



WORLD TRADE CENTRE™
JAIPUR

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EXPORT POTENTIAL OF RAJASTHAN



RESEARCH STUDY REPORT OF MVIRDC

MVIRDC



Sir Mokshagundam Visvesvaraya also known as Sir M.V is a noted Visionary and is one of the Builders of Indian Economy. He was known as a “capital mathematician & a very good English Scholar” who possessed the “higher character”.

Upon graduating as an engineer, Sir M.V took up a job with the Public Works Department (PWD) of Bombay and was later invited to join the Indian Irrigation Commission. He was good at Research, Planning and Development. Sir M.V completed various projects on irrigation, water supply systems, and drainage systems. The Governor of Bombay during those days, Lord Sandhurst complimented Sir M.V as “Most Able Engineer” at inauguration functions of Water Works around the city. Over the years A lot of ventures such as preparing Memorandums on Irrigation, furnishing well known working system known as Block System of Irrigation were taken up by Sir M.V. Soon he became one of the best officers among European and Indians within the Public Works Department.

Formation of MVIRDC

Sir. M. Visvesvaraya had established the All India Manufacturers’ Organisation (AIMO) in 1941, with the objective of spurring industrial development. AIMO continuously initiated and organized several programmes and activities to achieve these objectives and in the process, set up Chapters all over the country. Research and Development (R&D) being the backbone of industrial growth, Dr. Visvesvaraya was keen on establishing an R&D facility for Indian industry and economy. Mumbai, as the financial and commercial capital of the country, seemed the obvious choice. The idea was vigorously pursued through AIMO with the government of the then Bombay State in the late 1950s, for suitable land for the project.

With the concept of WTC emerging strongly world over, the idea of incorporating it in India took root. At its Annual General Meeting 1968, AIMO President, Mr. YA Fazalbhoy, put forth the concept to Prime Minister Ms. Indira Gandhi, who was the Chief guest. It found immediate favour with her and from then on the project proceeded at a quick pace. Well known architect Mr. Phiroz Kudianwala was commissioned to develop the WTC plan overnight. WTC Mumbai finally received the much needed impetus and Mr. Wankhede was nominated its first President.

Objectives

WTC Mumbai came into existence on June 26, 1970 and was registered under the Indian Companies Act, 1956 under section 25 as a not-for-profit company called M Visvesaraya Industrial Research and Development Centre (MVIRDC), with the main objective being to conduct ‘Research and Development’ and the ancillary objective of ‘establishment of WTCs in India and abroad.

The Centre facilitates in strategizing business goals, branding and developing an effective long term partnership. WTC Mumbai has build strong bridges of communication with diplomatic missions, business leaders, bankers, academicians and key government agencies and policy makers. WTC Mumbai believes in inclusive engagement for effective promotion of trade and investment in the country.

WTC Mumbai has emerged as a forerunner in promoting international trade and development. WTC Mumbai promotes International trade and Investment through an array of services and facilities. The Centre integrates Indian businesses and international counterparts on a single platform through one to one business networking empowering the business community with skills, rich resources and talent.

WTC Mumbai believes in building a community that facilitates international trade. The services offered by the Centre include trade research, trade facilitation programs, educational programs and an international library which benefit every segment of the society drawing together professionals, exporters, importers, research institutes, government agencies, etc. WTC Mumbai is also authorized to issue Certificate of Origin.

WTC Mumbai stands tall as an iconic building in the heart of the city in Mumbai, the commercial capital of India. On the facilities front the Centre is equipped with the only Air conditioned Exhibition Centre in the city along with business meeting rooms, cabin spaces, desk spaces and office spaces in the 32 storey building of the Centre 1 complex. The Centre 2 of the WTC complex is leased to the IDBI. The Arcade in the WTC Complex is home to shopping malls, fine dining restaurants, state emporiums, etc. Over 10,000 people visit the WTC Complex on a daily basis. During exhibitions nearly 15,000 to 20,000 people visit the Centre.

In its long journey of promoting research and trade trade MVIRDC WTC Mumbai has achieved several mile stones and now it is expanding its presence by establishing WTCs at Bhubaneswar, Goa and Jaipur.



WORLD TRADE CENTRE™
JAIPUR

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EXPORT POTENTIAL OF RAJASTHAN

A Research Study of MVIRDC



in association with



Business Mind Social Heart

Preamble



We are pleased to present this study report on 'Export Potential of Rajasthan', which has been published on the occasion of the setting up of World Trade Centre in Jaipur. The report portrays trade and investment opportunities in Rajasthan and discusses Government policies for growth, industrial development, sector wise opportunities, exports scenario and highlights the challenges and opportunities.

World Trade Centre (WTC) Jaipur is an initiative of M.Visvesvaraya Industrial Research and Development Centre (MVIRDC), promoter of WTC Mumbai. WTC Jaipur facilitates trade and investment promotion in the State, assists local businesses to foray into global markets and help enhance competitiveness of Rajasthan.

World Trade Centers are the single point of reference in regions where they are established to connect the government, industry and academia. World Trade Centers Association (WTCA) integrates the network of these WTCs to a single entity. It is a unique concept that connects businesses locally to trade globally through the most powerful global network of 343 WTCs in 100 countries, representing 1 million businesses across sectors facilitating international trade and investments.

WTC Mumbai is the premier operating Indian member of the WTCA, providing a wide range of services and facilities.

We trust the report will lead to better understanding of trade and investment opportunities in Rajasthan and the Government as well as the business stake holders will find this report useful and interesting.

Vijay Kalantri
Chairman
World Trade Centre Jaipur

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Executive Summary

A predominantly agricultural and rural State of India, Rajasthan's Gross Domestic Product (GSDP) has expanded at a CAGR of 12.83 per cent over 2004-05 to 2014-15. Rajasthan is a natural corridor between the wealthy northern and the prosperous western States, making it an important trade and commerce centre. With a stable political environment, the Government is committed towards creating a progressive business environment

Rajasthan offers a variety of unexploited agricultural and mineral resources, which is indicative of the scope for value addition and exports. The State Government has been investing in capacity building through the development of a strong institutional network at all levels. The State has renowned higher education institutions in various disciplines, producing thousands of skilled and proficient young individuals every year. The state is developing sector specific infrastructure, such as special purpose industrial parks and special economic zones (SEZs) for exports of handicrafts, IT and electronic goods

Rajasthan State Industrial Development and Investment Corporation Ltd. (RIICO) plays a catalytic role in industrial development of Rajasthan. Keeping in view the specific requirements of export-oriented units, RIICO has given emphasis for development of special parks for setting up of such units. RIICO on behalf of Govt. of Rajasthan is providing and developing these basic infrastructure facilities for the exporting units.

- Export Promotional Industrial Parks
- Special Economic Zones
- ASIDE Scheme (Assistance to state for developing export Infrastructure and allied activities)
- AIR Cargo Complex (ACC) and inland container Depot (ICD)

Based on an analysis, the top ten important sectors that hold a huge potential for exports from Rajasthan include Agro & Food Products, Electrical, electronics & computer software, Plastics & linoleums, Drugs & pharmaceuticals, Leather & leather products, Dimensional stones, Marbles, Granites & articles of stones, Chemical & allied, Engineering, Readymade garments, Gem & Jewellery

There are several challenges related to exports including inadequacies in the area of infrastructure, inefficiencies in the trading Processes, tariff and non-tariffs barriers, mind set and attitude towards technology, payment delay from overseas buyers and distributors and the lack of funding & aggregation which needs to be solved and has been discussed further in the report.

This report is an attempt to give an overview of Rajasthan as a state from the perspective of exports – particularly the resources and infrastructure available. Also, suggestions on potential sectors for export from Rajasthan and a detailed overview of them as well as suggestions for the growth of exports have been provided in the report.

CHAPTER 1

ECONOMIC PROFILE OF RAJASTHAN

OVERVIEW OF RAJASTHAN

Rajasthan is one of the largest states in India that shares about 10.4 % of the total area. Located on the western side of the country, it shares the wide and the inhospitable Thar Desert, which has an edge paralleling the Sutlej-Indus river valley along its border with Pakistan. The state generally has dry weather with extreme temperature and it rains during July-August. The Aravalli range which stretches from the North-Eastern to South-Western part of the state and divides it, makes the eastern region fertile while the remaining western region is mostly desert.

Rajasthan's economy is predominantly agricultural and rural in nature. There are wide fluctuations in the growth rate of the net state domestic product (NSDP) due to uncertainties in agricultural production which is almost entirely dependent on rainfall. Wheat and barley are the majorly cultivated crops , along with pulses, sugarcane, and oilseeds..

Rajasthan's gross state domestic product (GSDP) expanded at a CAGR of 12.83 per cent over 2004-05 to 2014-15.

Rajasthan is among the largest producers of edible oils in India and the second largest producer of oilseeds. It is also the biggest wool-producing State in India. Endowed with natural beauty and a great history tourism is flourishing in Rajasthan and forms an integral part of the economy.

The snap shot of socio-economic profile of Rajasthan and associated indicators is depicted in Table as under:

| Demographic Indicators of Rajasthan & India | | | | |
|---|---------------------------|--------------------------------------|---------------------|--|
| | Indicators | Unit | Rajasthan | India |
| 1 | Geographical Area | Sq km | 342239 | 3,287,240 |
| 2 | Population | (Census 2011) | 68,548,437 | 1,210,854,977 |
| 3 | Urban | | 17,048,085 (24.8 %) | 377,106,125 (31.1%) |
| 4 | Rural | | 51,500,352(75.13%) | 833,748,852(68.9%) |
| 5 | Literacy Ratio | (%) | 66.1% | 74.04% |
| 6 | Sex Ratio | Per 1000 males | 928 | 940 |
| 7 | GSDP (break-up by sector) | (FY 2014-15) constant 2004-05 prices | INR 2.72 lakh crore | INR 98.58 lakh crore (Advance estimates of GVA at Base (2011-12) prices) |
| | a. Agriculture | Lakh cr | INR 0.53 (19.43%) | INR 15.97 (16.20%) |
| | b. Industries | Lakh cr | INR 0.83 (30.58%) | INR 30.78 (31.22%) |
| | c. Services | Lakh Cr | INR 1.36 (49.99%) | INR 51.83 (52.58%) |

The population of Rajasthan as per Census of 2011 census stands at about 68 million, making it the 8th most populated State in India. The State is spread over an area of about 340000 sq. km. making it the largest State in the country in terms of area. The State has a decadal growth rate of about 21 percent which is the 11th highest growth rate in the country.

The population of the State is rising considerably due to rapid efforts towards development and progress. The literacy rate in the State is about 67%

Rajasthan has become a favorite tourist destination in terms of rich heritage, strong culture and tradition, with Jaipur zone being located in the heart of Rajasthan and close proximity to India's capital – Delhi has shown an increase in the tourist flow with the time. In 2012, Rajasthan accounted for 23.8 per cent of the total international tourist arrivals in India. Apart from these government initiatives giving incentives to all the sectors, has also triggered in-migration from not only the surrounding rural areas but also from various districts in the State.

High economic growth and stable political environment

- GSDP grew at a CAGR of 12.83 per cent between 2004-05 and 2014-15.
- With a stable political environment, the Government is committed towards creating a progressive business environment.

Rich labour pool and infrastructure support

- Rajasthan has been investing in capacity building through the development of a strong institutional network at all levels. The state has renowned higher education institutions in various disciplines, producing thousands of skilled and proficient young individuals every year.
- The state is developing sector specific infrastructure, such as special purpose industrial parks and special economic zones (SEZs) for exports of handicrafts, IT and electronic goods.

Abundant mineral resources and location advantage

- Rajasthan offers a variety of unexploited agricultural and mineral resources, which is indicative of the scope for value addition and exports.
- It borders six major states in the northern, western and central parts of India. Rajasthan is a natural corridor between the wealthy northern and the prosperous western states, making it an important trade and commerce centre

Policy and incentives

- The state offers a wide range of fiscal and policy incentives for businesses. The Government has introduced sector-specific policies for tourism, biotechnology, IT and ITeS industries.
- Rajasthan has a favourable industrial relations environment. In addition, the law & order situation in the state ensures a good working environment.

Infrastructure

Roads and especially highways to and from Rajasthan are well connected to other States in the country with a good network of roads, including National and State Highways. The State has an excellent bus service operated by Rajasthan State Road Transport Corporation (RSRTC) and private operators making connectivity easy and convenient.

Different types of roads and their length connecting Rajasthan:

| Types of Roads | Length (km.) |
|-----------------------|--------------|
| National Highways | 7309.68 |
| State Highways | 11,880.67 |
| Village Roads | 1,47,056.47 |
| Major District Roads | 9,540.42 |
| Other Districts Roads | 29,216.17 |
| All Roads | 2,05,003.41 |

Government of Rajasthan has taken up the development of Metro Rail Urban Transport Project in Jaipur through Jaipur Metro Rail Corporation Ltd. Phase-1-A of 12.1 km is being done by Delhi Metro Rail Corporation (DMRC) which has already commenced commercial operations from June, 2015.

On the other hand, there are three main airports in Rajasthan, the Jaipur International Airport, the Udaipur Airport, and the Jodhpur Airport. The Jaipur airport also contains an air-cargo complex

Agriculture

In India, the primary source of livelihood has always been confined to agriculture (that even includes forestry and fishing). This contributed to the largest sector of Indian Economy. Agriculture is a significant sector in the State, providing employment to 62 per cent of the population. The share of the agriculture sector in the GSDP for the year 2014-15 (at constant 2004-05 prices) was 19.43 per cent. The agriculture in the State is mostly rain-fed. However, with the advent of irrigation in certain regions, the agriculture production and yield has improved in the recent years. Rajasthan is the largest producer of bajra, rapeseed, and mustard and the second largest producer of oilseed, gram, and pulses in the country.

Rajasthan with its diverse agro-climatic conditions is richly endowed in the cultivation of a variety of crops. The State is the largest producer of guar and seed spices like coriander, cumin, fenugreek, fennel, etc. The State is the largest producer of mustard, second largest producer of oil seeds and third largest producer of soybean. It is also the largest producer of gram and second largest producer of moth bean.

Agriculture production in the year 2014-15 in Rajasthan

| Agriculture Production | |
|------------------------|--|
| Crops | Annual production in 2014-2015 ('000 tonnes) |
| Rice | 3156 |
| Wheat | 9032 |
| Fruits | 637.0 |
| Vegetables | 1270.1 |
| Flowers | 2.9 |
| Aromatic | 128.86 |
| Spices | 629.5 |
| Onion | 693.3 |
| Potato | 110.2 |
| Tomato | 77.7 |

Pulses production in the year 2013-14 was:

| | Pulses | Area in hectare | Production in Tonnes | Productivity |
|---------------|--------------|-----------------|----------------------|--------------|
| Kharif | Tur/ Arhar | 16818 | 14790 | 879 |
| | Other Pulses | 1954625 | 636696 | 326 |
| Rabi | Gram | 1252936 | 1277348 | 1019 |
| | Other Pulses | 6709 | 6513 | 971 |

Rajasthan has proximity to large consumer markets in the region (close to NCR) which has a large share of food consumption in the country. Infrastructure like Agro Food Parks at Kota, Jodhpur, Sriganganagar and Alwar has been developed by RIICO. Rajasthan also offers immense opportunities in the areas of organic farming, contract farming and in creation of post-harvest infrastructure such as special ware-houses, cold chains, testing & certification facilities.

The agriculture sector has thrown open tremendous opportunities for the successful establishment of vibrant and potentially profitable agro-processing units in Rajasthan. The State has an agricultural economy with nine agro-climatic zones and various types of soil that help during the cultivation of crops.

As per the State budget 2015-16, an estimated outlay of US\$ 659.56 million was made for agriculture and allied industries in the State. The capital expenditure for irrigation and flood control for the year 2015-16 is estimated to be US\$ 0.27 million.

The major schemes and programmes implemented by the Department of Agriculture during 2014-15 were:

- National Food Security Mission (NFSM)
- National Mission for Sustainable Agriculture (NMSA)

- National Mission on Oilseed and Oil Palm (NMOOP)
- National Mission on Agriculture Extension & Technology (NMAET)

Stating the export potential of the State the agri produce that have captured the export markets are Kinnow, Mandarin , fresh vegetables that includes Tomato, Onion, Okra, Pea, Green Chillies, Capsicum, Karela, Tinda, Cabbage, Cauliflower, Red Chilli, Aonla& its products, Honey & its products, Garlic whole & powder, Spices seed, Rose oil, dry petals, Gulkand, Isabgol husk, Senna and Mehndi Powder.

Horticulture (Animal Husbandry)

Rajasthan is not just India's largest State. It has also one of the highest livestock population in the country. The contribution of the Animal Husbandry Sector is more than 10% of the State GDP, thereby making livestock not only a significant component of the State economy but also an important shield against adverse climatic conditions.

It has been estimated that an economy of Rs.1, 25,000 crores revolves around horticulture sector. The value of livestock and its products alone touches Rs.75, 000 Crores. Rajasthan produces 10% of India's milk and a third of sheep and goat. It also produces the largest amount of wool in the country.

Feed and fodder availability in a drought prone State has been a major constraint of the sector in Rajasthan. A perpetual shortage of fodder to the tune of 40%. Despite this, the State has some of the finest indigenous milch cattle breeds as well as breeds for dual purposes and for draft.

Rajasthan offers excellent scope to the livestock and poultry feed sector. Maize, whose sowing area is touching one million hectares, reported a total production of around 1.5 million tonnes in 2013-14. This crop is good raw material of poultry feed. Similarly, Rajasthan is a leader in other crops like Sorghum, Pearl Millet (Bajra), Pulses, Oil Seeds, Wheat and Rice, all of which in some way or other, form parts of compound livestock feed.

Rajasthan also produces non-conventional ingredients, which can be integral part of the feed raw material. These include mesquite (Juliflora) pods, watermelon and Citreous (bitter melon), which are abundantly available in this state.

A State level Feed and Fodder Laboratory has been established with advanced facilities that are able to test feed and fodder for drug residue, fungal toxins and pesticides. Rajasthan University of Veterinary and Animal Sciences, Bikaner is involved in research in fodder production, nutritional value addition, hydroponics, poly-bag silage and on bypass fat and bypass protein technologies.

In order to make Rajasthan the destination of choice for investors, processors both domestic and global, the policy endeavors to create supply chain infrastructure needed for agro industrial development and even to encourage value addition in agriculture produce

and to reduce postharvest losses thereby increasing the income of farmers and delivering better quality products to consumers.

Electricity

Realizing the importance of power in overall development the State is trying to achieve self-sufficiency in power. This would provide a great support in the agriculture production.

According to the recent record of 2015, Rajasthan had a total installed power generation capacity of 17,534.85 MW. This comprised of 6,805.61 MW under state owned projects, 2,540.29 MW under central sector projects and 8,188.95 MW under private sector projects.

The total installed power generation capacity accounted for by state utilities, coal-based power plants, gas-based power plants, hydropower plants and renewable resources contributed 5,190.00 MW, 603.80 MW, 987.96 MW and 23.85 MW of capacity, respectively.

Rajasthan Rajya Vidyut Prasaran Nigam Ltd. (RRVPNL) is the State power transmission utility. Power distribution is done by three regional distribution companies, namely, Jaipur Vidyut Vitran Nigam Ltd., Ajmer Vidyut Vitran Nigam Ltd., and Jodhpur Vidyut Vitran Nigam Ltd. Rajasthan has a total installed power capacity of 15,742.22 MW*(up to December, 2014). There have been several initiatives in tapping wind energy for power generation in the state. The gross wind energy potential in the State has been estimated at 5,400 MW, out of which, a total of 3,065.55 MW*(up to December, 2014) wind power capacity has been installed.

As per the Budget 2015-16, the total estimated expenditure for the power sector in the state stood at US\$ 2.76 billion during 2015-16.

- The Internal and Extra Budgetary Resources (IEBR) included in the State were valued at US\$ 1.55 billion, including:
 - ✓ US\$ 1 billion and US\$ 0.14 billion of Rajasthan Rajya Vidyut Prasaran Nigam Limited; and
 - ✓ US\$ 0.17 billion, US\$ 0.15 billion and US\$ 0.09 billion of DISCOM Jaipur, DISCOM Jodhpur and DISCOM Ajmer, respectively.
- The Government would also be providing US\$ 76.82 million for Feeder Renovation Programme (FRP). In addition, the Government of Rajasthan would provide US\$ 1.13 billion for the purpose of equity contribution and budgetary support.

The main source of power generation in the State are Kota and Suratgarh Thermal projects, Dholpur Gas Thermal Project, Mahi Hydrel, Wind Farms, Bio-Mass, Captive power plants, Bhankra-Vyas Chamble, Satpura interstate partnership projects. Apart from that the State also gets power from Rajasthan atomic power project, Singroli, Rihand, Dadri, Anta, Auriya, Dadri Gas Plants, Unchahar Thermal and tanakpur, Salal, Chamera and Uri hydrel projects from the central sector.

The installed capacity in the State was 7716.63 MW. The total installed capacity in the year 2009-10 was 697.45 MW. A step towards becoming self-sufficient in power generation State government announced to set up six more power plants worth 4780 MW during the upcoming XII five year plan. The power projects include three super critical plants of 1320 MW each as extension of existing power projects at Suratgarh, Kalisind and Banswara projects.

In the power sector, five companies one each for generation and transmission in Jaipur and three for distribution each at Jaipur, Ajmer and Jodhpur are functioning in the State to strengthen the existing infrastructure and provide better quality of electric supply to the consumers. Under Rural Electrification Programme 36,125 villages out of 39,810 villages, have been electrified.

Availability of Electricity in Rajasthan:

| Sl. No. | Particulars | | Quantity (Million Unit) |
|---------|-------------|---|-------------------------|
| 1 | i) | Thermal | 3615.00 Million Kwh |
| | ii) | Hydro | 1011.80 Million Kwh |
| | iii) | Gas | 443.50 Million Kwh |
| | iv) | Electricity Purchase & Central Allocation | 5648.536 Million Kwh |
| | a) | Total electricity available | 10718.836 Million Kwh |

Telecom infrastructure

According to the Telecom Regulatory Authority of India (TRAI), Rajasthan had nearly 0.79 million wire-line subscribers as of October 2015. As of June, 2015, Rajasthan had 16,680,000 internet subscribers. The State recorded a tele-density of 78.90 per cent as of August 2015. Major telecom operators in Rajasthan are Bharat Sanchar Nigam Limited (BSNL), Bharti Airtel, Tata Teleservices, Reliance Communications, Vodafone Essar, Aircel Limited and IDEA Cellular Services.

Telecom infrastructure reach:

| Telecom infrastructure (October 2015) | |
|---------------------------------------|------------|
| Wireless subscribers | 57,565,830 |
| Wireline subscribers | 794,119 |
| Internet subscribers | 16,680,000 |

FDI Inflows & Investments

According to the Department of Industrial Policy and Promotion (DIPP), FDI inflows stood at US\$ 1.28 billion from April 2000 to September 2015. The electricity and manufacturing sector accounted for majority of investments made in the state. The total budget estimated for the year 2015-2016 is US \$ 11.85 billion.

PPP Projects Implemented in the State

Till December 31, 2014, a total 132 PPP projects costing INR 9,101.10 crore have been completed since the year 1997. Construction works under 49 PPP projects costing INR 6,496.03 crores are in progress; while, 146 PPP projects amounting to INR 36,311.95 crore are under different stages of projects development. Thus, a total of 330 PPP projects with estimated cost of INR 51,909.08 crore are at different stages of project development.

Sector-wise PPP projects, as on December 31, 2014, are depicted in the table given below.

| Sl. No. | Sector | Projects completed so far | | Projects under implementation | | Projects under planning or in pipeline | |
|--------------|------------------------|---------------------------|-----------------|-------------------------------|-----------------|--|------------------|
| | | No. | INR in cr | No. | INR in cr | No. | INR in cr |
| 1 | Roads (SH & NH) | 50 | 3,365.64 | 11 | 4,640.45 | 132 | 22,445.00 |
| 2 | Urban Infrastructure * | 21 | 136.07 | 9 | 707.71 | 7 | 11,392.95 |
| 3 | Power | 1 | 5,000.00 | 4 | 889.13 | 3 | 722.00 |
| 4 | Water | 1 | 46.00 | - | - | 2 | 1,700.00 |
| 5 | IT | 1 | 54.01 | - | - | - | - |
| 6 | Social | 47 | 372.50 | 20 | 184.69 | 1 | 10.00 |
| 7 | Others ** | 11 | 126.88 | 5 | 74.05 | 1 | 42.00 |
| Total | | 132 | 9,101.10 | 49 | 6,496.03 | 146 | 36,311.95 |

Status as on December 31, 2014

** 610 completed projects, 85 projects under implementation and 09 projects in-pipeline for Operation of Public Convenience in various cities, have been shown as single project in each category.*

*** 71 completed projects, 57 projects under implementation for Operation of Stage Carriage Services in rural areas of various districts, have been shown as single project in each category.*

PPP Projects Implemented and their status:

| Project Name | Sector | PPP Type | Project cost (US \$ million) | Stage |
|--|-------------------|-------------|------------------------------|---------------|
| Lignite-based power plant | Energy | BOT | 1,042.9 | Construction |
| Gurgaon-Kotputli-Jaipur Road | Roads | BOT-Toll | 363.9 | Construction |
| Jaipur-Deoli Build-Operate-Transfer road project | Transport | BOT | 345 | In operation |
| Four-laning of the Kaithal-Rajasthan border section of NH-152/65 | Transport | DBFOT | 300 | In Tender |
| International Convention Centre & Golf Course, Rajasthan | Urban Development | BOT | 190.0 | Construction |
| Mahapura (near Jaipur)-Kishangarh Road | Roads | BOT-Toll | 140.0 | In operation |
| Deoli-Kota Road | Roads | BOT-Toll | 131.8 | Construction |
| Palanpur-Swaroopganj Road | Roads | BOT-Annuity | 108.2 | Construction |
| Mahua-Jaipur Road | Roads | BOT-Toll | 105.0 | Construction |
| Operation, Management and Development of Jaipur Airport PPP | Transport | NA | 86 | In Tender |
| Narmada DR | Urban Development | BOT | 77.8 | Under Bidding |
| Bharatpur- Mahua Road | Roads | BOT-Toll | 54.3 | Construction |

Industrial Sector

The industrial sector contributes around 30.58 per cent to the State GSDP. The main industries in Rajasthan are mineral based industries, agriculture based industries, and textiles. Rajasthan is the second largest producer of polyester fiber in India. The Pali and Bhilwara districts are the largest producers of cloth in the State. The government has focused on MSMEs' lately and 15,221 (up to December 2014) industrial units have been registered during 2014-15. Mining is also a key sector and 3,403 mining leases for major minerals, 11,861 mining leases for minor minerals and 18,249 quarry licenses have been issued by the State Government. These quarries are mainly limestone, lignite, rock

phosphate and Gypsum based. The state has rich salt deposits at Sambhar Lake, copper mines at Khetri and Jhunjhunu. Zinc mines are located at Dariba, Zawarmala and Rampura Aghucha.

Favourable natural resources, policy incentives, strategic locations and infrastructure draw investments in sectors such as cement, IT and ITes, ceramics, tourism, automotive and agro-based industries. Bureau of Investment Promotion (BIP) and Rajasthan Industrial Development and Investment Corporation (RIICO) are responsible for promoting investments and developing industrial infrastructure in the state. Government of Rajasthan has been promoting the development of several SEZs across the state for sectors such as gems and jewelry, handicrafts, IT, electronics, automotive/auto components, and textiles. Rajasthan is endowed with two critical resources that are essential for solar power production: high level of solar radiation (per square inch) and large amounts of contiguous, relatively flat, undeveloped land.

According to Rajasthan Budget 2015-16 – the Government of Rajasthan allocated US\$ 76.47 million for the industry and minerals sector during 2015-16.

- Resurgent Rajasthan Summit planned for November, 2015.
- Land bank planned for industries.
- Offices of district industries centres and Commissioner Industries will be computerized
- For Honda Corps vendors, 25 acres of land will be allotted at Karauli Industrial area in Alwar
- 50 acres of land will be allotted for electronics manufacturing cluster in Salarpur-Bhiwadi industrial area
- 127 acre ESDM zone in Kaladwas extension will be constructed.

Important Industries in Rajasthan:

| Key Industries in Rajasthan | |
|------------------------------------|--------------------------|
| Cement | Auto and Auto Components |
| Tourism | Textile |
| IT and ITes | Agro-based industry |
| Ceramics | Gems and jewellery |
| Mining & Minerals | Marble |
| Handicraft | Steel |

According to Rajasthan Budget 2015-16 –

- In Small Scale Industries , policy for price preference for MSME and MSME facilitation centre will be built

- Interest free loan of around US\$ 1.41 million will be given to Rajasthan Small Industries Corporation Limited (RAJSICO) to set up a new centre with incubator, plug and play facilities etc, at Sodala, Jaipur.

As of April 2014, 19 Industrial Entrepreneurs Memorandums (IEMs) files were issued in Rajasthan with a proposed investment of US\$ 403 .62 million.

Out of the total allocated budget for operating industries and mineral sector, US\$ 24.05 million was proposed to be allocated to the Internal and Extra Budgetary Resources (IEBR) of Rajasthan State Mines and Minerals Ltd. In addition, US\$ 19.53 million was proposed to be allocated for the Industries Department and US\$ 0.13 million for the Handloom Development Corporation of the State.

Social Developments

Literacy Rate:

The State has a literacy rate of 66.1 per cent; the male literacy rate is 80.5 per cent and the female literacy rate is 52.7 per cent. In total, the State had 2,681 colleges. These includes 175 engineering colleges and 17 management colleges. As of 2014-15, there were 169 Industrial Training Institutes (ITIs) with 41,188 seats in the public sector. There were 844 ITIs with 1, 05,957 seats in the private sector. These institutes provide vocational training in engineering and non-engineering courses for one to three years.

The State has around 216 polytechnics with an intake capacity of 57,735 students. Short term, medium term and long term loans disbursed till December, 2014 in the State reached US\$ 2.31 billion, US\$ 40.06 million and US\$ 27.66 million, respectively.

Rajasthan Education statistics for the year 2014-15:

| Rajasthan's Education Statistics | |
|----------------------------------|--|
| School (No) | Primary: 49, 642 Upper Primary : 40, 322 Intermediate / senior secondary : 8,530 |
| Colleges (No) | 2,681 |
| ITIs (No) | Government : 215 Private Sector : 1,488 |
| Engineering Colleges | 175 |
| MBA Institutions | 86 |

E-teaching & e-training in District Institute of Education and Training and New Sainik School will be opened.

As per the Higher and Technical Education the State Higher Education Development Plan will be expanded, Additional US\$ 5.63 million sanctioned to 32 under construction college buildings.

Similarly in Medical Education, Setting up of multi-disciplinary labs in all medical colleges except SMS, Centre of organ transplant will be opened in SMS medical college, Bio-medical academy will be established in medical colleges and Nursing colleges will be established in PPP mode.

Health:

Rajasthan has a three-tier health infrastructure comprising of primary health centres, health units, community health centers and sub-centers. The State government has initiated targeted programs like Mukhya Mantri Nishulk Dava Yojna (Chief Ministers Free Medicine Scheme) and Chief Ministers BPL Jeevan Raksha Kosh (Life Saver Fund) to improve the healthcare of the people from the weaker sections of the society.

| Health Infrastructure as November 2015 | |
|---|--------|
| Community health centres | 615 |
| Primary health centres | 2,761 |
| Sub-centres | 14,437 |
| Districts Hospitals | 36 |
| Sub Districts Hospitals | 340 |

- As per the budget 2015-16, US\$ 1.01 billion was allocated to the State for improving the medical and health sector.

Health Indicators:

| Health Indicators | |
|--|-------|
| Population served per medical institutions | 3,715 |
| Population served per hospitals bed | 1,510 |
| Birth Rate | 25.6 |
| Death Rate | 6.5 |
| Life expectancy at birth (year) | |
| Male | 64.7 |
| Female | 68.3 |

Chapter 2

Industrial & Export Infrastructure of Rajasthan

Rajasthan has exhibited spectacular progress in several areas like agricultural production, harnessing of mineral resources, development of transport and communication, and in the production of energy resources over the years.

Rajasthan Industrial Development and Investment Corporation Ltd., (RIICO) is a government company, wholly owned by government of Rajasthan, India. RIICO is the apex organization for fostering growth of industrialization in Rajasthan. RIICO provides industrial lands and variety of technical inputs, by way of technological and managerial services, like relevant technical information, project briefs, project profiles, project reports, techno-economic feasibility reports, market surveys, financial and managerial consultancy and even diagnostic studies for projects rehabilitation. RIICO also provide financial assistance in project loan, equipment finance scheme (EFS), working capital term loan, medium term multipurpose loan. Flexi loan for hotels, hospitals and nursing homes, medium term loan against securitization of fixed assets etc.

(RIICO) acquires land for development of industrial areas and parks at different places in the State depending upon the potential of industrial development. RIICO has so far developed 324 industrial areas where around 34000 industries are in production. It has developed more than 300 industrial areas across various parts of Rajasthan. These industrial areas are developed with water, power, roads, shops and telecommunication facilities.

The special Industrial Complexes / Parks have been developed in the State by RIICO to meet the requirement of special industries. Few of the prominent special purpose industries parks are:

| Sl. No. | Product & Segment | Cities and Towns |
|---------|---|---|
| 1 | EPIP (Export Promotion Industrial Parks) 3 | Jaipur, Boranada (Jodhpur) &Neemrana |
| 2 | Handicraft Park (2) | Shilpgram (Jodhpur & Jaisalmer) |
| 3 | Agro Food Processing/ Agro Food Park(4) | Ranpur (Kota), Boranada (Jodhpur), Sriganganagar& MIA (Alwar) |
| 4 | Leather (1) | ManpurMacheri at Jaipur |
| 5 | Apparel Park (1) | Mahala at Jaipur |
| 6 | Stone Park (2) | Mandore at Jodhpur and Dholpur |
| 7 | IT Park with Special Infrastructure (4) | Jaipur, Jodhpur, Kota &Alwar with incubation centre |
| 8 | New IT Parks provided land to developers | Kant Kanwar (Jaipur), Bhiwadi (Alwar), Boranada (Jodhpur) |
| 9 | Textile Parks with special Infra set-up of & facilities for Textile units (3+2)=5 | Bhilwara, Chittorgarh& Jodhpur Private, Pali and Jaipur |
| 10 | Bio-tech Parks (3) | Jaipur, Jodhpur and Bhiwadi |
| 11 | Auto Components, Cables & Garments | Patodi (Chopanki), Autozone at Patodi (Bhiwadi) |
| 12 | Industrial Complex | Mazrakatha at Neemrana known as the Japanese Zone |

EXPORT INFRASTRUCTURE IN RAJASTHAN

RIICO plays a catalytic role in industrial development of Rajasthan. Keeping in view the specific requirements of export-oriented units, RIICO has given emphasis for development of special parks for setting up of such units. RIICO on behalf of Govt. of Rajasthan is providing and developing these basic infrastructure facilities for the exporting units.

- Export Promotional Industrial Parks
- Special Economic Zones
- ASIDE Scheme (Assistance to state for developing export Infrastructure and allied activities)
- AIR Cargo Complex (ACC) and inland container Depot (ICD)

Export Promotional Industrial Parks (EIPs)

The EIPs have been developed / are being developed under the scheme of department of Commerce, Govt. of India. In EIPs only those units that undertake to export a minimum of 33% of their production, are allotted land. Brief details of these EIPs are as under;

- *EPIP at Sitapura, Jaipur*

The first EPIP of the State was developed by RIICO at Sitapura, Jaipur over an area of 361 acres (409 plots). The park is functional since march-1997 with 208 units (230plots) under production and 62 plots (28 units) are under construction.

- *EPIP at Boranada, Jodhpur*

The second EPIP of the State has been developed by RIICO at Boranada, Jodhpur over an area of 207 acre on which an expenditure of approximately Rs.18 crore has already been incurred. Plots are allotted mainly to handicrafts units. All basic infrastructure facilities are available since July 2003.

- *EPIP at Neemrana, Alwar*

The third EPIP of the State is being developed at Neemrana located on NH-8 (Delhi- Jaipur Road). The park companies of 218 saleable industrial plots of which 210 plots have been allotted. This EPIP is being developed with an estimated project cost of about Rs.35 crore and expenditure of Rs.24 crore has already been incurred.

Special Economic Zone (SEZs): The wings of change

SEZs are specially delineated duty free enclaves treated as a foreign territory for the purpose of industrial, service and trade operations, with exemption from custom duties and a more liberal regime in respect of other levies, foreign investment and other transactions. Domestic regulations, restrictions and infrastructure inadequacies are sought to be eliminated in the SEZ for creating a hassle free environment. The SEZ scheme seeks to create a transparent system by introducing simplified procedures for enhancing productivity and making it easier to do business. SEZs envisages key role for the state government in export promotion and creation of infrastructure, investment and employability. Benefits derive from investment and additional economic activity in the SEZ and the employment generated has a multiplier effect on the economy.

SEZs have been driving industrial growth in India. This is an established fact today that for a business to be globally competitive and eco system has to evolve where all the key elements like infrastructure, resources, logistics, hassle free environment etc. need to be provided. SEZs act as a catalyst in providing these benefits to business.

Rajasthan Government has been very proactive for the growth of industries in the State. It has network of support organization like Rajasthan State industrial development and investment corporation (RIICO), Bureau of Investment Promotion (BIP), and the Rajasthan Finance Corporation (RFC) amongst others.

The State has adopted the Public Private Partnership model very successfully for the implementation of the SEZ projects in the State. Presently there are four operational SEZs in Rajasthan, while three of these are State owned by Rajasthan State Industrial Development

and Investment Corporation Ltd. (RIICO). The other one is joint venture between the RIICO and Mahindra & Mahindra.

Among those in the pipeline are six SEZs at advanced stages of formal approval from the Govt. of India and nine that have in principal approval. The details of the these four SEZs are as below, of these three SEZs have been developed / are being developed by RIICO. The brief details of these SEZs are as under;

- **SEZ for Gems & Jewellery units at Sitapura, Jaipur (Phase-I):** The SEZ for Gems & Jewellery units (phase I), has been set up at Sitapura, Jaipur. It is planned over 21.50 acres of land. All of the 51 Plots planned have already been allotted. Roads, drainage, boundary wall work and power supply/ street light work and other basic infrastructure facilities have been developed.
- **SEZ for Handicrafts units at Boranada, Jodhpur:** The SEZ for handicraft units at Boranada, Jodhpur has been planned over 180.94 acres of land (291) plots.
- **SEZ for GEMS & Jewellery units at Sitapura, Jaipur (Phase-II):** This SEZ for GEMS 7 jewellery units at Sitapura (phase-II), Jaipur has been planned over 89.39 acres of land (190 plots).
- **Public-Private Partnership for SEZ:** RIICO on behalf of the state government, is also promoting its first multiproduct SEZ in PPP mode on Jaipur-Ajmer National Highway. The SEZ shall be developed on 2500 acres of land and the domestic tariff area will be developed on 550 acres of land. In the phase-I government of India has approved IT/ITes SEZ, Handicrafts SEZ and light engineering SEZ. RIICO has also developed theme based parks which includes , IT parks at Jaipur, Jodhpur, Kota & Udaipur; EPIP at Jaipur and Jodhpur; Agro food parks at Kota, Jodhpur & Sri Ganganagar; Apparel Park at Jaipur; Bio-Tech Parks at Jaipur , Jodhpur and Bhiwadi.

Khadi & Village Industries

The Khadi & Village Industries Commission (KVIC) is a statutory body established by an Act of Parliament (No. 61 of 1956, as amended by act no. 12 of 1987 and Act No.10 of 2006. In April 1957, it took over the work of former All India Khadi and Village Industries Board. The broad objectives that the KVIC has set before it, are:

- The social objective of providing employment
- The economic objective of producing saleable articles
- The wider objective of creating self-reliance amongst the poor and building up of a strong rural community spirit.

Some of the major functions of KVIC are:

- Planning, promotion, organisation and implementation of programs for the development of Khadi and other village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary.

Its functions also comprise building up of raw materials and implements for supply to producers and creation of common service facilities for processing of raw materials as semi-finished goods and provisions of facilities for marketing of KVI products apart from training of artisans engaged in these industries and encouragement of cooperative efforts amongst them. To promote the sale and marketing of khadi and /or products of village industries or handicrafts, the KVIC may forge linkages with established marketing agencies wherever feasible and necessary.

The KVIC is also charged with the responsibility of encouraging and promoting research in the production techniques and equipment employed in the Khadi and Village Industries sector and providing facilities for the study of the problems relating to it, including the use of non-conventional energy and electric power with a view to increasing productivity, eliminating drudgery and otherwise enhancing their competitive capacity and arranging for dissemination of salient results obtained from such research.

- Further, the KVIC is entrusted with the task of providing financial assistance to institutions and individuals for development and operation of Khadi and village industries and guiding them through supply of designs, prototypes and other technical information.
- In implementing KVI activities, the KVIC may take such steps as to ensure genuineness of the products and to set standards of quality and ensure that the products of Khadi and village industries do conform to the standards.

The KVIC may also undertake directly or through other agencies studies concerning the problems of Khadi and/or village industries besides research or establishing pilot projects for the development of Khadi and village industries.

Rajasthan is mainly famous for its rich heritage – its history, the Maharajas and their palaces. But the state is more than just a tourist destination, state is now host to a number of small and medium enterprises alongside some major industrial units that have huge export profits and they have done well in the desert state. They are textiles, agro and food products, gems and jewellery, marble, handicrafts , readymade garments, carpet and durries and gem stones.

A brief detail about some of these clusters is as follows;

- **Gems & Jewellery**

With a history of dating back more than two and half centuries, the internationally recognized pink city of Jaipur is still a hot spot in the gems and Jewellery sector. From manual processing to value added branded products, the industry has grown, keeping pace with the changing trends. With over 2,00,000 peoples engaged in the industry, Rajasthan accounts for Rs.1650 crore of the total \$17 billion worth of Indian export of gems and jewellery. With more than 1300 exporters in the SME segment alone the sector has been witnessing a growth rate of 15-20%.

- **Handicrafts**

Another traditional industry that Rajasthan is well known for is the export of handicrafts. The industry that started about 25-30 years ago today boasts of an annual turnover of approximately 1400-1500 crore rupees. There are over 500 handicraft manufacturing and exporting units providing employment to about two lakhs people in Jaipur and Jodhpur, the two main handicraft centers in the state. In order to promote the industry an exclusive handicraft center is being set up in the Boranada Industrial area, Jodhpur, besides setting up industrial parks at Basni & Boranada.

- **Garments**

Garment manufacturing and exports is yet another important industrial cluster in the state. After the end of the quota system, the garment industry witnessed a sudden spurt of growth of 25-30%. Huge export orders kept all the exporters busy even in the off season for which tailors and fashion professionals were hired from neighboring states. Over 2502 garment manufacturing and exporters today account for annual exports worth Rs.850 Crore, of which Rs.500 Crore is from direct exports. The industry provides employment nearly to two lakhs people. The industry is now eyeing to grow domestic market too. The industry needs organized textile parks and apparel centers which have sound printing and dyeing facilities of international standards.

- **Printing & Dyeing**

Rajasthan has long been known for its printed and dyed textiles. But lately the hand block printing and dyeing units that employs lakhs of people that have been in thick of controversy over creating an ecological imbalance due to excessive use of dyes. With a total turnover of Rs.500 crore, the industry is getting orders from exporters across the country and especially from Delhi, Mumbai and Kolkata. Over a century old the cluster is asking for industry status as it has invested about Rs.600 Crore in machinery.

- **Carpets**

The State is also famous for heritage carpet weaving. With over 170 manufacturing and exporting units, Jaipur is one of the largest processing centers of handmade woolen carpets after Bhadoi in UP. Providing livelihood to over 2.5 lakhs people, the industry accounts for annual exports worth Rs.450 crore.

A handmade carpet with fine quality work generally costs between \$6 and \$ 30 per sq.ft. In the international market. The labour intensive natures of the industry and frequent droughts have helped the industry flourish in the state. Carpet manufacturing needs no power or water, which have always been scarcity in the State. The industry emerged as regular source of income for rural artisans and masses during drought in the State.

- **Agro Industry**

With about 20,000 units in the State, the agro industry has an export market of over Rs.500 crore. The size of the domestic market could be several times that of exports, but details are not available. There 2164 agro units in Nagore,1496 in Sawai Madhopur, 1391 in Jaipur and 1192 in Jodhpur. The industry has helped bring prosperity to the villages and increase production and income as well as absorb surplus labour in the area. In a way it helped solve the problem of unemployment. The major agro products from the state include oil seeds(Ground nut, Caster seeds), horticulture (fruits & Vegetables), tobacco, spices, cotton, dairy and guar gum.

- **Stones**

Rajasthan is home to exquisite natural stones like granite, marble stone, slate and sand stone and it has a long tradition of stone usage. Of the total exports from India, Rajasthan accounts for about Rs.800 Crore of stones, of which sandstone and marble are the main items. The Kishangarh cluster about 100 km. from Jaipur, is a major market for stones quarried in Makarana and Rajsamand. Huge marble deposits, a well-developed quarrying base, availability of cheap labour and indigenously developed machinery, a large domestic and export market and a well-established distribution network are the main reasons for the business doing well in the State.

Agro Food Parks

Rajasthan is one of the most fascinating states in India and perhaps the richest in agriculture heritage. It is a common belief that it is a land of desert, few people know and even less is aware that Rajasthan has vast tracts of land that are irrigable. It is predominantly agrarian State where agriculture contributes 25-40% of the State's Domestic Product and 70% of its produce is engaged in agriculture and allied activities. Thar Desert that runs, predominantly in the western part of the State and covers 250,000 Sq. Kms. has for centuries been a non-irrigable tract of land. The district of Barmer, Bikaner, Jaisalmer and Jodhpur provide the coordinates of the desert to a common travels. Indira Gandhi Canal has resulted a significant increase in the State. This canal covers the seven district of Rajasthan namely Barmer, Bikaner, Churu, Hanumangarh, Jaisalmer Jodhpur and Sriganganagar.

Crops of mustard, cotton and wheat now flourish in the semi-arid western region of the State where nothing but sand ruled the roost for several years. The canal is slowly but surely changing the face of Rajasthan. Government of Rajasthan is actively engaged in promoting various new techniques of modern day farming and bringing the technology to the farmer by organising several fairs and on site demonstrations. The governments massive be evinced by the number of subsidies and financial support that it is extending to the customer.

Government of India is providing grant-in-aid for development of Agro Food Park, so that all requisite information like Common Effluent Treatment Plant, Warehousing, Testing

Laboratory etc. are available at place and Agro units located in these parks can derive advantage of large scale. Congenial at place and Agro units located in these parks can derive advantage of large scale. Congenial environment, hassle free labour law and best-suited infrastructure are key elements, on which these parks have been designed. Rajasthan being primarily an agrarian economy and leader in producing Bajra, Barely, Pulses, Coriander and host of industrial ventures of this sector, looking to the current need of the hour, developing of Agro Food Park at Ranpur, Kota and Boranada, Jodhpur has been undertaken in the State.

| Description | Agro Food Park, Ranpur, Kota | Agro Food, Park, Boranda, Jodhpur | Agro Food Park, Sriganganagar |
|------------------------------|-------------------------------------|--|--------------------------------------|
| Area Acres | 136.74 | 192.47 | 81.14 |
| No. of Plots | 100 | 183 | 77 |
| No. of Plots for Dry Process | 73 | 146 | - |
| No. of Plots Wet process | 18 | 28 | - |
| No. of Plots for Green House | 9 | 9 | - |

Chapter 3

Advantage Rajasthan for Exports

Exports hold the key not only for a healthy balance of payment and macroeconomic positions, but also for a planned and sustained economic development. In the absence of better performance on the economic front, the balance of payments position of the country comes under strain and retards economic progress. Rajasthan has traditionally been an exporter of primary goods. The significance of exports from the State lies not only in earning foreign exchange for the country's exchequer but also in indirect benefits to the State such as:

- Expansion of market opportunities for its produce;
- Improvement in product quality and subsequent handling techniques;
- Technological up gradation in terms of plant, machinery and manufacturing process;
- Greater employment opportunities
- Exposure to the international marketing and technological environment etc.

The State government has identified exports as one of the thrust areas. Export promotion cell has been set up in the State Commissionerate of Industries. The Rajasthan Small Industries Corporation Limited (RSIC) has been recognized as an export house. Promotional efforts for export growth are also being made by the Bureau of Industrial Promotion and the RIICO Ltd. The manufacturers and exporters have given an excellent account of themselves in export efforts, which is evident from the sharp increase in the volume of exports in the recent years.

Government of Rajasthan has provided several incentives like over-riding priority in release of power connections to units set up in EPIP / Export processing zone, exemption from power cuts, purchase tax exemption depending on the level of investment and entry tax exemption to help promote export-oriented units. The policy of encouraging exports has already started paying rich dividend and in turn exports have led to the overall industrial development of the State.

The entrepreneurs of Rajasthan are exporting a wide variety of products, which includes handicrafts, carpets, readymade garments, printed fabrics, makeup's, leather goods, chemicals, minerals, stones viz. marble, granite, slate, sand stone, engineering goods, precious and semi-precious stones and jewellery etc. Rajasthan as a State offers some advantages for exports which are listed below:

1. Strategic Location

8,380 sq. km. of Rajasthan falls in the National Capital Region (NCR), which is around 24.50% of the total National Capital Region, the world's second largest urban agglomeration. Rajasthan shares its border with five major Indian states: Punjab, Haryana, Uttar Pradesh, Madhya Pradesh and Gujarat. These states have a combined population of 402 million (year 2011). Industries in Rajasthan have to their advantage, access to this enormous market.

2. Excellent Connectivity

Rajasthan has the second largest network of National Highways in the country with a total road length exceeding 7,310 km. National Highways provide excellent connectivity to cities like Delhi, Ahmedabad, Vadodara, Mumbai, Jabalpur, Bhopal, Agra, Gwalior, Indore, Amritsar. The railway network connects the state to all major cities in India and links the state to ports in Mumbai, Kandla and Mundra in Gujarat. The State has a fully operational international airport at Jaipur, with direct flights to Sharjah and Muscat. Rajasthan has airports at Jodhpur, Udaipur and airstrips in other major districts. An Air-Cargo Complex at Jaipur and Inland Container Depots at Jaipur (2), Jodhpur (3), Bhilwara&Bhiwadi facilitate trade within and outside India.

a. Delhi-Mumbai Industrial Corridor

Rajasthan touches six major states of the Northern, Western and Central India. It is a natural corridor between the wealthy northern and the prosperous western states of the country, which makes it an important trade and commerce centre. Dedicated Freight Corridor (DFC) is a 1,483 km long rail corridor connecting Jawaharlal Nehru Port near Mumbai to Dadri near Delhi. DFC will allow high-speed connectivity for high axle load wagons (25 tonnes) of double stacked container trains supported by high power locomotives. A band of 150 km has been chosen on both sides of the DFC to be developed as the Delhi-Mumbai Industrial Corridor (DMIC). With nearly 39% of DFC passing through Rajasthan, opportunities for industrial establishment along the route are eminent as the corridor will make Rajasthan easily accessible to western and northern markets. About 60% of the State's area (in 22 Districts including major districts such as Jaipur, Alwar, Kota and Bhilwara) falls within the project influence area. With this, the State will become an attractive destination for setting up industrial and support infrastructure units. In Khushkhera-Bhiwadi-Neemrana region, an integrated industrial township is being developed and on similar concept a

township along with other support infrastructure and projects is being planned in Jodhpur-Pali-Marwar area under DMIC in the first phase.

3. **Land Availability**

Rajasthan, geographically the largest State of India, offers land in plenty and at competitive prices. Rajasthan Industrial Development and Investment Corporation Ltd. (RIICO) ensure top-class infrastructure and other related support for establishment of new enterprises. To catalyze industrialization, the corporation has developed 327 industrial areas close to 74,228 acres throughout the State. Furthermore, the State Government has made several provisions under the relevant laws for leasing of government land and simplifying the procedure for conversion of land for agri-business activities.

a. **Agro Food Parks**

RIICO has developed four Agro Food Parks in Kota, Jodhpur, Sriganganagar and Alwar for development of agriculture based industries. Another Food Park is being developed near Kishangarh in Ajmer district by M/s Greentech Mega Food Park Pvt. Ltd. under the Scheme of Government of India.

b. **Single Window Approval**

A Single Window System is operational as a single point interaction mechanism for entrepreneurs to interact with the State for seeking statutory approvals for their projects. Keeping with the times, the entire process of application and monitoring is through web-enabled software called the Single Point Electronic Monitoring and Clearance System. Using this web-interface, entrepreneurs can register, fill and monitor application forms electronically. Forms along with the enclosures have to be submitted at the nodal office physically.

Chapter 4

Major Exports from Rajasthan

The present report envisages to introduce sectors with potential for export in Rajasthan. For the purpose of identifying the thrust sectors for export potential from Rajasthan, data of export of various items from Rajasthan for the last 10 years – as sourced from the Office of Commissioner of Rajasthan - was extracted from the Rajasthan Industrial Profile published by MSME Development Institute, Jaipur.

Exports data for various sectors in Rajasthan:

| Sr No | Product | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2010-11 | 2011-12 | 2012-13 | 2013-14 |
|-------|---|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| 1 | Textile | 1589.01 | 1807.53 | 1864.54 | 2023.16 | 2030.56 | 2500.13 | 3402.74 | 3800.08 | 4139.65 |
| 2 | Agro & Food Products | 545.6 | 579.53 | 762.07 | 1320.07 | 1877.08 | 2869.72 | 1078.38 | 14517.17 | 9080.75 |
| 3 | Gems and Jewellery | 1520.36 | 1724.32 | 1497.25 | 865.9 | 1710.44 | 2686.24 | 2970.03 | 3023.36 | 4564.15 |
| 4 | Engineering | 684.81 | 1104.43 | 3301.49 | 2871.23 | 3410.85 | 1920.17 | 2698.21 | 2914.81 | 3517.26 |
| 5 | Metal | NA | NA | NA | NA | NA | 4498.52 | 2779.21 | 1124.94 | 923.79 |
| 6 | Dimensional Stones, Marbles, Granites & articles of Stone Mica etc. | 470.42 | 581.59 | 923.43 | 1075.31 | 913.67 | 933.25 | 1812.18 | 2028.89 | 2539.42 |
| 7 | Mineral fuels, mineral oil & products | NA | 2113.37 | 2181.01 | 1316.62 | 810.26 | 2915.9 | 162.29 | 1052.91 | 171.65 |
| 8 | Electrical, electronics & computer software | 90.44 | 96.1 | 98.23 | 99.28 | 102.98 | 120.38 | 421 | 1171.82 | 1500 |
| 9 | Wool & Woolen | 24.2 | 32.11 | 22.25 | 24.51 | 20.47 | 16.92 | 34.26 | 35.25 | 39.75 |
| 10 | Chemical & Allied | 780.41 | 1373.2 | 1367.23 | 1031.29 | 1170.65 | 1347.43 | 2743.14 | 3779.69 | 4123.64 |
| 11 | Drugs & Pharmaceuticals | 45.34 | 59.58 | 90.48 | 75.95 | 121.62 | 186.52 | 281.22 | 293.76 | 359.9 |
| 12 | Plastics & Linoleums | 39.44 | 85.07 | 84.25 | 78.06 | 99.68 | 136.39 | 252.74 | 517.22 | 407.71 |
| 13 | Handicrafts | 1321.28 | 1609.05 | 1960.23 | 1484.42 | 1386.67 | 1875.95 | 2150.65 | 2363.83 | 3029.18 |
| 14 | Leather & Leather Products | 19.91 | 56.16 | 46.9 | 48.07 | 40.01 | 81.45 | 83.47 | 98.26 | 137.16 |

| | | | | | | | | | | |
|----|--------------------|---------|----------|----------|----------|----------|---------|---------|---------|----------|
| 15 | Readymade Garments | 414.23 | 812.24 | 657.95 | 585.79 | 880.38 | 933.25 | 1281.45 | 1288.2 | 1543.17 |
| 16 | Carpets (Durries) | 258.51 | 304.95 | 309.21 | 273.16 | 258.52 | 237.6 | 370.62 | 394.36 | 442.61 |
| 17 | Handlooms | 0.35 | 0.41 | 0.6 | 0.66 | 0.74 | 1.2 | 2.1 | NA | NA |
| 18 | Others | 197.63 | 16.77 | 19.29 | 15.56 | 401.84 | 9.05 | 77.11 | 18.94 | 7.52 |
| 19 | Total | 8002.03 | 12355.97 | 15186.41 | 13189.04 | 15236.42 | 23753.2 | 32749.6 | 39106.7 | 37286.71 |

Based on the information available, we calculated the Compounded Annual Growth Rate (CAGR) was calculated using the following formula:

$$CAGR = \left(\frac{\text{Ending Value}}{\text{Beginning Value}} \right)^{\left(\frac{1}{\# \text{ of years}} \right)} - 1$$

The following sectors were identified as the Thrust Sectors:

| Sectors | CAGR | Rank |
|---|-------|------|
| Agro & Food Products | 36.68 | 1 |
| Electrical, electronics & computer software | 36.62 | 2 |
| Plastics & linoleums | 29.63 | 3 |
| Drugs & pharmaceuticals | 25.88 | 4 |
| Leather & leather products | 23.92 | 5 |
| Dimensional stones, Marbles, Granites & articles of stone mice, etc | 20.60 | 6 |
| Chemical & allied | 20.32 | 7 |
| Engineering | 19.94 | 8 |
| Readymade garments | 15.73 | 9 |
| Gem & Jewellery | 12.99 | 10 |

In the subsequent sections, the above sectors would be explored in detail from the perspective of Rajasthan as a State. Information related to the major export products in the particular sector, the advantage the state has to offer with reference to the sector, policy support provided at the state and the National level, major countries where the produce is exported is being provided. In-depth information is provided for sectors have become a major focus of the government in the recent years.

The information provided here is a combination of the secondary research and primary interviews from various stakeholders in the business.

SECTOR 1 - AGRICULTURE, ALLIED & AGRO-PROCESSING

1. Overview

Agriculture, with its allied sectors, is unquestionably the largest livelihood provider in India, more so in the vast rural areas. It contributes a significant figure to the Gross Domestic Product (GDP). Sustainable agriculture, in terms of food security, rural employment, and environmentally sustainable technologies such as soil conservation, sustainable natural resource management and biodiversity protection, are essential for holistic rural development. Indian agriculture and allied activities have witnessed a green revolution, a white revolution, a yellow revolution and a blue revolution.

Rajasthan, situated in North-western India is largest state in terms of area in the country and contributes significantly in Indian Agriculture. The State of Rajasthan produces wheat, coarse grains, pulses, oilseeds & spices in abundance.

Rajasthan is not just India's largest State. It has also one of the highest livestock populations in the country. The contribution of the Animal Husbandry Sector is more than 10% of the State GDP, thereby making livestock not only a significant component of rural economy but also an important shield against adverse climatic conditions.

2. Policy Support

The State government has decided to adopt a two-pronged strategy for the promotion of agro-processing and agri- marketing in the state. Together, these steps should meet the requirements of the units in this sector and help in creating a favorable climate for investments in this sector. Firstly, this sector has been accorded the status of a Thrust Sector under the Rajasthan Investment Promotion Scheme, 2014 (RIPS 2014) and higher incentives and exemptions will now be available under RIPS 2014 to the units in this sector.

- Enterprises engaged in post-harvest crop activities and not having VAT/CST liability will be able to avail the benefit of 5% Interest Subsidy for 5 years.
- The enterprises engaged in manufacturing of cattle feed, poultry feed and fish feed shall also be entitled to avail the benefit of 5% interest subsidy for 5 years.
- Enterprises engaged in manufacturing and processing of agriculture/horticulture/animal products and having VAT/CST liability will be eligible for Investment Subsidy and Employment Generation Subsidy.
- Units with investment over Rs. 25 lacs have been made eligible for much higher levels of Investment Subsidy and Employment Generation Subsidy.
- Enterprises with investment of Rs. 100 crores or more or providing employment to at least 250 persons will now be eligible for availing customized package of incentives & concessions under RIPS 2014.

Furthermore, to meet certain specific requirements of this sector and to provide incentives which are presently not available under RIPS 2014, the State Government has also undertaken "Rajasthan Agro-processing & Agri-Marketing promotion scheme-2015".

The following additional incentives will be admissible under this Policy:

A. Transport Subsidy on export of spices:

Provision has been made not only for subsidy on surface transport to the ports but also for subsidy on marine transport. The maximum limit is Rs. 15 lacs per beneficiary / per year. This subsidy will be available for 3 years.

B. Subsidy for export of fruits and vegetables:

This subsidy is available up to a maximum limit of Rs. 10 lacs per beneficiary / per year. This subsidy will also be available for 3 years.

C. Transport subsidy for fruits and vegetables within the country:

Subsidy will be admissible for transportation of fruits and vegetables beyond a distance of 300 Kms. The maximum limit is Rs. 15 lacs per beneficiary / per year. This subsidy will also be available for 3 years.

D. Incentives for quality and certification:

The following types of incentives will be available:

- i. Patent & Design registration: Up to a maximum of Rs. 2 lacs per beneficiary per year.
- ii. Quality certification: Up to Rs 2 lacs to each enterprise for each certification per year.
- iii. Sending agri-products for test marketing abroad: 40% of the actual cost subject to a maximum of Rs. 50000/- per beneficiary for one sample of one commodity to one country.

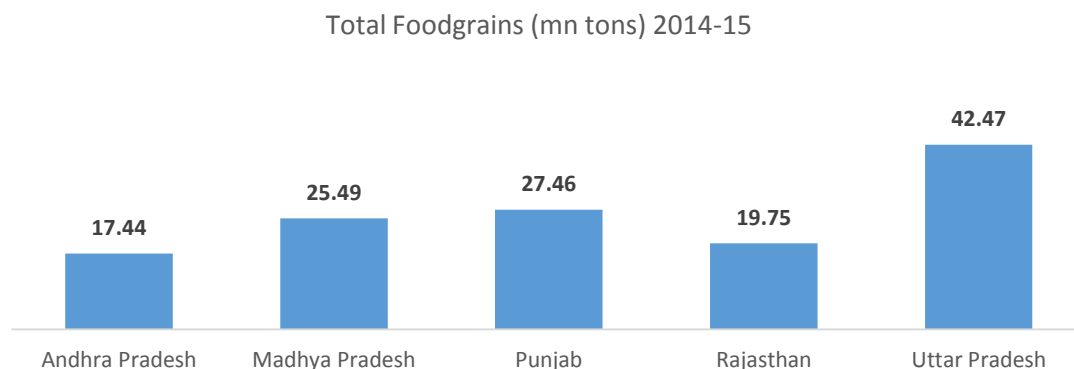
E. Incentive for Research & Development:

50% of the cost of development of new prototype subject to a maximum of Rs. 20 lacs for each undertaking in a year.

F. Incentive for Project Development:

50% of the cost of development of the DPR. Maximum Rs. 10 lacs during a period of 5 years.

Agro Food Processing



Rajasthan, with its diverse agro-climatic conditions is richly endowed in the cultivation of a variety of crops. The state is the largest producer of guar and seed spices like coriander, cumin, fenugreek, fennel, etc. The state is the largest producer of mustard, second largest producer of oil seeds and third largest producer of soybean. It is also the largest producer of gram and second largest producer of moth bean. Rajasthan has proximity to large consumer markets in the region (close to NCR) which has a large share of food consumption in the country. Infrastructure like Agro Food Parks at Kota, Jodhpur, Sriganganagar and Alwar has been developed by RIICO. Rajasthan also offers immense opportunities in the areas of organic farming, contract farming and in creation of post-harvest infrastructure such as special ware-houses, cold chains, testing & certification facilities.

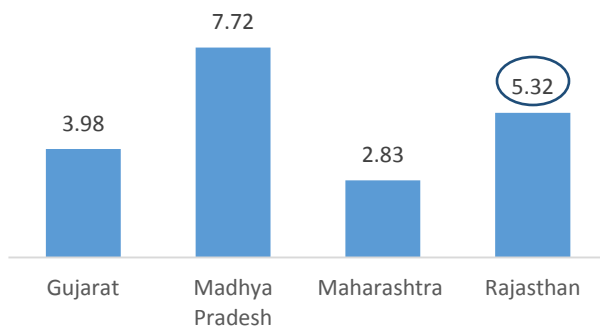
The State's APMC Act has been amended in lines with the model act suggested by the Union Government. Provisions have been made for contract farming, direct purchase outside the market yards, unified license etc. Further, Rajasthan is one of those few states, which has done away with Mandi Fees on perishable items like fruits and vegetables.

3. Scope & Potential

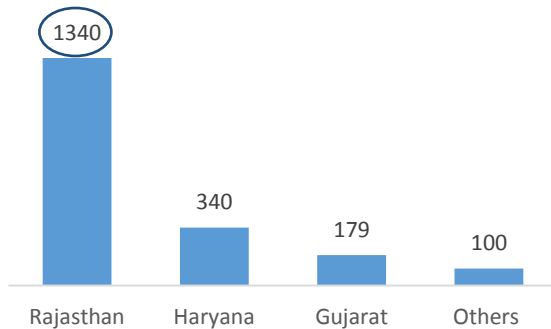
The State stands at 4th position after UP, Punjab & MP in food grain production. 4th largest production of Wheat and largest production of coarse grains. Maize, Sorghum, Barley, Pearl Millets are primary coarse grains in Rajasthan. 2nd in production of Gram, largest production of Moth Beans.

2nd largest Producer of total Oil Seeds and largest producer of mustard, 3rd largest producer of soya bean production and for ground nut it stands at 4th position in the country.

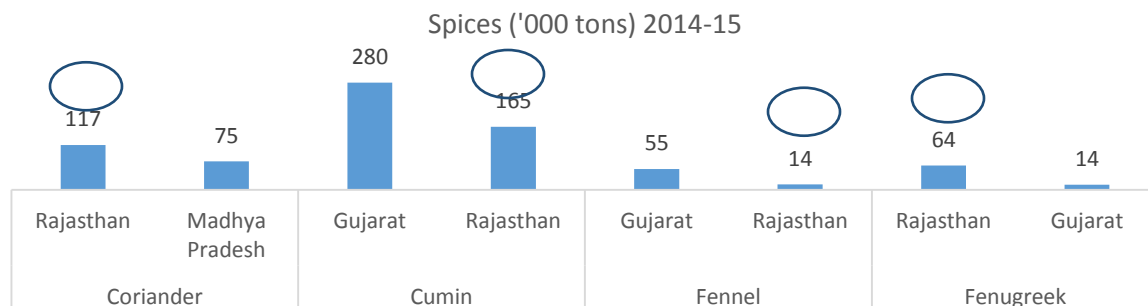
Total Oilseeds (mn tons) 2014-15



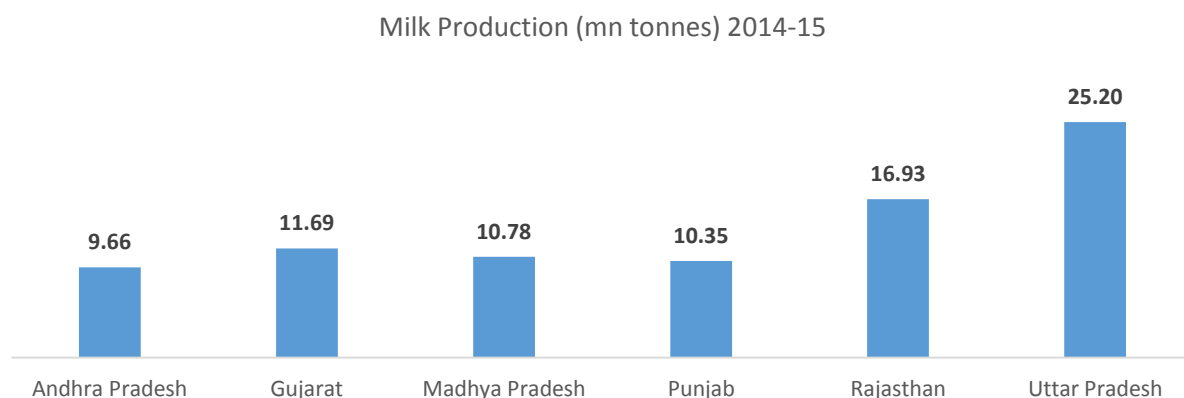
Guar seeds ('000 tons) 2014-15



Largest producer of Guar seed, Spices like fenugreek, coriander, cumin, and fennel.



Rajasthan, it has been estimated that an economy of Rs.1, 25,000 crores revolves around this sector. The value of livestock and its products alone touches Rs.75, 000 Crores. Rajasthan produces 10% of India's milk and a third of sheep and goat. It also produces the largest amount of wool in the country.



Rajasthan offers excellent scope to the livestock and poultry feed sector. Maize, whose sowing area is touching one million hectares, sees a total production of around 1.5 million tonnes. This crop is good raw material of poultry feed. Similarly, Rajasthan is a leader in other crops like Sorghum, Pearl Millet (Bajra), Pulses, Oil Seeds, Wheat and Rice, all of which in some way or other, form parts of compound livestock feed.

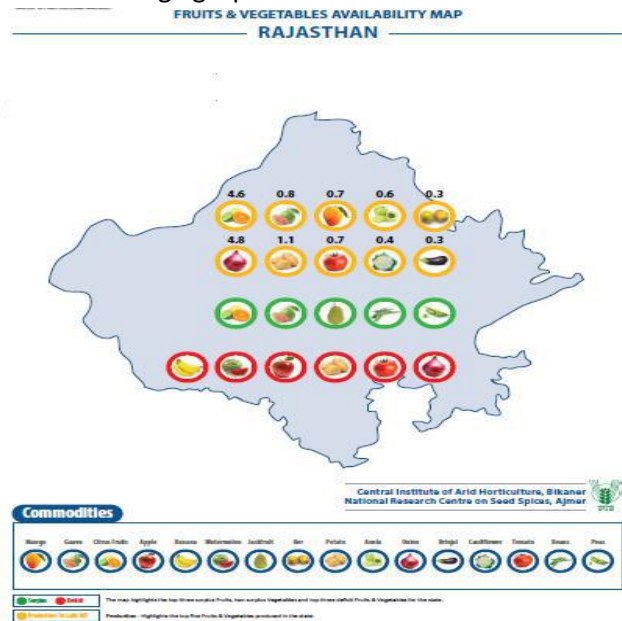
Rajasthan also produces non-conventional ingredients, which can be integral part of the feed raw material. These include mesquite (Juliflora) pods, watermelon and Citreous (bitter melon), which are abundantly available in the State. A State level Feed and Fodder Laboratory has been established with advanced facilities that are able to test feed and fodder for drug residue, fungal toxins and pesticides. Rajasthan University of Veterinary and Animal Sciences, Bikaner is involved in research in fodder production, nutritional value addition, hydroponics, poly-bag silage and on bypass fat and bypass protein technologies.

The agriculture sector has thrown open tremendous opportunities for the successful establishment of vibrant and potentially profitable agro-processing units in Rajasthan. Rajasthan being a major producer of different agri-produce offers vast potential in processing of:

- Soya based food-processing for soya milk and soya protein
- Cereals for high Fructose, Corn Syrup and low fat products, Barley for malt purpose
- Guar gum derivatives having application in paper, textile, mining and other industries and Guar gum powder having application in food, cosmetics, pharmaceuticals.
- Setting up of spice processing units for raw seed, powder seed, oleoresins
- Waxing plants, pack houses and cold chain for fruits & vegetables
- Units for drying, dehydration & processing units for canned juices, marmalades, squash, fruit juice concentrate of fruits like Oranges, Kinnow, Pomegranate, Guava and Date Palm.
- Processing units for vegetables like brinjal, cabbage, cauliflower.
- Essential oil extraction units of spices and medicinal & aromatic plants & olive.
- Processing units of herbal medicines based on Aonla, Isabgol, Sonamukhi, Ashwagnadha, Aloe vera, Henna
- Hi-tech nurseries for fruit plant sapling production
- Green houses for off season and exotic vegetable production
- Establishment of commercial dairy units
- Setting up of processing of camel milk and goat milk separately which is of therapeutic utility
- Setting up of Livestock feed units
- Establishment of poultry processing units Agro Food Parks, Refrigerated warehousing

The State has the export potential for the following agri-produce:

- Kinnow, Mandarin
- Fresh vegetables :
Tomato, Onion, Okra, Pea,
Green Chillies, Capsicum,
Karela, Tinda, Cabbage,
Cauliflower, Red Chilli
- Aonla & its products
- Honey & its products
- Garlic whole & powder
- Spices seed
- Rose oil, dry petals,
Gulkand
- Isabgol husk, Senna &
Mehndi Powder



Till date, despite its advantages, Rajasthan has not seen any major livestock feed industry come up. Given the advantages that Rajasthan offers, the State is an ideal investment destination for units in manufacturing and supply of nutritional feed, feed plants, machinery and related businesses.

4. Major Processors/ Exporters

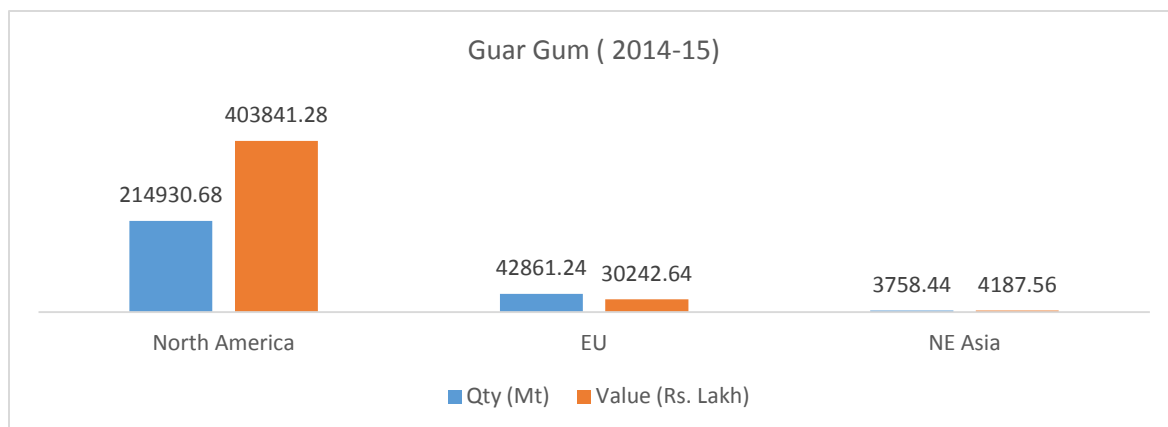
Rajasthan is a hub of processors & exporters of agro-based products. There are a large no. of national & regional players who are exporting unprocessed and processed items from Rajasthan. While AWB, Cargill, Field Fresh, ITC & Reliance are national players (they have facilities based in other states also)

There are home grown exporters and processors also; few of them are listed as below:

| Name | Address | Commodity |
|------------------------------|---------|------------------------------|
| Adarsh Guar Gum Udyog | Barmer | Guar gum splits/meals/powder |
| Shakambari Food Products | Jaipur | Namkeen& Snack Foods |
| Lotus Gums & Chemicals | Jodhpur | Guar gum powder |
| SMJ Spices | Jodhpur | Spices |
| National Agro Products | Jaipur | Snacks, Beverages |
| Rajasthan Agro Products | Jaipur | Spices |
| Vasundhara Gums & Chemicals | Jodhpur | Guar Gum |
| Shri Vijay Laxmi Enterprises | Jodhpur | Guar Gum |
| Ajay Agrotech | Alwar | Spices |
| Maharani Spices | Jodhpur | Spices |

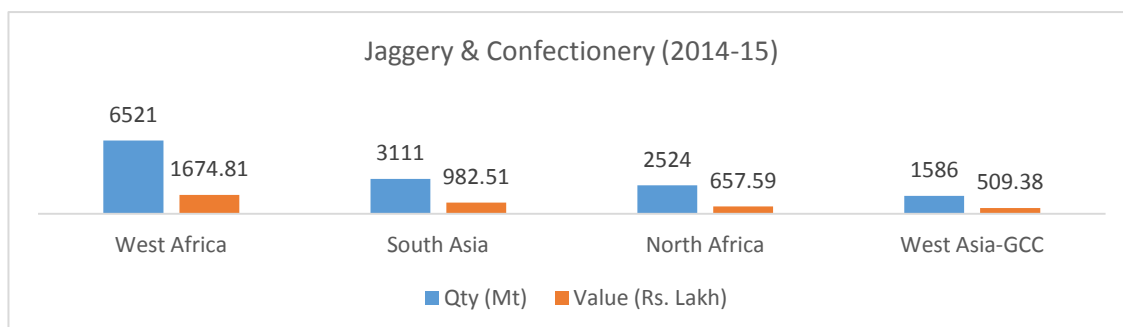
5. Major Importing Countries

Importing regions are mostly West Asia, African, Asian & North American continent with small quantities going to EU, Latin America and other parts of world also.

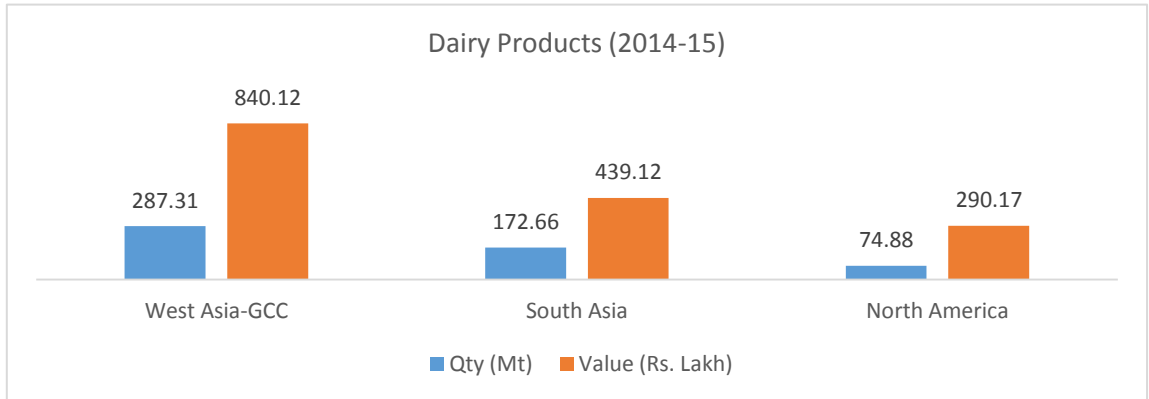


Guar Gum is one of the most exported items from Rajasthan. Almost **87% of total valued Guar Gum** items are imported by Northern American countries. While EU and NE Asian countries import it in smaller volumes.

Jaggery & confectionery are other high volume items that are imported from Rajasthan in abundance. West Africa alone contributes **30% in total imports** of Jaggery & Confectionery items.



West Asian Gulf countries have emerged as favorite destination for dairy products from Rajasthan. Almost **47% of total valued dairy** products are imported by West Asia-GCC.



Besides it whole food-grains like Wheat, Maize, Pulses and Groundnuts are imported from Rajasthan by West Asia-GCC, ASEAN, North America and North Africa. While for Preserved & dried vegetables EU countries are most important importing nations.

SECTOR 2- ELECTRICAL, ELECTRONICS & COMPUTER SOFTWARE

1. Overview

The IT & electronics industry is one of the fastest-growing industries in India, both in terms of production and exports. In fact, software development and IT-enabled services (ITeS) have made India's brand equity a force to reckon with. Today, India is a vast market for IT, with a major production base. In 2014–15, direct employment in the IT & ITeS sector was estimated at 3.5 million. The demand for electronic products and systems in the country is estimated to reach US\$ 400 billion by 2020.

In Rajasthan, production of electronic goods in the past ten years has increased from Rs.70 crores to about Rs.750 crores. The State occupies a prominent position in production of electronic components. Given its many positive features the Industry deserves continued support.

Software and services exports continued to remain on top of the IT industry's revenue. The export-driven software sector saw major long-term projects come to Indian ICT leaders and Indian Companies bagging a larger and larger share of the global outsourced business

2. Policy Support

The State of Rajasthan offers huge investment opportunities in IT sector especially ITeS. Rajasthan State Industrial Development and Investment Corporation Limited (RIICO) has developed state of art IT parks at Jaipur, Kota, Udaipur and Jodhpur to attract investment in IT sector. RIICO is also considering developing such IT parks at Bhiwadi (Alwar). The infrastructure in terms of developed plots, continuous power High-Speed Data Com Facility through satellite earth station, road etc. are being made available to the IT industries in IT parks. An investor friendly IT policy is already in place and provides lucrative incentives to IT industries.

An Electronic complex encompassing Electronics Hardware Technology Park would be developed by RIICO at Kukas, Jaipur having interalia. An Electronics Zone will be developed as a part of the Export Promotion Industrial Park at Jaipur.

The Software industry is growing at the rate of over 40% per annum and the potential for its development in locations like Jaipur is substantial. The following initiatives will be taken for development of computer software industry in Rajasthan. The Government will take steps to inculcate Information Technology(IT)-based work Culture in the State. Measures would

be taken to develop a local market, first by introducing computerisation in the Government in a big way.

A large Information Technology Park will be promoted at Jaipur, in which built-up space and developed plots at reasonable prices would be made available. A Production Incentive of 50% of land cost will be provided to entrepreneurs whose units go into commercial production within two years of allotment. An Earth Station is being set up in the State to provide high speed data communication facility with Department of Electronics, Government of India. For promoting advanced software training, up to 5 acres of land at a concessional rate of 25% of the prevailing land rates will be allotted by RIICO in selected industrial areas. Special measures will be undertaken to enlarge facilities for I.T. education in Technical Institutions and Colleges of the State. Computer Software will be considered as an industry for the purpose of all incentives and concessions. Software industries will be permitted to establish without any locational restriction in the urban areas. Software units will be considered as industrial consumers and electricity tariff would be levied accordingly. Software industry will be exempted from the provisions of Pollution Control Laws and regulations.

Mahindra Group and Rajasthan State Industrial Development and Investment Corporation (RIICO) have jointly developed an integrated business location in Jaipur - the Mahindra World City, an SEZ providing world class platform to the investors in this sector. The SEZ has a dedicated IT/ITeS zone spread over 750 acres which provides seamless telecom and broadband connectivity, quality satellite linkage and a range of voice and data solutions.

3. Projects for Investment in Rajasthan

| Product/Service | Investment INR Million |
|--|------------------------|
| Air Conditioners & Microwave Ovens (table) | 275 |
| Computer Mouse, Track Ball, etc. | 750 |
| Optical Fiber Cable | 1000 |
| Computer Colour Monitors | 1000 |
| Computer Printers (Ink Jet/Laser) | 750 |
| Refrigerators | 1500 |
| Air Conditioning Units | 3000 |
| Mobile Phones | 2500 |
| ATM, Cash Dispensers, etc. | 1500 |

4. Major Industries

The major industries are Electrolux, Ericsson, GE, Samcor, Instrumentation, Rajasthan Electronics & Instruments (REIL), Genus overseas, Allied Electronic, Compucom, Cistems software, Lipi Data, Aksh Optifibre

5. Major Importing Countries

Mechanical & Electrical:

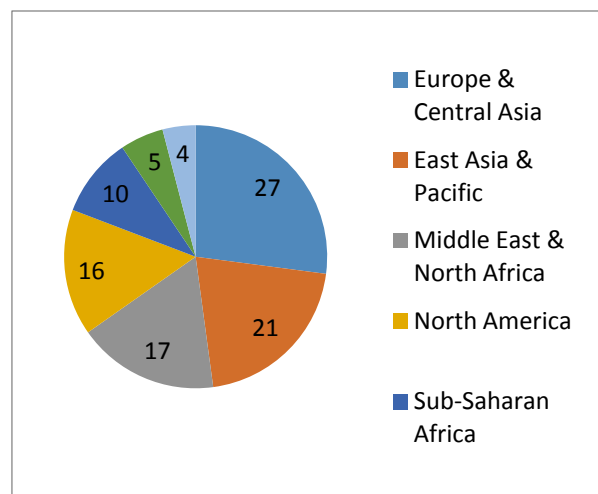
Major importing continents for Mechanicals & electrical products are as follows:

| Partner Name | Export (US\$ Thousand) |
|----------------------------|------------------------|
| World | 22,594,468.70 |
| Europe & Central Asia | 6,064,763.20 |
| East Asia & Pacific | 4,656,826.71 |
| Middle East & North Africa | 3,895,136.64 |
| North America | 3,480,805.44 |
| Sub-Saharan Africa | 2,195,303.87 |
| South Asia | 1,198,363.17 |
| Latin America & Caribbean | 908,906.47 |

Europe & Central Asia contributes 27% of total import from India for mechanical & electrical products.

United States is the biggest importing country of mechanical & electrical product from India worth USD 3.32 billion* followed by UAE worth USD 1.43 billion*.

**data is for 2014 imports*



Electronic & Computer software/services:

The IT & electronics industry grew 7.7 percent in terms of production during 2013-2014 and 10.2 percent in terms of exports over 2012-13, with India ranking among the top 30 markets in terms of production and sales.

Exports in the computer service industry stood at US \$ 84 billion during 2013-2014.

North America is the key market for the export of computer software and services. 59 per cent of India's exports were to North America in 2013-14.

In 2013-14, exports to the EU were estimated at 26.9 percent. Singapore, Hong Kong and other South Asian countries were among the major destinations for India's computer software/services exports during 2013-14.

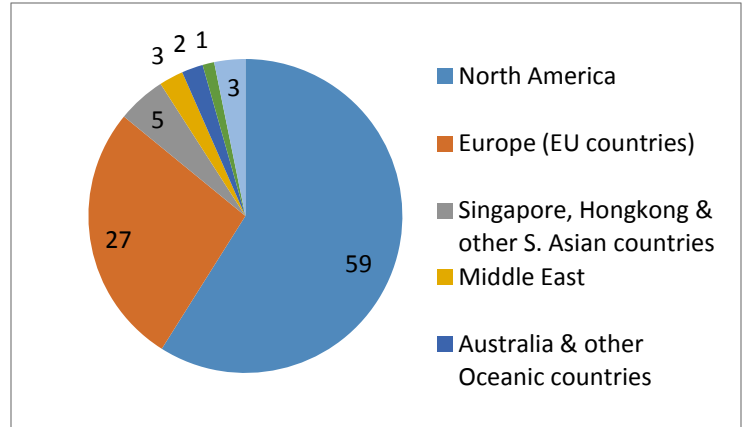


Fig 1: Export destination of Indian computer/Services (2013-2014)

The Middle East and Europe were the largest markets for electronic hardware, with exports worth US\$ 1.74 billion and US\$ 1.72 billion respectively in 2013-14. Moreover, they accounted for 45.14 per cent of the total electronic hardware exports.

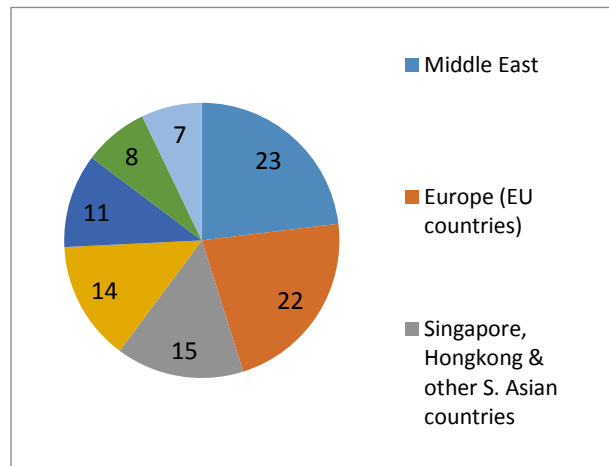


Fig 2: Indian electronics' export destination (2013-2014)

SECTOR 3 - PLASTIC INDUSTRY

1. Overview

No other Industry has created such a sensational flutter in innovative product development within a short period of invention as polymers, commonly known as plastics. The actual use of polymers came in the wake of Second World War and it has made rapid strides in product development now peaking to more than 90,000 uses and applications in all conceivable fields.

The Indian plastics industry made a promising beginning in 1957 with the production of polystyrene. Thereafter, significant progress has been made, and the industry has grown and diversified rapidly. The industry spans the country and hosts more than 2,000 exporters. It employs about 4 million people and comprises more than 30,000 processing units, 85-90 per cent of which are small and medium-sized enterprises.

With the plastics industry growing at a 10% of CAGR, the plastics industry is one of the intermediary sectors and is related to sectors like Automotive, construction, electronics, healthcare, textiles and FMCG etc. The consumption pattern of plastic products in India is focused on western India and northern India that account for 70% of the total demand. Due to the push by the government in domestic manufacturing, focus on the plastic industry has increased with more states like Rajasthan Punjab and Haryana realizing high growth rates in the plastic processing sector.

The per capita plastic products consumption of India (9.7kgs) is far lesser than other developed countries like USA and Europe. With a Polymer utilization rate of only 2% in the agriculture sector in comparison to the global average at 8%, the opportunities for growth in this particular sector are a lot.

2. Policy Support

The fourth Industrial policy of the State has made Rajasthan the most favored destination for industries. The policy has envisaged an attractive package of incentives to industries, which inter alia included sales tax exemption/ deferment, interest subsidy, octroi exemption, DG subsidy, subsidy for agro based units, incentive for quality certification, reduction in stamp duty, special scheme including interest subsidy and exemption from entertainment tax for amusement parks/cinemas/hotels, simplification of land conversion and exemption of land and building tax.

The strategy of the new Industrial Policy is a sectorally focused and cluster based approach. This is expected to help the thrust sectors become nationally and in due course, globally competitive and facilitate growth of exports from Rajasthan.

An Export Promotion Industrial Park (EPIP) measuring 365 acres has already been set up at Sitapura, Jaipur. Another EPIP, recently approved by the Government of India, will be developed at Bhiwadi. In addition to the existing Inland Container Depots (ICDs) at Jaipur, Jodhpur, Kota and Udaipur, new ICDs will be set up at Bhilwara, Bhiwadi and Ganganagar. Efforts will be made to secure rail-linkage for the ICDs so as to ensure faster and cost-effective transportation.

In Industrial Policy 1994, a number of incentives had been announced for 100% EOUs. These are being further liberalized and would be available to even those industries which are exporting 50% of their production. Public utility status under section 2(n) of the Industrial Disputes Act, 1947 would be granted to all such units. Exemption will be given from payment of sales tax on purchase of machinery for a period of five years to units set-up up to 31st March, 2003. Rates of purchase tax on raw materials for exporting units would be rationalized.

For minimum investment of Rs. 1 crore in plastic sector, 60% Investment subsidy & 10% Employment generation subsidy of VAT & CST for 10 years. 50% Entry Tax exemption on capital goods, for setting up new plant or expansion of existing enterprises

3. Projects for Investment in Rajasthan

| Product/Service | Investment INR Million |
|--|------------------------|
| Air Conditioners & Microwave Ovens (table) | 275 |
| Computer Mouse, Track Ball, etc. | 750 |
| Optical Fiber Cable | 1000 |
| Computer Colour Monitors | 1000 |
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5. Major Importing Countries

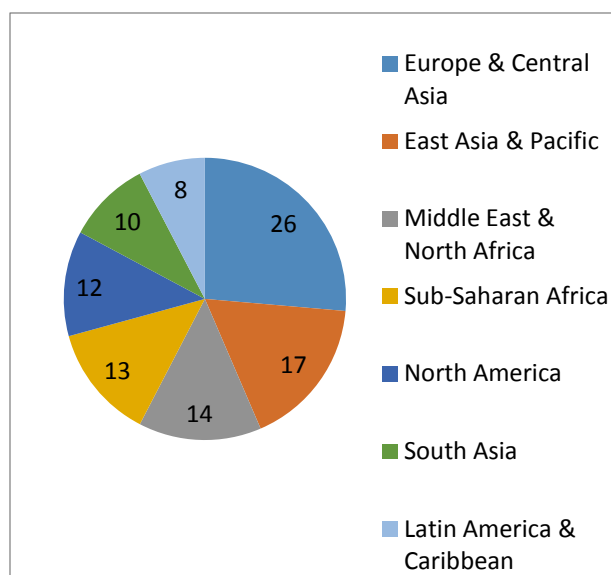
Major importing continents for plastic or rubber products are as follows:

| Partner Name | Export (US\$ Thousands) |
|----------------------------|-------------------------|
| World | 8,266,323.34 |
| Europe & Central Asia | 2,167,161.71 |
| East Asia & Pacific | 1,411,686.72 |
| Middle East & North Africa | 1,157,497.20 |
| Sub-Saharan Africa | 1,079,178.65 |
| North America | 991,138.08 |
| South Asia | 784,997.75 |
| Latin America & Caribbean | 628,276.81 |

Europe & Central Asia contributes 26% of total import from India for plastic & its products followed by East Asia & Pacific (17%).

United States is the biggest importing country of plastic product from India worth USD 896 million* followed by China worth USD 438 million.

**data is for 2014 imports*



SECTOR 4 - PHARMACEUTICALS AND BIOTECHNOLOGY

1. Overview

The Indian pharmaceuticals market increased at a CAGR of 17.46 per cent in 2015 from USD6 billion in 2005 and is expected to expand at a CAGR of 15.92 per cent to USD55 billion by 2020.

By 2020, India is likely to be among the top three pharmaceutical markets by incremental growth and sixth largest market globally in absolute size India's cost of production is significantly lower than that of the US and almost half of that of Europe. It gives a competitive edge to India over others

With 70 per cent of market share (in terms of revenues), generic drugs form the largest segment of the Indian pharmaceutical sector India supply 20 per cent of global generic medicines market exports in terms of volume, making the country the largest provider of generic medicines globally and expected to expand even further in coming years. Over the Counter (OTC) medicines and patented drugs constitute 21 per cent and 9 per cent, respectively, of total market revenues of USD20 billion

Indian pharma companies are capitalising on export opportunities in regulated and semi-regulated markets Department of Pharmaceuticals targets to export USD18.02 billion worth of pharmaceuticals in 2016. Indian drugs are exported to more than 200 countries in the world, with the US as the key market India is the world's largest provider of generic medicines; the country's generic drugs account for 20 per cent of global generic drug exports (in terms of volumes). In terms of value, exports of pharmaceutical products increased at a CAGR of 14 per cent during FY12–15 US is the largest export market for India During FY12-14, imports of pharmaceutical products rose at a CAGR of 13.04 per cent to USD4.6 billion

Apart from this, a new generation of biotechnology industry is mushrooming in Rajasthan and opening up new opportunities for economic development in the country. The small-scale sector is expected to play a major role in the growth of the biotech industry.

Rajasthan is very rich in bio resources. The State provides tremendous bio diversity, rarely to be found in any other State. Rajasthan is very rich in cattle breed also. State has highest livestock population and there is good potential in animal husbandry and genetic engineering. Thus, Rajasthan has great potential to create immense industrial activity in Biotechnology and modern Biotech products involving recombinant DNA based products and Bio Informatics.

2. Policy Support

Rajasthan Government decided to make 'Life Sciences' as a priority sector in RIPS 2014. Labour Laws will be eased for the sector and permission will be given for 24*7 operations. Additionally, self-certifications can be obtained for labour related regulatory requirements. Guidance cell under RBC would advise business units on Regulatory Compliance and procedures. Agri-biotech committee would be set up for speedy examination, approved trials. The government also plans to create a single desk e-platform for facilitating all industrial clearances within 21 working days. Also, the State government is formulating a detailed policy for preferential procurement of bio-fertilizers, tissue cultured plants, vaccines, drugs, diagnostic kits in conformity with RTPP Act and encourage investment in sectors to support its conformity.

A Biotechnology Growth Centre is envisaged to be set up in public-private partnership basis around Jaipur.

Specifically, the Clause 5 of RIPS 2014 envisages:

1. Provision of need based assistance to Bioclusters
2. Development of critical infrastructure cluster
3. Assistance for setting up 'Centre of Excellence'
4. Setting up of mega biotech parks in Alwar, Udaipur, Bikaner, Kota and Jodhpur
5. Setting up of Biotech Knowledge Park

The Government is also planning to promote Rajasthan as 'Biotechnology and Life Sciences Corridor' of North India. Also, events are being planned by the government to promote 'Brand Rajasthan' as biotech investment destination of choice.

A Bio e-commerce Agency is also being planned by the Government for investment, services, marketing, and delivery. This will be created on a PPP mode, if possible or if not, an independent Biotech Investment Services and Marketing Authority will be created by the State.

Rajasthan government proposes to set up three biotech parks in the state to facilitate industrial exploitation of its biological diversity and rich genetic pool.

The following Biotech parks have been set up in Rajasthan namely:

1. Bio Tech Park, Sitapura, Jaipur
2. Bio Tech Park, Bhiwadi (Alwar)

Due to a greater emphasis on food security, agricultural biotechnology and breeding have been declared by the government as strategic areas of research. Also, in order to enhance the intrinsic value of the States natural resources, the government is planning to set up a Mission for Bio-prospecting & Product Development from Plants & Centre for Drug Discovery from Natural Resources.

The State Government is also planning to create biotechnology enterprises with clean and green viable technologies and would place these companies in 'Green Category'. India, being a part of the Kyoto Protocol, such industries would attract international attention. Also, the government also plans to provide support for development of nutraceuticals and functional foods for the prevention of diabeters, obesity and cardiovascular diseases.

3. Major Industries

In the 'Rajasthan Biotechnology Policy 2015', the following opportunities are highlighted and this could have great export potential.

1. Research and development in the cattle species improvement programme and Biotechnology incubation centers
2. Bio-pesticides and bio-fertilizers
3. Genetic improvement of seeds
4. Genetic improvement of animal breeds
5. Dry farming
6. Treatment of industrial effluents
7. Recycling/recovery of bio-products
8. Waste management
9. Bio fuels/energy
10. Industrial enzymes
11. Fermentation products for better yield

4. Major Exporters

As per Rajasthan Exporters Directory, majority of the exporters of pharmaceutical products are clustered around Jaipur and Bhiwadi.

5. Major Importing Countries

The pharmaceutical products are exported to around 200 countries. The US A is the largest importer of these products. Exports to US rose at an annual rate of 19.8 % to USD 4.0 billion during 2013-14 from USD 1.9 billion during 2009-10. Exports to UK grew at 11.9 % between 2009 and 2010 and 2013 and 2014. Formulations constituted a major component of exports.

| Country-wise Drug, Pharmaceutical and Fine Chemical Exports from India | | | |
|---|----------------------|---------|-----------------------|
| Country | Value in USD Million | | CAGR (in per cent) |
| | 2009-10 | 2013-14 | |
| USA | 1954 | 4022 | 19.8 |
| Russia | 275 | 546 | 18.7 |
| UK | 349 | 525 | 10.8 |
| South Africa | 246 | 501 | 19.5 |
| Germany | 320 | 460 | 9.5 |

1. Overview

Leather is one of the most widely traded commodities globally. The growth in demand for leather is driven by the fashion industry, especially footwear. Apart from this, furniture and interior design industries, as well as the automotive industry also demand leather. The leather industry has a place of prominence in the Indian economy due to substantial export earnings and growth, besides the fact that it employs 2.5 million people.

Rajasthan has a large livestock population of around 477 lakh. This makes the State one of the biggest producers of leather. The State is home to the biggest cluster of leather *jutti*.

Pratap Nagar, in Jodhpur has always been very famous for leather "*Juttis*" or "*Mozris*" and the nomenclature of "*Mozri*" with beautiful embroidery work as "*JodhpurJuttis*" tells it all. The leather-based units are mostly individual households units from "*Meghwal*" caste employing both male and female members doing stitching and embroidery work respectively.

Rajasthan has about 20,000 unorganized units engaged in the tanning, most of which is undertaken within the State is through the traditional vegetable tanning process. A large number of artisans are scattered in Rajasthan, particularly, in the district of Jodhpur and has been involved in *jutti* making and leather embroidery work from vegetable tanned leather prepared in the village. They are engaged in making traditional shoes called *juttis* made of tough leather and are of ordinary design are sold in the villages or in nearby markets. The level of skill required to make the *juttis* is quite ordinary.

No systematic approach has been adopted for the development of various Leather cluster particularly with reference to technology up-gradation or broadening the marketing base of the product.

The art of making traditional "*Juttis*" is slowly fading out as a result of large number of the community being reluctant to undertake the work. This presents a great opportunity for exporters to enter the market and diversify and provide new designs.

2. Policy Support

Environmental Regulation compliances are in place and they are stronger than those in some of India's closest competitors, including China. Also, under the Union Budget 2015-16, central excise duty was reduced to 6 % from 12% on footwear, which is sold at a price higher than INR 1000.

In order to provide a boost to the leather industry, a USD 182.3 million plan – Indian Leather Development Program has also been proposed by the government.

3. Issues and Opportunities

About 87% of the artisans are restricted to selling their leather products in Jaipur and in rural haats.

Due to the lack of market information artisans are compelled to sell their products only in places they know of but where margins are low. A significant portion of artisans are unaware of markets outside their region.

According to Rural Non-Farm Development (RUDA), there is a demand for training and technical assistance among artisans and there is a possibility of commercialising these services. The number of exhibitions and fairs organised by institutions does not meet the demand for this service.

Many exporters feel that artisans have the basic skills for making *jhuttis/mojaris* but they do not put much emphasis on the quality of the end product. In order to tap the export market, it is essential to improve quality. Artisans feel that by receiving services related to improvements in the quality of their products, they will be able to penetrate beyond the markets of Rajasthan.

Exporters also feel that there is the possibility of offering training on aspects of quality in a stand-alone form.

Since most of the orders are time bound, delays in shipment or sub-standard products lead to substantial losses/rejection. Delays occur mainly due to the additional time spent on training artisans to maintain quality and due to the low mechanisation of production processes. Exporters want to hire artisans who are well trained at a relatively higher price.

If the traditional practices are blended with new design and look, the export market is an attractive proposition. The vegetable tanned leather products (*Jhuttis/Hats*) at Dubai international trade were well received.

The office of the development commissioner for handicrafts implements plan schemes covering various areas like training, design development technology up gradation, market promotion, exhibition and publicity, export etc. the people has a craze of hand made products whereas the leather *jhuttis* are purely hand make products so this has a potential for exports

Exporters collect information about skilled artisans either through RUDA or contact directly at the Jaipur haat. Representatives of exporters visit the Jaipur haat and select suitable artisans by observing their quality of work and interacting with them. If artisans agree to work with the exporter, they are then trained by the exporter to meet the specification of orders.

Exporters provide training to artisans in the production of *jhuttis* but in a very limited way as they train artisans to suit the specific orders they process. The duration of the training is limited and just enough to initiate the artisan into the production process.

Exporters supply the uppers of *jhuttis* which are stitched to the soles made by artisans. Artisans are paid as per the cost of material used in the sole and labour charges. The cost of each pair of *jhuttis* is predetermined amount by exporters based on labour charges and materials provided by the former. This type of association between exporters and artisans is not on a regular basis and based on specific orders. Artisans are contacted only when the exporter has a particular order.

Most of the artisans use the Jaipur haat as the main market channel because it is a very big market for selling traditional *jhuttis*. *Mojaris* are largely sold in other markets including Delhi.

Accessibility of the Delhi market through village agents is available to almost all the artisans in Udaipuria village and to some of the artisans in Maanpura, Macheri village who are producing *mojaris*. *Mojari* producers in other villages who do not supply to the Operation *Mojari* programme sell their *jhuttis* to Jaipur-based retailers/wholesalers. The number of artisans associated with UNDP-NLDP is gradually decreasing because of the strict quality checks, which according to the artisans, are arbitrary

CDC at Jaipur, Rajasthan was created to meet the most pressing need of the sector and mainstreamed the product in domestic and international market. Providing the artisan households exposure to collective manufacturing, marketing in the strong niche urban markets, as also to establish linkages between the artisan groups and the organized sector markets.

The centre manned by professional people to promote the products in the markets of Delhi, Mumbai, Punjab, Haryana, Bangalore, Uttar Pradesh, Kerala etc. The center ensured booking and distribution of orders seamlessly among group of artisans. The center facilitated inspection for quality and on-time delivery of orders. The center took special attention in ensuring timely payments to artisans supplying goods to the center

Tie-ups were made with major distributors and apex bodies for logistic support to facilitate export marketing.

More than 450 pairs of *Mojaris* manufactured project have been displayed at various international fairs.

The impact was visible and independent evaluation carried out by ORG Centre for Social Research, fielded by UNDP, reported that income of artisans have increased 30% - 40% and the artisans are able to get jobs throughout the year.

Mojari has participated in prestigious marketing events like Garda, Italy, GDS fair in Dusseldorf, Germany, Asia Pacific Fair in Hong Kong, International Shoe Fair & India International Trade Fair in New Delhi. Besides, *Mojari* has had a successful performance in marketing meets at Dilli Haat, India Habitat Centre and the Desert Pastorale at Jaipur and Mumbai.

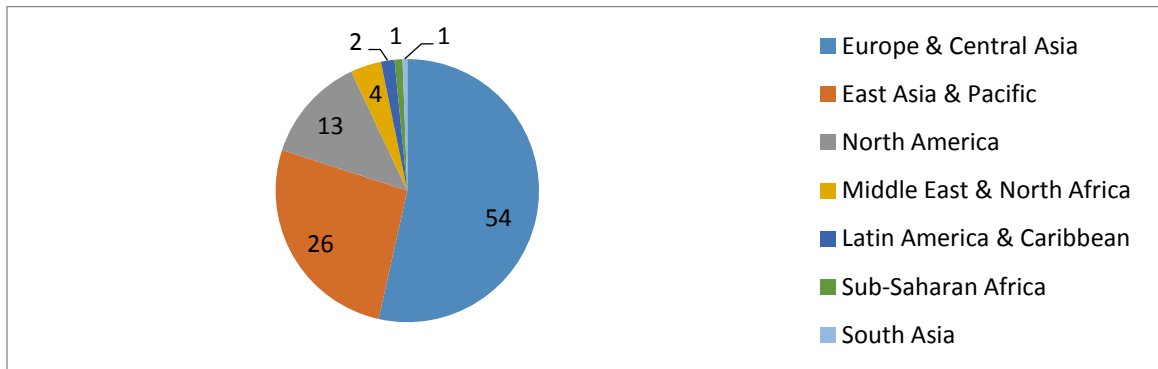
Mojaris have been exported to fashion conscious places like Italy, Germany, Belgium, USA, Canada, South Africa, Japan and Taiwan. There are encouraging inquiries from Australia, Spain, Hong Kong, Singapore, Korea & Thailand.

In the national markets organized distributing and retailing are already in place in the States of Delhi & Haryana. The markets of Mumbai, Karnataka and Tamilnadu are slated to be opened up shortly. Mojaris have also been lifted by the organized sector in the national markets

4. Major Industries

The leather Jhuttis or the mojari industry is the most prominent industry in the leather market

5. Major Importing Countries



Of the total exports of leather products, 54 % goes to Europe & Central Asia followed by 26 % in East Asia and Pacific.

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SECTOR 6 - MINERAL & DIMENSIONAL STONES

1. Overview

India is blessed with ample resources of a number of minerals and has the geological environment for many others. To exploit the India's geological potential it is important that scientific and detailed prospecting is carried out in search of its mineral resources.

India possesses enormous deposits of all types of natural dimensional stones with a variety of excellent properties. These are granites, marbles, slates, sand stones, limestones and quartzite's. India has advanced to any best international level in its quarrying and processing techniques and capacity and has established its own status in the world stone market with large exports. Country has a very large domestic market for all types of stones almost equal to Exports. Product range from cubes, size stones, pavement slabs, standard slabs and tiles, monuments, memorials and made to order items. Several thousand units mostly in small scale and cottage sectors cater to local needs. There are also many export-oriented units. Initial recognition for Indian granites originated from chiselled and hand-polished memorials exported to England, Ireland, Japan etc. Faster processing and production of polished stones became a reality in 40s, 50s and 60s. The industry grew rapidly from 70s. Exports of dimensional blocks commenced in 70s to Japan and also in smaller extent to countries like England, Germany, Italy etc. Immediately after black dimensional blocks, export of red granites and thereafter, some of the names became the most popular and recognised worldwide. To mention a few, Jet Black, Premium Plus and Premium Black, Ruby Red, Imperial Red, Paradiso, Black Galaxy, Kashmere White, Green Marble and Red Sand Stone etc. The trend for cut and polished granites became main focus and grew fast since 1985. Almost 70 per cent of the present total export value added finished products.

Rajasthan's geographical area is marked with diversity of land type and is characterized by sand dunes, fertile plains, rocky undulating land and some forested regions. The Aravalli range is considered as the oldest in the world and runs diagonally across the State. Almost two-third State is enveloped by the Thar Desert with arid and semi-arid climatic conditions.

Rajasthan is endowed with great natural attributes be it the Aravalli mountain ranges or the vast Thar Desert. Another feature that makes Rajasthan unique is its rich treasure of minerals. Blessed with 79 varieties, it is virtually a nature's museum housing both metallic and non-metallic minerals including beautiful building stones. It has a vantage position in having significant resources of radioactive minerals, Lignite, Petroleum and Natural Gas too.

Its share is 9% in the country's total mineral production. The State has virtual monopoly in the production of minerals like Lead, Zinc, Gypsum, Soapstone, Ball Clay, Calcite, Rock Phosphate, Feldspar, Kaolin, Copper, Jasper, Garnet, Wollastonite, Silver, etc. The State is proud to possess huge reserves of Lignite, Crude Oil and high quality Gas. It is also renowned for its deposits of Marble, Sand Stone and some unique decorative stones.

2. Policy Support

The State's Mineral Policy 2011 revealed certain limitations, particularly in case of minor minerals where provisions of granting mining lease in government land (including forest land) after delineation, proved to be a big hindrance for new grants and for mineral development. The Policy had also been silent regarding allotment of minor mineral concession in the tribal areas and for the upliftment of tribals. Provisions made for allotment of mineral concession by joint venture through RSMML in tribal area also proved to be insufficient and no concessions could be allotted in past year. This adversely affected the mineral exploitation in tribal areas.

In recent past, the construction industry has grown by leaps and bounds. The mineral based industries, especially cement, have assumed bigger dimensions. This sector is poised for major growth. Therefore, it was felt essential that the State now should devise a new Policy with a holistic approach in public interest and to attract new investment in the industrial mineral sector in the State.

The New Mineral Policy, 2015 takes cognizance of the fact that the mineral resources are finite. So the emphasis is on introducing cutting-edge technology in exploitation, wastage reduction and encouraging waste recycle. The emphasis is also on widespread job-creation, especially to people belonging to the scheduled castes and backward communities, with an obvious focus on greater revenue to the Government. Therefore, the Policy aims at development of economically sound and stable mining, minerals, metal and mineral reclamation industries; orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs.

The government is also aware towards any adverse impact of mineral extraction and processing upon the physical environment. Therefore, emphasis has also been laid on study and development of methods for disposal, control and reclamation of mineral waste and mined land.

Rajasthan with deficient rainfall and deserts is amply rewarded with lots of sandstone, granite, Kota stone, limestone, and marble. The 80 percent of India's supply, especially of marble, sandstone, and limestone, is from the state of Rajasthan.

From north to south and from east to west, it is noticeable that a rich variety of stones which are being used domestically and exported overseas. There are famous Makrana mines of flawless white marble which was used in building the magnificent Taj Mahal. Also there are Jodhpur sandstone, sandstones from Jaisalmer, Bidasar marble all of different yet rich variety.

Jalore granite, Kota stone, Bansi Paharpur sandstone, Dholpur stone, etc. are some of the examples of varieties of stones found in Rajasthan, and all of these have already been used to build some of the memorable monuments of all time in India, and abroad.

Mining, with modern technology, has become cost effective and stones have become affordable to all. There are increasing trend of introducing technology in all aspects of mining and processing which entails better days for entire stone business.

3. Scope & Potential

The Indian stone industry is spread throughout the length and breadth of the country. The journey of the processing industry started with circular saw machines; and gradually, because of constant upgradation of technology, it has graduated to using gang saws and circular wire saws. The latest resin lines, polishing lines and other top-of-the-range equipment that we use today have enabled us to meet the international quality standards. Even in today's mining sector, diamond wires are being used, dispensing the traditional blasting method. There are more than 20,000 units functioning all over India with a huge investment of more than Rs 50,000 crores and providing job opportunities to more than 15 lakhs people.

The granite, marble, slate and sandstone mining and processing industries locations in Rajasthan are MARBLE-Splendid varieties of marble are spread all over Rajasthan, mainly in the districts of Nagaur, Udaipur, Rajsamand, Banswara, Dungarpur, Jaipur, Sirohi, Bhilwara, Ajmer, Bundi, Alwar, Chittorgarh, Churu and Pali. Prominent clusters for processing and quarrying of marble in Rajasthan are as follows-

Makrana: Makrana White was used in Taj Mahal. Makrana is now a developed marble centre with hundreds of marble quarries, modern slab & tile processing and stone craft units. Important varieties are Super White, Albeta, Adanga, Kumari, Doongri, Pink etc.

Major centre for Marble handicrafts are:

- **Kishangarh** - Situated approx. 100 kms from Jaipur. It is the major market outlet for stones quarried in Makrana and Rajsamand.
- **Rajsamand** - Deposits of a variety of white & greyish white marble like (Morwar, Agaria, Dholikhan, Arna, Jhanjhar, Dharmeta etc.). Cluster spread over a stretch of 40 sq. kms from Nathdwara to Kelwa and Amet.
- **Udaipur** - deposits of over 100 million tons. One of the varieties is Rajasthan green; its an export bonanza quarried from Rikhabdeo-Kesariaji, 60 KMs from Udaipur City. 650-700 mines in operation in and around Udaipur. Green Marble, Pink Marble, Onyx Marble, Black Marble, White Marble, Indian Pink comes from Babarmal - 26

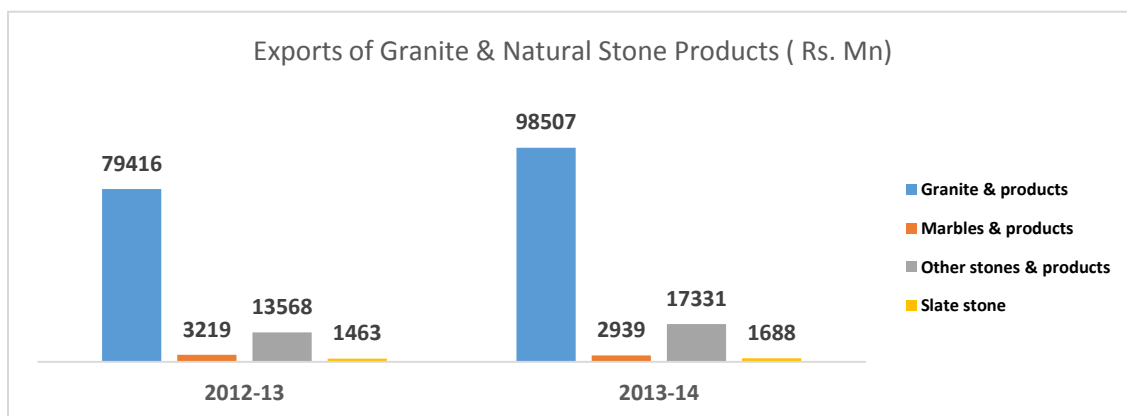
KMs from Udaipur City Babarmal Pink - a fine grain hard marble with black & white bands.

- **Banswara** - A variety of white to offwhite soft dolomitic marble (fine to medium grained).
Jaipur-With deposits of over 50 million tons, Jaipur has a variety of white & greyish white marble with important varieties being Pista, Onyx, Indo Italian, Black.
- **Abu Road** - Abu Road in the Sirohi District is a major cluster for processing of marble and is surrounded by extensive marble quarries around Selwara. It is also a processing centre for marble from Gujarat.
- **Churu** - Bidasar in Churu districts is famous for its Forest Brown and Forest Green marble varieties.
- **Granite** - Granite reserves in Rajasthan are estimated at 8479 million cubic metres and are spread over in the districts of Barmer, Jalore, Pali, Sirohi, Alwar, Jaipur, Jhunjhunu, Tonk, Ajmer, Bhilwara, Sikar and Udaipur. Prominent cluster of granite processing and quarrying in Rajasthan is Jalore with hundreds of small tiling plants. The quarries in Jalore, Barmer and Jaisalmer produce a wide variety of stones of excellent quality and colours.
- **Sandstone** - Sandstone reserves in Rajasthan, estimated at 900 million tons, are spread over in the districts of Bharatpur, Dholpur, Kota, Jodhpur, Sawai-Madhopur, Bundi, Chittorgarh, Bikaner, Jhalawar, Karauli, Nagaur and Jaisalmer. Prominent clusters of sandstone activity in the state are Dholpur, Karauli, Hindaun City, Sikandra, Bijolia and Jodhpur.
- **Stone-Handicrafts** - Stone handicrafts are a major activity of Rajasthan. The stonecraft sector is mostly in the unorganised sector. Most of the units are in cottage sector in Rajasthan. Most of the value added stonecraft units are located in clusters.

Types of stone handicraft in different region in Rajasthan:

| STONE HANDICRAFTS IN RAJASTHAN | | |
|----------------------------------|---|--|
| AREA | MATERIALS USED | TYPE OF STONE HANDICRAFTS |
| Makrana-Kishangarh-Madanganj | Marble | Statues, Engravings |
| Sirohi-Aburoad-Pindwara | Marble, Sandstone (from Dholpur, Karauli), Granite (from South India) | All kinds of articles especially engravings, statues, pillars etc. for temple work |
| Dholpur-Karauli-Sikandra-Hindaun | Sandstone (from Dholpur, Karauli) | Sculpture work, Furniture, Pillars, landscaping articles etc. |
| Jaisalmer | Yellow Limestone | Engravings, Pillars, Bolsters etc. |
| Jaipur | Marble (from Makrana, Jhiri and Andhi) | Sculptures |
| Jodhpur | Granite, Sandstone | Cylindrical items, Spherical items and engravings |
| Udaipur | Marble | All kinds of products |
| Jalore | Granite | Decoration items like balls, flower pots etc. |

An upward growth has been seen in exports of various products. Granite is the highest exported product among all.



4. Major Processors/ Exporters

The dimensional stones, marble, granite and articles of stone mica etc from Rajasthan continued to attract the dollar. Registering a growth of Rs 12%, the total exports of these products are up from Rs 2,539.42 crore in 2013-14 to Rs 2,848.57 crore in 2014-15. The

traders said that state has a lot of potential in this sector provided mining hurdles are removed. Few of the major exporters are listed here below:

| Exporter | Location | Items |
|---|-------------|---------------------------------------|
| Inani Marbles | Chittorgarh | Marbles, Dimensional Stones |
| R K Marble | Ajmer | Marbles, Dimensional Stones |
| Elegant Marbles & Granite Industries Ltd. | Abu Road | Granite, Marbles |
| Pacific Stone Mart | Barmer | Granite, Marbles |
| Granite Zone | Makrana | Granite |
| Shriram Granimarmo | Jalore | Granite |
| Rajul Exports | Jaipur | Natural Dimensional Stones |
| Eurro Export | Jaipur | Sandstone, Limestone, Granite, Marble |
| Dhoot Sangemermer Pvt Ltd. | Jaipur | Marble, Granite, Handicrafts |
| Grace Marbles & Granites pvt. Ltd. | Udaipur | Marble, Granite, Sandstone |
| Arihant Tiles & Marbles | Udaipur | Marbles, Dimensional Stones |
| Mahadev Marmo | Udaipur | Marbles |
| Aravali Minerals & Chemical Industries Ltd. | Udaipur | Marbles, Dolomites |

5. Major Importing Countries

Major Importing countries of Indian stones are USA, UK, Germany, China, UAE etc.

SECTOR 7 – ENGINEERING

1. Overview

Engineering is by far the largest segment in the Indian industry, employing approximately 4 million skilled and semi-skilled workers. The engineering sector has witnessed tremendous growth, led by significant investments in power projects and infrastructure development. In 2014–15, the share of engineering exports in India's total exports stood at 22.8 per cent.

2. Policy

The Government of Rajasthan opened the special economic zone focused on Engineering at Mahindra World City, Jaipur.

Spread across 250 acres each, the SEZ is part of the 3,000-acre multi-product SEZ which has IT, auto ancillary and logistic zones, with an envisaged investment of Rs. 10,000 crore and projected employment of one lakh.

The SEZ offers infrastructure such as seamless power supply, wide road network, water supply, serene landscaping, proposed logistics and warehousing zones, professional operations and maintenance.

3. Advantage Rajasthan

The average labour cost is significantly lower in Rajasthan compared to other states. Also, a number of newer technical institutions have opened in the country leading to generation of skilled manpower from the state. Also, Rajasthan is the greatest producer of non-ferric metals such as copper and zinc and accounts for 40% of the country's copper production and 100% of zinc production.

Also, the units situated in the Special Economic Zone or the Domestic Tariff Area can enjoy easy access to a large pool of skilled manpower resources and technical institutions.

4. Major Industries

The MSME Report informs the following potential industries for exports - Ball Bearing, Hand Tools, Heavy Duty Trailers, Meters, Nuts& Bolts, Steel Ingots, Railway Wagons, Machine Tools & accessories

5. Major Exporters

The Engineering SEZ at Jaipur houses companies such as QH Talbros, Veto Electropowers, Om Metals, Marsons, Dynamic Engineering, Tijaria Polyprep, Polymed, AL Paper House, Rustic Furniture, Pink City Enterprises and Readiprint.

1. Polymed Medical Devices, an existing client with a state-of-the-art medical devices manufacturing unit already operational at the Engineering SEZ, is expanding manufacturing operations at MWC Jaipur to cater to the growing domestic market.
2. KnitPro International is an India-based manufacturer and exporter of knitting accessories and a global category leader. An existing client of MWC Jaipur, KnitPro was the first company to become operational at the Engineering & Related Industries SEZ, and will now manufacture specialized wood at a new, upcoming facility.
3. Topline Overseas is a group company of TI Industries, which manufactures power distribution transformers & related products and is setting up a new facility at MWC Jaipur to cater to international markets

SECTOR 8 - CHEMICAL INDUSTRY

1. Overview

Basic chemicals and their related products (petrochemicals, fertilizers, paints, varnishes, glass, perfumes, toiletries, pharmaceuticals, etc) constitute a significant part of the Indian economy, accounting for nearly 2.1 per cent of the GDP. Among the most diversified industrial sectors, chemicals cover an array of more than 70,000 commercial products. In 2014-15, total FDI in chemicals (excluding fertilizers) stood at US\$ 669 million whereas cumulative FDI till May 2015 from April 2000 was US\$10.5 billion.

The chemical and petrochemical sector in India presently constitutes 14 per cent of the industrial domestic activity. It should also be noted that investments in this sector are highly capital intensive with long gestation periods. The growth of petrochemicals and chemicals is projected at 12.6 per cent and 8 per cent respectively in the 11th five year plan (2007-2012). According to the United Nations Industrial Development Organization (UNIDO), in terms of value added at constant 2000 prices, the Indian chemical Industry is 6th in the world and 3rd in Asia.

2. Production Trend

The production trend for major chemicals are as follows:

1. Production of Selected Major Chemicals

| Sector | Production (in 000 Metric Tonne) | | | | Growth (%) | |
|-----------------------|----------------------------------|---------|---------|---------------------|-----------------|--------------------|
| | 2007-08 | 2008-09 | 2009-10 | 2010-11 up to Sept. | 2009-10/2008-09 | CARG 2009-10/05-06 |
| Alkali Chemicals | 5443 | 5442 | 5602 | 2890 | 2.9 | 0.6 |
| Inorganic chemicals | 609 | 512 | 518 | 281 | -12.6 | -1.2 |
| Organic Chemicals | 1552 | 1254 | 1280 | 649 | -19.2 | -4.6 |
| Pesticides (Tech.) | 83 | 85 | 82 | 44 | -3.5 | 0.0 |
| Dyes & Dyestuffs | 44 | 32 | 42 | 24 | 31.2 | 8.8 |
| Total Major Chemicals | 7731 | 7325 | 7524 | 3888 | 2.70 | -0.5 |

2. Production of Selected Major Petrochemicals

| Sub-Group | Production (in 000 Metric Tonne) | | | | Annual Growth | |
|-----------------------------------|----------------------------------|---------|---------|---------------------|-----------------|--------------------|
| | 2007-08 | 2008-09 | 2009-10 | 2010-11 up to Sept. | 2009-10/2008-09 | CARG 2009-10/05-06 |
| Synthetic Fibers | 2524 | 2343 | 2601 | 1362 | 11.01 | 8.08 |
| Polymers | 5304 | 5060 | 4791 | 2486 | -5.32 | 0.12 |
| Elastomers (S. Rubber) | 106 | 96 | 106 | 51 | 10.42 | -0.92 |
| Synthetic Detergent Intermediates | 585 | 552 | 618 | 302 | 11.96 | 2.68 |
| Performance Plastics | 157 | 141 | 172 | 78 | 21.99 | 7.88 |
| Total Major Petrochemicals | 8676 | 8192 | 8288 | 4279 | 1.15 | 2.64 |

Source: Annual Report 2010-11, Ministry of Chemicals and Fertilizers, Government of India

3. Policy Support

1. Concessions to Chemical Companies

Some chemical companies had demanded concessions during the recession period. These included reduction in Central Excise Duty from 14 per cent - 8 per cent, roll back of Import duty of 5 per cent on Naptha, levy of crisis duty (10 per cent) on all chemicals, intermediates, dyes, pigments and pesticides, expeditious disposal of anti-dumping/Safeguard Measures, fiscal reliefs to SMEs and provision of low cost credit to them.

The Government has taken the following decisions in this regard:

- (i) Reduction of Excise Duty from 14 per cent-10 per cent and then from 10 per cent-8 per cent.

(ii) Anti-dumping duty/Safeguards were imposed in respect of following:

| Soda Ash | Imposition of Safeguard Duty 20 per cent |
|--------------|--|
| Caustic Soda | Imposition of Safeguard Duty 15 per cent |
| Carbon Black | Anti-Dumping duty \$78-\$195 per MT country specific |

(iii) DEPB rates were restored to March, 2008 level.

(iv) 150 per cent weighted deductions of expenditure on R&D for recognized R&D units.

(v) Period of credit for exports was increased from 180 days to 270 days.

2. Foreign Direct Policy in Chemical Sector

In chemical sector, 100 per cent FDI is permissible. Manufacture of most chemical products inter-alia covering organic/inorganic, dyestuffs & Pesticides is delicensed. The entrepreneurs need to submit only IEM with the Department of Industrial Policy and Promotion, provided no locational angle is applicable. Only the following items are covered in the compulsory licensing list because of their hazardous nature.

- Hydrocyanic acid & its derivatives
- Phosgene & its derivatives
- Isocyanates & di-isocyanates of hydrocarbons

4. Some Projects for Investment in Rajasthan

1. Agrow Allied Venture to set up pesticides unit in Kotpuli

Agrow Allied Venture Industries Ltd is planning to set up a pesticides unit in Kotpuli in Jaipur district of Rajasthan. The project involves setting up of a pesticide unit with a capacity of 6210 tpa to produce sodium salt, technical acid, amine salt, ethyl ester, Lambda Cyhalothrin etc., The project cost is estimated at Rs. 40 million.

2. Bohra Industries plans expansion of its chemical unit in Umra

Bohra Industries Ltd is planning to expand its chemical unit in Umra Industrial Area in Girwa Tehsil in Rajasthan. The project involves setting up of manufacturing facilities to produce powder single super phosphate (1000 tpd), triple super phosphate (150 tpd),

granulated single super phosphate (300 tpd), synthetic gypsum (550 tpd), di-calcium phosphate (30 tpd), phosphoric acid (160 tpd), potassium fluoride (0.3 tpd). The total project cost is estimated at Rs. 179.2 million.

3. SRF to expand Multi-purpose Fluorinated Specialty (Organic) Chemicals Plant:

SRF to expand Multi-purpose Fluorinated Specialty (Organic) Chemicals Plant in Jhiwna village in Tijara Taluk in Alwar district in Rajasthan. The expansion details of the new unit are as follows.

| S.N | Products | Production Capacity (TPA) | | |
|-----|--|---------------------------|----------|-------|
| | | Existing | Proposed | Total |
| 1 | Chloromethanes(CMS) Plant | 30000 | 7000 | 37000 |
| 2 | HFC-134a Plant | 2000 | 4000 | 6000 |
| 3 | Hydrofluoric Acid Plant | 7500 | 4500 | 12000 |
| 4 | Multi-purpose plant (FluoroSpeciality Plant) | 350 | 2150 | 2500 |

Hydrofluoric Acid Plant Refrigerant (R-11, 12, 22) Plant, HFC-134a, Multi-product Plant producing Pharma intermediates, Chloromethane Plant, Multi-product Plant Producing Fluorinated Special. In the proposed multi-purpose Fluorinated Specialty Chemicals, P-5 will be manufactured and will involve reduction of p.50, Hydrolysis of P.51, etherification of P.52 and reduction of P-53 to produce P-5. The total project cost is estimated at Rs. 1178 million.

4. Mehrul Industries to set up dye and dye intermediaries unit at Kapsan

Mehrul Industries to set up dye and dye intermediaries unit at Kapsan in Chittogarh district of Rajasthan. The proposed capacity of the unit will be 250,000 kg/annum. Hydro benzene (HB) and Diphenyl Diamine (DD) will be manufactured. The project cost is just Rs.0.25 million.

5. Major Players

- United Phosphorous Ltd, Mumbai
- P.I.Industries, Jaipur M/s.BASF India, Mumbai
- BASF India, Mumbai
- Excel India, Mumbai
- Atul Ltd., Bulsar
- ColourChem Ltd., Mumbai
- Sudarshan Chemical Industries, Pune
- Colourtex, Ahmedabad
- Monsanto Chem Ltd., Mumbai
- Jubilant Organosys Ltd., New Delhi
- Herdilia-Schentady Ltd. Mumbai
- National Organics Chemicals Ltd., Mumbai
- DCM Sri Ram Consolidation Ltd., New Delhi
- Gujarat Heavy Chemicals Ltd., Ahmedabad
- India Glycols Ltd., New Delhi
- Gujarat Alkalies and Chemicals Ltd., Baroda
- Rayalseema Chemicals, Hyderabad
- Galaxy Organic Ltd., Mumbai
- Lubrizol Ltd., Mumbai
- ICI Calcutta

6. Major Importing Countries

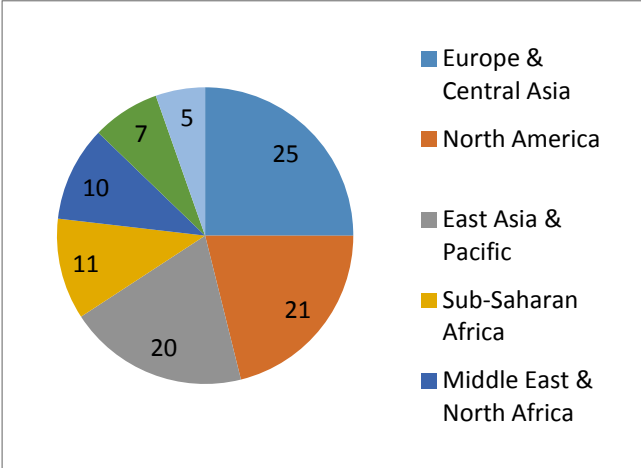
Major importing continents for Chemical products are as follows:

| Partner Name | Export (US\$ Thousand) |
|----------------------------|------------------------|
| World | 33,389,324.57 |
| Europe & Central Asia | 8,266,520.50 |
| North America | 6,975,447.19 |
| East Asia & Pacific | 6,503,390.59 |
| Sub-Saharan Africa | 3,649,309.80 |
| Middle East & North Africa | 3,428,594.07 |
| Latin America & Caribbean | 2,445,315.10 |
| South Asia | 1,782,579.56 |

Europe & Central Asia contributes 25% of total import from India for chemical products followed by North America (21%).

United States is the biggest importing country of chemical products from India worth USD 6.63 billion* followed by China worth USD 1.51* billion.

**data is for 2014 imports*



SECTOR 9 - READYMADE GARMENTS

1. Overview

The apparel and industry occupies a unique and important place in India. It is one of the earliest industries to come into existence in the country. The apparel industry caters to one of the most basic requirements of people and holds importance; maintaining the prolonged growth for improved quality of life. The sector has a unique position as a self-reliant industry, from the production of raw materials to the delivery of end products, with considerable value-addition at every stage of processing. Over the years, the sector has proved to be a major contributor to the nations' economy. The industry is important in terms of output, foreign exchange earnings and employment. It contributes around 14% to industrial production, 4% to GDP and 17% to the country's export earnings. Its immense potential for generation of employment opportunities in the industrial, agricultural, organized and decentralized sectors & rural and urban areas, especially for women and the disadvantaged is noteworthy. India exports readymade garments to more than 200 countries in the world where EU, USA, UAE, UK & Germany are major importing countries.

Textiles is recognized as one of the most important thrust sectors of the state as Jaipur is famous for readymade garments and apparel and on the other hand Bhilwara produces nearly half of the country's poly viscose suiting and along with that there were other significant textile hubs also in the state like Banswara, Jodhpur, Pali, Balotra and Kishangarh, among others.

2. Policy Support

As such there is no separate policy for export of readymade garments but State govt. is focusing on Textile sector and has been providing incentives to for boosting the industry in the state. Rajasthan is in the orbit of most important players in the textile and garment sector as it offers investors a complete matrix to invest, grow and flourish. The state is the centre of attraction for investors as it provides special incentives to textile units, trained manpower, abundant power availability and access to market.

The minimum wages in Rajasthan for the garment industry for highly skilled labour is Rs 259 which is around Rs 6734, the lowest in Northern belt. The low wages, good power supply, niche product categories is diverting a lot of buyers to Jaipur area in Rajasthan. Buyers foresee Jaipur as a very strong hub for manufacturing in the coming days because it is price competitive as compared to Delhi, NCR and exporters are slowly but gradually catching up in terms of efficiency, design and innovation. In terms of compliance also exporters are trying to match up standards of international requirements by closely working with the buyers and buying agents.

Technical Textiles has been included as a thrust sector in the new Rajasthan Investment and Promotion Scheme (RIPS-2014). Special focus has been given to Technical Textile Sector by providing 7% interest subsidy. In addition to this, concession in stamp duty, conversion charges and electricity duty have also been provided in the Scheme. Such a pragmatic and forward-looking policy is aimed at both employment generation and investment promotion. Rajasthan has initiated path breaking reforms in the field of labour laws which are aimed at ease of doing business and making it easier for companies and employers to hire, train and lay-off workers welfare and employment generation. If all goes well, Rajasthan will see many new units and shifting of units from Delhi and adjoining areas as well in the coming times.

Rajasthan has well-developed social, physical and industrial infrastructure as well as good virtual connectivity. Majority of the factories are located in designated Industrial areas and Export promotional industrial parks (EPIP) resulting in professional and systematic working. Companies have invested in advanced and highly sophisticated Cut to Pack facilities, with advanced machinery from reputed companies like Juki, Brother, Pegasus, Kansai, Hashima, Barudan, SWF, Gerber, Optitex, etc.

Rajasthan as a State has a lot of advantage when it comes to the Textile Sector.

Cooperative Government machinery-The State Government has a very proactive approach towards industrial, infrastructure and overall development.

Compliant Factories-Manufacturers are certified with internationally recognized industry standards like WRAP, BSCI, Sedex, ISO 9001:2008. Working with the reputed international brands and labels like Zara, Mango, Carrefour, New Look, Miss Selfridges, Macy's, K-mart, etc.

Cost effective-Manufacturers are cost effective in production due to the lower cost of resources in the state as compared with bigger cities in other parts of the country. Resulting in lower overheads and better price for the customers.

Experience in trade-The garment manufacturing industry has been flourishing in the State since more than 35 years. Resulting in a trained pool of manpower and expertise in manufacturing garments.

Printing, dyeing and tie-dye-Rajasthan is a major producer of printed, dyed fabric and tie-dye for fashion garment industry and Rajasthani prints of Bagru and Sanganer have got international recognition.

Embroidery, embellishment and value addition-The manufacturers have superior design capabilities and specializing in embroidery, hand embellishment by bead and sequence, lace work and patch work.

Variety of fabrics-Manufacturers are handling all kinds of Woven and Knitted fabrics like cotton, blends, viscose, voiles, crepes, georgette, chiffons, velvet, jacquard, dobby, linens, cotton jersey, viscose jersey, melange etc.

Small Minimum order quantities (MOQ's)-Companies are doing small order quantities per style to meet the demand of boutique and high value customer.

Competent talent pool- The state has 1,050 colleges including 80 engineering colleges, 58 polytechnic institutes and 846 industrial training institutes (ITIs).Jaipur Ranked 3rd in India in 'Ease of Doing Business' by World Bank Report on India.

Conducive environment for industrial growth-Rajasthan has favourable industrial-relations environment with negligible incidents of labour unrest. In addition, the law situation in the State ensures good working environment.

Adequate Power supply- The state is blessed with adequate power availability.

3. Scope & Potential

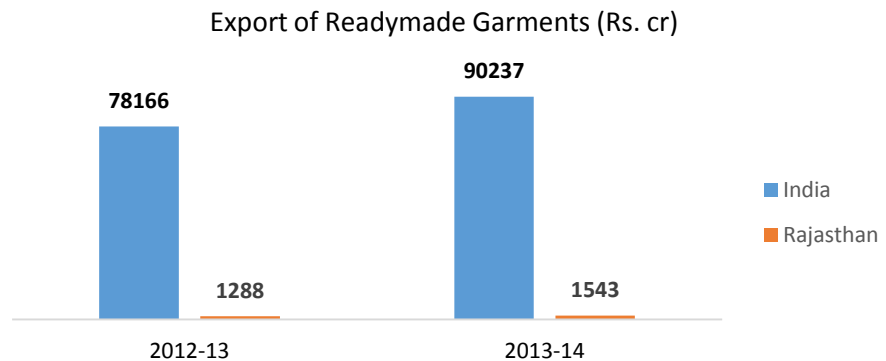
The State is known for its royal Rajputs clan art of music and very colourful fabrics with the most sensational mirror works and embroideries. The block prints, tie and dye prints, Bagaru prints, Sanganer prints, and embroidery are majorly carried out in this state and are known worldwide. Rajasthan has major hub of exports in Jaipur where more than 200 export houses are exporting to the world.

Rajasthan is the leading producer of blended yarn and fabrics. Installed capacity of spindles in Rajasthan is at 1, 81,419 nos., growing rapidly with increasing investments. The total yarn export for 2014-15 is INR 29.36 billion.

Rajasthan is a major producer of printed and dyed fabric for fashion industry. Owing to the high production of apparels in the State, the linked demand for fabric for garment production is also growing.

With highest production of PV suiting fabric, Rajasthan is the most appropriate destination for manufacturing formal men’s wear. Existing industry base and availability of trained manpower make Rajasthan a preferred choice for venturing into manufacturing of fashion garments.

Readymade garments export makes up almost 50% of total textile export. While India in 2012-13 exported readymade garments worth Rs. 78166 cr; Rajasthan made up of mere 1.65% of it. Although in next financial year Rajasthan improved its share marginally by 0.7 points to 1.71 % when it exported readymade garments of Rs. 1543 cr.



Significantly the growth in export of readymade garments in Rajasthan is better than country’s growth rate in same segment.

With Govt.’s major thrust in reviving the sector; Readymade garments export give huge opportunities to increase its share.

| Year | 2012-13 | 2013-14 | Growth Rate % |
|-----------|---------|---------|---------------|
| India | 78166 | 90237 | 15.44 |
| Rajasthan | 1288 | 1543 | 19.79 |

4. Major Processors/ Exporters

The dimensional stones, marble, granite and articles of stone mica etc from Rajasthan continued to attract the dollar. Registering a growth of Rs 12%, the total exports of these products are up from Rs 2,539.42 crore in 2013-14 to Rs 2,848.57 crore in 2014-15. The traders said that state has a lot of potential in this sector provided mining hurdles are removed.

Few of the major exporters are listed here below

| Exporter | Location | Items |
|-----------------------------|----------|--|
| Patterns India | Jaipur | Ladies Garments, Kidswear |
| Bhavya International | Jaipur | Jackets, stoles, scarves |
| Karni Exports | Jaipur | Ladies Garments, Kidswear |
| Lotus Apparel Export | Jaipur | Ladies Garments, Kidswear |
| Cheer Sagar Exports | Jaipur | Ladies Garments, Kidswear, Home Furnishing |
| Kohinoor Craft | Jodhpur | Mens, Ladies Garments, Accessories |
| Punay Garments | Jaipur | Mens', Ladies, Kids Garments |
| Ahuja Overseas | Jaipur | Ladies Garments |
| The Choice Fashion Pvt Ltd. | Jaipur | Ladies Garments |

5. Major Importing Countries

Major Importing countries of RMG are UK, USA, Canada, Germany, Italy, France, UAE, Turkey, Spain, Belgium, Japan etc.

SECTOR 10 - GEMS & JEWELRY

1. Overview

The Gems and Jewellery sector plays a significant role in the Indian economy, contributing around 6-7 per cent of the country's GDP.

One of the fastest growing sectors, it is extremely export oriented and labour intensive. Based on its potential for growth and value addition, the Government of India has declared the Gems and Jewellery sector as a focus area for export promotion. The Government has recently undertaken various measures to promote investments and to upgrade technology and skills to promote 'Brand India' in the international market.

India is deemed to be the hub of the global jewellery market because of its low costs and availability of high-skilled labour. India is the world's largest cutting and polishing centre for diamonds, with the cutting and polishing industry being well supported by government policies. Moreover, India exports 95 per cent of the world's diamonds, as per statistics from the Gems and Jewellery Export promotion Council (GJEPC).

The industry is projected to generate up to US\$ 35 billion of revenue from exports in 2015. India's Gems and Jewellery sector has been contributing in a big way to the country's foreign exchange earnings (FEEs). The Government of India has viewed the sector as a thrust area for export promotion. The Indian government presently allows 100 per cent Foreign Direct Investment (FDI) in the sector through the automatic route.

Market Size

The gems and jewellery market in India is home to more than 500,000 players, with the majority being small players.

India is one of the largest exporters of gems and jewellery and the industry is considered to play a vital role in the Indian economy as it contributes a major chunk to the total foreign reserves of the country. UAE, US, Russia, Singapore, Hong Kong, Latin America and China are the biggest importers of Indian jewellery.

The overall gross exports of Gems & Jewellery in December 2015 stood at US\$ 2.06 billion, whereas exports of cut and polished diamonds stood at US\$ 1.20 billion. Exports of gold coins and medallions stood at US\$ 23.19 million and silver jewellery export stood at US\$ 147.33 million in December 2015. The overall gross imports of Gems & Jewellery in December 2015 stood at US\$ 2.23 billion. Gems and jewellery exports reached US\$ 36.2 million in 2014–15. The industry grew 4.3 per cent, with exports worth US\$ 36.2 billion in 2014–15 compared with US\$ 29.4 billion in 2009–10. In 2014–15, export of cut and polished

diamonds declined 5.0 per cent to US\$ 23.2 billion. Gems and jewellery exports could reach US\$ 58 billion by 2015.

According to a report by Research and Markets, the jewellery market in India is expected to grow at a Compound Annual Growth Rate (CAGR) of 15.95 per cent over the period 2014-2019.

The cumulative Foreign Direct Investment (FDI) inflows in diamond and gold ornaments in the period April 2000-December 2015 were US\$ 751.37 million, according to Department of Industrial Policy and Promotion (DIPP). Rajasthan is the biggest production centre of colored precious & semi-precious stones .Emerald constitutes the major chunk of the export. Rajasthan contributes substantially to India's total export of cut and polished stones aggregating over US\$ 10 billion. The state of Rajasthan exported Rs 51,066 crore worth of gems and jewellery (including diamonds), which remain most valued products exported from Rajasthan in 2014-15.

2. Policy Support

Rajasthan has a good international presence in coloured gemstone. For centuries, Jaipur has been a world-renowned centre for sourcing of fine-cut precious and semi-precious gemstones. Over the past decade, the industry has witnessed a complete transformation. With heavy investment in technology, gemstone cutters have forward integrated and have started jewellery manufacturing. Jaipur now exports a wide range of studded silver, gold and even platinum jewellery. RIICO has developed a special zone for Gems & Jewellery at the Export Promotion Industrial Park (EPIP) at Sitapura, Jaipur, besides a Gem & Jewellery SEZ.

The strategy for the development of this Industry will be to boost the existing industry while simultaneously encouraging manufacture of studded jewellery and diamond polishing. **Availability of gold** at international prices in Industry clusters will be facilitated by approaching the authorised Agencies in this regard. Establishment of a **custom bonded warehouse** at an appropriate locations to make available gold, silver and precious stones would be supported. RIICO will provide land for setting up an Artisan school in the Private/NGO sector for gemstone/ diamond polishing and studding. Demand based flatted/built up factories would be provided to interested entrepreneurs to reduce the lead time in project execution. Efforts will be made to provide **assaying and hall marking** facilities through a suitable agency, in a major industry cluster. **Exhibitions** of Gems and Jewellery would be encouraged at Jaipur to facilitate strong national and international market linkage. A **centre for Jewellery design** and training would be set up as a part of the Indian Institute of Crafts being established at Jaipur. Efforts will be made to involve the World Gold Council in setting up of this Centre. Establishment of a Gem Bourse will be facilitated, as it is considered an essential infrastructural requirement for International Trade in gem stone. Land will be allotted for the Gem Bourse at a suitable location.

3. Major Exporters

The major exporters of Gems & Jewellery industry are concentrated in Jaipur, Jodhpur & Udaipur.

- Dwarka Gems Ltd., Jaipur
- Amrapali, Jaipur
- Dhannu Jewellers, Ajmer
- Suranas, Jaipur
- Kalajee Jewellery, Jaipur
- Mangi Chand Bhandari Jewellers, Jodhpur
- N D Diamonds, Bhilwara

4. Major Importing Countries

India exports gems and jewellery to nearly 160 countries. Among the first ten buyers of India's gems and jewellery the US (28%) mostly remained at the top. Other major buyers are Hong Kong (21%), UAE (15%), Belgium (8%), Japan, Switzerland, Netherland, the U.K., France, Singapore and Germany. India has also succeeded in reaching some new markets like Turkey, Trinidad, Korea, Cyprus, Finland, Taiwan, Lebanon, Spain, Israel, Sweden and Denmark etc. The ten main overseas market taken together, account for more than 90 per cent exports of the gems and jewellery by India. Gems and jewellery exports of India contribute nearly 20 per cent to country's total foreign exchange earnings.

Chapter 5

Challenges & Way Forward

Rajasthan, being an agrarian economy holds excellent potential for exports, particularly in the food sector. Processed food is one of the major industries, which the government is giving a major impetus. The state has been long known for production of spices which hold a huge potential in countries like the United States, Malaysia, United Arab Emirates (UAE) and United Kingdom (UK). The state has not exploited its potential to export juices, herbal medicines and camel milk for therapeutic utility.

A greater emphasis on agriculture has also promoted the government to focus more on 'Agricultural Biotechnology' in its industrial policy.

Also, non-communicable diseases making a top place in the global burden of disease - generic drugs and nutraceuticals also offer a huge potential and can be the 'pharmaceutical export basket for generic drugs'.

With the creation of infrastructure, Rajasthan also has a huge potential for exports of electricity and software goods

Despite traditional industries, such as Textiles and Leather having a huge potential, Rajasthan as a state has not been able to exploit this potential.

There are several challenges for the export in Rajasthan. Some of these along with solutions are as follows.

Diversification and inadequacies in the area of infrastructure

Transportation is one area where Rajasthan is compared very unfavorable with its competitors. For instance, shipping a container of textile or garments from India to the USA is costlier in India than in its Asian competitors. Despite a longer route, shipping to the US eastern seaboard out of Bangkok is almost 18% cheaper compared to Mumbai or Chennai

The state government should set up new inland container depots or dry port facilities with the assistance of the Centre at shipment centers so that there are no difficulties in cargo storage, customs clearance and container availability

Also, testing laboratories of international standards need to be set up under public-private-partnership for different kind of export commodities so that exporters from the state can save time and money by not depending on facilities in cities like Delhi and Mumbai

Also, efforts should be made to establish direct connectivity to Bangkok, Hong Kong, Singapore and other prominent export markets from Jaipur to improve trade.

Trading Processes

Steps need to be taken to reduce procedural formalities for exports transactions, and ensure speedy redressal of exporters' grievances through Rajasthan Export Promotion Council.

Also, thrust sector councils led by the Centre should be created at state level to prepare strategies and action plans to achieve targeted growth of exports. This can also be done through aiding the industry associations

Tariff and non-tariffs barriers

The exporters also have to face the tariff and non-tariffs barriers from considerably important countries of EU and US market practices peak tariffs and Tariff escalations in the textile import from India and other developing countries so as to provide protection to its own industry.

To change the mind set and attitude towards technology

It will be a biggest challenge before the exporters to change the mentality of people to adopt the new and updated technology without hesitation to gear the exports market from Rajasthan, raise its efficiency and competitiveness to meet the international competition.

Export houses need to be kept updated on usage of newer technologies and their adoption in the manufacturing process to improve its overall long-term viability

Payment delay from overseas buyers and distributors

This is a major hindrance for accelerating export but simultaneously it is coupled with non taking risk attitude of the entrepreneurs for selling abroad on one hand and on the other, lack of professionalism of the firm.

Moreover, governmental support can act as catalyst in mitigating such problems. Every access in understanding of rules & regulations for export will be an added advantage for which government should arrange workshops, camps at various district headquarters and at RIICO industrial Clusters.

Lack of funding

Many traditional industries and small scale businesses suffer greatly from lack of working capital and access to credit and loan facilities. Banks cite poor recovery rates, wrong

utilization of funds, lack of marketing facilities for finished products and lack of education on part of the borrowers as reasons for the low proportion of loans made. This has forced (for e.g. artisans) to borrow from their local moneylender or trader at high interest rates

Financial products and mechanisms for small scale entrepreneurs need to be set up

Lack of aggregation

Most of the production typically takes places in scattered clusters in rural areas, while markets are usually in urban centers.

Currently, there is a lack of organized systems to efficiently aggregate goods from small producers, carry out quality checks, store approved goods in warehouses, and supply them to wholesalers and retailers in urban areas. In lieu of this, retailers have to directly source from select producers, which is often not viable in the long run, resulting in the loss of a large percentage of the market for manufacturers.

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