

Chapter - 5.1

Position of Rajasthan in Indian Economy

Rajasthan has glorious place in Indian history. Rajasthan is the underdeveloped state with many natural calamities. This chapter describes the position of Rajasthan in Indian economy from the point of view of population, area and infrastructures with the comparison of other states.

Presently Rajasthan is considered as a developing state of Indian economy. This state of western part of India is associated with many paradoxes. More of the half part of Rajasthan has desert. Most of the agriculture depends on monsoon. Industries are concentrated in a few areas of Rajasthan. Rajasthan lacks the infrastructure facilities. During the last 50-60 years of development Indian economy experienced many inequalities. Many states of India have become developed and other are still underdeveloped. This regional despiritry is due to the different types of policies in different states. Rajasthan is one of the states of India which is making efforts to get developed.

The boundary of Bharatpur and Dholpur touches Uttar Pradesh and boundary of Alwar, Jaipur, Sikar and Jhunjhunu touches Hariyana. In South boundary of Dungarpur, Banswara, Jalore and Sirohi touches Gujarat and the boundary of Banswara, Kota, Baran, Dholpur, Sawai Madhopur and Karouli touches Madhya Pradesh. Thus, size of Rajasthan is like the unequal parallelogram. Length of Rajasthan from West to

East is 869 kilometer and that from North to South is 826 kilometer. Jaipur is the capital of Rajasthan situated in the East middle part. Table – 1 shows the main features of the economy of Rajasthan.

Table-1

Main Features of Rajasthan Economy

S.No.	Item	Number
1	Area	3.42 lakh Sq. Km
2.	District	33
3.	Division	7
4.	Tehsil	314
5.	District Council	33
6.	Panchayat Samiti	295
7.	Gram Panchayat	9900
8.	Village	45493
9.	City	222
10.	Municipality	147
11.	Populaiton	6.85 Crore (2011)
12.	Population Density	200

The economic infrastructure (electricity, road, transport, communication, etc.) and social infrastructure (education, health, etc.) are in the backward position in the state and there are vast possibilities of their development in future.

Now we study the position of Rajasthan according to different areas as below :

1. Area of Rajasthan:

Total area of Rajasthan is 342239 square kilometers which is 10.41% of the total area of India while area of Gujarat is 6%, area of Uttar Pradesh is 7.3%. It is clear that on the basis of area Rajasthan is the biggest state.

Rajasthan has desert in its 61% part. Area of Rajasthan is 16 times of Israel, 171 times of Mauritius, 5 times of Srilanka and 2 ½ times of Bangla Desh and Purtgal.

Rajasthan is backward due to its natural conditions along with the fact that the journey of economic development here started very late. Thus, Rajasthan requires more efforts to keep pace with other states of India.

2. Population in Rajasthan :

Total population of Rajasthan is 6.85 crore (2011) while that of India has been estimated as 121.09 crore (2011). Population of Rajasthan is 5.7% of total population of India. Indian population increased by 17.7% in the period 2001-2011 while population in Rajasthan increased by 21.3% in the same period. So, it is a matter of worry that growth rate of population in Rajasthan is higher than that of India. According to 2011 census the position of Rajasthan in India is 8th.

3. Infrastructure in Rajasthan:

Rajasthan is accounted in the category of non-specific states. Position of Rajasthan in India is 14th on the basis of infrastructural facilities. Thus Rajasthan is very backward state. The infrastructural position in Rajasthan can be studied as below:

- (i) Plants of electricity production are situated at Kota, Suratgarh and Dholpur. Atomic energy plants are at Singroli, Rihand, Dadri, and Anta.

- (ii) In 2010-11, per capita consumption of electricity in Rajasthan was 844 kilowatt hours which is less than that in Gujarat, Punjab and Haryana as shown in the below Table – 2:

Table-2

Percapita Electricity Consumption (2013-14)

(kilowatt hours)

State	Consumption of Electricity
Rajasthan	1011.2
Bihar	159.9
Gujarat	1972.6
Hariyana	1773.1
Punjab	1810.0
All India	956.6

Source: Economic Survey : 2016-17, Raj: Table 27, P A50.

At the end of Dec., 2016 total power capacity in Rajasthan was 17894.2 megawatt in which 5405.30 megawatt was received from the projects owned by government and rest amount of electricity was received from central projects, wind energy and solar energy projects. In 2013-14 per capita consumption of electricity was 1011.2 kilowatt hours in Rajasthan. Upto March 2014, 40249 villages were electrified while there were total 45493 villages in Rajasthan in 2011.

- (ii) It was estimated that upto the end of March 2016 length of roads per 100 square kilometer area was 63.61 km while national average was 166.47 km and thus the condition of Rajasthan is not satisfactory.
- (iii) For balanced and integrated development of Rajasthan development of roads is necessary and an important mean. Roads prepare efficient and effective base for all sectors of economy which results into economic and social benefits. Roads reduce

the distance between centers of services and knowledge. There is positive correlation between economic development and road system. Length of roads in Rajasthan is less than that in Gujarat, Hariyana and Madhya Pradesh. In March 2015 the length of railway route was 5898 km in Rajasthan in which 4801.18 km was the length of broad gaze, 983.71 km of meter gaze and 86.70 km was of the narrow gaze. This is also not satisfactory.

- (iv) In Rajasthan the literacy ratio in people of SC and ST is very low. This direction still needs much more efforts. Enrollment level is increasing but drop out is also very high. Following Table 3 shows the Gross Enrollment Ratio (GER) in Rajasthan.

Table- 3
Gross Enrollment Ratio (2014-2015)

Area	Primary Class (1-5)			Middle Class (6-8)		
	Boys	Girls	Total	Boys	Girls	Total
Rajasthan	98.8	97.3	98.6	87.4	83.9	85.8
All India	94.9	101.4	100.1	87.7	95.3	91.2

(Economic Survey : 2016-17.P.111: Statistics of School Education)

It is clear that in middle schools GER of girls is lower in Rajasthan than in India.

Level of literacy is also very low in the state. In 2011, it was 66.1%. It was 79.2% for male and 52.1% for female.

- (v) In health facilities the position of Rajasthan is very backward in comparison with India.

Following Table-4 shows the index of health indicators:

Table-4
Indices of Health Indicators (2015)

Area	Infant Mortality Rate	Birth Rate	Death Rate
Rajasthan	43	24.8	6.3
India	37	20.8	6.5
Kerala	12	14.7	6.9

(Economic Survey: 2015-16, Table 27, P.A49)

Table clears that birth rate in Rajasthan is more than in India. Infant mortality rate in Rajasthan is more than in India. Position of Kerala is better than both Rajasthan and India. In 2016, total allopathic medical institutions were 17546 in Rajasthan in which 113 were hospitals. In 17546 institutions, sub-health centers were 14408 and dispensaries were 194.

- (vi) Position of Rajasthan in banking facilities is not satisfactory. In June 2016, number of bank branches in Himachal Pradesh were maximum.

4. Position of Agriculture in Rajasthan Economy:

70% population of Rajasthan earn living from agriculture. In economy of Rajasthan agriculture plays very important role where half of the total income comes from agriculture and other related activities. Irrigation is important in agricultural production. Rajasthan lacks the surface water sources. Due to less rainfall underground water level is reducing, Due to uncertainty, unequal distribution and unfavorable weather conditions agriculture production is decreased or increased.

Contribution of agriculture can be seen as below:

- (i) Size of average holding in 2010-11 was 3.07 hectare in Rajasthan while in India it was 1.15 hectare. In 2005-06, this size was 3.38 hectare in Rajasthan. In agriculture holding Nagaland is at the first place and Rajasthan is at the 4th position in India.
- (ii) In 2009-10, 11.3% of the total agriculture area of India we found in Rajasthan. Here, position of Rajasthan in India is 1st.
- (iii) Rajasthan is an important producer of oil seeds. 1/8 of the total oil seed production in India comes from Rajasthan. Rajasthan occupies 1st place in India in the production of mustard.
- (iv) In 2015-16, 7.5% production of foodgrains comes from Rajasthan. Place of Rajasthan is very important in India in the production of cotton.
- (v) Jawar, rice, bajara, maize, gram, wheat, mustard, oil seed, cotton and pulses are the famous crops of Rajasthan. Since some years in past Rajasthan has shown progress in the production of vegetables, orange, lemon and malta. In commercial crops red peper, mustard and cumin seed are famous in Rajasthan.

5. Position of Rajasthan in Irrigation:

Agriculture in Rajasthan depends on rainfall. Large regional disparities are seen in the availability of water for irrigation. Rivers of Chambal, Mahi, Ravi and Vyas are the good source of water. Ganganagar, Bikaner, Jaisalmer and Jodhpur receive water from Indira Gandhi canal while Kota, Bundi, Baran and Sawai Madhopur receive water from the Chambal river. Mahi-Bajaj Sagar supplies water to Banswara.

In 2012-13, gross irrigated area was 39.47% which was less than that in India.

6. Position of Industries in Rajasthan Economy:

Economy of Rajasthan is an industrially backward economy. State government is making efforts for industrial growth through various plans and programs. In 2015 under Resurgent Rajasthan a conference of foreign industrialists was organised in Jaipur to create the investment atmosphere.

Gross state domestic product measures all achievements of an economy. Economy of Rajasthan is agriculture based economy and when agriculture production increases or decreases then growth rate also increases or decreases.

Agriculture sector includes agriculture, animal husbandry, forestry and fisheries. Industrial sector includes mining, registered manufacturing units, non-registered manufacturing units, electricity, gas and water supply. Service sector includes railway, other transport, warehousing, communication, trade, hotel, public administration, banking and insurance.

Rajasthan is backward in factory sector but is doing well in handicrafts, and rural industries. Exporters of Rajasthan earn foreign exchange from ornaments, carpets and hand weaving. Factories in Rajasthan are 2 ½ times less in comparison to Gujarat and Maharashtra.

7. Position of Minerals in Rajasthan:

Rajasthan is enriched in minerals. There are 39 big minerals and 22 small minerals. On this ground place of Rajasthan in India is 2nd. In production of copper and zinc Rajasthan is at the first place. At current prices Rajasthan earned Rs. 511 crore in 1991-92 from minerals which is 2% of the net domestic product. It became 4.5% in 2013-14. 70% of total production of minerals come from Rajasthan.

Important Points:

- Rajasthan is less developed state due to draught, irregular rainfall and lack of water resources.
- Rajasthan lacks infrastructure facilities. So, Rajasthan is said to be backward.
- Agriculture is the base of economy of Rajasthan.
- Uttar Pradesh has less land area and in agriculture production it has higher levels in comparison to Rajasthan.
- Total product from all sectors in the period of one year is known as gross domestic product.
- Deducting depreciation from gross domestic product gives net domestic product.

Questions for Exercise

Objective Type Questions:

1. On the basis of area, the biggest state is
(a) Uttar Pradesh
(b) Madhya Pradesh
(c) Rajasthan
(d) Bihar ()
2. The % part of desert in Rajasthan is-
(a) 27%
(b) 61%
(c) 40%
(d) 50% ()
3. Population of Rajasthan in 2011 was-
(a) 6.85 crore
(b) 5.85 crore
(c) 6 crore
(d) 7 crore ()

4. At end of December 2016, the electricity production capacity of Rajasthan was-
(a) 17894.2 megawat
(b) 5405.30 megawat
(c) 11371.61 megawat
(d) 15405.30 megawat ()
5. In 2010-11, the average land holding was
(a) 3.07 hectare
(b) 1.05 hectare
(c) 3.88 hectare
(d) 4.07 hectare ()

Very Short Answer Questions:

1. What is area% of Rajasthan in comparison to area of India?
2. Which place is occupied by Rajasthan in India in the production of minerals ?
3. In which minerals production Rajasthan occupies 1st place?
4. In which district of Rajasthan the Mahi is constructed ?
5. What was the production of oilseeds in Rajasthan in comparison to India ?

Short Answer Questions:

1. What is difference in gross domestic state product and net domestic state product ?
2. Write a note on agriculture in Rajasthan.
3. What is relation between land and agriculture in Rajasthan economy ?
4. Explain the position of Rajasthan in India on the basis of industries.
5. Write a brief note on geographical situation of Rajasthan.

6. Explain the importance of mineral estate in Rajasthan.

Essay Type Questions:

1. Determine the place of Rajasthan in Indian economy.
2. Determine the place of Rajasthan in Indian economy in agriculture, industry and area.
3. Geographically, Rajasthan is larger than Gujarat and Maharashtra but economically backward. Explain.

Answer to Objective Type Questions:

(1) c (2) b (3) a (4) a (5) a

Reference Books :

- Economy of Rajasthan- Dr. Chhipa and Sharma J.P.H., Jaipur
- Economic Survey : 2016-17

Chapter - 5.2

Natural Resources in Rajasthan

Importance of Natural Resources in Economic:

Natural resources include all those free gifts provided by nature which are available in the atmosphere (physical environment) and on which earning for living depends. Natural resources include land, climate, forest, soil, mines, water and energy.

Nature, level, and development of any economy depend on quantity, quality and use capacity of physical and natural resources. Natural resources provide base for whole of the economic system and affect each aspect of economic life of human being.

Mining resources provide raw material to industries. Oil, coal and natural gas are like the back bone for the economy.

Rapid growth of America, Britain, France, Germany, etc. took place to large extent due to the natural resources. In the same way Punjab, Hariyana, Gujarat, Maharashtra and other Indian states have developed with the help of these natural resources. Rajasthan is the biggest state of India with geographical area of 3.42 lakh km which is 10.41% of the total area of the country. Climate, land, forest, water and minerals in Rajasthan determine both the direction and condition of industrial development which has long term effect on income and employment. So it is correct to say that quantity and quality of

natural resources affect the economic development of Rajasthan. Proper utilization of these resources can further boost the economic development of the state and thus problems of poverty, employment, etc. can be solved effectively.

Land Resources in Rajasthan:

Land resources directly affect the agricultural development. Here the quantity and quality (both aspects) of land resources are important. Agriculture is the most important economic activity in economy of Rajasthan. Crops are produced by keeping in view the types of soil, rainfall and climate. Use of land in economy is done as the primary resources, Rajasthan is mainly divided in four parts on the basis of land and climate.

1. North-West Desert Region
2. Eastern Plants
3. Central Mountain Area
4. South-East Plateau

1. North-West Desert Region:

About 61% part of the state lies in this region. There are 12 district in this region, mainly Bikaner, Churu, Jaisalmer, Barmer and Jodhpur. Marwar area and Thar desert are in this region. Main characteristics of this region are:

- (i) Average rainfall in about 12-15 cm which is

less and thus ureals are mainly produced.

- (ii) Mostly sand soil is available.
- (iii) Gwar, Jawar, bajra, moong and moth are the main crops.
- (iv) Irrigation facility is available in Ganganagar and Hanumangarh districts and thus crops of cotton, wheat and sugarcane are sufficiently produced.
- (v) Salt is produced in the salt water lakes of sambhar, Didweana and Pachpadra.
- (vi) Animal husbandry is the main industry.
- (vii) 57% area of Rajasthan is covered by this region.

2. Eastern Plains :

This region includes Jaipur, Dausa, Bharatpur, Dholpur, Tonk, Sawai Madhopur, Karouli, Alwar, Sikar and Some part of Jhunjhunu district contribution of this region in Rajasthan economy is so-so. Its main characteristics are:

- (i) Average rainfall is of 40-80 cm and this there is more population density.
- (ii) Wheal, oilseeds, cotton, sugarcane, gram, bajra and mustard are the main crops.
- (iii) Sufficient water availability is there and thus this region is fertile. This region covers 23% area of the state.

3. Central Mountain Area:

This region includes mainly Dungarpur and Udaipur with some part of districts of Sirohi, Pali, Banswara and Chittorgarh. Gurushikhar (172 meter high) and moutn Abu are in this region. Main characteristics are:

- (i) Average rainfall is 20-90 cm.
- (ii) Red, black, brown and stone based soil is found.
- (iii) Copper, mica, iron, zink, etc. are the main mining products.

- (iv) It covers about 9% area of Rajasthan.

4. South-East Plateau:

This region is also known as the Malwa-Harouti region in which districts of Kota, Baran, Bundi and Jhalawar are situated. Red and black soil is available and cotton, groundnut, rice, sugarcane and wheat are the main crops. Average rainfall is of 30-70 cm.

Soils in Rajasthan:

Crop pattern, sources of irrigation, means of transport and population density depend on nature of soil. The soil found in Rajasthan is of the following types.

(1) Sand Soil:

Area of this soil is the largest in the state. It is not more fertile. It is mainly available in districts of Churu, Barmer, etc. mostly cereals are produced in this soil.

(2) Red soil:

This soil has nitrogen, phosphorus lime, potash and iron elements in it. It is available in Dungarpur, Udaipur and Ajmer districts.

(3) Loan Soil :

This soil has potash, lime, phosphorus and iron in it. This soil lacks nitrogen and found in Jaipur, Dausa, Tonk and Dholpur districts.

(4) Black Soil:

This soil lacks nitrogen and organic matter with sufficient quantity of calcicum. This soil is found in Bansawra, Pratapgarh, Bundi, Jhalawar and Baran districts.

Except these soils red and yellow soil, red and black soil, brown sand soil are also found in different places of Rajasthan. Improvement in soil structure and productive capacity are always welcome and for it the water problem should be solved. Surface and ground water exploration should be controlled. Practices of deforestation should be checked and controlled.

Government Efforts in Land Conservation:

These are as given below:

- (1) Desert Development and Draught Prone Area Programs are running to check the expansion of desert.
- (2) Research work is being carried out on dry area at 'KAJARI' institute in Jodhpur.
- (3) Work of land reform is being done with the central cooperation under the 'combating desert program.'

Water Resources in Rajasthan:

Economy of Rajasthan depends on available water resources as water is required for agriculture and Rajasthan economy is an agriculture based economy. The occurrence of frequent famine and draught is the common in this state. 13.9% of the total agricultural area in India is in Rajasthan alone while 1% of the water resources is available in this state. Water resources are of two types in Rajasthan:

1. Surface water :

It includes the sources of rivers, canals, lakes and dams.

2. Underground Water:

It includes the sources of wells, handpumps and tubewells.

Main Rivers in Rajasthan:

These are as below :

1. Chambal River:

Details of this river are as under-

- (i) This river originates from Janabhav hill near Mau in Madhya Pradesh and passes through Kota, Sawai Madhopur and Dholpur districts. Chambal river's length is about 210km and at last it joins the Yamuna river.
- (ii) Kali Sindh, Parvati, Parvan, Banas, etc. are the tributaries of Chambal river.

(iii) Gandhi Sagar, Jawahar Sagar and Rana Pratap Sagar dams are on the Chambal river.

(iv) Electricity is generated from its water.

2. Mahi River :

(i) This river originates from Vindhya hills of Madhya Pradesh and flows for 174 km in Rajasthan. Then it enters in Gujarat.

(ii) Mahi Sagar dam is constructed on this river in Bansawara.

(iii) Electricity is generated from the water of Mahi river.

3. Banas River:

(i) It originates from Khamanor hills (Kumbhalgarh).

(ii) The Bisalpur dam is on this river which is used for drinking water and irrigation.

4. Looni River:

It is the largest river of Rajasthan. It originates from the Nag hill near Ajmer, flows in Jodhpur district. Salt is produced from water of Looni river.

Banganga, Ghagghar, Sabarmati, Sookari, Sahibi, Katli, Mantha, Jakham, Parvati, Kali Sindh, Meza, etc. are the other rivers of Rajasthan.

Lakes in Rajasthan:

Following is the information about

1. Lacks of Sweet water:

Pichhola lake, Fateha Sagar lake, Rajasamand lake and Jaisamand lake are in Udaipur. Aana Sagar lake, Faisagar lake and Pushkar lake are in Ajmer. Silised lake (Alwar), Nakki lake (Sirohi), Nav Khan lake (Bundi) and Kailana lake in Jodhpur are the other sweet water lakes.

2. Lack of Salt Water

These are used for making salt. Sambhar

lake (Jaipur), Didwana lake (Nagour), Lunkaransar lake (Barmer) are the lakes of salt water. 'Sambhar Salt Limited' produces salt in Rajasthan.

Main Canals in Rajasthan:

These are as described below:

1. Indira Gandhi Canal:

The origin of this canal is Harike dam on Satalaj and Vyas rivers. Its water is used for irrigation in Ganganagar, Bikaner, Barmer, and Jaisalmer districts.

2. Ganga Canal:

It originates from Husainiwala near Firozpur from the Satalaj river. It irrigates Ganganagar district.

3. Bharatpur Canal:

This canal is a branch of Agra canal which is 28 km long. It irrigates Bharatpur district.

Wells, Tubewells and Dams :

Through wells and tubewells underground water is used. In dams rainfall water is collected/stored. Level of underground water is an issue to be worried about. Water in dams depends on rainfall.

Efforts of proper utilization of water Resources in Rajasthan:

Following point are to be mentioned.

- (i) Available water should be used properly. Improved irrigation techniques should be used.
- (ii) Water sources are fixed in nature. So water conservation efforts should be made. Effective farmers should control the water irrigation system.
- (iii) State share in international water resources should completely to used.

- (iv) Rainfall water storing should properly be managed so that the depleting underground water level can be checked.

Forest Resources in Rajasthan :

Relation between vegetation and human being is seen from afar. Vegetation affects human life, culture, and daily routine. Rajasthan is backward in vegetation. Area of Rajasthan covered by forest is about 7% to 8% while according to the national forest policy forest should cover 33.33% of the total area. In India forest is in only the 22.8% area.

Role of forest in the economy of a state is very important. We have three types of natural vegetation in Rajasthan. These are forest, grass and desert vegetation. The south-east part of Rajasthan has forest only in the districts of Sawai Madhopur, Kota, Jhalawar, Baran, Bundi, Banswara, Dungarpur, Chittorgarh, Udaipur, Alwar, Bharatpur and Sirohi. Karouli, Baran and Udaipur districts have maximum forest area while Churu and Jasalmer have least forest area.

Administratively, forest in Rajasthan is divided in there parts:

1. Reserved Forest:

In these forests grass feeding to animals and cutting of trees are not allowed.

2. Protected/Safe Forest:

In these forests people are sometimes allowed for feeding grass to animals and to cut the dried trees.

3. Unclassified Forest:

In these forests rainy grass pastures, trees and small shrubs are found.

Types of Forests:

These are described as below:

1. Forest of Dry Sagwan:

These are mainly found in Banswara and Dungarpur districts and in some parts of Udaipur, Chittorgarh and Kota districts.

2. Mixed Autumn Forest:

Mainly in Udaipur and some parts of Kota, Bundi, Chittorgarh, Rajsamand and Sirohi districts these forests are found. Main trees of these forests are banyan, gluten, blackberry, acacia, mango, etc.

3. Tropical Forest:

Thorn trees are found mainly in Bikaner, Jodhpur, Ajmer, Sikar, Pali, Jhunjhunu, Dausa and Nagour districts. Acacia, Sal, Ber, etc. are the main trees of this forest. Quadrant (Khejri) is the famous tree of this forest that is why it is known as the tree of heaven and it is the state tree of Rajasthan.

4. Semi-Dry Mangrove Forest:

These are the ever green forests. The area of 32 square km around Abu mountains has these forests. This is the area of semi dry mangrove forest of Rajasthan. Mango, bamboo, blackberry, neem, rohita, etc. are the main trees here.

Economic Contribution of Forests in Rajasthan:

Following points show the economic contribution of forests in Rajasthan:

1. Building Wood:

In forests of Rajasthan wood of Saagwan, Salar, Acacia, Mango, etc. is used in buildings.

2. Fuel:

Forest wood is used as fuel for cooking food, etc.

3. Grass:

It is used for animals and in making of ropes, broom, etc.

4. Bamboo:

It is used in making basket, paper, hut, bunk etc.

5. Honey and Wax :

We get honey and wax from forests.

6. Kattha, Khas and Tendu Leaf:

These are also obtained from forests of Rajasthan and have their commercial use.

7. Tourism Industry:

Forests attract tourists because of their natural beauty and thus foreign exchange is earned.

Government Efforts for Forest Development:

Government of Rajasthan has taken following actions for forest development:

1. Under program of social forestry individuals and Panchayat Raj institutions are distributing plants to get them sown in rural and urban areas.
2. Plants are given to farmers, schools and government institutions under farm forestry.
3. Budget of Rs. 1617.6 was allocated for forestry development in 2012-13 under 12th five year plan. Forest department is making efforts to reduce the desert area.
4. Work of plantation was done in 1992-93 to 2002 under Aravali plantation.
5. Plantation was done under Indira Gandhi Canal Project Forestry, non- Aravali forestry and non-Marwari forestry.
6. With the assistance of Japan steps were taken to develop and conserve forestry under the Rajasthan Forestry and Biodiversity Project in the period of 2012-13 to 2018-19.
7. 19 forest development agencies have been established in Rajasthan under the

Integrated Rural Forestry Plan of the Indian Government.

Mineral Resources in Rajasthan:

Different aspects of minerals in Rajasthan have been analysed as below:

Role of Minerals in Economic Development:

Mineral resources also decide the direction of economy like natural resources. Iron, still, cement, coal, petrol and diesel, etc. are very useful for the economic development. Each mineral is used as raw material in industries and thus increases the income and employment.

Following are some facts about mineral resources in Rajasthan.

1. The place of Rajasthan in India is 5th from the point of view of product value.
2. About 5 lakh people have got employment directly or indirectly in mining activities in Rajasthan.
3. At current prices Rajasthan earned Rs. 511 crore in 1991-92 and Rs. 21750 crore in 2013-14 from the mining business.
4. Presently Rajasthan is the single producer of jasper and bolastonite in the country.
5. Rajasthan has the first place in India in the production of lead, zinc ore, tungeston ore, phosphorus, calcite, ceramic, felsphere, garnet, gypsum, jasper, silver ore soap stone, etc. Table -1 shows the % share of Rajasthan in mineral production in India:

Table -1

% Share of Rajasthan in Mineral Production in India.

S.No.	Mineral	% shavna
1.	Bol Stonite	100%
2	Jaspar	100%
3	Zinc Phasphate	99%

4.	Florite	96%
5.	Gypsum	93%
6.	Marble	90%
7.	Asbestos	89%
8.	Soap stone	87%
9	Zink	80%
10	Rock Phosphate	75%

Rajasthan is very backward in the production of iron ore, boxcite, croprite, magnese, coal and petroleum. Rajasthan is now doing something good in petroleum in Barmer district. Contribution of Rajasthan in mineral production in India is 5.74% with 5th place.

Presently there are 39 main minerals (zince, lead, gypsum, copper, etc.) and 22 minor minerals like kota stone, sand stone, marble, etc.

Main minerals of Rajasthan are as discussed below:

1. Metallic Minerals:

Copper, gold, iron, lead, zinc, silver, magnese, etc. are the metallic minerals. These are used in metallic industries. Lead and zinc are used in making gun bullets.

Copper is found in Khetri-singhana (Jhunjhunu), lead and zinc are found in Jawar and Rajpura Dariba area (Udaipur), tunguston is found in Revat hill Degana (Nagour), and magnese is available in Banswara, Jaipur, Udaipur and Sawai Madhour districts.

2. Non-metallic Minerals:

Asbestos, felspar, silica sand, china clay etc. are the non-metallic minerals. Asbestor is found in Udaipur and Dungerpur districts. Most of the felspar is available in Ajmer district.

3. Electronic and Automic Minerals:

Mica is found in Bhilwara, Jaipur, Tonk, Udaipur and Ajmer districts. In India, Rajasthan

has the 3rd place in the production of mica. Mica is used in the production of electrical equipments aeroplane, computers, transport and medicines.

Under automic minerals uranium is found in Udaipur, lithium in Ajmer and breayl is found in Bhilwara district.

4. Precious Minerals:

Under precious minerals emerald and garnet are included. In the production of emerald Rajasthan has the monopoly. It is available in Udaipur, Rajsamand and Jodhpur districts.

Garnet is available in Ajmer, Tonk, Bhilwara and Sikar districts. In its production there is monopoly of Rajasthan. It is found in the red colour.

5. Fertilizer Minerals:

Gypsum, rock phosphate, pyrites and limestone are the fertilizer minerals. Gypsum is used in colours, chemical fertilizer and plaster of paris. It is found in Nagour, Bikaner, Churu, Sriganaganar, Jodhpur, Jaisalmer, Barmer, Pali and Jalore districts.

Rock Phasphate is used in chemical fertilizer. It is available in Udaipur (Jhamra-Kotra, Dakan Kotra, Bhinder, Bailagarh, Lakhwas) and Jaisalmer (Lathi and Birmaniya).

Pyrites is found at Saladipura in Sikar district. It is used in chemical fertilizer.

Lime stone is largely available in Ajmer, Udaipur, Banswara, Chittorgarh, Bhilwara, Sirohi, Pali and Jaisalmer.

6. Minor Minerals:

Bentonite is a minor mineral. It is available in Barmer, Sawai Madhopur and Bikaner.

Multani soil is a natural soil and is available in Bikaner (Palana, Kesar Desar), Barmer (Kapurdi, Alameriya, Shiv) and Jaisalmer districts.

Marble, granite and building stone are also the minor minerals. 100% quality marble is found in makrana (Nagour). It is also found in Sikar, Jaipur, Alwar, Udaipur, Jalore and Sirohi districts.

Granite is found in Sikar, jaipur, Jhunjhunu, Ajmer, Dausa, Barmer, Pali, Bhilwara, Alwar and Sirohi districts.

Building stone is mostly available in Jodhpur, Kota, Jhalawar, Jaipur, Bikaner, and Chittorgarh districts. Red building stone is available in Karoli, Bharatpur and Dholpur districts.

7. Other Minerals:

(i) Soap Stone:

Rajasthan has monopoly in its production. It is used in toys, cosmetic products, rubber, etc. It is found in Jaipur, Dausa, Alwar, Bhilwara and Dungarpur districts.

(ii) Slate Stone:

It is used in making slates. It is exported to Germany, Holand and Australia. It is available in Alwar district.

(iii) Calcite:

It is also known as calcium carbonet and is used in making of paper, taxtiles, paints, etc. It is mainly found in Sikar district and in Sirohi, Pali, Jaipur and Udaipur districts also.

8. Petroleum, Natural Gas and Coal:

In desert land of Rajasthan oil fields are available in Barmer district. It will change the fate of Rajasthan. These oil fields are known as mangala, shakti, aishvarya, saraswati, rageshwari, kameshwari, vijaya, vandana and bhagyam.

Lignite coal is used in production of electricity. 60 crore tone coal is found in Barmer, 35 crore tone in Bikaner and 20 crore tone coal is available in Nagour district.

Search of Oil, Natural Gas and Coal Bed Mithen (CBM) Wells:

- In 2016-17, 33 oil wells have been searched in Jaiselmer and Barmer-Sanchur basin.
- Till now stock of 3.7-4.1 billion barrels of oil has been discovered in Barmer-Sanchour basin. Upto December, 2016 Ms. Keyarn Energy searched 171 oil wells.
- Petroleum sector gives important reveue to Rajasthan In 2014-15, Government of Rajasthan received Rs. 5100 crore as revenue from the petroleum sector.
- Production of mineral oil has started from 29-08-2009 in Mangla Oil Field.
- Ms. Focus Energy has completed the work of 50 oil wells in Shahgarh Sub-Basin in Jaisalmer.
- High quality gas has been searched in 3 wells.
- Production of high quality gas has started from July 8, 2010 by Ms. Focus Energy.
- Production of natural gas has been started in 16 oil wells in Shahgarh Basin.

Problems of Mineral Industry in Rajasthan and their Solutions:

Many types of minerals are available in Rajasthan and some of them have been developed irrationally. Some of minerals are still not developed. Following are the problems of the mineral industry.

1. Unequal Distribution of Minerals:

Most of minerals are found in southern and South-East districts of Rajasthan. Less minerals are available in North part of the state. Due to this there are inequalities in economic development of the state.

2. Unplanned Exploration:

Due to lack of transport facilities and new

technology minerals are being explored, without any rational plan. Secondly, the cost of exploration of minerals is higher in hill areas.

3. Lack of Machines and Equipments :

Due to shortage of financial resources with mining owners they can not purchase good quality machines and required equipments.

4. Lack of Fuel and Iron Minerals:

Engineering and heavy industries are not being developed due to lack of iron and fuel.

5. Lack of Efficient and Trained Workers :

Most of workers engaged in mineral industry are not efficient and well trained.

6. Lack of Water and Electricity:

Rajasthan lacks both in water and electricity. Due to this mineral industry is underdeveloped.

7. Most of the minerals are explored in Rajasthan and sent outside for purification which reduces quality.

8. According to Geologists, the rate at which minerals are being explored is very high and in future the quantity of minerals will decrease. This will create a big problem. So it is necessary to conserve the mineral resources. There should be a proper mineral policy of the government.

In 1979, the Rajasthan State Mineral Development Corporation was established. Its objective was to accelerate the exploration and marketing work of minerals and to adopt the scientific method in it.

In the same way Rajasthan State Mining and Minerals Corporation and Rajasthan State Tungsten Development corporation were established.

New Mineral Policy of Rajasthan, 2011

The mineral policy in Rajasthan was

declared in 1994 and 2005. In 2011 new mineral policy has been declared in Rajasthan with 11 objectives as given below:

1. Creation of favourable atmosphere for value added of minerals.
2. To increase employment opportunities.
3. To increase use of modern techniques in the exploration of minerals.
4. To promote mechanized and scientific exploration keeping in view the environmental products and mineral protection.
5. To mobilize human resources to increase the mine and mineral based industries.
6. To expand basic facilities in output areas.
7. To expand basic facilities in mining areas
8. To promote the work of mining and testing of fertilizers and industrial minerals.
9. To promote petroleum refinery and methane and lignite based industries.
10. To simplify processes and rules to solve the problems in mineral development.
11. To implement measures to increase welfare of mining workers.

Important Points:

- Natural resources include all the free gifts received by human being from nature.
- Base of economy depends on structure, type and fertility of land.
- Agricultural production depends on the proper contribution of land and water resources. Increase of agricultural production increases the economic activities of public.
- Water resources give assistance to all the processes of production in an economy.

- Forest has important contribution in the prosperity of a state. Developed forests balance the environmental activities.
- Forests develop tourism in Rajasthan. Pollution is controlled and foreign exchange is received from forests.
- Minerals are the life line for the economy of Rajasthan. The state which has sufficient minerals and explores them properly, get the higher levels of income and employment.

Questions for Exercise

Objective Type Questions :

1. Importance of natural resources lies in-
 - (a) Increasing state domestic product
 - (b) Consumption and environment improvement
 - (c) Development of tourist industry
 - (d) All of the above ()
2. Number of natural parts of Rajasthan is –
 - (a) Four (b) Five
 - (c) Three (d) Ten ()
3. District of North-West desert is-
 - (a) Churu (b) Kota
 - (c) Jaipur (d) Tonk ()
4. Tree of heaven of Rajasthan is –
 - (a) Neem (b) Ker
 - (c) Khejara (d) Babool ()
5. Mahi dam is situated in district of-
 - (a) Kota (b) Tonk
 - (c) Banswara (d) Jaipur ()
6. Sambhar lake is situated in district of.
 - (a) Jaipur (b) Nagour
 - (c) Barmer (d) Churu ()

7. The mineral whose 100% production in India is in Rajasthan is –
 - (a) Bolastonite and Jaspar
 - (b) Rock Phosphate and lead concentrate
 - (c) Iron
 - (d) Soap Stone ()

Very Short Answer Questions:

1. Name two lakes where salt is produced.
2. Where is 'KAJARI' institute?
3. Where is Pachpadra lake ?
4. What is mineral whose project is his khetari ?
5. Which dam is on the Chambal river ?
6. In which district the Bisalpur dam on Banas river is constructed ?
7. When was the first mineral policy of Rajasthan declared ?

Short Answer Questions :

1. Name the important minerals received from forests.
2. Name the main canals of Rajasthan which are used for irrigation.
3. Explain the impact of mineral resources on income and employment.
4. Where are the salty water lakes in Rajasthan ? What is economic use of these lakes ?
5. Developing forest area gives economic benefits and earns foreign exchange. Explain.

Essay Type Questions :

1. Why is the economy of Rajasthan affected from natural resources ? Explain in detail.
2. How does the increase in forest and water resources strengthen the economy of Rajasthan ? Explain.

3. Minerals are the backbone for the Rajasthan economy. Explain this statement.
4. If fertile land and sufficient water resources are available in a state, its economy can not be weak. Explain your views in detail.

Answer to Objective Type Questions:

- (1) d (2) a (3) a (4) c (5) c (6) a (7) a

Reference Books:

1. Economic Appraisal of Rajasthan : 2016-17
2. Economy of Rajasthan- Dr. Chhipa and Sharma, J.P.H., Jaipur.

Chapter - 5.3

Human Resources Development in Rajasthan

We use natural resources and natural resources are not active. Human resources get maximum production with the help of natural resources which is used by human resources. So human resources are both means and ends and are more important than natural resources. Without human resources research and development work are not possible. Human resources are a liability also because food, residence, education, health, entertainment and employment are arranged for them.

For the rapid economic development of any economy both physical and human resources are required. Physical resources are explored by human resources. In human resources the quantitative and qualitative aspects are included. Better the both aspects higher the levels of economic development. Human resources are the social infrastructure of the economic system in which population, education, health, habitat and drinking water are studied. Population affects various aspects of economic development.

Meaning of Human Resources:

Human being has the capacity of knowledge gaining and its expansion. To gain knowledge there is need of positive thinking, proper training and efficiency. When we complete these processes with success, we become more valuable and get the maximum social status. For this the first step is the education which has to be

supported further by good health. When both these things become together with human being, human being becomes able to choose the best alternatives. Such person develops himself alongwith the development of nation. This is known as human formation or human resource.

As soil is changed in to the soil pot through the production process, in the same way education converts human being into human capital and this is known as human development. In all round development of human being social background, good educational and training institutions, and health facilities play important role.

Importance of Human Resources:

The main base of development is the population. For the proper use of natural resources, human resources are required. Population affects economic development also. Population affects various indicators of economic development like labor force, rate of capital formation, level of income, per capita land ratio, distribution of income, living standard, level of investment, size of production and productivity, environment, etc. The main points in this regard are as below:

- i. Size of human resource indicates the power.
- ii. Necessary labor force is achieved from population.

- iii. Human resources use natural resources and increase their productivity
- iv. Population, on one hand, is a factor of production and on the other hand, it is the end also.
- v. Increase in population increases the market demand.
- vi. Research, innovation and invention are possible only by the human resources.
- vii. Technical knowledge is developed.

Even having the favourable effects of population, there are many unfavourable effects of it also.

Position of Human Resources in Rajasthan:

Position of human resources in Rajasthan can be seen as below:

Human resources have two aspects:

1. Quantitative Aspect:

Under this aspect following facts are included:

- i. Population size and growth
- ii. Density of population
- iii. Urban and rural population in Rajasthan

2. Qualitative Aspect:

It includes the following sub-aspects.:

- i. Education and literacy
- ii. Health
- iii. Habitat

All the above aspects (and their sub-aspects) have been analysed as below in reference of Rajasthan:

Quantitative Aspect:

i. Population Size and Growth in Rajasthan:

The factor which affects the development of

human being mostly is the size and growth of population. If growth of population is uncontrolled, there is lack of able persons which harms the human capital formation which has its negative effect on the economy. Most of the state income is used to fight with the issues of poverty, residence facilities, health and education and thus developmental works are badly affected. Thus study of size and growth of population of a state becomes necessary. Table-1 shows the size and growth of population in Rajasthan.

According to census of 2011, the population of Rajasthan increased upto 6.85 crore (which was 5.65 crore in 2001) and population of India increased upto 121.06 crore in 2011 which was 102.07 crore in 2001. In the period 2001-2011, the population of Rajasthan increased by 1.20 crore. This decadal growth rate was 21.30% while that for India was 17.7%. Thus the decadal growth rate of population in Rajasthan is more by 3.6% than in India but the area of Rajasthan is 10.4% of the area of India. 5.7% of total population live in Rajasthan. The place of Rajasthan in India from the population point of view is 8th. Uttar Pradesh has the maximum population in India.

Table-1

Year	Population (Crore)	Decadal Growth Rate 1%	Special note
1901	1.03	-	
1911	1.10	6.70	
1921	1.03	(-)-6.29	Negative growth
1931	1.17	14.14	
1941	1.39	18.01	
1951	1.60	15.20	
1961	2.02	26.20	

1971	2.58	27.83	
1981	3.43	32.97	Maximum growth
1991	4.40	28.44	Rapid growth
2001	5.65	28.41	
2011	6.85	21.30	

It is clear from the table that population in Rajasthan increased from 1.03 crore in 1901 to 6.85 crore in 2011. In 1901-1951, population increased by only 57 lakh while in 1951-2011 it increased by 5.25 crore. After independence population increased rapidly which is an alarming issue and needs to be thought upon.

The growth rate of population in Rajasthan had been more than that in India. This has resulted into the higher population size in Rajasthan. Before independence both birth and death rates were lower in Rajasthan and thus both population size and growth were low. In this way there was no population problem. In 1921 growth rate was negative due to epidemic, disease, and world war.

In 2011, population was maximum in Jaipur district and minimum in Jaisalmer. The maximum population increase as 32.5% in Barmer and minimum increase was 10% in Ganganagar.

Causes of Population Growth in Rajasthan

There are many causes of population growth in Rajasthan. These are:

1. Child Marriage:

In rural Rajasthan child marriage is a common event which results into birth of children in lower age and thus population starts increasing rapidly. The legal marriage age is 21 years for boys and 18 years for girls but this rule is frequently ignored by people.

2. Poverty and Low Living Standard:

Rajasthan is traditionally a backward state. Population is used both as power and resource and so people keep large size of family for both power and resource. This results into increase in population. Presently people consider additional children as additional source of income. These small children are engaged in earnings.

3. Lack of Education:

In Rajasthan the level of literacy is low and due to this people do not think about their future. Female literacy is lower than male literacy in Rajasthan. Due to this there is lack of family planning methods and thus population increases.

4. Economic Backwardness:

Rajasthan is economically backward. There is negative relation between level of economic growth and size of population. So growth rate of population is higher

5. Hot Climate :

Climate of Rajasthan is hot and thus people get matured earlier. This results into the higher possibility of population increase.

6. Failure of Family Planning Program :

Due to indifference, laziness of government servants and lack of publicity efforts family planning program has failed and desired results could not be achieved.

7. Difference in Birth Rate and Death Rate:

There is big difference between birth rate and death rate in Rajasthan. This big difference means the birth rate is higher and the death rate is lower and thus the result is the increase in population. Birth rate in Rajasthan is higher due to the lower average age of marriage and the way of thinking of people that marriage is compulsory. Death rate is lower due to expansion of health facilities.

Birth rate measures the number of live infants divided by total population and then multiplied by 1000. Thus,

$$\text{Birth Rate} = \frac{\text{Total No. of births in the year}}{\text{Total Population in the year}} \times 1000$$

In the same way, death rate is calculated as :

$$\text{Death Rate} = \frac{\text{Total deaths in the year}}{\text{Total Population in the year}} \times 1000$$

8. Population Migration:

People migrated to Rajasthan from the neighbor countries and other states during the planning period. This has increased population in Rajasthan also.

9. Belief in Fate:

Most of people consider that children are given by God. So people are not sensitive towards small families.

10. Other Reasons :

Lack of entertainment resources, insufficient social security, lack of knowledge, etc. are the other causes responsible for increase in population in Rajasthan.

(ii) Density of Population:

Number of people living in per square kilometer is the measure of density of population. According to census of 2011, population density in Rajasthan was 200. It was 382 in India. In 2001 it was 165 in Rajasthan. The maximum density of population is 1106 in Bihar and minimum population density is 17 in Arunachal Pradesh.

(iii) Urban and Rural Population in Rajasthan:

We study urban and rural population separately because there is big difference in the structure, density, distribution, living standard and other issues of the urban and rural population. According to 2011 census 75.13% of total population in Rajasthan live in rural area and remaining 24.87% population live in urban area.

Thus two third population of Rajasthan live in rural area.

(iv) Sex Ratio:

Number of women for 1000 men is the sex ratio. According to 2011 census, the sex-ratio in Rajasthan was 928 while it was 921 in 2001. The highest sex-ratio in India is 1084 in Kerala. Lowest sex-ratio is 846 in Dhoulpur and highest sex-ratio is 994 in Pratapgarh in Rajasthan in 2011.

Sex-ratio in age group of 0-6 is known as the child sex-ratio. In 2011, this sex-ratio was 888 in Rajasthan which was 909 in 2001 which is an issue of worry.

(v) District wise Population and Sex Ratio:

In 2011, maximum population was in Jaipur and minimum population was in Jaisalmer district. Jaipur had the maximum density of population while Jaisalmer had the minimum density of population.

Qualitative Aspect:

The detailed analysis of various factors relating with qualitative aspect of population is as below:

1. Literacy and Education:

Education plays most important role in human resource development. Education is the base of social, cultural and economic progress. Education is very important source of human capital. Education develops the work efficiency of human being. Education contributes in economic development by strong thinking about the social infrastructural facilities.

The main objectives of different development plans in Rajasthan is to make people more happy and prosperous by developing social and economic sectors of economy. So, state government primarily tries to develop the social sector. Activities associated with social sector are

education, health, family welfare and drinking water.

History tells that efforts are being made by governments to develop education sector since very beginning. Without sufficient investment in human capital the continuous economic development is not possible. Education develops understanding, rationality, quality and efficiency in people. Education increases productivity and constructiveness in people which results into the development of entrepreneurship and technology. Thus, each country develops specific education system for the development of social and cultural activities.

At the time of organization of Rajasthan, the education system of Rajasthan was underdeveloped and poor. Since then government has been trying to take concrete steps for the development of education sector.

Status of Literacy in Rajasthan:

In 2011, total literacy in Rajasthan was 66.10%, male literacy was 79.20% while female literacy was 52.10% . Literacy rate in India was 72.99% in 2011. Clearly, literacy rate in Rajasthan is lower than in India. Table 2 shows the literacy rates in India and Rajasthan.

Table – 2

Literacy Rates in 2001 and 2011

Type of Literacy	Rajasthan		India	
	2001	2011	2001	2011
Total Literacy	60.40	66.10	64.80	72.99
Male Literacy	75.70	79.20	75.30	80.89
Female Literacy	43.90	52.10	53.70	64.64

Source : Economic Review: 2014-15. P.A44

It is clear from the above table that literacy in Rajasthan is very much less than that in India. Specially female literacy is very low. In caparison of 2011 with 2001, the literacy had improved in Rajasthan. Maximum literacy is in Kerala.

The female literacy in Rajasthan is very low. The condition of rural area is worse than of urban area as for as female literacy is concerned. The literacy in scheduled caste and scheduled tribe is very low. Table 3 shows the literacy rates in rural and urban areas.

Table 3

Literacy Rates in Rural and Urban Areas of Rajasthan

Literacy	2001	2011
Total Literacy	60.4	66.11
Rural Literacy	55.3	61.4
Urban Literacy	76.2	79.7

Source: Economic Review: 2014-15 P.A44

Table 4 shows the maximum and minimum literacy rates in districts of Rajasthan.

Table 4

District wise Maximum and Minimum Literacy Rate in Rajasthan

Literacy	Distrit
Maximum Literacy	Kota (76.61%)
Minimum Literacy	Jalore (54.9%)
Maximum Literacy	Jhunjhunu (86.9%)
Minimum Literacy	Pratapgarh & Banswara (69.5%)
Maximum Literacy	Kota (65.9%)
Minimum Literacy	Jalore (38.5%)

Causes of low literacy in Rajasthan:

Following are the some causes of it:

1. Before organization of Rajasthan rulers did not develop the education.
2. Various governments did not pay proper attention to develop the literacy.
3. Some social and economic reasons are also responsible.
4. Poverty in the state is also responsible.
5. There is lack of resources and institutions.

Status of Primary, Secondary and Higher Education in Rajasthan:

In 2014-15 there were 41525 primary, 37573 higher primary and 27155 secondary and higher secondary schools in Rajasthan. Total enrolment in all these schools was 60.75 lakh students.

In national education policy primary education has been given preference. To educate the children of 6-14 years age group, 'Universal Education Campaign' has been started. Right to Education (RTE) act, 2009 has been implemented in April, 2011. Under this Act, 25% seats are reserved for children of weaker sections in private schools.

To increase education for girls, 200 Kasturba Gandhi Balika Vidyalaya are working in Rajasthan and 10 Mewat Balika Residential Schools are being run.

To increase literacy many literacy programs have been launched. These are: comprehensive literacy campaign, national literacy mission, literacy India program, comprehensive education program, etc.

Secondary Education :

It is that level of education at which students select or choose their course for employment and self employment. In 2016-17, there are 13527 secondary and 15683 higher

secondary schools in Rajasthan. 3875 secondary and 9444 senior secondary schools are in the public sector. Total enrolment in secondary education is 37.96 lakh in which 15.48 lakh are girls. The gross enrolment ratio is aimed to be 100% in 2017 for which scheme RMSA (Rashtriya Madhyamik Shiksha Abhiyan) is working in the state. Efforts are being made to open at least one higher secondary school in each gram panchayat. 66 english medium Swami Vivekananda Governemnt Model schools have been established.

Facilities of toilets, drinking water and facilities of physical resources are being provided for girls and cycles are being distributed. Students are given scholarships under the schemes of NTSE/STSE.

Higher Education :

Presently there are 1729 colleges in Rajasthan where 192 colleges are of the government and 1509 are private colleges, 7 are self financed and 4 colleges are being run on the public private partnership basis.

814 are B.Ed. colleges, 15 colleges are law colleges of the government and 43 are private law colleges. There are 40 private universities and 7 deemed universities. 3.56 lakh students is the enrolment level of government colleges.

Number of girls is increasing in higher education. Thus there are 27 girls degree colleges and 17 post graduate colleges in Rajasthan. For technical education we have 197 polotechnic colleges, 2015 ITI in 2016-17. For medical education, there are total 12 medical colleges in which 8 are government and 4 are in private sector.

Thus it is clear that the quantitative objective of education are being tried to get them fulfilled but due to lack of physical facilities and poverty many students are not getting benefit of education. Literacy programs are not being implemented optimally and thus literacy is

increasing at low pace. Qualitatively education is weak and it is not employment oriented.

2. Health:

Health of people is affected mainly by balanced diet, drinking water, hebetate, etc. Healthy people can increase economic and general development for good health. Health facilities are required which increase the work efficiency of people. Health facilities increase life expectancy and decrease the infant mortality and general mortality rates which are the indicators of social development. Following Table 5 shows the position of health indicators in Rajasthan.

Table 5
Health Indicators in Rajasthan

S.No.	Health Indicator	Rajasthan	India
1.	Infant Mortality Rate (5 Rs-2016)	43	37
2.	Mother Mortality Rate (SRS. 2011-12)	244	167
3.	Gross Reproduction Rate (SRS -2013)	2.8	2.3
4.	Infant Mortality Rate (0-4)	13	11
5.	Birth Rate (SRS -2015)	24.8	20.8
6.	Death Rate (SRS -2014)	6.3	6.5
7.	Total Life Expectation (SRS: 2010-14)	67.7	67.9
8.	Male (SRS 2006-10)	64.7	64.6
9.	Female (SRS 2006-10)	68.3	67.7

Table shows that on the basis of all the health indicators the condition of Rajasthan is very poor

in comparison to India. In comparison to other states, Rajasthan is not healthy in health sector.

Health Facilities:

These facilities include hospitals, number of doctor, nutrition, drinking water ,etc. Upto 2016, allopathic institutions in Rajasthan were 17546 in which 114 were hospitals, 194 were dispensaries, and 14408 were sub health centers. Presently there are 118 Ayurvedic hospitals, 3577 are ayurvedic dispensaries, 3 are yoga classes and natureopathy hospitals. There are 46669 beds in all hospitals. Our states lacks health facilities in comparison to other states in India. There is need to expand health facilities in rural sector at which our government is taking steps year to year.

Schemes for the Expansion of Health Facilities in Rajasthan

Following two schemes are being run in the state

(i) Chief Minister Free Medicine Scheme:

This scheme was launched in the state on October 02, 2011 which is beneficial for both outdoor and indoor patients. Most of the medicines are given free under this scheme.

(ii) Chief Minister Free Test Scheme:

Under this scheme tests are conducted free for the benefit of patients in all the hospitals.

Excepts above schemes there are many other schemes being run in the state like Janani Shishu Suraksha Yojana, National Child Health Program, Chief Minister B.P.L. Jivan Raksha Kosh Yojana, Janani Express, Chief Minister 108 Toll free Ambulance Scheme, etc. State insurance scheme for government servants, family welfare and population stablisation program, National Health Mission, Asha Sahyogini, etc. schemes are also working in Rajasthan.

Problems of Health Sector in Rajasthan:

These are as below:

- (i) Lack of health facilities in rural and distant areas.
- (ii) Untrained staff at the time of infant birth.
- (iii) Lack of hospitals in rural areas.

3. Habitat:

There is need of healthy housing facility for human being. Living in clean houses makes people mentally and physically healthy. For this, both state and central governments are making efforts for B.P.L. families to make available the cheap housing facilities. Following are such schemes:

(i) Rajive Awas Yojana (R.A.Y):

The objective of this scheme is protect the health of people living in unhealthy houses so that they can improve their living standard. This scheme was launched in 2011 in two stages of two years. The implantation strategy of this scheme was approved the Govt. of India in 2013-2022. The implementation strategy of this scheme has the two stages, namely (i) slum free urban scheme (S.F.C.P.O.A.) and (ii) Project for selected slums.

(ii) Integrated Habitate and Slum Development Program (IHSDP) :

This program aims to make available the housing and other basic facilities to people living in slums in urban areas. Under this program all the sections of society are aimed who are living in slums through the group system. A budget of Rs. 101278 crore has been sanctioned under this programme. This progress includes the construction of houses, roads, drainage system, community centers, community toilets, safety tanks, road lights and the facilities of drinking water.

(iii) Indira Awas Yojana (IAY) :

This plan was started in 1986 as a sub-plan of Rural Landless Employment Guarantee Programme and the Jawahar Employment

Scheme under the efforts of making available the houses to rural poor. This plan has the following characteristics:

- Construction of houses for minorities and specially abled people living below the poverty line in rural areas.
- Sanction of assistance to the joint name of husband-wife or the female member of the family.
- Construction of healthy toilets and smokeless cooking places for SC/ST people.
- Mukhya Mantri Jan Awas Yojana 2015.
- No role of contractors or intermediaries and the departmental agency in decisions regarding construction techniques, construction material and design. For this, decisions are taken by beneficiaries independently.

4. Drinking Water:

Drinking water plays important role in the development of human resources. So, it is necessary that drinking water must be available for human resources. This is the problem both in urban and rural areas. Government is making efforts to solve the problem of drinking water through various plans and programs. In 2016-17, Government has taken into hands the work of drinking water supply to 2039 colonies and small villages. Presently, following schemes are working for the purpose of availability of drinking water:

(i) Rural Drinking Water Schemes:

For these schemes financial resources are given by both centre and the state government.

(ii) Urban Drinking Water Schemes :

Under these schemes 33 district headquarters and 222 urban towns are included. All the 222 towns are being benefitted by the piped drinking water scheme.

Cities of Jaipur, Ajmer, Jodhpur, Bikaner, Bharatpur, Kota and Udaipur receive drinking water supply from the permanent water source. There is problem drinking water in some cities and towns due to excess exploration of underground water and less conservation of it. State government has taken policy decision to change the underground water source to the plans based on surface drinking water.

(iii) Big Drinking Water Schemes:

For the permanent solution of the long term drinking water problem some surface sources have been developed by the state government. These are Indira Gandhi Canal Project, Narmada River Project, Bisalpur Dam Project, Jawai Dam Project, etc. These projects have to be completed in coming 3-4 years.

Conclusion :

After the study of quantitative and qualitative aspects of population it is clear that quantitative aspects of population have shown rapid increase while qualitative aspects are still very weak. There is need of control of population growth, increase in both quantitative and qualitative literacy, effective control in birth rate, increase in health facilities and positive change in social indicators. Government must make efforts for the humane development and human capital formation.

Important Points:

- Both physical and human resources are important in the economy.
- We study population, education, health, habitation and drinking water in social infrastructure.
- Sex-ratio is the number of females per thousand males.
- The highest sex-ratio is in Dhoulpur (994) and the lowest sex-ratio is in Jaisalmer (846).

- Education is the base of social and economic progress of human life.
- Female literacy is important for social development. In rural areas of Rajasthan female literacy is very low.
- Healthy person can increase the social and economic development rapidly. So there is need to develop the health facilities in Rajasthan.
- There are many schemes being run for the improvement of health facilities in Rajasthan. These are free medicines and tests scheme, Janani Shishu Suraksha Yojana, National Child Development Program, Janam Express, etc.

Questions for Exercise

Objective Type Questions:

1. According to census 2011, total population of Rajasthan is –
(a) 5.65 Crore (b) 6.85 Crore
(c) 5.85 Crore (d) 6.65 Crore ()
2. In Rajasthan in the decade of 2001-2011 the population growth rate is –
(a) 28.44% (b) 28.41%
(c) 21.30% (d) 20.40% ()
3. District with highest population density is –
(a) Jaipur (b) Ajmer
(c) Udaipur (d) Jaisalmer ()
4. Sex-ratio in Rajasthan, according to 2011 census, is-
(a) 936 (b) 928
(c) 920 (d) 925 ()
5. According to census 2011, the district of maximum female literacy is –
(a) Kota (b) Jalore
(c) Jhunjhunu (d) Pratapgarh ()

Very Short Answer Questions:

1. What is meaning of human resource ?
2. In which district of Rajasthan the maximum literacy is found ?
3. What is the percent population living in rural areas in Rajasthan ?
4. What are the indicators of human development ?
5. When was the RTE Act enacted in Rajasthan?
6. Which district of Rajasthan has the maximum population ?
7. According to 2011 census which is the district of Rajasthan having the least population ?

Short Answer Questions:

1. What are the problems of primary education in Rajasthan ?
2. Explain occupational distribution of population.
3. Describe the health indicators of Rajasthan.
4. Explain the Chief Minister Free Medicine Scheme.
5. List the factors affecting the growth of population .
6. What is sex-ratio ? What is its status in Rajasthan ?
7. What are the reasons of low level of literacy in Rajasthan ?

Essay Type Questions:

1. Explain the causes of population size and growth in Rajasthan.
2. Describe the status and problems of educations in Rajasthan? What are the measures to solve these problems?
3. Describe the efforts of government of Rajasthan for education and health.

4. Explain the quantitative aspects of human resources in Rajasthan.

Answer to Objective Type Questions:

(1) b (2) c (3) a (4) b (5) a

Reference Books:

1. Indian Economy- Dr. Chhipa and Sharma, J.P.H., Jaipur
2. Economic Appraisal: 2016-17.

Chapter - 5.4

Tourism Development in Rajasthan

Human being is a social one who is so busy in the activities that feeds up the human being in the daily work. The result is that human being needs some change in the routine activities and for it the importance of tourism comes in.

Tourism is the activities which includes the tours of historical places, places of natural beauty, religious places and hill stations where people visit for the knowledge of language, culture and customs of different parts of a country. In modern time tourism has also developed like the industrial activities and thus known as tourism industry.

In Rajasthan tourism is highly concerned to be placed along with cultural tradition.

Role of Tourism in Rajasthan Economy :

Kashmir, Goa and Rajasthan are the three important tourist centers in India. Due to terrorism and separatist activities in Kashmir the tourism has become of less importance. In Rajasthan, government has declared tourism as industry. In reality, tourism has become the back bone of Rajasthan economy. In the state economy tourism plays important role as described below:



Hawamahal, Jaipur

1. Foreign Exchange Earning :

Through tourism foreign currency of crore of rupees is earned. Each third tourist of all the foreign tourists visits Rajasthan. In 2015, 351.87 lakh domestic tourists and 14.75 lakh foreign tourists visited Rajasthan while in 2015-16 total number of tourists visited Rajasthan was 346 lakh. In Rajasthan, total expenditure of tourists is more than thousand crore rupees each year which plays an important role in the development of Rajasthan.

2. Means of Employment :

Tourism is a pollution free industry. It is assumed that one person gets employment behind each eight foreign tourists. In the same way one person gets employment behind 32 domestic tourists. People get employment as guide, travel agent, driver, hotel owner, crafts, etc. So, it is clear that people get employment directly or indirectly in the tourism industry.

3. Art and Culture Development:

The cultural heritage of Rajasthan is alive due to tourism. Opportunities of cultural interaction increase from tourism. Programs of dance and music are organized at occasions of festivals and fairs in which many domestic and foreign tourists enjoy, for example, tourists are attracted by Teej, Gangour and puppet shows in Jaipur. Desert festival of Jaisalmer attracts many

tourists each year. The paintings on walls of buildings in Shekhawati region attract tourists also. The paintings in building of Poudhars, Chhavachhariya, Mansinghaka, Seksariya, etc. are very attractive in Navalgarh. Elephant riding in Amer, camel riding in Jaisalmer, etc. are good events enjoyed by tourists.

4. Increase in Transport Facilities:

Tourism activities increases transport facilities in Rajasthan. The "Palace on Wheels" train is running absolutely for tourists only. Increase in transport facilities increases employment opportunities also. Thus industries and trade are developed. Foreign tourists increase the foreign trade.

From the point of view of tourism, the following circuits have been developed:

- i. Dhundhar circuit (Jaipur-Ajmer-Dousa)
- ii. Mewar circuit (Alwar-Bharatpur-Sawai Madhopur)
- iii. Vangad circuit (Dungarpur-Banswara)
- iv. Hadoti circuit (Kota-Bundi-Jhalawar)
- v. Marwara circuit (Ajmer-Pushkar-Merta, Nagour)
- vi. Shekhawati circuit (Sikar-Jhunjhunu-Churu)
- vii. Desert circuit (Bikaner-Jaisalmer-Barmer-Jodhpur)
- viii. Godwad circuit (Mount Abu, Ranakpur, Jalore)
- ix. Mewar circuit (Udaipur-Kumbhalgarh-Nathdwara-Chittorgarh, Jaisamand-Dungarpur)
- x. Ranthambor circuit (Ranthambor-Sawai Madhopur-Tonk)

These all circuits have their own separate properties. In some circuits there are hills and in some others there is desert. Thus nature has given

vast opportunities in Rajasthan in the sphere of tourism.

Main Tourism Points in Rajasthan:

Rajasthan as a special place of tourism is not only in India but also on the world map. On one side, there is Sonar fort in Jaisalmer (800 years old) and on the other side, there is the famous fort in Chittorgarh which is related with brave Rajput king Maharana Pratap. Bharatpur has the world famous Ghana bird sanctuary and there are many lakes in Udaipur (known as lake city). Thus Rajasthan has treasury of historical and cultural buildings in each corner. Important tourist places are as below:

1. Fort and Palace:

In 1733, King Surajmal constructed Lohagarh fort in Bharatpur. Royal palace of Deeg is the idle place to take rest. The palace of Dhoulpur is famous for the use of red colour stones.



Amer Fort, Jaipur

Old fort of Ranthambhore is in the Sawai Madhopur district. Its height is 200 meters. Jaipur, capital of Rajasthan, is known as Pink City which is a planned city and was established by king Jaisingh II in 18th century. The famous palaces and monuments of Jaipur are built on the basis of Hindu sculpture. A good mixture of hindu and muslim cultures can be seen in the area of Merwada. The victory stories of warriors of Rajasthan is present in these royal palaces and forts. Royal palaces in Jaipur, Udaipur,

Bharatpur, Kota, Bundi and Bikaner are the important centers of attraction. Forts constructed in hills are in Deeg, Amber, Bikaner, Jaisalmer, Targarh, Shergarh, Chittorgarh and Kumbhalgarh.

2. Religious Points:

Delwara Jain temple (made of marble) and Jain temple of Ranakpur are the famous religious points in Rajasthan. These temples are the example of good and unique missionary work. Jagdish temple, Rishabhdev temple, Charbhuj temple, Nathdwara temple and Aikling Ji temple are situated in Udaipur district. Temples of Sanvariya, Bijoliya, Shiv temple of Chousa, temple of Paran, Brahma temple of Pushkar, Soni temple of Ajmer, Mosque of Khwaja in Ajmer, Khatu Shyam temple in Sikar, Salasar Hanuman temple, Govinddev temple of Jaipur, Sun temple of Amber and Karni Mata temple of Bikaner are the famous temples of Rajasthan.

3. Art and Cultural Points:

Rajasthan is a rich state in art and culture. Ornaments of enamel of Jaipur, painting-dyeing



Nakora Jain Temple:

and handmade paper of Nathdwara Pratapgarh and Sanganer (Jaipur), wooden toys of Bikaner, carpets of Bikaner, Jaipur and Barmer and foliage on pots of brass and silver of Jaipur are very attractive to tourists. Thakala painting of Pratapgarh, phad painting of Shahpura, painting of Bundi & Kishangarh style and sculpture of Jaipur are also very famous. Dandiya dance of

Marwar, Ghumar of Mewada, Dhol dance of desert, chakari dance of hadouti and agni dance of Bikaner are some of the famous dances of Rajasthan. Dashahara fair of kota, Teej and Gangour fairs of Jaipur, Holi of Bharatpur, Diwali of Jaipur, etc. are the main festivals of this state. Kapil muni fair of Kolayat, Khawaza Chishti fair of Ajmer, Kela Devi fair of Karouli, animal fair of Pushkar, Ramdev fair in Pokharan, Tejaji fair of Parbatsar, Gojaji fair of Ganganagar and Ganeshji fair of Ranthambhour are having the cultural importance also.



Navalgarh Ki Haveli

4. Vastu and Architectural Points:

Dhai Din Ka Jhopra of Ajmer, Jantar-Mantar, Hawamahar and Chandramahal of Jaipur, Patawa Haveli of Jaisalmer, Deeg palace, Vijay Stambh and Kirti Stambh of Chittorgarh, Chourasi Khambhon ki Chhatari of Bundi, Sarbag ki Chhatriyan, Bawari of Raniji, building of Ramgarh, Toran gate of Udiapur, etc. are the beautiful example of the architecture of Rajasthan.

5. Wildlife Tourism

The best bird sanctuary of Asia is in Bharatpur which is near to Kewaladev. Sariska forest of Alwar, Darra forest of Kota, forest of Dholpur and Sitamata forest near Pratapgarh are good tourist points. Ranthambhore is very famous for being out of the 9 big tiger area projects which is declared as national forest in 1983.



Ranthambhore Forest

Except all of the above some more points of geographical importance are: Anasagar, Faisagar, Pushkar lake in Ajmer, Galata Ji in Jaipur, Ummed Sagar in Jodhpur; Nakki lake in Mount Abu; Jaissamand, Udaisagar, Fatehsagar and Pichhola lakes in Udaipur. Birla temple and Zoo of Jaipur, Sunset point of Mount Abu, Camel riding in moon light in desert, Brijmohan Birla planetarium and many more are also the centers of tourists.

Problems of Tourism and their Solutions:

Rajasthan does not have development facilities for tourists like other states of India, Following are the main problems of it;

1. Lack of Proper Residential Facilities:

It is not comfortable to stay at tourist places due to lack of proper residential facilities. There are no sufficient number of hotels and tourists rest centers. To solve this problem state government has tried to start paying guest facilities. Land is being made available at concessionable rates for hotel construction. Old forts and palaces are converted into heritage hotels through renovation.

2. Problem of Publicity, Guide and Public Contact :

At important tourist places there is neither trained guide nor the any facilities of public contact. Due to this, tourists do not get proper

guidance about the tourist points and places. To solve this problem the tourist department has started the services of tourist information centers and tourist welcome centers.

3. Lack of Sufficient Transport and Communication Facilities :

The facilities of transport and communication are available at some important and big tourist places but at small tourist places these facilities are not sufficient. Due to this problem tourists face problems. To solve this problem the tourist department should provide the required facilities regarding transportation and communication.

4. Problem of Maintenance of Tourist Places:

At small tourist places there are some problems related with proper light, cleanliness and maintenance. Government should also look into the solution of this problem.

5. Lack of Marketing Centers:

For domestic and foreign tourists there should be some shops at which they can buy things of their choice at reasonable prices. Shopkeepers who charge higher prices in such cases should be treated properly according to provisions of rules and regulations. Some marketing centers should be opened for the purpose.

6. There is need of safety of tourists, proper arrangement of police administration, respect of tourists and faithfulness to them. Beggars create problems to tourists and it should be controlled properly.

Tourism Policy 2001

In 2001 a tourism policy was launched in Rajasthan to make tourism an industry and to create employment. Main points of this policy were:

- i. Development of proper market to sell the product of handicrafts and small industries.
- ii. Provision to allot maximum 4 bigha land at $\frac{1}{4}$ price of the reserved rates to establish the tourist units.
- iii. 100% recruitment of work force from the local people in the tourist unit.
- iv. Concession in luxury tax to new tourist unit for 5 years.
- v. 60% concession in registration fee for purchasing land for new hotels.
- vi. 100% concession in land and building tax to hotels to be established in rural areas.
- vii. Publicity and marketing of tourism in the state.
- viii. Increasing events of camel-horse riding, etc.
- ix. Developing cinema, theatre, film shooting etc. to increase tourists.
- x. Interest rebate of 2% to Government efforts for units investing upto Rs. 60 lakh.

Government Efforts for Tourism Development in Rajasthan :

Under various plans in Rajasthan, government tries to give incentives to private entrepreneurs through Rajasthan Tourism Development Corporation for providing facilities like residence, transport, guidance and other facilities. Efforts are also being made to expand the information about new tourism centers.

To develop tourism at international level, Rajasthan Tourism Development Corporation was established on 1 April, 1979 as a private limited company. This corporation performs the following functions:

1. To implement the project scheme for tourists.
2. To maintain and develop the tourist places.

3. To build and run the hotel, motel, etc. as facilities to tourists and provide food and residence facilities.
4. To provide facilities of transport, entertainment, etc. to tourists and to arrange package tours.
5. To publish the literature on tourism and to distribute it to attract the tourists.

Programmes of Tourism Development in Rajasthan :

Following are the various programmes started or launched by government:

1. In march 1989 state government declared tourism as industry. The subsidy to private investors increased from 15% to 20%.
2. Paying guest scheme was started for 4000 tourists by 562 families in Jaipur, Jodhpur, Udaipur, Jaisalmer, Bikaner, Ajmer, Chittorgarh, Mount Abu and Puskhar.
3. For conservation of Jaisalmer fort the dirty water was treated and sewerage scheme was launched.
4. State government is developing the tourist centers. Presently this is going on in Ajmer Sharif and Pushkar. Before this, developmental work was done at Kailadevi, Gogamedi, Salasar, Ramdevara, Deshnok and Mehandipur Balaji.
5. The air service is being expanded for tourists. Now number of flights has increased from 9 to 42 per week.
6. Light and sound shows have been started at motidungari in Udaipur and Amber palace.
7. Number of heritage hotels is increasing in Rajasthan.
8. Efforts are being made to increase the tourists in Rajasthan.

9. In the budget of 2010-11, desert safari, international kite and balloon festivals are organised.
10. The Jaipur Jantar-Mantar has been included in World property/estate by UNESCO in 2011-12.
11. In 2012-13 heritage walk was developed in cities and facility of drinking water developed at religious places.
12. The tourism policy was extended upto 31 March, 2014 in 2013-14.

Proposal for Tourism Development by Vasundhara Raje in 2014-15 Budget :

This proposal includes the following points:

1. The 'Rajasthan Day' has to be celebrated every year as a festival like 'Tomatino Festival' in Spain and Goa Karnival.
2. Development of Pali, Jalore, Rankapur (Sirohi), Narvaria and Jawai dam.
3. Development of places of Silished, Jaisamand, etc.
4. Development of religious area and bus stand in sambharlake area.
5. Development of tourist places in Bundi Ranthambore, Jhalawar, Deeg and Dholpur districts.
6. Development of Budha Pushkar (Ajmer), Nathdwara (Rajsamand) and Kela devi (Karouli) and other religious places.
7. Construction of Mega Desert Tourist centre.

New Tourism Unit Policy, 2015

Under this policy new investment proposals will be received. These tourist units will also receive the economic benefit under the proposed policy (units sanctioned under the previous policy of 2007). It is to be explained that under the Rajasthan tourism unit policy, 2007 the tourism

department had approved 1500 projects of tourism units upto 2015 and under which Rs. 12500 crore had been invested.

Following are the main points of the Rajasthan Tourism unit Policy, 2015:

1. Under this policy the various units of tourism sector have been defined widely which includes hotel, motel, heritage hotel, budget hotel, restaurant, camping sight, convention center, sports resort, resort, health resort, amusement park, animal safari, park, road way, tourist luxury coach, etc.
2. Land conversion of new tourism units will be free in urban and rural areas. No development fee will be charged from new tourism units in urban areas.
3. In urban and rural areas present heritage property and hotels will be free from land conversion charges.
4. Time limit for land conversion is fixed.
5. Urban development tax on constructed area of heritage hotels will be charged according to the residential rate but on open area no urban development tax will be charged.
6. Heritage hotels will have to pay the B.S.U.P. shelter fund only on the constructed area.
7. Heritage hotels will be issued the lease deed.
8. There is no limit on width of roads for heritage hotels in rural and urban areas.
9. Tourism units are allowed to double F.A.R. i.e. from 2.25 to 4.50.
10. Heritage hotels are allowed to use maximum 10% or 1000 square meter, whichever is less, of constructed area for commercial use.

11. Building plan will be approved by the concerned department within the fixed time limit.

Important Points :

- People get puzzled with daily routine of working and go to near nature to feel happiness in terms of tourism.
- In Rajasthan culture guest are worshiped and due to this spirit tourism in Rajasthan is expected to be developed.
- Government is taking help of private partnership for the development of tourism to earn foreign exchange.
- Development of tourism industry increases the employment opportunities for local people.
- Development of tourism maintains our culture and civilization along with earning income.
- There are 10 circuits according to point of view of tourism in Rajasthan.
- Old forts, havelis, religious places and natural beauty is sufficiently found in Rajasthan to increase tourism.
- Fairs, festivals, functions, etc. attract tourists to visit Rajasthan.
- Government of Rajasthan recognizes tourism as industry and tries to develop tourism with the private sector.

Questions for Exercise

Objective Type Questions:

1. The established in Jaisalmer is-
- (a) Nahargarh fort
(b) Taragarh fort
(c) Sonar Fort
(d) None of above ()

2. Which included in new tourism package is-
- (a) Palace on wheels
(b) Heritage Hotel
(c) Paying Guest Scheme
(d) All of the above ()
3. Number of tourism circuits in Rajasthan is-
- (a) 5 (b) 7 (c) 9 (d) 10 ()
4. Ranthambore is situated in –
- (a) Alwar
(b) Sawai Madhopur
(c) Bharatpur
(d) Sikar ()

Very Short Answer Questions:

1. In which district Mount Abu is situated ?
2. Where is the Brahma temple ?
3. Which city of Rajasthan is famous in enamel ornaments?
4. Where does the Gogaji fair take place?
5. In which city the Jantar-Mantar is situated ?
6. Where is the Poddhar ki Haveli situated?
7. In which district the Ghana bird sanctuary is?
8. Where is the Tal Chhapar Deer Park ?
9. When was the Rajasthan Tourism Development corporation established ?

Short Answer Questions:

1. What were the provisions for tourism in budget of 2012-13 ?
2. What are the main functions of R.T.D.C. ?
3. The vastu and architecture plays important role in the area of tourism. State your view.

4. What is importance of forts and palaces in tourism industry?
5. Development of tourism industry improves the economic condition of people. How? Explain.
6. What are the three main tourist places in India ?
7. Name any three problems of tourism sector.

Essay Type Questions :

1. What is meaning and importance of tourism?
2. What are the problems of tourism? How are these problems solved ?
3. Write an essay on development of tourism in Rajasthan.
4. What are the tourist places in Rajasthan ? Write in detail.

Answer to Objective Type Questions :

(1) c (2) d (3) d (4) b

Reference Book :

1. Economic Appraisal 201-15.
2. Economy of Rajasthan- Dr. Chhipa and Sharma, J.P.H., Jaipur.

Chapter - 5.5

Constraints in the Economic Development of Rajasthan and Measures to Overcome them

Economic development of a state is not only seen in terms of state domestic product but also reflected in level of education, expansion of health facilities, social strength and development of infrastructure.

For economic development the planned development process was adopted in Rajasthan with the first five year plan in 1951. Rajasthan has not yet received the category of developed state even in last 65 years with the completion of 11 five years plans and 6 annual plans.

Following are the constraints in the economic development of Rajasthan:

1. Natural/Geographic Constraints

Here, the following constraints are included:

- (a) Large Desert of west
- (b) Position of Aravali Range
- (c) Dependence on Rainfall
- (d) Draught and Desert
- (e) Regional Difference
- (f) Large Desert Land

These constraints have been described as below:

(a) Large Desert of West :

About 61% of the total land area of western

Rajasthan is surrounded by desert. There are 12 districts in this desert are: Due to desert these 12 districts face problems in agricultural and industrial development. It is also difficult to develop the transport facilities due to desert.

(b) Position of Aravali Range:

The Aravali Range is there from South-West to North-East which divides the state in to two parts. Due to the position of Aravali eastern districts of Rajasthan receive more rainfall and the western district get low rainfall. In these districts, the level of rainfall remains very low. Aravali area is very rich in minerals. Due to this area is industrially very developed but western districts are industrially very underdeveloped. In this way due to Aravali there are many inequalities in Rajasthan.

(c) Dependence on Rainfall:

Only river Chambal flows in whole of the year and there is no such river in Rajasthan. All the agricultural activities and other needs of water depend on monsoon only. Due to poor monsoon in any year, there becomes the shortage of even drinking water. In this situation agricultural activities face great problem. Farmers sow seeds in expectation of good monsoon but due to lack of rainfall crops are destroyed and the economy of the state can not develop.

(d) Draught and Desert :

There have been many draughts in Rajasthan. In 1991-92 and 2002-03 whole of the state was suffered from draught. Thus resources proposed for development were diverted towards the relief oriented programs. Draught results, on one hand side, into economic losses and, on the other hand side, it harms the development process of the state. The impact of draught can be seen on the economy of whole of the Rajasthan. Government losses the rental income and industrial sector does not get raw material. Decreasing employment results into low level of purchasing power and thus low levels of demand.

(e) Regional Difference :

There are many disparities in Rajasthan. Due to desert in West, plains in East, Aravali range and plateau in South the state can not make unanimous efforts for development. Due to these differences different types of programs are launched.

(f) Large Desert Land:

The large desert land is there in Rajasthan which is useless for agriculture purpose and other uses. This type of land does not contribute in the development of Rajasthan.

2. Economic Constraints:

Economic constraints are of the following types :

- (a) Lack of Irrigation Resources
- (b) Lack of Agriculture based Activities
- (c) Lack of Technology
- (d) Lack of Energy
- (e) Lack of Investment
- (f) Backward Infrastructure
- (g) Poverty and Unemployment
- (h) Biased Policy of Central Government

These constraints are being analysed as below:

(a) Lack of Irrigation Resources

Rajasthan is a state of water shortage. There is scarcity of both ground surface water and underground water. In desert districts there is shortage of drinking water. For drinking water journey of miles is undertaken. So it becomes difficult to develop agriculture, animal husbandry and industries.

(b) Lack of Agricultural based Activities:

Most of the population of Rajasthan is engaged in agriculture which is based on monsoon. Due to lack of rainfall and facilities of irrigation the level of agriculture production is very low. However, the alternative resources of earnings like animal husbandry, cottage industries, etc. are lacked. So, the economic condition of farmers is very poor.

(c) Lack of Technology :

Rajasthan is museum of minerals but due to lack of proper technology these minerals are not explored and thus can not be used properly.

There are plenty stores of natural gas, petroleum and coal but due to lack of exploration their productive use could not be possible.

(d) Lack of Energy :

For development of each sector infrastructure facilities are required. Rajasthan lacks these facilities also. Here, production of electricity is much less than the demand, which is due to lack of availability of high quality coal and water projects. High quality coal comes from other states and agreements are made with other states for the hydro electricity.

(e) Lack of Investment :

There are many industrialists and industrial houses in Rajasthan but they invested in other

states. Neither these industrialists nor foreign investors were attracted by Rajasthan. The reason behind this is the geographical situation and lack of energy and thus industrial development of Rajasthan is only in the hands of public sector.

(f) Backward Infrastructure:

Rajasthan lacks the transport infrastructure due to desert and hill areas. Roads are not good and railway lines are limited. Transport facilities are veins of economic development but this is a challenge still for Rajasthan.

(g) Poverty and Unemployment:

The problem of poverty and unemployment is dominant in Rajasthan even after having the economic planning process since independence. It is a challenge for policy makers and economists that how this problem can be solved.

Initially, it was assumed that problems of poverty and unemployment would be solved with the development and thus we tried to increase the growth rate but it could not be achieved.

Efforts were made in five year plans to remove poverty and unemployment but no significant results were found. Due to considering

distribution of poverty as one of the base to get funds from the centre is an important problem for policy makers, economists and politicians.

(h) Biased Policy of Central Government:

Rajasthan mostly faced the biased policy of the central government and thus our state could not get sufficient grant. Tribal and desert areas of Rajasthan were always ignored by the government.

3. Social Constraints:

These constraints include the following:

- (a) Population Growth
- (b) Level of Education and Literacy
- (c) Backward Social Structure

These social constraints have been analysed as below:

(a) Population Growth:

The higher growth rate of population has been a significant cause of under-development in Rajasthan. The decadal growth rate of population in Rajasthan is very high in comparison to India and thus availability of resources for the increasing population is a great problem. It is also a problem to meet out the needs of employment, education, health and residence of the population in the state.

(b) Level of Education and Literacy:

Rajasthan is a backward state in the sphere of education and literacy. The literacy rate was 67.1% according to the census of 2011 in Rajasthan. The female literacy rate in Rajasthan was 52.7%. It is clear that the lower literacy rate is a hurdle in the growth process because of the poor quality of human resources. Even after making many efforts for the development of education in Rajasthan the sufficient facilities could not be provided to people. Availability of health facilities in remote and rural areas is still a challenge.

(c) Backward Social Structure:

Most of the population live in rural areas in Rajasthan where child marriage, dowry system, sex discrimination, untouchability and other social problems are seen. Rural population is illiterate so people can not keep themselves away from these problems. This type of society is a constraint in the development of the Rajasthan.

Measures to Remove constraints in Economic Development

Following measures can be helpful in removing the various constraints of economic development of the state.

1. Increasing Dry Farming:

Due to lack of rainfall and irrigation

facilities there is need of cultivation of such crops which need less water. Desert land should be improved for agriculture purpose. Improved and suitable irrigation system should be adopted in Rajasthan, Also, the favourable agricultural activities should be developed.

2. Development of Agriculture Supported Activities:

To improve the economic condition of farmers, there is need of the development of agriculture supported activities like animal husbandry, bee keeping, poultry, small scale and college industries, etc. This step can reduce the dependence of people on agriculture and thus economic condition of farmers can be improved.

3. Controlling Expansion of Desert:

Development of intensive forestry is required to control the expansion of desert in Rajasthan. The plantation there in desert areas should be favourable to the natural conditions and soil. Facilities of irrigation and drinking water should be made available. Irrigation projects should be launched. Connecting rivers can be a very good and effective solution of the problem.

4. Small and Cottage Industries:

These industries should be developed more because sufficient capital is not available for investment in Rajasthan. It will increase employment opportunities and thus the economic condition of state will improve.

5. Management of Draught and Famine:

The rainwater should be stored to reduce the dependence on the monsoon. Wells and dams should be constructed and reconstructed to make the water available for long time. This will control the draught and famine.

6. Development of Non-traditional Energy Resources:

Rajasthan has vast possibilities of

development of solar and wind energy. Thus these sources of energy should be developed so that the problem of its shortage can be controlled.

7. Attracting Investors:

Facilities should be provided to domestic and foreign investors to invest in Rajasthan. Industrial development can be boosted through this device.

8. Development of Tourist Areas:

Rajasthan is a centre of attraction of tourists. Indian and foreign tourists visit Rajasthan in a large number every year so efforts should be made in developing this sector. Forts, havelies and hill areas attract tourists in Rajasthan and thus these areas should be developed in the state.

9. Development of Infrastructure:

State government should take steps to develop the education, health, transport, communication, banking, irrigation, energy and other facilities so that agriculture and industry sectors can develop.

10. Mineral and Industrial Development:

Economic surveys should be conducted intensively to find the possibilities of industrial and mineral development in the state. Minerals should rationally be explored.

11. Development of Animal Husbandry:

Due to the availability of dairy and poultry development possibilities in Rajasthan, these areas should be developed so that the state economy can develop with increasing opportunities of employment and income.

12. Development of Handicrafts:

The activities of handicrafts are concentrated in many party of Rajasthan and thus these areas need to be developed so that levels of income and employment can increase. The works of painting, dying, bandhej, gota patti, etc. are

famous through out the country which need some special attention of government.

13. Development of Rural Infrastructure:

In rural Rajasthan facilities of education, health and transport should be developed to remove the social backwardness. Literacy of rural women and tribal needs should be emphasized more so that these areas can come into the main stream.

14. Financial Management:

Due to the limited economical and financial resources there is need to control the wastage and misallocation of the scarce financial resources in Rajasthan. For this teams of experts and analysts should be formed for the effective planning system.

For this there is need of the administrative efficiency also. Efficient and honest people should be awarded and corrupt should be punished.

15. Control on Population Growth:

Population growth should be controlled and literacy rate should be increased. Economic freedom to women, family planning, family welfare and such other programs should be launched in this regard.

16. Cooperation, Coordination and Public Participation :

Under the world wide atmosphere of globalization and liberalization efforts should be made for the coordination and cooperation among various agencies, institutions, boards, etc. so that objectives of development can be achieved. In this regard public cooperation should be used in the developmental programmes.

Important Points :

- For development of Rajasthan the way of five years plans was adopted.

- About 61% of the land area is covered by desert.
- The Aravali range is in the state from South-West to North-East.
- Due to lack of water, agriculture depends on monsoon and monsoon is insufficient and uncertain.
- There is lack of technology and investment in Rajasthan.
- The social and economic infrastructure facilities in Rajasthan are backward.

Questions for Exercise

Objective Type Questions:

1. The first five year plan was started in Rajasthan in the year of:
(a) 1950 (b) 1951
(c) 1981 (d) 1956 ()
2. Number of desert districts in Rajasthan is—
(a) 10 (b) 15
(c) 12 (d) 5 ()
3. Famine was there in Rajasthan in the years of :
(a) 1991-92 and 2002-03
(b) 1991-92 and 2003-04
(c) 1990-91 and 2002-03
(d) 1990-91 and 2000-01 ()
4. The % of literacy in Rajasthan is.
(a) 67% (b) 67.2%
(c) 66.1% (d) 66.2% ()
5. Non-traditional sources of energy is-
(a) Solar energy
(b) Wind energy
(c) Both solar energy and wind energy

(d) None of the above ()

6. The obstacle in the development of rural areas is-

(a) Child marriage

(b) Lack of education

(c) Sex discrimination

(d) All of the above ()

Very Short Answer Questions:

1. In which direction is the Aravali range in Rajasthan ?
2. What is famine?
3. What do you mean by regional difference ?
4. What is dry farming ?
5. In what type of industry less capital is required?
6. In which part of India is the plateau ?
7. In which part of Rajasthan there is plane area ?
8. Why is there low rainfall in western districts of Rajasthan ?

Short Answer Questions:

1. What are the geographical constraints in the economic development of Rajasthan ?
2. How does the economic infrastructure affect the economic development ?
3. Social customs harm the economic development in Rajasthan. Explain.
4. Why do industrialists not invest in Rajasthan ?
5. Why is there less rainfall in western districts of Rajasthan ?

Essay Type Questions :

1. Describe the constraints in economic development of Rajasthan.
2. Explain the measures to remove the constraints in economic development of Rajasthan.
3. Write your own original note on the constraints in economic development and their removal in Rajasthan.

Answer to Objective Type Questions :

(1) b (2) c (3) a (4) a (5) b (6) d

Reference Books:

1. Economic Review, 2016-17. Deptt. of Economics & Statistics, Govt. of Rajasthan, Jaipur
2. Economy of Rajasthan : Dr. Chhipa and Sharma J.P.H., Jaipur.