	307	24.3	-18
Goat Breeding	112	17.1	-1.4	-5.8	20.9	130	-93

Source: Author's Calculation based on data from Finance Accounts, Government of Jharkhand

From the table, it is seen that the growth rates over the years for the expenditure on subsidies over various heads has been quite erratic. The growth rates have been negative for all the heads in the year 2013-14. On the other hand, year 2015-16 witnessed the highest growth rate in subsidies over

all heads. If we analyse on the basis of the different heads, Seed Exchange has had more positive and comparatively higher growth than the other heads under which expenditure on subsidy has been made.

After providing a brief overview of the overall expenditures on subsidies by the state of Jharkhand, followed by the overall allocation of subsidies by different heads, we now analyse each subsidy head in detail. It would be interesting to analyse the expenditure for each head as that would provide a clearer picture of how the money is getting utilized.

Animal Husbandry

Under animal husbandry, the major state plan schemes include animal health programs, modernization of hospitals, strengthening of state-run farms, pig development schemes, goat, sheep, and wool development schemes, poultry development schemes and others. Table 11.3 depicts the physical and financial progress of the animal husbandry scheme for the years 2014-15 and 2015-16.

Table 11.3: Physical and Financial Progress of Animal Husbandry Scheme2014-16

Heads	Outlay	Sanctioned	Allotment	Expenditure	Surrender	Achievement
Animal health	802	752	752	764	37.4	98% for treatment and 100% for castration
Strengthening of farms	651.04	638.76	638.76	180.72	470.32	56% for milk production
Direction & Administration	605	425	425	249	355	-
Pig Development Schemes	458	458	458	450	7.76	79% for composite units
Strengthening of AI	400.04	400.04	394.76	320.88	79.16	51% for AI
Goat, sheep and wool development schemes	392	392	392	387.79	4.21	99% vidhwasamman units
Poultry Development Scheme	365	365	365	361.23	3.77	91% broiler and farming units
Other	636	636	586	403	233	-

Source: Finance Accounts, Government of Jharkhand

From the table, we see that Animal health has received the largest outlay followed by strengthening of farms, pig development scheme, and goat and wool development schemes. Under the head ‘others’, subsidy for civil aviation, tourism, civil supplies, small industries, and power is included. Out of the total outlay for various heads, the percentage sanctioned is 94% (Animal health), 98% (strengthening of farms), 70% (direction and administration), and 100% (pig, goal, and poultry development schemes). The percentage of sanctioned amount from the total outlay does not tell us the actual utilization. The next few columns from the table reveal the expenditure rate (expenditure/allotment). This gives us a deeper insight into the importance given to each head.

With the exception of animal health, all expenditures were below the amount allotted. For instance, the rate of expenditure was 28% (strengthening of farms), 58% (direction and administration), and 98% (pig, goat and poultry development schemes). Thus, we see that while the rate of expenditure was the least for strengthening of farms, it was the highest for animal health and development schemes.

Lastly, each head had various targets that had to be achieved. However, not all heads could meet their required targets. The last column of the table shows the success rate which is defined as a ratio of total achievement to total target. It is expected that the higher the expenditure rates, the higher should be the achievement rate. The heads that have the maximum achievement rates are animal health (98% for treatment and 100% for castration), goat sheep and wool development (99%), and poultry development (91%). It is also seen that these are the same heads that have the highest expenditure rates. On the other hand, the heads that have the least achievement rates are strengthening of Artificial Intelligence (51%) and strengthening of farms (56%). Artificial Intelligence has an 81% expenditure rate; however, it has one of the lowest achievement rates. This means that further strengthening in this head is required.

The Seed Exchange Program

With regard to the seed exchange program, we have been able to get information on the financial achievement and the number of beneficiaries for the different districts in Jharkhand. Table 11.4 lists the achievements and the beneficiaries for the districts in Jharkhand. However, data on beneficiaries for some of the districts are missing.

Table 11.4: Financial Achievements and beneficiaries for the seed exchange program for Jharkhand (₹ Lakhs)

Districts	Financial Achievements	Beneficiaries	Fin. Ach/Beneficiaries
Ranchi	124.5	6950	0.017
Gumla	174.5	6595	0.02
Simdega	61.9	8109	0.007
Lohardaga	55.7		
East Singbhum	24.09		
West Singbhum	46.8	2220	0.021
Saraikela	81.1		
Latehar	119.1		
Dumka	40.84		
Jamtara	115	11135	0.01
Sahibganj	100.08	7977	0.012
Pakur	22.64	1213	0.018
Khunti	66.28	9262	0.007
Garhwa	253.66	11352	0.02
Palamu	98.64	3332	0.02
Hazaribagh	145.2		
Ramgarh	30.76		
Dhanbad	49.12		
Chatra	112.46	12600	0.008
Koderma	88.07		
Giridih	163.22	12224	0.013
Bokaro	87.48	5262	0.016
Deoghar	139.73		
Godda	117.56	15646	0.007

Source: Government of Jharkhand

From the table, it is seen that Garhwa received the highest financial achievement, followed by Gumla and Giridih. Alternatively, with regard to the beneficiaries, Godda was the highest beneficiary, followed by Chatra and Giridih. The ratio of financial achievement to beneficiaries tells us the per beneficiary financial achievement. The range for this is quite narrow, from ₹ 0.007 to 0.02 lakhs. Districts like Garhwa, Palamu, and West Singbhum have the highest achievement per beneficiary. On the other hand, districts such as Chatra, Khunti, and Simdega have recorded the lowest financial achievement per beneficiary.

Horticulture

A National Horticulture Mission was launched in 2005-06 as a Centrally Sponsored Scheme to promote holistic growth of the horticulture sector. Horticulture is a significant sector for Jharkhand and has the best diversified option for agricultural land use. Owing to the high value of horticultural crops, as compared to agricultural crops, there is high popularity of the horticulture sector.

We have data on the area and production of certain horticulture crops for five years starting from 2013-14 till 2017-18. Data on area and production is obtained for certain fruits and vegetables (Table 11.5).

Table 11.5: Production per area (hectare/meter) for few vegetables and fruits in Jharkhand (2013-18)

Fruits	2013-14	2014-15	2015-16	2016-17	2017-18
Berry	1.10	1.10	5.95	16.21	12.5
Bael	2.45	2.45	67.91	68.45	61.7
Pomegranate	4.25	4.25	3.8	1.5	2.8
Anola	4.32	4.28	4.66	5.29	5.03
Papaya	10.01	10.02	59.8	43.4	43.8
Vegetables	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
Capsicum	0.93	0.93	0.93	11.02	11.05
Bittergourd	9.02	8.96	8.65	8.24	8.36
Tomato	9.52	9.52	12.6	11.72	13.2
Potato	13.3	13.3	13.95	12.6	14.3

Source: Finance Account, Government of Jharkhand &Author's Calculation

The above table depicts the production per area for a few vegetables and fruits from the year 2013-14 to 2017-18. For most of the crops the production per area has shown an increasing trend over the years. This could be either due to a decrease in the area or an increase in production. In some cases, it was seen that while the area under cultivation was more or less constant, production had increased, thereby causing an overall increase in the production per area. On the other hand, for certain vegetables and fruits like capsicum and pomegranate, it is seen that the area under cultivation was decreased year-on-year, accompanied by an increase in production causing an increase in the total production per area. However, on an average, for almost all crops, it was seen that the average production per area had seen an increasing trend. This paints a promising picture and suggests that the Government should be investing more into this sector for future growth.

Chapter 12: Outcome Evaluation in the Context of Recommendations of the 14th Finance Commission

Introduction

The 14th Finance Assessments of Revenue receipts and expenditures, interest payment, pension payment capital outlay and own revenue deficit from 2015-16 to 2019-20. They had also made recommendations for financing of local governments, both rural and urban. We now look at the extent to which the assessments have been realized and the recommendations have been fulfilled.

Assessment of Own-Tax and Non-Tax Revenues

For states with an above average tax/GSDP ratio of 8.26, the 14th Finance Commission assumed a tax buoyancy of 1.05, and for those with less than the prescribed ratio, a higher tax buoyancy of 1.5 was assumed to arrive at the projections. For Jharkhand, this ratio from 2011-12 to 2014-15, was much lower than 8.26, though the tax buoyancy was much higher than 1.5 for all the years, except 2014-15. Table 12.1 reports the Projections of Tax and Non-Tax revenues by the 14th Finance Commission for the years 2015-20. As of now, we have the revised estimates of own-tax and non-tax revenues for 2017-18 and budget estimates for 2018-19, so we can check the amount of revenue that has been realized one year before the conclusion of this period. The percentage realized is a percent of the actual values by the projected value. In terms of revenue, both tax and non-tax, the higher the percent realized, the better it is. Looking at the trend for the percentage realized for both tax and non-tax revenue, we see that for tax revenues, the percentage realized increased from 84% in 2015-16 to 97% in 2017-18; however, it started to fall after that. Similarly, for non-tax revenues, we see that the percentage realised increases from 122% (2015-16) to 210% (2017-18); however, it again falls to approximately 158%.

Table 12.1: Projections of Revenues of the 14th Finance Commission 2015-20 (₹ Crores)

	2015-16	2016-17	2017-18	2018-19	2015-18	2015-19
Projected Own-Tax Revenues (₹ Crores)	13644	16044	18867	22187	48555	70742
Own-Tax Revenues (₹ Crores)	11478.9	13299.25	18400	19250	43178.6	62428.69
% Realized	84.13	82.89	97.53	86.76	88.93	88.25
Projected Own Non-Tax Revenue	*4759.00*	*5039.00*	*5357.00*	*5717.00*	*15155.00*	*20872.00*
Own Non-Tax Revenue	*5853.02*	*5351.41*	*11257.32*	*9029.96*	*22461.75*	*31491.71*
% Realized	*122.99*	*106.20*	*210.14*	*157.95*	*148.21*	*150.88*

Source: 14th Finance Commission Report, Annual Financial Statements, Government of Jharkhand

Assessment of Expenditures

Since the classification of revenue expenditures as plan and non-plan is no longer in use, we report the projections of pensions and interest Payments. Table 12.2 reports the projections of pensions and interest payments for Jharkhand in the period 2015-20. As compared to tax and non-tax revenues, for expenditures, we would like a lower or at par realized percentage. If the realized percentage for expenditures increases 100%, it would burden the state deficits. The expenditures

mainly comprise of interest payments and pension payments. It is seen that the realized percentage for pension payments is less than that of interest payments. While the average realized percentage is 90% for pension payments, for interest payments it is close to 100%.

Table 12.2: Projections of Expenditures of the 14th Finance Commission 2015-20 (₹ Crores)

	2015-16	2016-17	2017-18	2018-19	2015-18	2015-19
Projected Interest Payments	3623.00	4128.00	4692.00	5323.00	12443.00	17766.00
Interest Payments	3320.08	4172.25	4467.79	5631.04	11960.12	17591.16
% Realized	91.64	101.07	95.22	105.79	96.12	99.02
Projected Pensions	4716.00	5188.00	5707.43	6278.52	15611.00	21889.00
Pensions	3990.01	4135.29	5841.43	5595.52	13966.73	19562.65
% Realized	84.61	79.71	102.36	89.14	89.47	89.37

Source: 14th Finance Commission Report, Annual Financial Statements, Government of Jharkhand

Assessment of Fiscal Deficits and Debt

The 14th Finance Commission mentioned that fiscal deficit of all states will be anchored to an annual limit of 3% of their GSDP. States will be eligible for flexibility of 0.25% over and above this for any given year for which the borrowing limits are to be fixed, if their debt GSDP ratio is less than or equal to 25% in the preceding year. Table 12.3 gives the values of fiscal deficit as a percentage of GSDP since the time of the Finance Commission recommendations, 2014-15. It should be noted that only in the year 2015-16, did the values of fiscal deficit cross within the prescribed range. Although the fiscal deficit is increasing since 2016-17, it is still well within the prescribed range.

Table 12.3: Fiscal Deficit as percentage of GSDP

2014-15	2015-16	2016-17	2017-18
3	4.98	4.32	4.61

Source: Jharkhand Economic Survey 2017-18

As for public debt, the 14th Finance Commission had made projections for public debt for the years 2015-20. It will be interesting to see if the actual debt levels were higher or within the range projected by the commission. Although in 2014-15, the actual debt was lower than what was projected, it shot up by almost 0.5% points in 2015-16 and 2016-17, and it is disturbing to note that it was almost 1% points above the projected level for 2017-18.

Table 12.4: Jharkhand's Public Debt as a percentage of GSDP

Year	2014-15	2015-16	2016-17	2017-18
14th Finance Commission Projections	23.13	24.2	25.16	25.77
Actual Figures	22.06	24.97	25.69	26.65

Source: 14th Finance Commission, Jharkhand Economic Survey 2018-19

Assessment of Grants to Local Bodies, Public Sector Undertakings

The 14th Finance Commission had suggested that grants to both municipalities and panchayats be divided as basic grants and performance grants. Although the same has been practised for municipalities, performance grants could not be started in Panchayats as of date. The criteria for giving performance grants are on the basis of good record keeping and revenue generating capabilities of gram panchayats. The Gram Panchayats still do not have the capacity for revenue generation.

As for public sector undertakings, the commission noted that a comprehensive view should be taken of the true benefits and costs. If the recommendation be that of disinvestment, the interests of the workers should be taken at a reasonable fiscal cost. In line with this view, the Jharkhand State Electricity Board was unbundled and reorganized into four government companies, each with a separate function of generation, transmission or distribution.

Chapter 13: Debt Roadmap for Jharkhand and the Impact of GST on Cumulative Debt

Introduction

Formulating a sustainable debt roadmap is crucial for any economy, and more so for emerging and developing economies that have incurred debt for future economic growth. The debt roadmap is essentially a blueprint of the sustainability of the repayment of the past accumulated debt and the ability to accumulate debt in the future. The principles of fiscal consolidation are laid down by the Finance Commission after reviewing the financial status of the Union and the different states based on various indicators. The 14th Finance Commission had listed out some recommendations in the 14th Finance Commission Reports based on the reports from different stakeholders (States), the Union Government, and the Comptroller General. Below are few of the recommendations made by the 14th Finance Commission while setting out a fiscal roadmap for the states.

- Fiscal deficits of the state has to be within 3%, with a 0.5% flexibility, 0.25% if the state has a debt to GSDP ratio of 25% or less, and 0.25% if the interest payments to revenue receipts is less than or equal to 10%.
- Stronger compliance mechanism to be accountable for the fiscal target.
- An amendment to the FRBM Act to eliminate the effective revenue deficit by April 2015. Also, an establishment of an independent fiscal council to assess the implications of the fiscal policy undertakings is recommended.
- Exclusion of the State from the operations of the NSSF Scheme.
- Setting up of a Consolidated Sinking Fund.
- Replacement of the FRBM Act with the Debt Ceiling and Fiscal Responsibility Legislation.

These are some of the important recommendations made by the 14th Finance Commission, keeping in mind the fiscal responsibility of the Union as well as the State. From the recommendations given by the 14th Finance Commission, it is seen that there are certain parameters on which the debt sustainability is defined and estimated. It is worth noting how Jharkhand as a state has performed over the last few years with respect to such parameters to assess the debt sustainability report of the state.

First, we look at an important parameter which is the *interest payments to revenue receipts*. Interest payments are payments made to the debt incurred in the past. However, it is important that these interest payments do not exceed the revenue generating capacity. In other words, interest payments come under the category of committed expenditures for the state. Interest payments amounted to ₹ 2929.15 Crores in 2014-15 to ₹ 4172.25 Crores in 2016-17. The growth rate is approximately 15%. On the other hand, revenue receipts had seen a growth of 22% between 2014-15 and 2016-17. It is of interest to look at how interest payments as a percentage of revenue receipts have been over the years. The interest payments to revenue receipts have witnessed a consistent decline from 11% in 2011-12 to 8% in 2017-18.

Another indispensable parameter for measuring debt sustainability is the *debt to GSDP ratio*. This too has been promising and the debt to GSDP ratio has been consistently declining from 20% in 2011-12. However, in 2015-16 there has been a slight increase in the debt to GSDP ratio because of the UDAY scheme. The ratio is still under the tolerable limit, ending at 26% in 2017-18.

Projection of Jharkhand's fiscal indicators

With the change in the tax regime, through the implementation of the Goods and Services taxes (GST), it is worthwhile to understand how the fiscal scenario of the State would be in the next five years or so. The GST will have a major impact on the indicators such as the tax revenue, tax buoyancy, fiscal deficit and debt of the State. Against this background, we project the fiscal indicators of the State across three two scenarios as described below:

Scenario 1: Current Scenario pre-GST, with estimates provided by Finance Department, Government of Jharkhand
Scenario 2: Current Scenario with actual data of GST implementation till 2019

Methodology

In the first scenario, we use the revised and budgeted estimates (2017-2019), as well as the forecasted estimates (2019-2025) that are provided by the State Finance Commission of Jharkhand. Actuals are provided till the year 2016-17. Using the Compounded Annual Growth rate from 2010-11 to 2016-17,[19] the forecast estimates from 2019-20 to 2024-25 for various parameters are provided. Table 13.1 lists out the CAGR rates calculated to come up with the forecasted estimates from 2020-25. The forecasted estimates are calculated using the formula: Value in period (n+1) = Value in period (n)*(1+CAGR).

These actuals, estimates, and forecasted values are provided for Tax, Non-Tax Revenues, as well as Expenditures by the Ministry of Finance, Government of Jharkhand.

Table 13.1: CAGR rates computed for various indicators used to produce forecasted estimates

Particulars	CAGR calculated from 2010-2017
Own Tax Revenue	15.11
Non-Tax Revenue	11.38
State Share from Centre	20.82
Grants from Centre	14.51
Revenue Expenditure	15.85
Capital Expenditure	26.39

Source: Ministry of Finance, Government of Jharkhand

In the second scenario, we use actual data till 2018-19. Monthly data for the month of 2018-19 from April to February is provided in the CAG Audited Reports. The missing month is March. To calculate the data for the month of March so as to get the annual data for 2018-19, we extrapolate using the following method:

$$\text{Data for March (2018-19)} = \frac{\text{Data for Feb } 2018-19}{\text{Data for Feb } 2017-18} * \text{Data for March } (2017-18)$$

[19] CAGR = (Final Value/Initial Value)^(1/n)-1. Thus, forecasted estimate in 2019-20 is: 2016-17(1+CAGR)^3

We then compute the Compounded Annual Growth Rate from 2010-11 to 2018-19 for different indicators to come up with the forecasted estimates from 2019-20 till 2024-25. The CAGR for the parameters post implementation of GST from 2010 to 2019 are enlisted in Table 13.2.

Table 13.2:CAGR rates computed for various indicators used to produce forecasted estimates

Particulars	CAGR calculated from 2010-2019
Total Tax Revenue	16.05
Non-Tax Revenue	15.2
Grants from Centre	13.4
Revenue Expenditure	13.8
Capital Expenditure	21.68

Source: Ministry of Finance, Government of Jharkhand& Author's Calculations

Using these actual and forecasted estimates for all indicators we calculate the following:[20]

a. Fiscal Deficit is then calculated using the formula Revenue – Expenditure – Disbursements of Loans and Advances.
b. Debt is calculated using the formula: $Debt_t = Debt_{t-1} + FD_t$
c. Finally, fiscal indicators such as Debt/GSDP, Fiscal Deficit/GSDP, and tax buoyancy are estimated. Tax buoyancy is defined as $\frac{\%\ Change\ in\ Tax\ Revenue}{\%\ Change\ in\ GSDP}$

[20] Calculations of fiscal indicators follow the formula used in the CAG Report on State Finances

Table 13.3: Forecasted values for various economic indicators for Jharkhand using estimated values as provided

	16-17	17-18(RE)	18-19(BE)	19-20(FE)	20-21(FE)	21-22(FE)	22-23(FE)	23-24(FE)	24-25(FE)
OTR	13299	18400	19250	20284	23349	26878	30939	35614	40996
NTR	5351	11257	9029	7394	8235	9173	10217	11379	12675
Share from Centre	19141	22711	27000	33758	40786	49278	59537	71932	86907
Grants from Centre	9261	10557	12036	13721	15642	17831	20328	23174	26418
Total Tax Revenue	32440	41112	46250	54043	64136	76156	90476	107546	127903
RE	45089	58393	62938	67713	79921	93218	108813	127113	148598
CE	10860	12741	12305	21927	27714	35028	44272	55955	70722
L&A	1335	2022	1644	2781	2022	1644	2781	2022	1644
GSDP	253536	279451	308785	342052	379855	422899	472014	528178	592549
FD	10230	10230	9572	17264	21645	26730	34844	42991	52968
Debt	66826	77056	86629	103893	125538	152268	187113	230105	284073
FD/GSDP	4.03	3.66	3.10	5.04	5.69	6.32	7.38	8.13	9.10
Debt/GSDP	26.35	27.57	28.05	30.37	33.04	36	39.64	43.56	47.94
Buoyancy		2.61	1.19	1.56	1.68	1.65	1.61	1.58	1.55

Source: Ministry of Finance, Government of Jharkhand; Figures in ₹ Crores

The values in Table 13.3 have been obtained from the Annual Financial Statements from the Ministry of Finance, Government of Jharkhand. The Forecasted Estimates (FE) are calculated using the CAGR of each indicator from 2010-11 to 2016-17. However, this does not take into account the impact of the Goods and Services Tax as these estimates were calculated prior to the introduction of the GST. Tax and Non-Tax Revenues have been increasing at around 16%. On the other hand, while revenue expenditures have been increasing at around 16.2% from 2016-2025, capital expenditure is forecasted to increase by a massive 28% in the same period. It is seen that the Fiscal deficit has been increasing consistently since 2019-20 as the forecasted estimates for revenue and capital expenditure have been increasing at a faster rate than the revenues. Similarly, Debt too has been increasing, with the Debt to GSDP increasing from 30% in 2019-20 to 48% in 2024-25. As mentioned earlier, since these estimates do not include the impact of the GST, they are not completely accurate and reliable. We now compare these fiscal indicators obtained by the estimates provided by the Ministry of Finance to the actual data that has been obtained till 2018-19.

Table 13.4: Forecasted values for various economic indicators for Jharkhand using actual values till 2019

	16-17	17-18	18-19	19-20(FE)	20-21(FE)	21-22(FE)	22-23(FE)	23-24(FE)	24-25(FE)
TTR	32441	33497	39064	45314	52564	61003	70797	82163	95353
NTR	5351	7846	8994	9998	10347	11778	13408	15263	17375
Grants from Centre	9261	11412	11290	12757	12821	14354	16070	17991	20141
RE	45089	50952	50982	57609	65232	74275	84572	96296	109645
CE	10860	11952	12800	15488	17128	20621	24826	29888	35983
L&A	1335	1851	385	392	359	365	371	376	382
GSDP	253536	279451	308785	342052	379855	422899	472014	528178	592549
FD	10230	11999	5119	5420	6987	8152	9526	11182	13185
Debt	66826	78825	83945	89365	96352	104506	114033	125215	138400
FD/GSDP	4.03	4.29	1.65	1.58	1.83	1.92	2.02	2.11	2.22
Debt/GSDP	26.35	28.20	27.18	26.12	25.35	24.71	24.15	23.70	23.35
Buoyancy		0.31	1.58	1.49	1.45	1.41	1.38	1.34	1.31

Source: Ministry of Finance, Government of Jharkhand; Author's Calculations; Figures in ₹ Crores

In Scenario 2, as reported in Table 13.4, actual data for all indicators have been provided by the CAG Accounts Report till the year 2018-19. Using data from 2010-11 till 2018-19, the CAGR for all indicators have been computed, and using this CAGR, we produce the forecasted estimates from 2019-20 till 2024-25. This procedure of using the CAGR to calculate forecasted estimates has been done by the Ministry of Finance, Government of Jharkhand, and hence the same has been followed.

It is interesting to note that the GST was implemented in the year 2017 in the month of August. The impact of the GST is seen to have a positive impact on the Fiscal Deficit of the Government, lowering it as compared to the forecasted estimates in Table 13.3. Additionally, it is seen that the Fiscal Deficit to GSDP ratio is well below the threshold limit, and averages to around 2.2% in the years 2020-2025. The Debt to GSDP ratio also looks promising with the average ranging around 25% for the years 2020-2025. These two indicators are well below the upper limit as prescribed by the FRBM. The tax buoyancy also shows a healthy ratio of around 1.4 throughout the forecasted period. It is seen that with the implementation of the GST, while Total Tax Revenue (Own Tax Revenue plus Share from Centre) grows at an average of 14.5%, Non-Tax Revenue is forecasted to grow at an average of 16.2%. On the other hand, revenue and capital expenditure is forecasted to grow at an average of 12% and 16% respectively.

In conclusion, it can be said that the debt sustainability road map for the state of Jharkhand is well disciplined and conservative. If it controls its expenditures, and routes it in efficient ways, the debt can be controlled and sustained as the case has always been.

Appendix

Preparing a consistent GSDP series for states from 2006-07 to 2016-17

Method: We use the splicing methodology to construct the GSDP series from 2006-07 to 2011-12. As of now the GSDP series using 2004-05 as the base is till 2014-15. We need to construct the GSDP series for states, keeping 2011-12 as the base (as this is the newer base series). We therefore construct the GSDP data from 2006-07 to 2010-11 using the 2011-12 base year. This method is known as 'forward splicing'.

An example of the same is listed below for the state Jharkhand.

Appendix Table

Year	2004-05 base year	2011-12 base year
2011-12	135618	150918
2010-11	127281	x

Figures are in ₹ Crores

In the similar way, the GSDP data for the previous years using 2011-12 base year has been calculated for all states. Below are two tables. The first table enlists the GSDP data for all states from 2006-07 to 2011-12 using 2004-05 as the base year. The second table enlists the GSDP data from 2006-07 to 2011-12 using 2011-12 as the base year. In effect, the second table has the actual GSDP data from 2011-12 to 2016-17 (2011-12 base year) and the back-calculated series from 2006-07 to 2010-11 (2011-12 base year). All these figures are in current prices.

Appendix Table 1: GSDP (₹ Crores) of all states using 2004-05 as base year

2004-05 series						
	2006-07	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Andhra Pradesh	174064	212361	237383	273327	319864	362245
Assam	64692	71076	81074	95975	112688	125903
Bihar	100737	113680	142279	162923	203555	243269
Chhattisgarh	66875	80255	96972	99364	119420	144382
Delhi	135584	157947	189533	217619	252753	287107
Gujarat	283693	329285	367912	431262	521519	598786
Haryana	128732	151596	182522	223600	260621	298688
Himachal Pradesh	30274	33963	41483	48189	57452	64957
Jammu & Kashmir	33230	37099	42315	48385	58073	68185
Jharkhand	66935	83950	87794	100621	127281	135618
Karnataka	227237	270629	310312	337559	410703	455212
Kerala	153785	175141	202783	231999	263773	312677
Madhya Pradesh	144577	161479	197276	227557	263396	305158
Maharashtra	584498	684817	753969	855751	1049150	1170121
Odisha	101839	129274	148491	162946	197530	220589
Punjab	127123	152245	174039	197500	226204	256374
Rajasthan	171043	194822	230949	265825	338348	414179
Tamil Nadu	310526	350819	401336	479733	584896	667202
Uttar Pradesh	336317	383026	444685	523394	600286	685496
Uttarakhand	36795	45856	56025	70730	83969	97858
West Bengal	261682	299483	341942	398880	460959	528316

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Appendix Table 2: GSDP (₹ Crores) of all states using 2011-12 as base year

2011-12 series											
	2006-07	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
Andhra Pradesh	182308.2	222419	248626.2	286272.6	335013.7	379402	411404	464272	524946	600298	695491
Assam	73566.77	80826.56	92196.13	109141.3	128147.1	143175	156864	177745	195723	227959	25341
Bihar	102341.6	115490.8	144545.3	165518.2	206797.4	247144	282368	317101	342951	369469	425888
Chhattisgarh	73216.87	87865.72	106168	108786.9	130744.8	158074	177511	206833	221142	234212	262263
Delhi	162355.9	189134.6	226957.4	260589.2	302660.6	343798	391388	443960	494885	548081	616826
Gujarat	291662	338534.7	378246.7	443376.2	536168.6	615606	724495	807623	921773	1029010	1162287
Haryana	128236.8	151012.8	181819.9	222739.9	259618.4	297539	347032	400662	437462	485184	547396
Himachal Pradesh	33892.04	38021.91	46440.63	53948.06	64318.08	72720	82820	94764	103772	114239	126020
Jammu & Kashmir	38138.11	42578.56	48564.97	55531.52	66650.45	78256	87138	95619	98370	117187	126847
Jharkhand	74486.4	93420.98	97698.65	111972.7	141640.4	150918	174724	188567	218525	231294	135560
Karnataka	302513.8	360280.2	413109	449382.1	546756.5	606010	695413	816666	913923	1045182	1156002
Kerala	179051	203915.6	236099.1	270115.1	307109.4	364048	412313	465040	512564	561546	621700
Madhya Pradesh	149506.2	166984.4	204001.9	235315.3	272376.2	315568	380925	439483	479939	542750	647304
Maharashtra	639569	749340	825007.4	936379.3	1148000	1280369	1459628	1649695	1780721	1986721	2257032
Odisha	106639.4	135367.6	155490.5	170626.9	206841.1	230987	261700	296475	314267	330874	377202
Punjab	132207.4	158334.2	180999.9	205399.3	235251.3	266284	297734	332147	355102	390087	428340
Rajasthan	179574.1	204539.1	242468	279083.5	355223.8	434837	493551	551031	615695	683758	759235
Tamil Nadu	349753.1	395136.1	452034.6	540335.1	658782.7	751486	854825	968530	1072678	1176500	1270490
Uttar Pradesh	355232.3	395136.1	469695.2	552831	634047.6	724050	822393	940356	1011790	1137210	1250213
Uttarakhand	43363.79	54042.4	66026.81	83357	98959.48	115328	131613	149074	161439	177163	191886
West Bengal	257803.2	295043.9	336873.5	392967.6	454126.4	520485	591464	676848	718082	797300	879167

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