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Environmental Protection and Industrial Development in Rajasthan

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ABSTRACT: Over the last few years, the Rajasthan government has adopted several new policies to facilitate new investments and strengthen the industrial infrastructure. The Rajasthan Industrial Development Policy 2019, Rajasthan Investment Promotion Scheme 2019, Rajasthan MSME (Facilitation of Establishment and Operation) Act 2019, all have numerous provisions for industries, from best incentives across the country to smooth commencement of operations. Recently, Rajasthan CM, Ashok Gehlot, launched a 'One Stop Shop' facility that brings together 14 significant departments under one roof to ensure smooth clearances of investment proposals. A Board of Investment has been constituted under the CM's chairmanship to decide on special packages for major investment proposals. The state government has also introduced sector-specific policies, like the new solar energy policy, hybrid & renewable energy policy, agriculture & tourism policy to harness renewable energy potential and ensure quality power supply. The Industry Department is also proactively pursuing investors looking to establish/expand their base. Even during the lockdown, officials were actively in touch with the investors' fraternity and investment consultants from several countries. Video conferences were held with representatives of investor bodies from various states.

KEYWORDS: Rajasthan, Industrial, solar, policy, renewable, environmental, protection, MSME, lockdown

I. INTRODUCTION

The Rajasthan Industrial Development Policy will be establishing a pharmaceutical and medical device development cell. The pharma-related clearances have also been associated with 'One Stop Shop' for faster approvals. Also, to further promote the pharma sector, the RIPS 2019 proposes fiscal assistance for manufacturers of Active Pharmaceutical Ingredients (API) and medical devices. To facilitate the renewable energy sector, we have introduced the Rajasthan Solar Energy Policy, 2019 and the Wind and Hybrid Energy Policy, 2019. The CM has a vision to promote Rajasthan as a hub of renewable energy, providing affordable & quality power without contributing to pollution. The policy has attracted many major investments, and the state is advancing towards establishing 'Ultra Solar Power Parks'.¹

The government is also keen to develop the ancillary industries, and discussions are being held with investors regarding local development of various components. It is also exploring possibilities to promote local manufacturing of solar cells and panels.²⁶

Environmental conservation is certainly not an obstruction to industrialisation; it is rather essential for sustainable development. Rajasthan will assist industries to become more environmentally friendly. For this purpose, the new industrial policy supports green building and eco-friendly industries; incentives and necessary regulatory support are being offered for reuse & recycling of industrial waste.² The government is also working to explore new methodologies.

The industries department is working with stakeholders from industrial areas to form Special Purpose Vehicles (SPVs) to encourage waste management & recycling. The state government is also working to ensure that the deserving applications for environmental applications are disposed off in due time, thus avoiding unnecessary delay and hardships for investors. Rajasthan is among the leading states in ease of doing business; it has been ahead in reforms and facilitating trade & industry. This, along with skilled manpower, affordable land, infrastructure and effective governance, makes the state a preferred investment destination.²⁵

The industrial policy takes care of overall industrial development and encourages industries to partner in skill development. The state has also developed a centralised repository of human resources under the banner of 'Rajkaushal'.³ Soon, it will be valuable for planning skill upgradation programmes and will develop an ecosystem conducive to both the investors and labour force. The Rajasthan Industrial Policy 2019 established a vision for

'Industry 4.0', which will extend incentives to the industries for the acquisition of technology, skill development and R&D. Centres will be developed for R&D by bringing together industry and academia. Special fiscal and infrastructure support to units using automation and data exchange in manufacturing technologies have been envisioned. Support shall also be provided to state incubators for upgrading facilities with new-age technologies, such as Internet of Things (IoT), FinTech, clean energy, climate engineering, clean transportation, etc.⁴ Further, the policy envisages educational institutes to promote entrepreneurship by providing access to labs and state of the art machinery.

The CM has laid a vision to make Rajasthan the most preferred investment destination with a conducive ecosystem for an inclusive, balanced and sustainable industrial development. Thus, the industrial infrastructure development goals are not limited to trade freight corridors, grid-based gas supplies but also to develop social infrastructure, such as hospitals, colleges and childcare facilities to those employed in these industries.⁵

II. DISCUSSION

As per direction of National Green Tribunal (NGT), The RAJASTHAN STATE POLLUTION CONTROL BOARD considering industrial development along with environmental protection introduce "Special Dispensation Scheme"TM for a period of four months starting from 15th March,2018 to 14th July,2018.⁶ Under this scheme, those units that covered under Orange or Green category who have not obtain prior consent before establish/operate any industry will apply for consent to establish/operate under the provision of Water Act, 1974 and the Air Act, 1981 as per the prevailing²⁴ procedure/consent fee. However, with a onetime relaxation, that such units will not be required to pay a fee for the years they were in operation so far. India ranked 134 out of 175 countries in terms of ease of doing business. China ranked 93, and the relatively tiny Vietnam ranked 104, 30 places higher than India. In terms of dealing with licences and sundry government permissions, India ranked 155, China was only marginally better at 153, but Vietnam was way ahead at 25. As far as registering property was concerned, India was placed at 110, versus China at 21 and Vietnam at 34. Regarding flexibility in hiring, utilising and retrenchment of workers, India was 112, compared to 78 in China and 104 in Vietnam.⁷

Now come the real party poopers. In exports and imports, our still cumbersome procedures ranked India at 139; China was 38, and Vietnam 75. We fared abysmally in the ease of enforcing commercial contracts: ranked 173 (that is, only two countries are worse than us), versus 63 for China and 94 for Vietnam. And our monstrous difficulties in winding-up ranked India at 133 in the ease of closing business, compared to 75 for China and 116 for Vietnam.⁸

All these hassles have to do with the multiple governments : centre, state, districts, municipal entities and courts. All involve multiple permissions often sequential and occasionally conflicting in their remit which take far too long to be resolved.²³

Rajasthan, with its enchanting heritage, culture and art, has mesmerized the world for centuries. Interestingly, Rajasthan has now also started featuring prominently on the list of an entirely new category of people.⁹ Rajasthan's business environment is powered by an enterprise-friendly government, good infrastructure and abundance of highly skilled young workforce. The remarkably peaceful and politically stable state offers a set of unique advantages and opportunities for profitable investment in the Industrial sector. Rajasthan is a vibrant, exotic state where tradition and royal glory meet in a riot of colors against the vast backdrop of sand and desert. It has an unusual diversity in its entire form people, customs, culture, costumes, music, manners, dialects, cuisine and physiographic. The land is endowed with invincible forts, magnificent palace havelis, rich culture and heritage, beauty and natural resources.¹⁰

It is a land rich in music, dance, art & craft and adventure; a land that never ceases to intrigue & enchant. There is a haunting air of romance, about the state, which is palpable in its every nook and corner. This abode of kings is one of the most exotic locales for tourists the world over. The state has not only survived in all its ethnicity; it owes its charisma and color to its enduring traditional way of life.²²

The panoramic outlook of the state is simply



mesmerizing, with lofty hills of Aravali's one of the oldest mountain ranges of the world; and, the golden sand dunes of the Great Indian Desert - the only desert of the sub-continent. No other region in the country is a conglomeration of so many paradoxes. It is a land of superlatives; everything over here is breathtakingly beautiful, impressive and fascinating. Rajasthan is located in the northwestern part of the subcontinent. It is bounded on the west and northwest by Pakistan; on the north and northeast by the states of Punjab, Haryana, and Uttar Pradesh; on the east and southeast by the states of Uttar Pradesh and Madhya Pradesh; and on the southwest by the state of Gujarat.¹¹

The Tropic of Cancer passes through the southern tip in the Banswara district. The capital city is Jaipur and it is well connected with other parts of the country and easily accessible.

The state has an area of 132,140 square miles (342,239 square kilometres). In the west, Rajasthan is relatively dry and infertile; this area includes some of the Thar Desert, also known as the Great Indian Desert. In the southwestern part of the state, the land is wetter, hilly, and more fertile. The climate varies throughout Rajasthan. On average winter temperatures range from 8° to 28° C (46° to 82° F) and summer temperatures range from 25° to 46° C (77° to 115° F). Average rainfall also varies; the western deserts accumulate about 100 mm (about 4 in) annually, while the southeastern part of the state receives 650 mm (26 in) annually, most of which is from July through September during the monsoon season.¹²

Rajasthan has a single-chamber legislative assembly with 200 seats. The state sends 35 members to the Indian national parliament: 10 to the Rajya Sabha (Upper House) and 25 to the Lok Sabha (Lower House). Local government is based on 33 administrative districts.²⁵

Economy: Rajasthan's economy is primarily agricultural and pastoral. Wheat and barley are cultivated over large areas, as are pulses, sugarcane, and oilseeds. Cotton and tobacco are cash crops. Rajasthan is among the largest producers of edible oils in India and the second largest producer of oilseeds. Rajasthan is also the biggest wool-producing state in India. There are mainly two crop seasons. The water for irrigation comes from wells and tanks. The Indira Gandhi Canal irrigates northwestern Rajasthan. The industrialization of Rajasthan slowly began in 1960s. The main industries are mineral based, agriculture based, and textiles. Rajasthan is the second largest producer of polyester fibre in India. The Bhilwara District produces more cloth than Bhiwandi, Maharashtra.¹³



Rajasthan has a prominent place in quarrying and mining in India. The state is the second largest source of cement. It has rich salt deposits at Sambhar; copper mines at Khetri and zinc mines at Dariba; Zawar mines at Zawarmala for zinc; Rampura Aghucha (opencast) near Bhilwara. Dimensional stone mining is also undertaken in Rajasthan: Jodhpur sandstone is used in monuments, important buildings, residential buildings, etc. This stone is termed "chittar pathar".²⁶

Endowed with natural beauty and a great history, tourism is flourishing in Rajasthan. The palaces of Jaipur, lakes of Udaipur, and desert forts of Jodhpur, Bikaner & Jaisalmer are among the most preferred destination of tourists both Indian and Foreign. Tourism accounts for eight percent of the state's domestic product. Many old and neglected palaces and forts have been converted into heritage hotels. Tourism has increased employment in the hospitality sector.¹⁴

Flora and Fauna: Though a large percentage of the total area is desert, and even though there is little forest cover, Rajasthan has a rich and varied flora and fauna.

The natural vegetation is classed as Northern Desert Thorn Forest (Champion 1936). These occur in small clumps scattered in more or less open forms. Density and size of patches increase from west to east following the increase in rainfall. Some wildlife species, which are fast vanishing in other parts of India, are found in the desert in large numbers such as the Great Indian Bustard (*Ardeotis nigriceps*), the Blackbuck (*Antelope cervicapra*), the Indian Gazelle (*Gazella bennettii*) and the Indian Wild Ass.



An indicative list of approvals with timeframe for setting up business in Rajasthan. Industrialization plays an important role in creating employment

avenues and promoting share of industrial sector in the State Domestic Products (SDP). In the financial year of 2007-08, a total of 7,707 small and artisan units were registered upto December 2007. These units with a total investment of Rs. 961.80 crores have generated direct employment for 53,169 persons.¹⁵

During the financial year 2007-08, 341 new factories and 76 new boilers were registered wherein about 13,580 workers got employment upto December 2007. Rajasthan started experiencing industrial development between 1950 and 1960. Large and small scale industries started springing up in the Kota, Jaipur, Udaipur, Bhilwara and other Industrial Estates of Rajasthan. The main industries of Rajasthan include textile, rugs, woolen goods, vegetable oil and dyes. Heavy industries consist of copper and zinc smelting and the manufacture of railway rolling stock.

The other industries related to Private Sector include steel, cement, ceramics and glass wares, electronic, leather and footwear, stone and other chemical industries. Rajasthan experienced growth at the rate of 6.9% per annum in the Industrial sector. Following are the broad categories of Industries available in Rajasthan.¹⁶

- Agro Based Industries
- Animal Husbandry Based Industries
- Textile Based Industries
- Chemical and Plastic Products
- Electrical and Electronics Industries
- Engineering Industries
- Leather and Leather Products
- Mineral Based Industries
- Export Items
- Service Sector
 - IT & Tele communication
 - Real Estate
 - Financial Services²⁶

Textile is the major industry and, Rajasthan is considered as India second largest producer of Polyester Fiber. Besides these, Rajasthan is also involved in the large scale production of cotton and wool in the country. The production of Textiles accounts 21.96 % in the state. Rajasthan also produces huge quantities of spun yarn and is the fourth largest producer in India.

Cement Industry - The state of Rajasthan is also the major producer of cement and accounts for 15 per cent of the cement output of the country.¹⁷

Chemical Industry- The chemical industry produces calcium carbide, caustic soda, sulphuric acid, pesticides, insecticides and fertilizers.



Salt Production- Rajasthan is the third largest producer of salt (sodium chloride) in the country and accounts for one-tenth of the country's salt production.²⁶

The large mineral and metal deposits like zinc, copper, lignite, gypsum and mica in the state have also fostered the growth of a large number of industries that are involved in producing by-products by utilizing these natural resources.¹⁸

Growth & Present Scenario

Stake Holders for Industrial Development

Rapid industrialization is the stated priority of the government which is committed to provide an environment that is business friendly and enabling in nature. Given the effective law enforcement and peaceful environment -, industrial units in the state share a remarkably healthy industrial relation environment, with the absence of labour unrest. The overall law and order situation in Rajasthan is very good. The natives welcome people from outside, and discrimination on the basis of community or regional backgrounds is unheard of. Following are the stakeholders providing support in the Industrial Development in Rajasthan :

A. Rajasthan State Industrial Development & Investment Corporation Ltd. (RIICO)

RIICO- The Rajasthan State Industrial Development & Investment Corporation Ltd. since its inception in 1969, has emerged as a multi-faceted and dynamic institution .It has kept pace with the industrialisation process in providing complete and innovative means of financial and investment support services. RIICO has played a catalytic role in the industrial development of Rajasthan. RIICO has also embarked upon creation of Special purpose Industrial Parks with excellent infrastructure facilities for specific types of industry. The location for these industry -specific areas are carefully selected after assessing the easy availability of related resources such as raw material ,labour etc. Services provided by RIICO to investors and entrepreneurs include:¹⁹

- Site selection and Acquisition of land
- Financial assistance to small medium, and, large scale projects
- Equity participation in large projects on merit
- Technical consultancy for project identification and technical tie up
- Escort services ,facilitation of government clearances
- Merchant banking and financial tie ups
- Extending incentives and concessions according to the policy of State Government²²

B. Commissioner of Industries Office

Industries Department of Rajasthan being responsible for implementation of Investment Policy Scheme, Industries Development Scheme, Entrepreneurship Development Scheme, Cluster Development Scheme, PMRY, Urban and Rural Haat Scheme of Government of India, different schemes for the development of handloom and agro food industries as promulgated by Government of India from time to time. The Department is also responsible for the implementation of various Acts and Rules regarding weights and measures enforcement etc.²⁶

C. District Industries Centre (DIC)

The main functions of the Department include promotion of small scale industries in each district, to assist in the marketing of their products, development of salt areas, handicrafts artisan development, development of handloom, etc. The Department also provides various concessions and facilities and assistance for setting up of industrial units in the State. Registration of SSI units under the scheme of Government of India is one of the main functions of the Department.

D. Micro, Small & Medium Enterprise

Office of Development Commissioner (MSME), an apex body at Central level, for formulating policy for the development of Micro, Small and Medium Scale Industries in the country is headed by the Additional Secretary & Development Commissioner (Micro, Small and Medium Scale Enterprises) under Ministry of Micro, Small and



Medium Enterprises, Govt. of India.

It is rendering the services through MSME Develop Institute Jaipur, covering the following areas:-

- Advising the Govt. in policy matters concerning small scale sector.
- Providing techno-economic and managerial consultancy, common facilities, and extension services.
- Providing facilities for technology up-gradation, modernization, quality improvement & infrastructure.
- Human resources development through training and skill up-gradation.
- Providing economic information services.²⁰

E. Rajasthan Financial Corporation (RFC)

The Rajasthan Financial Corporation (RFC) was constituted under a notification of the State Government dtd. 17 January, 1955 under the SFCs Act, 1951, for providing long term financial support to tiny, small scale and medium scale industries in the State of Rajasthan.

The Corporation is continuing to work as a Catalyst of development for translating into practice the industrial policies and priorities of the Central and the State Governments as also for providing and improving upon immediate assistance in the planned and balanced development of industries in the State, particularly in the small and tiny sectors.

Since, its very inception, the Rajasthan Financial Corporation has been striving incessantly towards its Goal - that of extending a helping hand to varied entrepreneurial section of society for their financial requirements²⁴

F. Bureau of Investment Promotion (BIP)

BIP is the single window agency for clearing all medium and large-scale investments. BIP is supposed to assist the investors looking at business opportunities in Rajasthan in every possible way:

- Identifying investment opportunities
- Providing access to information that is critical to setting up of project
- Assisting translating of investment possibilities into concrete investment proposals
- Single window for clearances through high-level Empowered Committees
- Assisting site-selection and obtaining infrastructural facilities
- Interfacing with Government Departments for required clearances²⁶

BIP is the nodal agency for Single Window System, put into operation to expedite clearance of private sector projects. The Bureau is the Secretariat for the Board of Infrastructure Development and Investment Promotion (BIDI), headed by the Chief Minister and the State Level Empowered Committee. These committees are empowered to take decisions on project proposal, which are binding on all departments, the focus being to clear within the prescribed time limit.¹⁵

G. Electricity & Water Providers

Rajasthan Rajya Vidyut Vitran Nigam Ltd., (RRVVNL) : Provides the electric connection to the industries and operates all the 400kV, 220 kV, 132 kV and 66kV electricity lines and system in the State.

Public Health & Engineering Department (PHED) : It provides the water connection to Industries

I. Rajasthan Renewable Energy Corporation Limited (RRECL)

It is working as a State Nodal Agency for promoting & developing Non-conventional Energy Sources in the State and as a State Designated Agency (SDA) for enforcement of provisions of Energy Conservation Act 2001 in the State.

J. Rajasthan State Pollution Control Board

The Rajasthan State Pollution Control Board is a body corporate constituted under section 4 of the Water (Prevention and Control of Pollution) Act, 1974. Under the Environment (Protection) Act, 1986 the Board, having different rules for addressing the problems of various sectors is giving the mandatory permission for industries. The State Board is engaged in implementation of the various rules under EPA, 1986:²⁵



K. Confederation of Indian Industry (CII)

K. Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the growth of industries, partnering industry and government alike through advisory and consultative processes.¹⁷

Department Timelines Environment Site/environment clearance: 90 days

NOC to establish: 45 days

NOC to operate: 30 days

Renewal of consent: 30 days Industries Letter of intent/industrial license: 15 days

Sponsoring for essential raw materials: 30 days Incentives District level clearance: 30 days

State level clearance: 45 days Medical and Health Power Drug License: 45 days

Loads up to 60 HP: 70 days

Loads above 60 HP and up to 300 KW: 90 days

Loads above 300 HP and up to 3000 KW: 180 days

Load above 3000 KW and up to 33KV: 375 days Revenue Land conversion up to 20 hectares: 30 days

Land conversion above 20 hectares: 60 days

Land allotment: 30 days

Land allotment if government approval is required: 60 days RIICO/RFC Sanction of loan: 60 days

Allotment of plot in industrial areas: 15 days¹⁹

III. RESULTS

Rajasthan is home to most of the conventional and non-conventional sources of energy generation. The government of India has released its roadmap to achieve 175 GW capacity in renewable energy by 2020, which includes 100 GW of solar power and 60 GW of wind power.

The Union government is preparing a 'rent a roof' policy for supporting its target of generating 40 gigawatts (GW) of power through solar rooftop projects by 2020.²⁴ Coal-based power generation capacity in India, which currently stands at 229.40 GW, is expected to reach 330-441 GW by 2040. In 2018-19, the total imports in the conventional power sector were around Rs 75,000 crore and \$2.9 billion in the renewable energy segment.

All this offers tremendous opportunity for stimulating domestic manufacturing and import substitution in the energy sector, said N.K. Jain, Chairman, FICCI Rajasthan Sub-Committee on MSMEs, at a webinar attended by around 200 participants.

There are 7 to 8 states in India that are suitable for generation of wind energy but Rajasthan has an advantage that alternative economic usage of the land having wind potential is limited and therefore it becomes easy to set up wind power plants said, Vinod Bishnoi, Vice President and Project Head, India Business, Suzlon Energy Ltd.¹¹

Rajasthan has come up with a very good policy in 2019 which has a stated objective to promote wind, hybrid and hybrid with storage energy. Captive consumption and third-party sale should be encouraged as it will provide cheap electricity to the industries helping them to become competitive as well as boost the RE sector, he added. Power Grid Corporation is making 3-4 substations which will take care of purchase and transmission of power.²³

"Solar sector offers tremendous opportunity for domestic manufacturing with varied usage across sectors especially for MSMEs and we should take benefit of this gift of nature to Rajasthan", said Sunil Bansal, General Secretary, Rajasthan Solar Association. He added that the coming decade gives the opportunity to convert Rajasthan into a manufacturing hub for solar equipment not only for solar energy projects but many other items such as solar lamps, pumps, dryers, mosquito traps, torches, fans, deep fridges, ventilators, lanterns, traffic lights, solar AC, etc. He also suggested for reserving certain items for purchase from the MSME sector.¹³

"The Investment Board and One-Stop Shop mechanism of 14 departments would greatly facilitate and boost investors willing to invest in the state", said Anandi Lal Vaishnav, Additional Commissioner, Bureau of Investment Promotion, GoR. He added that RIPS 2019 has given fairly good benefits to Renewable Energy manufacturing sector under the policy and in the customised package also as it is under the thrust sector.¹⁵

"The industrial infrastructure, connectivity and generation potential in Rajasthan provides immense opportunity for manufacturing and import substitution in the solar sector", says Manish Gupta, Director, Insolation Energy. There are around 12 equipment/elements used in a solar power project which can be manufactured locally out of which around 10 elements can be manufactured by MSMEs with limited capital investment, he added.



“Enabling initiatives by the Government of India underscore its focus on domestic manufacturing and opening new opportunities. States need to promote R&D and technological advancements as well as develop advanced skill sets in manufacturing and focus on export competitiveness to leverage this opportunity,” said Ankit Piplani, VP, E&Y.¹⁶

IV. CONCLUSIONS

The Congress government in Rajasthan is bringing a new policy on micro, small and medium enterprises (MSME) for fast industrial development and creation of more employment opportunities. The MSME sector will be protected with new incentives and facilities and steps taken for its modernisation. State Industries Commissioner²² Mahendra Kumar Parakh said here on Friday that the important aspects of single window system, industrial clusters, smart industrial areas and easy availability of finance were being considered for the formulation of new policy. Mr. Parakh met the representatives of industrial organisations to get suggestions for drafting of the policy. The previous MSME policy of 2015, which remained in force till 2019, had focused on a combination of both fiscal and non-fiscal interventions and facilitated the budding entrepreneurs.¹⁸ It had streamlined procedures, rules and regulations for ease of doing business and initiated steps for attracting investments. Mr. Parakh said the MSMEs were the backbone of the State’s economy and the people in the State could get the maximum employment in the MSME sector. The grants were being given to entrepreneurs for setting up new enterprises as well as for renovation and modernisation of old units under the Chief Minister’s small industries incentive scheme, which stipulates 8% interest subsidy on loans up to ₹25 lakh. The new policy will incorporate the suggestions made for infrastructure development for industries, training for capacity building,²¹ better marketing support, export promotion assistance and institution of awards for best entrepreneurs. The cluster development approach is also expected to ensure an inclusive and sustainable growth and competitiveness of MSMEs. Representatives of the Confederation of Indian Industry (CII), Federation of Rajasthan Trade and Industry, PHD Chamber of Commerce and Industry, Bagru Industries Association and Vishwakarma Industries Association gave suggestions for the new policy at the meeting.²⁰

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