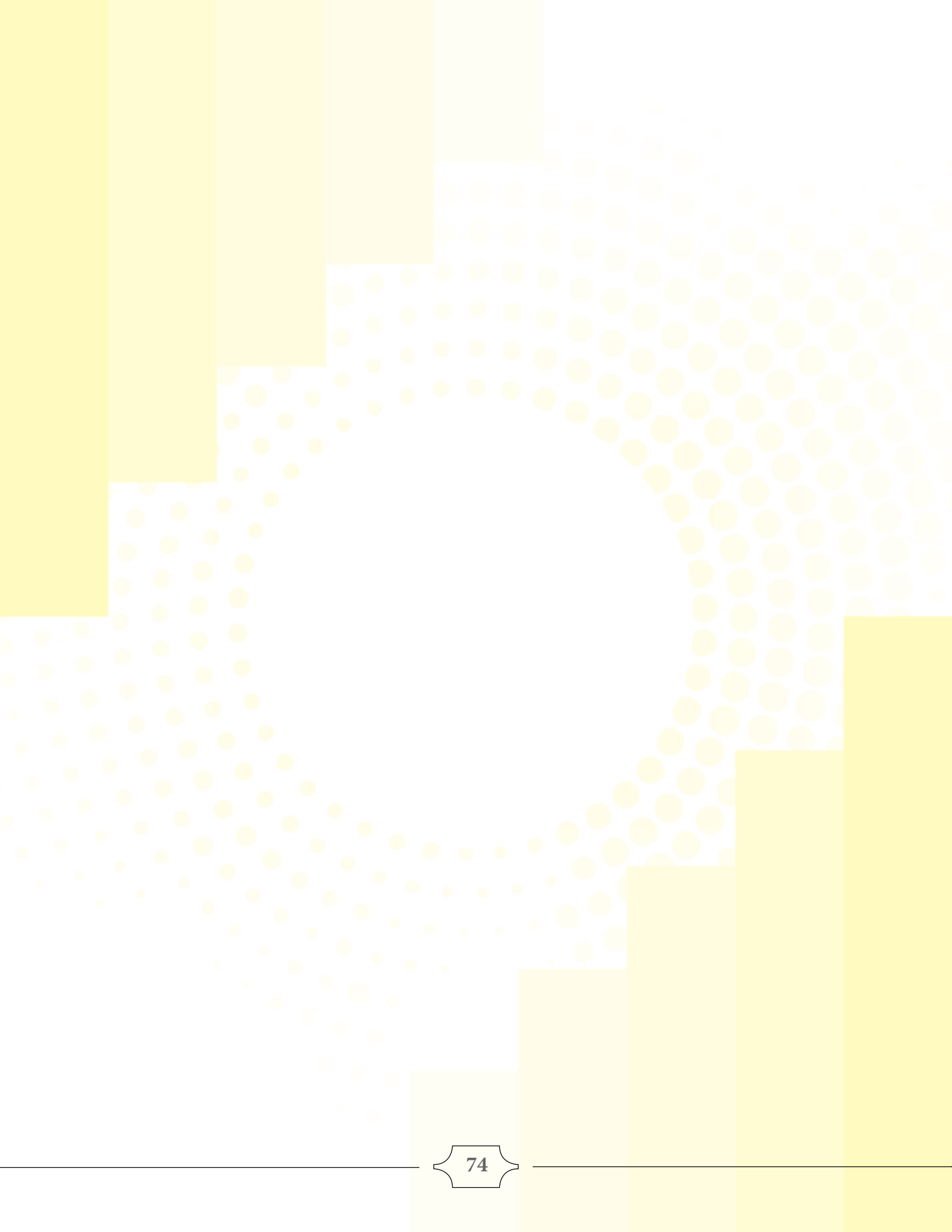


Chapter - 5

**Industry, MSME &
Infrastructure**



Chapter 5

Industry, MSME & Infrastructure

The section sequentially deals with the status and initiatives of large Industries, MSME and traditional industries. It then discusses the infrastructure aspects of energy and water resources in the state.

Macro perspective

The state is working diligently on ‘Atmanirbhar Madhya Pradesh Roadmap 2023’ released in 2020-21 for leveraging state’s potential into boosting socio economic growth. Manufacturing sector and Tourism play important role. Under Atmanirbhar Madhya Pradesh Roadmap, Government of Madhya Pradesh is focusing on scaling up industries; improving market linkages, developing infrastructure and streamlining the financial institutions for better access to credit, especially for the MSME sector; promoting sustainable and responsible tourism. Aim is to promote sustainable industrializations, to create decent employment opportunities and to encourage innovations through the “Vocal for Local” strategy.

The state has prioritised its policy reforms for creating employment opportunities, encouraging use of alternative sustainable solutions, attracting investment, promoting public private participation and deepening of business opportunities in rural areas.

To boost innovation-driven entrepreneurial culture and to inculcate the spirit of innovation, Government of Madhya Pradesh has launched ‘Madhya Pradesh Startup Policy 2022’. ‘Madhya Pradesh Mukhyamantri Udyam Kranti Yojana 2022’ was started for expanding MSME units and for increasing self-employment opportunities in the state. The State has come out with ‘Renewable Energy Policy 2022’ to harness the solar potential of the state for market initiative and alignment of Business ecosystem. ‘Scheme for Promotion of Ethanol and Bio-fuel Production 2021’ has been launched to encourage establishment of Ethanol Blending plants in Madhya Pradesh. For attracting investments, providing incentives and offering financial assistance to MSMEs, Government of Madhya Pradesh has devised ‘MSME Development Policy 2021’, ‘Industrial Promotion Policy 2021’. MSME Cluster Development Scheme guides Cluster development for MSMEs in the state. The State has rolled out ‘One District, One Product (ODOP)’ in all the districts of Madhya Pradesh with aims to help districts foster economic and socio-cultural growth, and create employment opportunities, especially in rural areas through focus to encourage agro-processing and market development.

Leveraging state’s geographic advantage, the State government has focused on multisectoral development by creating supportive infrastructure, conducive policy framework and operational reforms. Industry, MSME and Tourism sectors are discussed in subsequent section.

5.1 Industry

5.1.1 Policy initiatives

The state has devised future looking policies to steer the economy towards growth oriented sectors.

Industrial promotion and attracting investment

Scheme for Promotion of Ethanol and Bio-fuel Production 2021 has been launched to provide subsidy, concessions and incentives for setting up Ethanol Blending plants in Madhya Pradesh. Government of Madhya Pradesh intends to contribute in national target of 10% blending of fuel grade ethanol with petrol by 2022 and 20% by 2025. This scheme aims to deliver multiple outcomes such as attracting investments, addressing environmental concerns, conserving water, reducing import dependency and providing boost to agriculture sector.

Industry Promotion Policy 2021 is effective for sustaining the investment climate. In the year 2021-22, an amount of Rs. 445.79 crore was sanctioned and disbursed under the facilitation and assistance provided in this Policy. Under this policy, periodic relaxations and incentives are provided for the expansion to mega level industrial units of food processing apparel manufacturing, biotechnology, herbal minor produce and IT sector (Administrative Report of DIPIP, 2021-22).

Creating Business friendly environment

Madhya Pradesh has successfully implemented business reforms related to Environmental Registration, Labour Registration, Obtaining Utility Permissions, Inspections Reforms, Access to Information & Transparency Enablers and Single Window System. Assessment of states for Business Reform Action Plan 2020 was released in June 2022 in which Madhya Pradesh was graded as 'Achievers'. (Assessment of states for Business Reform Action Plan , 2020)

Various online systems have been setup to assist investors in a transparent, time-bound and hassle-free manner. State Industrial Land Bank Portal, a GIS system for displaying the availability of land and infrastructure with details about all State-owned industrial estates along with the prevailing land rates, connectivity and utility infrastructure; Integrated New Venture Establishment INVEST for implementation, completion and monitoring of proposal of the industrial project, including approval and distribution of all facilities to the entity; Madhya Pradesh Single Window System, a one-stop portal for investors to digitally access all state related business approvals and apply for them as per their business requirements.

5.1. 2 Snapshot of Industries

Gross Value Added

The Gross Value Added (GVA) by various economic activities of the secondary sector in the state economy is presented in Table 5.1.

Table 5.1 : Gross value added by Economic Activity OF Secondary Sector at Current (2011-12) Prices

(Amount in Rs. crore)

Economic Activity	2011-12	2015-16	2021-22 (Q)	2022-23 (A)
Manufacturing	38,286	51,912	89,986	1,00,019
Electricity, gas, water supply & other utility services	9,031	21,527	36,304	40,703
Construction	34,954	43,725	79,259	93,594
Secondary Sector	82,272	1,17,164	2,05,549	2,34,316

Source: (Directorate of Statistics and Economics, Government of Madhya Pradesh, 2023)

The above table indicates the increasing contributions of all activities in the secondary sector. In the year 2022-23, the Manufacturing sector has the highest contribution (42.69 percent) in the secondary sector, followed by the Construction sector (39.94 percent) and Electricity, gas, water supply & other utility services sector (17.37 percent). In the past decade, the Electricity, gas, water supply & other utility services sector has witnessed an average annual growth of 15.63 percent, while the construction sector has grown by 10.70 percent and the manufacturing sector has grown by 10.06 percent (Directorate of Statistics and Economics, Government of Madhya Pradesh, 2022).

Number of factories and Fixed Capital

The growing number of factories represents the symbol of economic growth and productivity. Figure 5.1 presents the number of factories and invested fixed capital over a period of one and half decade in Madhya Pradesh. The trend of number of factories is continuously increasing and 16.34 percent growth has been observed in the period of six years (2004-05 to 2009-10). However, 13.27 percent decadal growth of the factory's growth has been observed.

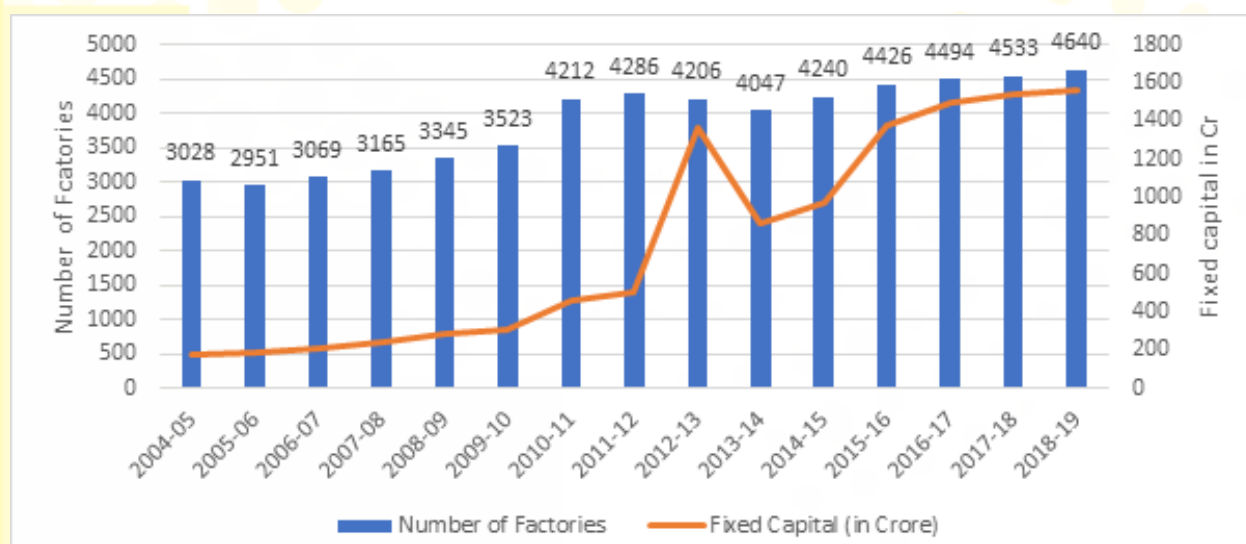


Figure 5.1 : Number of factories and Fixed Capital

Source: (Annual Survey of Industries, 2020)

The fixed capital investment is also showing increasing trend from 2004-05 to 2012-13. After 2013-14 the fixed capital growth is continuously increasing. The fixed capital value post 2014-15 show a remarkable increasing trend. This indicate towards more capital-intensive industry investing in the state. This trend indicates positive efforts of the state to attract large investments required for expanding the economy.

Gross Output and Net Value Added in Factories

Gross output presents the values of all products manufactured by a firm. Figure No 5.2 present the trend of NVA and gross output of factories over a period 15 years.

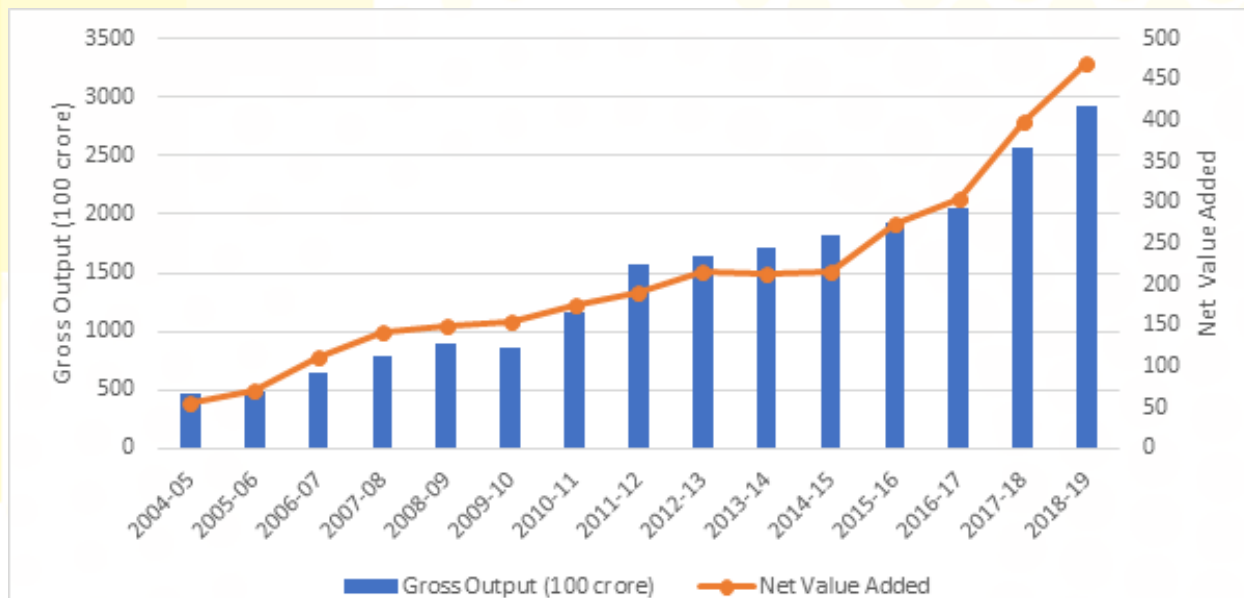


Figure 5.2 : Gross Output and Net Value Added in Factories

Source: (Annual Survey of Industries, 2020)

The rapid increase of Net Value Added positively indicates faster industrialization of the economy. It signifies that the industries are able to capture a growing share of the economic value-added paradigm. In the global manufacturing processes, industries capturing higher value additions are usually considered for rapid future growth and higher profitability.

5.1.3 Infrastructure support for Industries

To ensure regional balance, Government of Madhya Pradesh is developing Bhopal, Gwalior, Indore, Jabalpur and Rewa as growth centres in the State. The State has notified 231 industrial areas (194 by MSME Department and 37 by DIPIP), six food parks, eight integrated development centres, three dry parks, one stone park, one Greenfield SEZ in Pithampur, four IT SEZs (one government Crystal IT Park in Indore and three privately operated SEZs-Infosys, TCS, and Impetus), and an apparel park in Indore (DIPIP Website). One multiple-purpose SEZ is proposed in Chhindwara. Indore is also going to have a gems and jewellery park to enhance the state’s diamond sector (Invest MP website). As per Report on ‘Madhya Pradesh Industrial Park Profiles & Land Bank’ by MPIDC of January 2023, the state’s industrial land bank provides for 73015 hectares for the Industrial Parks out of which 19011 hectares is developed land. There are 76 developed, 19 developing and 13 proposed land banks

parcels in across five growth centres Madhya Pradesh; maximum are located in Indore region. The state also has six major dry Inland Container Depots (ICDs) and it has created a total capacity of 240 lakh metric ton of warehousing. The state has surplus of power with installed capacity of 28,000 MW in the state. It has 900 MCM water of Narmada water reserved for industrial purpose.

Further, new Industrial parks are being planned to be developed by making Bhopal-Indore and Atal Progress-way a model of integrated economic development. Assessment of industrial development and investment potential of the proposed Atal Progress-way is in progress. In-principle approval has been given for the establishment of Medical Device Park in Madhya Pradesh at Vikram Udyogpuri Ujjain on 360 acres of land at a cost of Rs. 222.77 crore. 07 existing industrial areas namely Dewas-2 and 3, Pithampur Sector-1 and 2 and SEZ (Second Phase), Banmour District Morena, Pratapura District Niwadi, Khairitaigaon-Borgaon District Chhindwara, Lamtara District Katni and Food Park Babai District Hoshangabad have been upgraded at a cost of Rs. 95.08 crore. Apart from these, 09 existing industrial areas namely Jaggakhedi District Mandsaur, SEZ Phase-II Indore, Nimrani District Khargone, Electronic Complex Indore, Readymade Garment Complex Indore, Maksi District Shajapur, Siddhgawan District Sagar, Naugaon Bina District Sagar, IGC Maneri District Mandla are in process of upgradation (Administrative Report of DIPIP, 2021-22).

Further, the state is developing industrial corridor on the sides of Chambal Progress Way and Narmada Expressway. The state is part of the Delhi Mumbai Industrial Corridor (DMIC), which has established industrial and investment zones, including as Pithampur-Dhar-Mhow, Ratlam-Nagda, Shajapur-Dewas, and Neemach-Nayagaon. To encourage industrial growth and job possibilities, the state is constructing four investment corridors (Bhopal-Indore, Bhopal-Bina, Jabalpur-Katni-Satna-Singrauli and Morena-Gwalior-Shivpuri-Guna).

There are four major operational airports in the state in Bhopal, Indore, Gwalior, and Jabalpur. The Raja Bhoj Airport in Bhopal and Devi Ahilyabai Holkar Airport at Indore are the busiest airports in Madhya Pradesh. Air Cargo Terminal at Bhopal Airport has commenced its operations in January 2023. Bhopal, Indore, Jabalpur, Gwalior, Itarsi, Ratlam, Bina, Katni, etc, are the main railway stations. The state has around 20 major railway junctions.

5.2 MSME

5.2.1 Policy initiatives

Madhya Pradesh Mukhyamantri Udyam Kranti Yojana 2022: The scheme targets to provide collateral-free credit for self-employment. The interest subvention under the scheme is aimed to reduce the interest cost for the beneficiaries and increase the project viability. This mechanism aims to expand MSME units for increasing the self-employment opportunities in the state.

Madhya Pradesh Startup Policy and Implementation Scheme 2022: Government of Madhya Pradesh has launched 'Madhya Pradesh Startup Policy 2022' to establish Madhya Pradesh as a preferred destination for startups and incubators by enabling the ecosystem to support the entrepreneurial culture in the state. The State Government's approach is to institutionalise the culture of start-up through academic interventions at school and college level and to create an enabling ecosystem by connecting start-ups, investors, incubators and other stakeholders. Following interventions are made under the scheme for strengthening state's Startup ecosystem:

Access to Market: The Government of Madhya Pradesh passed a resolution in April 2018 to relax the criteria such as “Prior Turnover”, “Prior experience” and “Submission of EMD” to encourage startups to participate in the public procurement process.

Funding Support: As per Madhya Pradesh Startup Policy and Implementation Plan 2022, Madhya Pradesh Venture Finance Limited and Madhya Pradesh Venture Finance Trustee Limited have been merged with Madhya Pradesh Laghu Udyog Nigam so that a special venture capital fund can be created for funding support to startups. The initial target size of the fund is Rs. 100 crore. The State conducted startup investor connect programs viz. B-Next Foundation organised B-Next Smart City Hackathon 2.0 and Innonext Challenge 2020 to provide a platform for the startups to connect with private funds and investors. Madhya Pradesh Startup Policy and Implementation Plan 2022 has provisioned State Innovation Challenge with a special incentive of Rs. 1 crore, a separate startup centre in Bhopal and assistance for finance, project management, marketing and legal issues.

Fostering Innovation and Entrepreneurship: As on February 2023, there are 2597 startups registered in the State’s Startup Portal. This portal has been instrumental in easing the procedure of registration with comprehensive details available for startups. The State has conducted several programmes with HEIs to support budding student entrepreneurs. The programs included various webinars on topics like Industry Academia Innovation. The State has established an Entrepreneurship Development Cell (EDC) in various HEIs across the State for providing entrepreneurial support to emerging investable startups.

In State’s Startup Ranking issued by Department of Promotions of Industry and Internal Trade (DPIIT) of Government of India, Madhya Pradesh has improved its position from ‘Emerging Startup Ecosystem’ in 2019 to ‘Aspiring Leader’ in 2021 (National Report on States’ Startup Ranking, 2019, 2021). As on February 2023, there are 2787 DPIIT registered Startups from the Madhya Pradesh, out of which 1243 are Women-Led Startups. Some prominent startups from Madhya Pradesh are RTIwala, Swaaha, Appointy, WittyFeed and ShopKirana.

MSME Development Policy 2021: MSME Development Policy 2021 has been released by the state government to create employment, inclusive growth, create an active policy and regulatory environment, create opportunities for self-employment and achieve the scope of overall industrial development of the state through these. (Department of MSME, Government of Madhya Pradesh, 2023).

One District One Product: Under the “One District One Product scheme”, selected products from each district of the state are branded and promoted. Additionally, exposure visits to relevant units outside the state are being facilitated to manufacturers and entrepreneurs of selected products from districts. Purpose of the visit is to provide them with training from experts for quality improvement of the products. This has resulted rise in exports of selected products and in associated employment opportunities. For promotions, Miniachers of the selected products are displayed at railway stations, hotels of MP Tourism, and other important places of the state. There are a total of 38 unique products from 52 districts in Madhya Pradesh. In future, ODOP scheme is likely to convergence with schemes like ‘District as Export Hub’, ‘PM-FME’. (Department of MSME, Government of Madhya Pradesh, 2023).

5.2.2 Financial allocation

The Government of Madhya Pradesh intends to further strengthen the MSME ready

infrastructure through substantial budget allocation and investments. The total budget estimation for MSME department in the FY 2022-23 is Rs. 656.08 crore. Amount of Rs. 100 crore has been allocated to Mukhyamantri Udyam Kranti Yojana (MMUKY) which Government's key initiative for self-employment. Budgetary allocation in the major scheme is mentioned in Table 5.2.

Table 5.2 : Details on Scheme Allocation of MSME Department

(Amount in Rs. crore)

Particular	Actual 2020-2021	Actual 2021-22	Budget Estimates 2022-23
MSME Business Investment Promotion	110.65	393.13	289.00
Infrastructure Development of MSME	87.20	88.01	90.00
Cluster Development	25.00	36.40	40.00
Mukhyamantri Udyam Kranti Yojana (MMUKY)*	-	0.88	100.00
Others	258.42	272.54	137.08
Total	481.27	790.97	656.08

*Source: (Department of MSME, Government of Madhya Pradesh, 2023) *MMUKY scheme has been started in January 2022.*

5.2.3 Snapshot of MSME

MSME Units and Employment Generation

The system of filing Udyog Aadhaar Memorandum was replaced with the system of enterprise registration on July 01, 2020. The registration of enterprises by the MSMEs of the state on the Udyam portal of the Government of India is mentioned in Table 5.3.

Table 5.3 : Details of MSME registration in Udyam Portal

Year	Number of Units
2020-21 (July 01, 2020 to March 31, 2021)	1,55,450
2021-22	2,46,513
2022-23 (January 31, 2023)	2,75,879

Source: (Udyam Portal of Government of India, 2023)

In 2020-21 (for period between July 01, 2020 to March 31, 2021), 1.5 lakh units were registered with potential employment of 13 lakh. As on January 31, 2023, total 2.7 lakh MSME units have been registered on the portal. These units have potential to generate 14.4 lakh jobs.

5.2.4 Infrastructure support for MSMEs

Financial approval of Rs. 63.13 crore was given in FY 2021-22 (till November 2022) for developing infrastructure in the industrial areas / institutions established in the state. As of February 2023, 194 industrial areas have been notified by the MSME Department for MSMEs. Approval has been given to 22 clusters in the state. These 22 clusters are being developed on 380 hectares of land

in Indore, Neemuch, Rajgarh, Khandwa, Shivpuri, Burhanpur, Bhopal, Sehore, Raisen districts and about 1300 industrial units are expected to be set up and about Rs. 5,400 crore will be invested and will generate about 50,000 jobs. (MSME Department, 2023).

5.3 Traditional Industries

5.3.1 Khadi and Village Industries Development

Pradhan Mantri Employment Generation Program Scheme (PMEGP)

Under the plan, in the year 2020-21, the Khadi and Village Industries Commission has distributed Rs 35.89 crore margin money to 1199 units for setting up units in villages with a population of up to 20 thousand, which has provided employment to 12562 persons. Similarly, in the FY 2021-22, by the month of September 2021, 3366 persons have been supported employment with margin money incentive of Rs. 9.61 crore margin money in 337 units (Khadi and Village Industries Commission, 2022).

Khadi and village industries production

A total of 14 production centers of cotton khadi, poly cloth, silk khadi, woollen khadi and other village industries production are being operated at different places of Madhya Pradesh and total Rs. 9.32 crore was produced in the FY 2020-21. Due to this employment was provided to 548 spinners/ weavers. In the year 2021-22, production worth Rs. 1.68 crore was produced till September 2021 and employment has been provided to 533 spinning weavers. (Khadi and Village Industries Commission, 2022).

Sale of Khadi and Village Industries

In the FY 2020-21, 14 sales emporiums operating in the state sold Khadi and Village Industries items worth Rs. 11.10 crore. In the year 2021-22, till the month of September 2021, products worth Rs. 2.39 crore have been sold. (Khadi and Village Industries Commission, 2022)

5.3.2 Handloom

The handloom industry also provides employment to the weavers of the state while maintaining the heritage of production of traditional and artistic fabrics. In the FY 2022-23, till the month of September, 2022, according to the report of Karvi Sanstha, 16.30 thousand handlooms are functional in the state. Employment was provided to about 33.10 thousand weavers/artisans from the working looms.

In the FY 2021-22, financial assistance of Rs. 1.85 crore was provided under Integrated Cluster Development Programme, Kabir Bunkar Protsahan Yojana, Skill and Technical Development Scheme for Handloom and Handicraft Sector and Marketing Assistance Scheme, a total of 698 beneficiaries were benefitted and 06 Melas were organized.

In the FY 2022-23, under the Integrated Cluster Development Program Scheme, Marketing Assistance Scheme for Handloom and Handicraft Sectors, Skill and Technical Development Assistance Scheme and Kabir Weaver Award Scheme, a total amount of Rs. 1.04 crore was approved till the month of November 2022. A total of 231 beneficiaries were benefitted from the said assistance and two fairs were organized.

Marketing Assistance

37 emporiums are being operated by the corporation to provide marketing assistance to artisans and weavers, out of which 13 are located outside the state. Crafts are sold by emporiums for direct market linkage by organizing exhibitions every year across the country. In the FY 2021-22, crafts and handloom garments worth Rs. 12.73 crore were sold through these emporiums. For direct market linkage, exhibitions/emporiums were organized in the FY 2021-22, in which an amount of Rs. 16.46 crore was sold.

Government supply

In the FY 2020-21 till March 2021, garments worth Rs 10.39 crore were supplied to government departments. In the FY 2021-22 garments worth Rs. 9.78 crore has been supplied, for which 765 looms were involved and 1.42 lakh man days were created.

5.3.3 Sericulture

The main objective of agro-forestry-based sericulture is to provide means of profitable employment to the villagers in the village itself, so that they can earn their livelihood smoothly. Also, providing an alternative means of employment to women is to strengthen their economic self-reliance. The schemes of silk industry are mainly being implemented for scheduled castes, scheduled tribes and economically weaker sections. Presently the activities of silk industry are being conducted in 44 districts.

Till March 2021, 3.21 lakh kg of Mulberry cocoon and 52.48 lakh pieces of Tussar cocoon had been produced, benefiting 4424 beneficiaries. In this period, 9.60 hectares of area was planted by private sector under Mulberry plantation while 20 hectares of area was planted at self-reliance centres.

Till March 2022, 2.72 lakh kg of Mulberry cocoon and 19.85 lakh pieces of Tussar cocoon had been produced, benefiting 3507 beneficiaries. In this period, 65.2 hectares of area was planted by private sector under Mulberry plantation while 91.60 hectares of area was planted at self-reliance centres i.e. Mulberry plantation has been done in total area of 156 hectares. Till September, 2022-23, 0.31 lakh kg mulberry cocoon and 2.46 lakh pieces of tussar cocoon have been produced.

E-silk portal has been prepared by the Silk Directorate to make the selection and registration process of farmers transparent and to make accounting and supervision effective. 1751 farmers were registered in the FY 2020-21 and 1548 new farmers were registered in the FY 2021-22. Rs 2.28 crore has been paid for planting saplings on the land of 268 beneficiaries. (Directorate of Sericulture of Madhya Pradesh, 2022)

5.4 Tourism

Protected forest areas and wildlife, historical buildings, temples and places of religious importance are the main centres of tourism attraction in Madhya Pradesh. The state government attaches utmost importance to this sector in view of the immense possibilities of strengthening livelihoods at the local level through tourism. Due to the policy initiatives of the Department, the number of tourists for religious tourist places has increased by 122% in the year 2022 as compared to the year 2021 and the number of tourists for non-religious tourist places increased by 58% in the year 2022.

5.4.1 Policy initiatives

The state has released various policies for encouraging public private participation for tourism infrastructure development, operations and maintenance.

Attracting private investment

The state has issued various policies to encourage public private partnerships for development, operation and maintenance of tourism infrastructure. Under the tourism policy, an amount of Rs 88.90 crore was paid as public grant during the year for setting up 17 tourism projects by private investors in the state. With the establishment of these units, an investment of Rs 41795.21 crore has been made in the state, which provided employment to 33.36 thousand people. For the development of heritage assets (Singhpur Palace and Rajnagar Fort), Rs. 20 crore capital investment has been made in the state, which will generate direct and indirect employment of 1600 people. Contracts have been executed with private investors for setting up and operating 3 route facility centres of Brownfield model, with a capital investment of Rs. 1.50 crore and generating direct and indirect employment to about 120 persons. The 'Adventure and Camping Policy' has been implemented to provide licenses to private investors for activities related to camping and adventure tourism on additional lands of notified forest areas of the state.

Promoting socio-economic development of the local community

Madhya Pradesh Home Stay Establishment (Registration and Regulation) Scheme 2019:

To promote public participation in the facility of staying in a clean environment including the experience of the state's culture, traditions and food to the tourists and to increase employment opportunities to the local people setting up of home-stay units, bed and breakfast, village stay and farm stay schemes are being implemented. (Administrative Report of Department of Tourism, 2021-22)

Formation of District Tourism Promotion Council: Provision has been made for formation of District Archaeology and Tourism Council for promotion of weekend and local tourism in districts, organization of cultural and tourism festivals and development and operation of tourist places at local level with private investment. At present, District Archaeological and Tourism Councils have been constituted in all the districts of the state.

Rural Tourism: Rural tourism based on cultural experience, operated by local/rural community is being started near major tourist places or places of tourism importance of Madhya Pradesh. Work will be done directly & indirectly in 100 villages under the five-year action plan. Villages in 06 major cultural areas of Madhya Pradesh will be developed into heritage villages. Local cuisine, cultural experience will be made available by local people at local villages/places. Local handicrafts will be promoted and training cum production centres will be constructed in 02 villages, where there will be work of continuous capacity enhancement and production. (Administrative Report of Department of Tourism, 2021-22)

Promote sustainable development

Madhya Pradesh Responsible Tourism Mission 2022: In order to make tourism more responsible and sustainable in Madhya Pradesh, "Madhya Pradesh Responsible Tourism Mission" has been started the state. The main objective of the mission is social development, economic

development and environmental protection of the local community associated with tourism. Madhya Pradesh Tourism Board has signed a contract with Kerala Responsible Tourism Mission, Government of Kerala and International Centre for Responsible Tourism (ICRT) UK for better implementation of projects.

5.4.2 Financial Allocations

The state has immense potential to develop as one of the best tourist destinations and government is also putting best effort by providing financial and non-financial support. Below given Table No 5.4 present the budget expenditure of tourism department which is showing increasing trend for the mentioned financial years except for the FY 2021, which got affected due to COVID-19 pandemic. The Budget estimates for the FY 2022-23 is approximately Rs. 244 crore.

Table 5.4 : Budget Expenditure of Tourism Department

(Amount in Rs. crore)

Year	2004-05 (A)	2009-10 (A)	2014-15 (A)	2019-20 (A)	2020-21 (A)	2021-22 (RE)	2022-23 (BE)
Budget Expenditure	11.2	69.7	123.7	155.4	100.9	191.1	244.6

Source: (Budget of Madhya Pradesh of various years)

Trends of Tourist arrivals

There has been an unprecedented increase in the number of tourists for religious tourist places and non-religious tourist places in the year 2022 as compared to the year 2021. Development of Mahakal Lok at Ujjain has attracted highest footfall growth that is 1796 % in 2022 over 2021. While, Sanchi, Udaygiri, Pachmarhi, Khajuraho, Shivpuri have witnessed footfall increase above 100% in 2022 over 2021. Location wise footfall are mentioned in Table 5.5 and 5.6 below:

Table 5.5 : Footfall in general tourist locations

(Figures in lakh)

Location	Arrival 2021	Arrival (2022)	Growth 2022 over 2021
Sanchi	1.45	3.88	168%
Udaygiri	0.34	0.78	130%
Pachmarhi	1.30	2.74	111%
Khajuraho	2.42	5.06	109%
Shivpuri	6.74	13.66	103%
Indore	26.29	50.51	92%
Bhimbetka	0.84	1.53	82%
Pench	1.23	2.07	69%
Gwalior	2.55	4.02	58%

Bhopal	15.00	23.31	55%
Kanha	1.77	2.53	43%
Bhedaghat	4.94	6.57	33%
Bandhavgarh	1.45	1.92	32%
Panna	4.20	5.28	26%
Dhamnar	0.23	0.28	23%
Madhai	3.40	4.11	21%
Mandu	7.94	8.64	9%
Adamgarh	0.18	0.19	8%
Jabalpur	10.19	10.48	3%
Burhanpur	0.40	0.41	2%
Orchha	1.35	1.33	-2%
Chanderi	0.50	0.44	-12%
Total	94.70	149.73	58%

Source: (Department of Tourism, Government of Madhya Pradesh, 2023)

Table 5.6 : Tourist footfall in religious locations

(Figures in lakh)

Location	Arrival 2021	Arrival 2022	Growth 2022 over 2021
Ujjain	9.6	181.6	1796%
Maihar	57.4	110.1	92%
Omkareshwar	9.0	15.4	72%
Amarkantak	14.2	24.3	71%
Salkanpur	13.9	17.3	25%
Datia	0.3	0.4	24%
Bhojpur	6.2	7.2	15%
Maheshwar	9.7	6.3	-35%
Chitrakoot	59.2	35.7	-40%
Total	179.6	398.4	122%

Source: (Department of Tourism, Government of Madhya Pradesh, 2023)

5.5 Infrastructure

Macro perspective

Economic development parameters are deeply associated to the infrastructure development and its financing. A number of initiatives are been taken to improve connectivity and availability of housing, water, energy. Most significantly among them is the approach of considering the private

sector as partner to the process instead of just being a service provider. The capital expenditure in the form of various infrastructure projects yields a higher return in due course of time. The state government has made tremendous efforts for strengthening state's infrastructure. Such initiatives are discussed in this section.

5.5.1 Policy initiatives

Renewable energy policy 2022: State launched a policy on renewable energy with aim to harness State's renewable energy potential, to attract investment, to increase power export outside the state, develop heritage cities as Green Cities and generate employment opportunities. Key features of the policy are as follows-

- attract investment Rs. 50,000 crore in the Renewable Energy generation sector and Rs. 10,000 crore in Renewable Energy Equipment Manufacturing sector by 2027.
- thirty percent (30%) Renewable Energy in State's energy mix by 2027.
- development of Ten thousand (10,000) MW Renewable Energy Technology based Park under Government of India and Government of Madhya Pradesh Scheme by 2027.
- ten thousand (10,000) MW Renewable Energy Projects for exporting power outside the state by 2027.
- Generate more than 50,000 new jobs by 2030.
- Deploying renewable energy technologies on a net zero carbon basis to develop model renewable energy cities and green zones by the 2030.
- Develop all the heritage cities as 100% green cities by 2030.
- Promote the use of renewable energy in the field of e-mobility in the state. For this, proper coordination will be established between e-vehicles and other resources of transport and renewable energy.

5.5.2 Financial allocation

The budget allocation for various infrastructure sectors is reflected in revenue and capital expenditure categorization in the statement of accounts of the Madhya Pradesh budgets. Table No 5.7 indicates cumulation of both these heads for different sectors over last few years:

Table 5.7 : Budget allocations for different Infrastructure sectors

(Amount in Rs. crore)

Total Expenditure (Revenue expenditure + Capital expenditure)	2018-19	2019-20	2020-21 (RE)	2021-22 (BE)
(A) Water, Sanitation & Housing				
Water and supply and sanitation	3471	3557	4897	8412
Housing	6187	5543	4410	3181
Urban development	6551	5540	5760	6212
(B) Irrigation and flood control				

Major irrigation	6620	7740	7927	7230
Medium irrigation	1604	1664	1725	1964
Minor irrigation	1103	645	572	628
Command area development	111	70	33	37
(C) Energy				
Power (Conventional + Renewable)	12343	14639	12287	16745
(D) Transport				
Roads and bridges	7915	7304	6187	6957
Total (Infrastructure)	45907	46702	43797	51367

Source: (Annual Financial Statement, Finance Department of Madhya Pradesh, 2021-22)

The increasing trends emphasise the focus towards infrastructure development in the state. Water and sanitation has witnessed highest budgetary expansion of over 142 percentage between the period 2018-19 to 2021-22. Energy sector has also witnessed a rise of over 35 percentage during this period.

Madhya Pradesh has maintained a high capital expenditure to GSDP ratio over last few years. It has made an average capital expenditure of 4.8% of GSDP over last 5 years (from 2017-18 to 2021-22). Under infrastructure expenditures, the state has made prominent capital expenditure contribution in sectors of Irrigation (15.08%), water & sanitation (13.68%), roads (9.6%), rural development (8.07%) and education (5.78%).

The consumption led economic growth and unification of market with roll-out of GST regime has offered Madhya Pradesh an opportunity to be the trans-shipment location and logistics hub of the country, particularly for movement of capital commodities like coal, steel, fertilizer and food grain. This stream of infrastructure development is dependent on multiple stakeholders with the state and nationally. The national plan of addressing this inter-agency coordination is planned through the Gati-Shakti digital tools. The state of Madhya Pradesh has taken number of steps to leverage this platform in its infrastructure planning and implementation.

5.5.3 Snapshot of Infrastructure

Energy sector

The state has made considerable progress in energy sector. Most importantly it has turned itself in power surplus category from power deficit few years ago. This change has happened with a constant focus on expanding the installed power generation capacity in the state. The steps taken to improve the supply infrastructure has resulted in a sufficient per capita power availability in the state.

Sources of Energy

The energy production in the state is a balanced mix of production from different sources. The abundance of coal in the state and the prevailing technology paradigm promoted Coal domination in power production; it contributes 63.3 percentage of the total installed power generation capacity in the state. Gas based production is primarily central government initiative

with small contribution of private sector. The thermal energy production is equitably owned by central undertakings, state PSUs and private sector investments. Renewal energy capacity is 34.1 percentage of the total installed capacity. Hydro-based power generation is funded by both the state and central governments, while solar power generation is largely dominated by the private sector. The combined energy capacity of the state has crossed 28 thousand MW.

Renewable energy potential

Madhya Pradesh ranks 8th in terms of overall potential for renewal power supply in the country. Madhya Pradesh is ranked 4th on this count after Rajasthan, J&K and Maharashtra. At 61,660 MW potential, it offers 8.2% of the total solar potential of the country.

Table 5.8 : Source wise ranking of estimated potential of renewal power (in MW)

	Wind power	Small Hydro	Biomass Power	Solar Energy
Total energy potential in India (in MW)	6,95,509	21,134	17,538	7,48,990
Rank of Madhya Pradesh	8	4	2	4
Madhya Pradesh Capacity (in MW)	15404	820	1364	61660

Source: (MOSPI, Government of India)

The state is currently using about 2.3% of the available solar capacity. The new Renewable Energy Policy of 2022 includes ventures to increase utilisation of state's solar potential.

Installed capacity

The total installed capacity of the state stands 8th in the country. The trends in Figure No 5.3 suggest almost doubling of the installed power generation capacity between 2005 and 2013 from 5770 MW to 10631 MW. The capacity further doubled in the FY 2018 from the 2013 base to 21,728 MW. The capacity further expanded by 16 percentage by the FY 2022 from its base in year 2018.

(In Mega Watt hour)

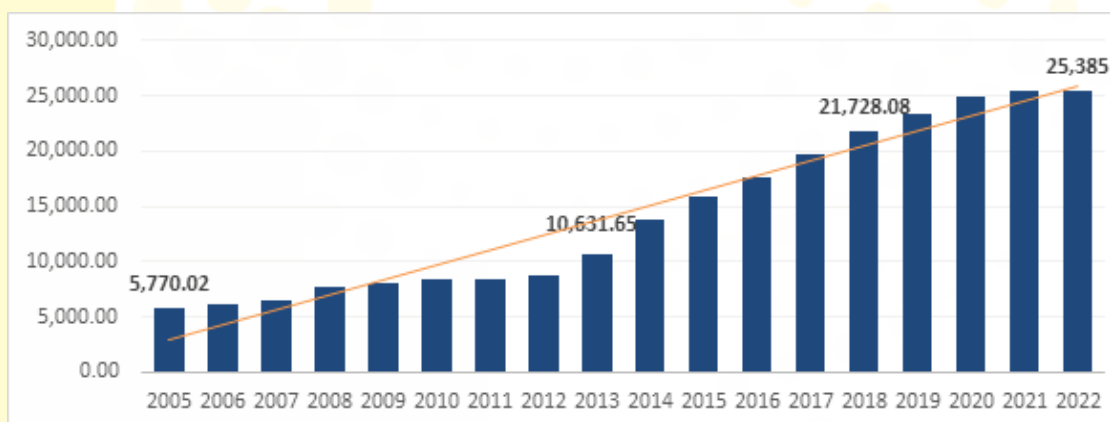


Figure 5.3 : Installed power generation capacity in Madhya Pradesh

Source: (RBI, 2022)

Energy availability

The installed capacity however can better be gauged in terms of the per capita power availability in the state. The state doubled its per capita power availability in last 10 years from 570.2 KW to 1184.9 KW. This expansion in power availability is important benchmark as a requirement for further undertaking higher intensity mechanised industrial setup.

(In KiloWatt hour)

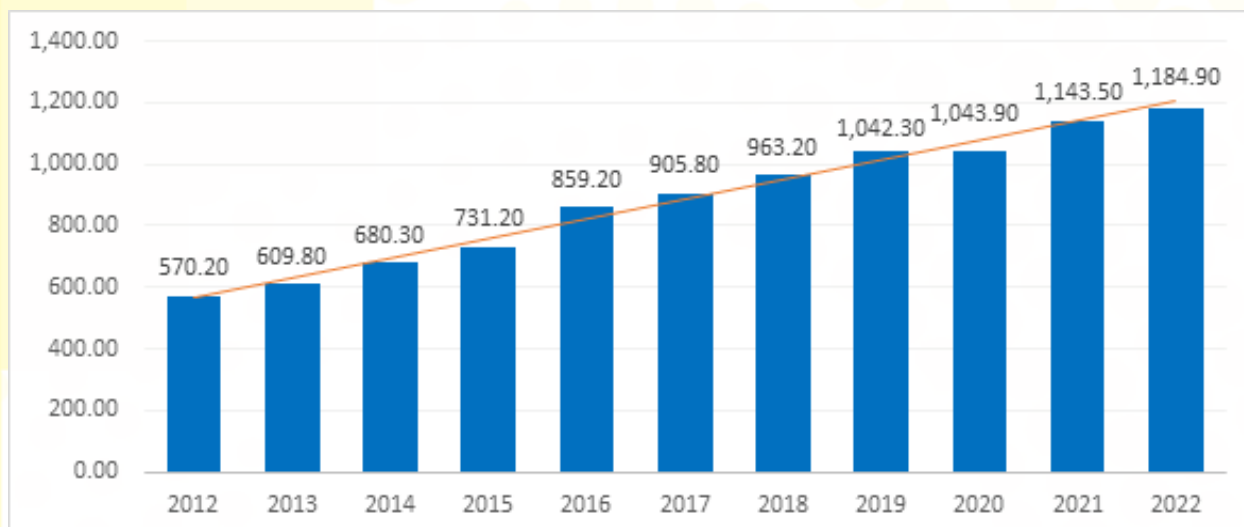


Figure 5.4 : Trend of Per capita power availability in Madhya Pradesh

Source: (RBI, 2022)

Power Consumer trends

The efforts to connect all households with electricity connection in recent years has resulted in expansion of the consumers. The state has Rs. 1.666 crore power consumers as at Mar 2021, which is 2.94% higher than that of in year 2019-20. The consumer count has shown a growth of 16.4% during the period 2017-18 to 2020-21. The irrigation connections have shown a significant growth of 25.5% followed by domestic user growth (14.25%) during this period.

Table 5.9 : Category wise consumer count

S.No.	Consumer Category	Consumer Count			
		2017-18	2018-19	2019-20	2020-21
1.	Domestic	10,574,041	11,564,215	11,845,696	12,081,200
2.	Non-domestic	967,665	1,024,339	1,071,641	1,122,933
3.	Street lighting	17,325	19,180	20,218	21,289
4.	Public water works	39,446	42,274	44,914	48,281
5.	Irrigation	2,593,047	2,799,495	3,075,883	3,254,483
6.	LT consumption	119,943	123,577	125,178	131,308

7.	HT Consumption	4350	4652	4870	4959
8.	Railways	0	0	0	0
9.	Non industrial	2266	2318	2430	2473
	Total	14,318,083	15,580,050	16,190,830	16,666,926

Source: (Annual Report of Energy Department, Government of Madhya Pradesh, 2020-21)

A rapid expansion of consumers in the low and high-tension industry category is positive development considering the high predictability and constant usage of these consumers. Likewise, the metering of irrigation connections is improving the performance indicators for the power sector.

Energy supplied

The state is comparable to top energy states for its power supplies. As per the data for the energy supply between April to December 2021, Madhya Pradesh showed a requirement of 62,324 million units. This is 5th highest in the country, much more than the GSDP ranking of the state (10th nationally), signifying a robust supplies network. A detailed look at this energy supplies by consumer segment gives deeper insights. (Ministry of Power, Government of India)

The consumer segment details in Table No 5.10 shows that the energy supplied grew by 7.3 percentage CAGR during the period 2011-12 to 2021-22. This growth is led by a rapid increase in the domestic segment. The efforts taken by the department in terms of providing the metered connections for irrigation purposes and feeder separation is showcasing a irrigation segment growth of 9.9 percentage CAGR. This is a positive development in bringing clarity of power usage and consequent policy actions.

Table 5.10 : Energy supplied by consumer segments

(in Million units)

Energy supplied	2011-12	2015-16	2019-20	2021-22	Growth 2021-22 over 2011-12
Domestic (Including Licensee)	6932	10934	15142	17300	8.7%
Non-Domestic (Including Non-industrial)	2457	3504	4393	4247	5.1%
Public Lighting & Water works & Railways	2816	3132	2021	2221	-2.1%
Irrigation	9438	18882	22802	26725	9.9%
Industrial	7298	9060	11472	12185	4.8%
Total	28941	45512	55829	62678	7.3%
LT Consumption	19049	33768	42897	48917	9.0%
HT Consumption	9892	11744	12932	13760	3.0%

Source: (Energy Department, Government of Madhya Pradesh, 2021-22)

Other Initiatives– Harnessing Technology for power sector efficiencies

As per Annual report of Energy department 2021-22, the energy department has taken significant technology initiatives to improve the internal and consumer facing processes. Some of these initiatives include Data-warehouse, Open source technology electricity billing, GIS Survey Application, Aadhaar Seeding and Land Record Mapping and Smart Electricity App.

Water resources

The total length of the rivers in M.P is approximately 3956 km and 553 km share boundaries with other states.

Major Canals of the Madhya Pradesh

Canal system in Madhya Pradesh contribute 17.92% of the total irrigated area Which amounts to 2766.8 Thousand Hectares of area. The table below details the canal of Madhya Pradesh.

Table 5.11 : major canals of the districts

Canal	River	Beneficiary Districts
Chambal Canal	Chambal	Bhind, Morena, Sheopur, Mandsaur, Neemach, Gwalior
Tawa canal	Tawa	Hoshangabad
Halali Canal	Betwa	Vidhsha, Raisen
Barna canal	Barna	Raisen, Sehore
Wainganga canal	Wainganga	Balaghat, Bhandara (Maharashtra)
Dejla-Dewada canal	Kunda	Khargone
Satak	Satak	Khargone
Mahi canal	Mahi	Jhabua, Dhar
Narmada canal	Narmada	Khandwa, Khargone, Barwani
Rajghat Canal	Betwa	Shivpuri, Guna, Datiya, Tikamgarh

The use of water for irrigation is closely associated to power usage in the state. As indicated in Table No 5.7 ‘Budget allocations for different Infrastructure’ of previous section, the state has committed a significant amount in budget for expansion of irrigation services to meet the increased demand of power consumption for irrigation purpose. Following section provides comparative and performance details for this sector. The use of water for drinking purposes is detailed in subsequent section.

Irrigation potential developed by Water Resources department

The Water Resources Department has allocated 3499 thousand hectares of irrigation potential in the year 2022-23 through large, medium and small irrigation schemes. 256 thousand hectares of irrigation was used as on November 2022 (Kharif). Year-wise Irrigation potential and utilization is shown in Table 5.12.

Table 5.12 : Irrigation potential and utilization

(Thousand hectares)

Year	Large, medium irrigation potential	Use of minor irrigation potential	Use of total irrigation potential
2016-17	1998.63	904.11	2902.74
2017-18	1814.16	658.88	2473.04
2018-19	2080.32	889.06	2969.38
2019-20	2116.3	1008.70	3125.01
2020-21	2353.78	1029.67	3383.46
2021-22	2505.25	994.02	3499.28

Source: (Water Resources Department, Government of Madhya Pradesh, 2023)

Command Area Development

In order to increase agricultural production by developing and utilizing maximum irrigation potential in the areas under better land, water management and large and medium irrigation projects in the state, irrigation projects have been included in the Command Area Development and Water Management Programme by the Ministry of Water Resources, New Delhi, Government of India. As on March 2022, field channel construction work has been carried out in a total of 7,19,371 hectares against the total command area of 10,37,765 hectares of 23 (13 major and 10 medium) irrigation projects under the Directorate. Out of these 23 projects, 10 projects have been covered by the Government of India under Pradhan Mantri Krishi Sinchai Yojana on priority basis. In the FY 2022-23, budget provision of Rs. 28.45 crore has been made and a target has been set to construct field channels in 6856 hectares area. The work is in progress (Annual Report of Narmada Valley Development Authority, 2021-22).

Irrigation potential developed by Narmada Valley Development Authority

Construction of water course and field channel in the projects constructed and under construction under Narmada Valley Development Authority is in progress.

Table 5.13 : Command development details

S.No.	Project Name	Estimated irrigation potential	Progress (as on December 2021)
1	Rani Avanti Bai Lodhi Sagar	1,57,000	70,921
2	Baragi Diversion	2,45,00	1,518
3	Maan	15,000	15,000
4	Jobat	9,850	9,850
5	Indira Sagar	1,23,200	48,919
6	Omkareshwar	1,46,800	45,082
7	Apperbeda	9,900	990
Total		7,06,750	2,01,190

Source: (Annual Report of Narmada Valley Development Authority, 2021-22)

The projects under construction and under construction are targeted to provide irrigation facility in 7.50 lakh hectare area in the year 2021-22, for which water flows from the canals of the projects are continuing. The details of annual irrigation from the year 2017-18 to the year 2021-22 are as follows:

Table 5.14 : Irrigation area developed by Narmada Valley Development Authority

	2017-18	2018-19	2019-20	2020-21	2021-22
Annual irrigation in lakh of hectares	5.42	5.70	5.85	5.70	7.50 (Target)

Source: (Annual Report of Narmada Valley Development Authority, 2021-22)

Rural Drinking water

Madhya Pradesh Public Health Engineering Department is providing pure drinking water to rural habitations through hand pumps and tap water supply schemes. About 5.62 lakh hand pumps and more than 20 thousand tap water supply schemes in 127 habitations of the state have been fully covered by providing water to 80,221 habitations at the rate of 55 liters per person per day.

Pure drinking water through household tap connections has been provided to 56 lakh rural households of the state. Through this scheme, a target has been set to provide pure drinking water household tap connections by the year 2024.

In single village tap water schemes, cost amount of Rs. 13610.49 crore has been sanctioned in 20667 villages and cost Rs. 29022.67 crore has been sanctioned for 48 group tap water schemes of 15420 villages. The work of all these approved schemes is in progress. About 20.95 lakh household tap connections will be obtained from these schemes (Public Health Engineering Department, Government of Madhya Pradesh, 2022).

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