



# An analytical Study on Coal Industry with Reference to CIL & SCCL

**Dr. B. NAGESWAR RAO**

Associate Professor of Economics, Government Degree College Yellandu  
Bhadradri Kothagudem District, Telangana State  
Email:- nageswarraoeco@gmail.com

**Abstract:** This study examines the state-wise distribution, production performance, and sector wise dispatch patterns of coal in India for the period 2021–22 to 2023–24. In 2023–24, total coal reserves stood at **378207 million tons (MT)**, classified into three categories Exact/Measured 52.86, 40.11 and 7.04 percent respectively. Coal reserves are heavily concentrated, with **Odisha, Jharkhand, and Chhattisgarh** accounting for 69.57 percent, indicating a strong but regionally skewed mineral base. National coal production demonstrated steady growth, rising from **778.21 MT** in 2021–22 to **997.25 MT** in 2023–24 (provisional). **Coal India Limited (CIL)** emerged as the largest producer, contributing over about 77.0 percent of total output, while **Singareni Collieries Company Limited (SCCL)** maintained stable production around 70 MT annually. **Captive and other private producers** recorded the highest growth rates, reflecting increasing private sector participation despite lower target achievements. Coal dispatch volumes followed a similar growth trajectory, reaching **972.65 MT** in 2023–24. Public power units remain the dominant consumers of coal accounting for over 82.0 percent of CIL's dispatches, though private power utilities recorded a significant 30.0 percent of growth in coal consumption. Non-power sectors such as cement, steel, and miscellaneous industries represent smaller but stable market segments. The findings highlight India's strong production capabilities, supported by robust state-owned enterprises and expanding private involvement. However, the high reserve concentration and significant share of Inferred resources (26,621 MT) underscore the need for targeted exploration, infrastructure expansion, and diversified coal utilization to ensure long-term energy security and balanced regional development.

**Key Words:** Coal reserves, Coal production, Coal dispatch, State-wise distribution, Public power utilities, Private power sector, Singareni Collieries Company Limited (SCCL), Coal India Limited (CIL), Inferred resources and Energy security

## 1. INTRODUCTION:

The coal sector is playing a pivotal role in Indian economy; it has been serving in multidimensional ways towards the overall growth of national GDP since independence. It is core energy source not only for industrial sector but also primary and tertiary sectors serving as a major source of energy and at the same time a significant contributor to government revenue in terms of taxes and duties of import and export of coal and its related things. On the other hand the coal industry has been providing the major employment source not only for the skilled and unskilled mass workers in India. Despite the alternative energy sources have been growing, but coal and its related energy sources have been producing the major power to the rural and urban needs and as well as all the sectors of the economy. In addition to these of irrespective of the rural and urban energy needs, coal remains crucial for power generator, especially in meeting the country's growing energy demands. Here the following lines shall be focus on the some of the importance aspects of coal sector and its contribution towards the development of the overall Indian economy. As of October 31, 2024, India is the world's third-largest power generator and consumer, with an installed capacity of 454.45 gigawatts (GW). Coal plays a central role in the country's energy mix, contributing over 55.0 percent of total commercial energy and accounting for 70.0 percent of power generation. The coal sector is also a major employment provider, supporting around 13 million jobs across mining, transportation, power generation, and steel manufacturing. While India has sufficient thermal coal reserves to meet its power generation needs, it faces a shortage of steel-grade coking coal, which is essential for the steel industry. By February 2024, the country's total thermal capacity was 240 GW, of which coal accounted for 210 GW (87.5 percent), underscoring its importance to energy security and reliable power supply. Coal production in



India has shown steady growth, rising from 609 MT in FY2015 to 997 MT in FY2024, registering a compound annual growth rate (CAGR) of 5.6 percent. In FY2024 alone, production grew by 11.7 percent and consumption by 10.7 percent, driven mainly by the power and steel sectors. Looking ahead, production is projected to grow at a faster pace, with an estimated CAGR of 7.0 percent from FY2025 to FY2030, further strengthening its role in India's economic framework.

Around 69.0 of India's power generation is coal based, it is estimated that by 3031 -32 the usage of coal for primary commercial energy is 40.0 percent. It is the most abundantly domestically available fossil fuel, while about 80.0 percent of oil has to be imported for other energy source. Total 293.50 billion tons of coal has been estimated by the geological department of India. It is around 8.0 percent of the global coal reserve are available in India. Coal will remain the cheapest source of electricity for at least another two decades. As per the CAGR, for Indian coal production has been estimated at 5.0 to 6.0 percent in medium term. Coming to Demand supply gap is 200 MT, India imported 168 MT of coal (2012-13) to overcome the Demand supply gap for coking coal is 34 MT, India is the 2nd largest producer of cement in the world, coal shortage affects cement industry, Cost of imported coal is twice as compared to domestic coal, Coal import is 3rd largest consumer of foreign exchange \$ 22 billion in 2012-13, 20.0 percent increase in 2013-14 year. Formations wise coal, type of coal, The state wise coal reserves, company wise production, state wise and company extended particulars, As per the geological survey of India, the available coal reserves in India is 301564 MMT as on April 1<sup>st</sup> 2014. In India, the major 14 states are having the different types of coal reserves as observed from the above table. The coal reserves are broadly divided into three categories, such as Proved, Indicated and Inferred coal reserves. As on 1<sup>st</sup> April 2014, the all types of coal reserves are 301564 Million Metric Tonnes available in India. The major coal reserves states are Jharkhand, Odessa, Chhattisgarh, West Bengal, Madhya Pradesh, Telangana/Andhra Pradesh and Maharashtra and the rest of the states are at insignificant in all types of coal reserves.

## 2. COAL SCENARIO OF TELANGANA STATE:

The newly separated Telangana state has a unique geological set up that can host a diversity of mineral deposits which have a significant economic value. The state Telangana has an area of 112955 Sq. Km, bounded 15° 46'-19° 47' of Northern latitudes and 77° 16'- 81° 43' of Eastern longitudes. There is significant mineral potential that still lay untapped in Telangana for the growth of mining industry. Now the state has been needed a systematic regulatory and administrative procedures, infrastructure facilities leading to sustainable exploration and mining activity to be formulated. The challenges like lack of sufficient water storage systems, infrastructure facilities in all the sectors of economy have limited. In Telangana state about 45.0 per cent of the forest area, while 20.0 per cent of the country's coal deposits in the country are also found here. The Singareni Collieries Company Limited excavates coal from these mines for industrial needs and thermal power stations. Year wise growth rates of coal reserves, coal production growth rates, reduction of manpower details in coal mines, wage particulars, gender wise distribution of man power in SCCL and region and mine wise manpower distribution particulars have been analyzed with the help of following schedules in Telangana state and as well as Singareni Collieries Company Limited.

At present Coal India Limited (CIL) and Singareni Collieries Company Limited (SCCL) major coal producing companies in India. The CIL established in 1975 as a holding company with the main objective of produce the coal efficiently and effectively current CIL as the world's largest hard coal producer. The company has a massive employment with 239210 as on March 2023. Across the nation the CIL has been operating 83 mining sites with the potential of total 322 mines in the eight states. Of the total mines 138 underground, 171 opencast and another 13 are mixed mines. The Singareni Collieries Company Limited (SCCL) was established in 1920 December it is one of the state owned mining company in Telangana state with the ratio of 51:49 of state and central governments. It has large plength area around the Pranahitha and Godavari vally of Telangana. The company has 8791 MT of coal reserves in the radios of 350 km. The company operational mines 39 of which 17 opencast and 22 underground mines across the 6 districts in Telangana state and the providing the employment around 42000 workforces

## 3. REVIEW OF LITERATURE:

The World Coal Institutes its report 2006 mentioned that Coal meets over 25.0 percent of global energy needs and 40.0 percent of electricity use, driving economic growth. It is the main fuel for power generation worldwide and vital for producing more than 65.0 percent of global steel (World Coal Institute, 2006). According to World Coal Association 2008 report, mentioned that coal is vital for industries like cement, steel, chemicals, and electricity, also yielding by-products like fly ash used in concrete. It powers over 41.0 percent of global electricity and supports over 70.0 percent of steel production, it has central role in industrial processes and global economic infrastructure. Singh (2008) noted that coal mining areas face environmental issues like greenhouse gases and acid rain. With India's vast fossil fuel reserves, the challenge lies in using efficient, eco-friendly equipment to balance mineral development with



environmental restoration, ensuring sustainable resource use and minimal ecological damage. Balat (2010) highlighted the continuous rise in global power demand and the urgent need to adopt renewable sources like tidal, wind, solar, and hydropower, given coal's finite reserves. The Developing countries currently use 55.0 percent of coal, expected to reach 65.0 percent by 2025, with coal meeting 34.0 percent of global power needs by 2050. The study concludes that replacing coal with renewable energy sources for sustainable energy, economic growth, and environmentally friendly development. A study by Chauha (2004) shows that in the coalfield area of Orissa the annual average Total Suspended Particulate (TSP) concentration exceeded the respective standards set in the National Ambient Air Quality Standard (NAAQS) protocol at most residential and industrial areas. Mishra (2007) observed that opencast coal mining causes extensive land damage, community displacement, and agricultural loss, triggering issues like soil erosion, dust, noise, water pollution, and biodiversity decline. Underground mining also leads to land subsidence, where ground levels sink due to coal extraction beneath the surface. The above mentioned studies and reports highlighted the importance of coal and how the coal belts are facing the disadvantageous situations etc. theses not mentioned the coal resources, coal production, dispatch and sector wise demand for the coal produced by the Coal India Limited and Singareni Calorics Company Limited.

#### 4. METHODOLOGY:

The data base for the study mainly used the secondary source of data on the Coal sector of India and Telangana. At national level mainly adopted the Coal India Limited and in Telangana the Singareni Collieries Company Limited are the main limits and the areas of the study. The relevant data has been collected from the Ministry of Coal reports 2024, Coal India Limited websites and SCCL too. The main indicators for the study are source of coal, coal production, coal dispatch and company wise and sector wise consumption of coal from the two adopted companies of CIL and SCCL for the financial years of 2021-22, 2022-23 and 2023-24. The data has been computed requirement of the study simple percentages, average annual growth rates have been traced by the structured data which was gathered by secondary sources as mentioned earlier.

#### 5. OBJECTIVES:

The study has been adopted the following objectives here under.

- To examine the state-wide varieties of coal sources like exact, specified and inferred
- To find out the national level coal production, achievement and annual growth rates
- To analyze the company wise and sector wise coal consumption for the financial years of 2021-22, 2022 – 23 and 2023-24 of CIL and SCCL.

To justify the objectives the study has been adopted the 5 simple average and percentage tables. The main indicators of state wise coal reserves by sources wise, actual coal production, target coal production, achievement and the annual growth rates, company wise and sector wise coal dispatch and its annual growth rates for the subsequent financial years of 2022-23 and 2023-24.

**Table – 1**  
**State-wise Coal Reserves in India (Coal Resources in million tonne)**

Name of the State	Exact (331)	%	Specified (332)	%	Inferred (333)	%	Total Resources	%
Odisha	52046	55.06	37536	39.71	4936	5.22	94519	24.99
Jharkhand	55749	63.47	26994	30.73	5095	5.80	87838	23.22
Chhattisgarh	37236	46.10	42294	52.36	1244	1.54	80774	21.36
West Bengal	17459	51.45	12699	37.42	3775	11.13	33933	8.97
Madhya Pradesh	15279	47.42	12457	38.66	4482	13.91	32219	8.52
Telangana	11257	48.55	8497	36.64	3433	14.81	23186	6.13
Maharashtra	8065	60.47	3425	25.68	1847	13.85	13336	3.53
Bihar	310	5.73	5040	93.38	48	0.89	5398	1.43
Andhra Pradesh	1025	24.56	2369	56.79	778	18.65	4172	1.10
Uttar Pradesh	884	83.26	178	16.74	0	0.00	1062	0.28
Meghalaya	89	15.45	17	2.86	471	81.69	576	0.15
Assam	465	88.53	57	10.90	3	0.58	525	0.14
Nagaland	9	1.83	22	4.56	448	93.60	478	0.13
Sikkim	0	0.00	58	57.54	43	42.46	101	0.03



Arunachal Pradesh	31	34.61	40	44.45	19	20.94	90	0.02
<b>Total</b>	<b>199904</b>	<b>52.86</b>	<b>151682</b>	<b>40.11</b>	<b>26621</b>	<b>7.04</b>	<b>378207</b>	<b>100.00</b>

Source: Ministry of Coal Annual Report 2023-2024

Table – 1 shows the state-wise coal reserves in Indian states in 2023 – 24 calendar years. The coal reserves have been observed in the three stages, First one is coal reserves under depth of 331 meters these are exact/measured, second one is coal reserves under the depth of 332 meters referred as specified/indicated and the third coal reserves as more than 333 meters these are inferred coal reserves as per geological survey of India. These three stages of coal reserves together constitute the total estimated resources of coal. The aggregate coal reserves of the country stand at 378,207 Million Tons, of the total coal reserves the measurable or exact coal reserves accounting for 52.86 percent as the highest followed by Specified reserves for 40.11 percent, and Inferred reserves for 7.04 percent as the lowest. The coal reserves in India has been concentrating in the some of the states like Odisha, Jharkhand, and Chhattisgarh, all together 69.57 percent of India's total coal reserves it is heavily concentrated states of coal reserves. In Odisha state alone 94519 MT, accounting 25.0 percent of national level coal reserves of which about 55.0, 40.0 and 5.0 percent of exact, specified and inferred coal reserves respectively. The state of Jharkhand has the second largest coal reserves state, it has 87838 MT of coal stocks of them exact sources are 63.47 and 30.73 percent of specified reserves and the inferred sources are a marginal. In Chhattisgarh state is the third largest coal reserves with 80774 MT and it is account for 21.36 percent to the total coal reserves in India. Of the 80774 MT, specified sources are accounting for 52.0, exact sources are 46 percent and inferred sources are very nominal.

The states like West Bengal (8.97%), Madhya Pradesh (8.52%), and Telangana (6.13%) form the medium concentration of coal reserves which are contributing about 24.0 percent to the total coal reserves of India as per the data by Coal annual report 2023-24. West Bengal has the fourth largest coal reserve state with total of 33933 MT, constitutes about 9.0 percent, of which, exact, specified and inferred coal stocks are 51.45, 37.42 and 11.13 percent respectively. The total coals reserves of Madhya Pradesh is 32219 MT account for 8.52 percent of which, 47.42, 38.66 and 13.91 percent of exact, specified and inferred sources respectively. These states are mainly Deccan plateau states and these are not only for coal and also for other minerals. The states such as Maharashtra, Bihar, Andhra Pradesh are very meager coal reserves of 13336 MT constitutes as 3.53, 5398 MT account for 1.43 and 4172 MT equal to 1.10 percent respectively and these states are relatively modest shares, it is interesting to note that in Bihar, the majority of reserves are in the Specified category with 93.38 percent as the highest in this category. The remaining states with negligible less than 1.0 percent of coal reserves, like Meghalaya, Assam, Nagaland, Arunachal Pradesh, and Sikkim However, they display interesting geological contrasts. The state of Meghalaya and Nagaland have very high proportions of Inferred reserves 81.69 and 93.60 percent, respectively, implying significant uncertainty and the need for advanced exploration. On the other end the state of Assam's coal is largely Exact 88.53 percent, albeit in small absolute volume. In the coal reserve the dominance of a few states in terms of resource concentration has implications for inequalities in industrialization, infrastructure development and energy security in general. But in the practically the coal mine states are not having much industrialization and even infrastructural development expect West Bengal. Conversely, states with larger *Inferred* shares require intensified geological surveys to upgrade reserves for sustainable long-term supply. Moreover, the spatial disparity necessitates robust transportation networks to ensure coal availability in deficit regions. The overall reserve structure of coal with more than half of the resources in the *Exact* category indicates India's strong potential to sustain domestic coal production. However, the 7.04% share of *Inferred* resources still represents a considerable quantity of 26,621 MT that remains geologically under-assessed. This offers both a challenge and an opportunity for the future of India's coal exploration programs.

Table – 2

Company-wise Actual and Target base Coal Production for the Calendar Years of 2021-22, 2022-23 and 2023-24 in Million Tons (MT)

Company	2021-22	2022-23		Achievement %	Growth %	2023-24 (Provisional)		
	Actual	Annual Target	Actual			Annual Target	Actual	Achievement %
CIL	622.63	700.00	703.20	100.46	12.9	780.00	773.64	99.18
SCCL	65.02	70.00	67.14	95.91	3.3	70.00	70.02	100.02
Captive & Others	90.56	141.00	122.85	87.12	35.6	162.14	153.59	94.72
<b>Total</b>	<b>778.21</b>	<b>911.00</b>	<b>893.19</b>	<b>98.05</b>	<b>14.8</b>	<b>1012.14</b>	<b>997.25</b>	<b>98.53</b>

Source: Ministry of Coal Annual Report 2023-2024





Table –2 presents the production performance of major coal-producing companies in India. The main coal mining companies are **Coal India Limited (CIL)**, **Singareni Collieries Company Limited (SCCL)**, and **Captive & Others** as per the data from the table. The main indicators of actual production, annual target, percent of achievement and annual growth rates of coal for the sequence years of 2021- 2022, 2022 – 23 and 2023 -24 for the study. The data underscores both progress in national coal production and the operational variances across different coal mining companies of the study.

At National perspective, in the current base year (2021-22) the overall actual coal output of India is 778.21 MT, it is lower than following year 2022-23 it is 893.19 MT and the annual growth worked out as 14.8 percent it is very positive trend. In 2022-23 the annual target of coal production is 911.0 MT and the actual output is 893.19 MT achieved by 98.0 percent it is indicating the almost equal to the target but the gap is only 2.0 percent it is due to SCCL and other companies are not reached their target levels due to their whether circumstances. In the provisional year (2023 – 2024) the coal production of India is 997.25 MT as against the target 1012.14 MT as such the achievement less than 100.0 percent but it is very close to the target with 98.53 percent. These facts highlight a healthy and growing trend in India's coal production ability, with both public and private sectors contributing to supply security of coal. The CIL actual output in 622.63 MT in calendar year 2021-22, and the following calendar year annual target is 700.0 MT but actual production is 703.20 MT and achieved more than 100.46 percent and the growth rate compared to previous year is 12.9 percent as the remarkable. In the provisional year 2023-24 the annual target of coal production is 780.0 MT and the actual output is 773.64 MT and the achievement is about 99.0 percent. The current year CIL has slightly short to the target, but at the same time CIL is the largest coal producer in India The second largest coal producer in India is SCCL, in the base year 2021 -23 the actual output of coal is 65.02 MT, in the continuing year the annual target is 70.0 MT, actual production is 67.14 MT and the achievement about 96.0 percent and the annual growth rate is 3.3 percent as lower than the other companies. In the current year the annual target is as the same with 70.0 MT, actual production is almost reached with 70.02 MT and the achievement 100.02 percent it is good sign for the coal and energy sector for India and indicating that enhanced the working efficiency of the company.

The Captive and other coal mining companies have the actual coal production is 90.56 MT in base year of 2021 – 22 and the following year the actual production is 122.85 MT as against to annual target 141.0 MT and the achievement is 87.12 percent as relatively lower, but it is remarkable growth rate with 35.6 percent as more than the rest of tow companies when compared to 2021-22 to 2022-23. On the other hand in the provisional year 2023-24 the actual production is 153.59 MT as against the annual target of 162.14 MT, and the target achievement is about 95.0 percent as relatively lower than the rest of two companies. The fact is that growing private-sector involvement in coal supply but highlights the need for improved capacity utilization due to more demand for the coal at regional and national level. The data from the table inferred that the coal sector in India is in good performance, because of two major coal-mining companies are achieving their targets and with better annual growth rates in the three sub-sequent calendar years. The coal sector of India reflecting the better working conditions as such the coal production is in sustainable conditions but on the other hand the private competitive companies have to need to improve their production capacity.

Table–3 shows the **sale performance** of major coal producers in India — **Coal India Limited (CIL)**, **Singareni Collieries Company Limited (SCCL)**, and **Captive & Others** over three consecutive years, providing data on actual dispatch volumes, annual targets, achievement percentages, and year-on-year growth rates. Coal dispatch mean sales/consumption/demand by the outsiders. The company and year-wise performance of coal sales for the sequent years of 2021-22, 2022-23 and 2023-24 for main indicators as mentioned in the earlier table – 2. In the base year 2021-22 the actual sales is 819.21 MT, but in the following calendar year 2022-23 the actual sale is 877.36 MT and the overall annual growth rate is 7.1 percent as. In 2022-23 calendar year national level target sales of coal is 911.0 MT and the actual achieved by 877.36 MT and the achievement growth in sales worked out as 96.31 percent. In the provisional year 2023-24 the actual sold out of coal is 972.65 MT as against the target of 1012.14 MT and the achievement is 96.09 percent it is performing well in the despatch of coal in India as per evident data from the table.

**Table – 3**

**Company-wise Actual and Target base Raw Coal Dispatch for the Calendar Years of 2021-22, 2022-23 and 2023-24 in Million Tons (MT)**

Company	2021-22	2022-23		Achievement %	Growth %	2023-24 (Provisional)		
	Actual	Annual Target	Actual			Annual Target	Actual	Achievement %
CIL	661.74	700.00	694.54	99.22	5.0	780.00	753.50	96.60



SCCL	65.53	70.00	66.69	95.28	1.8	70.00	69.88	99.83
Captive & Others	91.94	141.00	116.13	82.36	26.3	162.14	149.27	92.06
<b>Total</b>	<b>819.21</b>	<b>911.00</b>	<b>877.36</b>	<b>96.31</b>	<b>7.1</b>	<b>1012.14</b>	<b>972.65</b>	<b>96.09</b>

Source: Ministry of Coal Annual Report 2023-2024

The CIL maintains its leadership role in national coal dispatch, accounting for the majority of the country's total dispatch volumes. In 2021 – 22 the dispatched coal is 661.74 MT as the highest as the SCCL and Other captive companies these are 65.53 and 91.94 MT respectively. in the subsequent year 2022-23 the actual dispatch of coal is 694.54, 66.69 and 116.13 MT of CIL, SCCL and Other companies respectively. Coming to the annual growth rates it is 5.0, 1.8 and 26.3 percent by the respective CIL, SCCL and other companies. In 2022-23 the annual target for the coal dispatch is 700.0 MT for CIL, 141.0 MT for Other companies and 70.0 MT for SCCL, but actual dispatched coal is 694.54, 116.13 and 66.69 MT of CIL, Other companies and SCCL respectively and the achievement of the targets 99.22, 95.28 and 82.36 percent of CIL, SCCL and other companies respectively. In the provisional year 2023-24 the actual dispatched coal performance of CIL is 753.50 MT as against annual target of 780.0 MT and the achievement rate is 96.60 percent. In the case of SCCL actual coal dispatched in 2023-24 is 69.88 MT as against the annual target of 70.0 MT and the achievement is almost 100.0 percent, in the private companies actual coal dispatch is 149.27 and the annual target is 162.14 MT and the achieved growth rate is 92.06 percent. Based on the analysis CIL is the largest company in not only production but also coal dispatch in all the subsequent years, the SCCL has the remarkable progress in the sale of coal it is almost 100.0 percent in the provisional year. The other companies have over expectations of their coal sales because they don't get the target achievement and at the same time lower percent than the rest CIL and SCCL

**Table – 4**

**Sector-wise Actual Raw Coal Dispatch & Growth Rate for the Calendar Years of 2022-23 and 2023-24 of CIL (Million Tons (MT))**

Sector	FY 2023 – 2024 Actual	FY 2022 – 2023 Actual	Growth Percent
Steel	3.27 (0.43)	3.28 (0.47)	0.0
Power ( Utility )	619.14 (82.16)	586.58 (84.43)	5.6
Power( Captive)	51.88 (6.88)	39.80 (5.72)	30.0
Cement	4.21 (0.55)	3.49 (0.50)	21.0
Others	75.00 (9.95)	61.54 (8.85)	22.0
<b>CIL</b>	<b>753.50 (100.0)</b>	<b>694.69 (100.0)</b>	<b>8.0</b>

Source: Ministry of Coal Annual Report 2023-2024

Table-4 outlines the distribution of raw coal dispatch across key consuming sectors of **steel**, **power (utility)**, **power (captive)**, **cement**, and **others** and along with the overall dispatch from **Coal India Limited (CIL)**. The data demonstrate both the financial years of 2022-23 and 2023-24, actual dispatch and its growth rates. In fact the total dispatched coal of CIL in 2022-23 FY is 694.69 MT, it was raised by 753.50 MT in 2023-24 FY and the annual growth rate of dispatched coal is 8.0 percent. The government power sector consume the major share of coal it is 82.16 (619.14 MT) percent in 2023-24 FY and it is 84.43 (586.58 MT) percent in 2022-23 FY the percent share is reduced around 2.0 percent but the dispatched of coal increased by 5.6 percent. In the private power sector is the second largest consumer of coal by the CIL, of the total coal 753.50 MT the private sector coal consumption for the power generation is 6.88 (51.88 MT) percent in 2023-24 FY and it is 5.72 (39.80 MT) out of 694.69 MT in 2022-23 FY and the annual growth rate is 30.0 percent. Cement alone 4.21 MT and it is account for 0.55 percent in 2023-24 FY and it is 0.50 (3.49 MT) percent to the total 694.69 MT in 2022-23 FY and the annual growth rate is 21.0 percent in cement sector. The share of



coal consumption by steel manufacturing units 0.47 (3.28 MT) percent out of 694.69 MT of coal dispatched in 2022-23 FY, it is 0.43 (3.327 MT) percent out of 753.50 MT in 2023-24 FY but the annual growth rate is stable. In the aspect of other utilities of coal consumption is 8.85 (61.57 MT) percent to 694.69 MT in 2022-23 FY and it is 9.95 (75.0 MT) percent to 753.50 MT in 2023-24 FY and the annual growth rate is 22.0 percent. The coal consumption of CIL for the two subsequent years of 2022-23 and 2023-24, the major demand by public power generation companies it is more than 84.0 and 82.0 percent in the subsequent years and it growth rate reported as 5.6 percent which means the public sector demand is a lion share. The private limited power generation companies are consumed the coal from CIL it is 5.72 and 6.88 percent and the annual growth rate is 30.0 percent steel and cement companies demand of coal from CIL is very nominal shares and the demand by the other purpose is considerable share is 9.50 percent and 8.85 percent in the subsequent years. However, the coal demand from the CIL is in the positive direction from the above mentioned sectors.

**Table – 5**  
**Sector-wise Actual Raw Coal Dispatch & Growth Rate for the Calendar Years of 2022-23 and 2023-24 of SCCL**  
**(Million Tons MT)**

Sector	FY 2023 – 2024 Actual	FY 2022 – 2023 Actual	Growth Percent
Power (Utility)	60.79 (86.99)	54.65 (81.94)	11.2% +
Power (CPP)	2.56 (3.66)	3.59 (5.38)	28.7% -
Cement	2.91 (4.16)	3.49 (5.23)	16.6% -
Sponge Iron/CDI	0.36 (0.51)	0.48 (0.71)	25.7% -
Others	3.26 (4.66)	4.48 (6.71)	27.3% -
<b>Total dispatched Coal of SCCL</b>	<b>69.88</b> <b>(100.0)</b>	<b>66.69</b> <b>(100.0)</b>	<b>4.8%</b>

Source: Ministry of Coal Annual Report 2023-2024

Table-5 presents the sector-wise distribution of **Singareni Collieries Company Limited (SCCL)** raw coal dispatch volumes over two consecutive financial years, highlighting year-on-year changes and percentage growth rates. The dispatched coal of SCCL is 69.88 MT in 2023-24 FY as against 66.69 MT in 2022-23 FY and the annual growth rate of dispatched coal 4.8 percent. The coal demanding sectors are government power generation companies, private power generation companies, cement, sponge iron company and other private limited companies from SCCL company. In 2023 - 24 the total dispatched coal of SCCL is 69.88 MT of which about 87.0 (60.79 MT), 4.66 (3.26 MT), 4.16 (2.91 MT), 3.66 (2.56 MT) and 0.51 (0.36 MT) percent of coal demanded by the public power generating companies, other private companies, cement companies, private power generation companies and sponge iron company respectively. In the previous FY 2022-23 the total dispatched coal from SCCL is 66.69 MT of which Public power generating companies, other companies, private power generation companies, cement companies and sponge iron company are about 82.0 (54.65 MT), 6.71 (4.48 MT), 5.38 (3.59 MT), 5.23 (3.49 MT) and 0.71 (0.48 MT) percent respectively. The annual growth rate in the dispatched coal of SCCL is 4.8 percent to 2022-23 to 2023-24 FY in this aspect the highest growth rate is noted in public power generating companies with 11.2 percent as positive and the remaining companies coal demand has been observed as negative with 28.7, 27.3, 25.7 and 16.6 percent of private power generating companies, other private companies, sponge iron company and cement companies respectively. The data shows a mixed performance, with notable expansion in the utility power segment and declines in most non-power industrial segments. The data observed that only the public power generation companies utilized the coal as major share form SCCL and the rest of the companies private limited, cement and private power companies are a little bit share and the sponge iron factory is not considerable in the demand aspect of coal from the SCCL. Other than public power generation units, the rest of all companies coal dispatched rate is reverse progress.



#### **4. SUMMARY AND CONCLUSION:**

The forgoing analysis for the study has been justified all the three objectives, in the introduction part for the study analyzed the importance of coal sector in aspect of production of coal how it is useful for the industrial development, national level and state level role of coal sector also explained on the other hand the profiles of CIL and SCCL discussed in the brief manner. In the review of literature, coal sector and energy sector both are how led the industrial sector at global and national levels, on the other hand the coal belts are facing environmental impact were analyzed in a brief manner but the overall performance of coal sector in the recent financial years not mentioned. The first objective is to examine the state wise verities of coal reserves for the three FY, at national level about 378207 MT of coal reserves identified by the geological survey of India in 2023-24 FY of which more than 52.0 percent as measured sources and 40.0 percent are specified coal reserves. The major coal stock states are Odisha, Jharkhand and Chhattisgarh all together about 70.0 percent of coal reserves and the states of WB, MP and TGS contributing around 24.0 percent of coal reserves have observed by the study. The second objective it to find out the coal production achievement and annual growth rates, in this aspect, for the three subsequent financial years the study has been observed positive trends have been observed in the three financial years but small differences also there but not considerable level. Among the coal producing companies CIL is predominant and the SCCL is significant in the production of coal. In the coal production achievement CIL is about 100.0 percent whereas SCCL is 96.0 percent and the annual growth rates is 12.0 and 3.3 percent as positive in both the companies. The Third objective is that company and sector wise coal consumption/demand, the study observed that production and demand of coal for the two companies is almost equal, the major demand holders public limited power generation companies more than 82 percent of coal utilized by these power units under government sector in both companies of the study. Coming to the growth rates only the government sector power generating companies coal demand growth rates are positive and the remain coal demanded companies were reported as negative growth it is particularly in SCCL

India's coal sector demonstrates resilience, consistent growth in both production and dispatch, and strong performance from state-owned enterprises like CIL and SCCL. However, the heavy reliance on public power utilities and the uneven geographical distribution of reserves require policy interventions. Future priorities should focus on expanding exploration, improving transportation infrastructure to coal-deficit regions, diversifying industrial coal consumption, and ensuring that inferred resources are converted into measurable reserves. Such measures will strengthen India's energy security and support balanced regional development.

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