

Natural Resources of Rajasthan

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This is the third of a series of articles dealing with different aspects of the economy of Rajasthan. The earlier articles in the series, Rajasthan—State Finances and Co-operative Banking in Rajasthan were published in the issues of May 17 and May 31.—Ed.

WHEN the late Sardar Patel inaugurated the State of Rajasthan on the memorable 30th day of March, 1949, the curtain was rung down on a long act in some of the oldest and most glorious of Indian States, and an integrated State, pulsating with new life, came into being. This date marked a turning point in the history of Rajasthan. It marked the end of medieval, although benevolent, despotism in the princely States of Rajasthan and the beginning of the era of modern democracy. Thus politically speaking—and to a great extent economically also—Rajasthan is about 200 years behind Europe where the Enlightened Despots had their hey-day in the 18th century. Shree Balwant Singh Merita, former Minister for Industries and Commerce, Rajasthan, in one of his speeches said: "Colonel Tod discovered Rajasthan historically, the great Sardar politically and it is now for you (the people of Rajasthan) to discover this largest State in India economically." Rajasthan has always been the symbol of bravery, heroism and patriotism. But glorification of the past is a poor substitute for future progress. Rajasthan scarcely figured in the economic history of India. In the popular mind, economically speaking, it has always been associated with burning deserts and small hills, scanty rains and famines. Rajasthan has traditionally been backward, politically as well as economically. To a great extent it is true that the economic problems of Rajasthan require more attention at the hands of its Government and people alike, than most other problems. The newly-born State has still to develop its economic potentialities.

Economic conditions of a country represent the relationship between its men and nature. In the last resort, the inhabitants have to come to terms with nature, and the limitations imposed by the physical features and natural resources of a country determine the pattern and tempo of its economic development. In Rajasthan, these factors count for much in moulding the economy of the State.

With its area of about 1,30,000 sq. miles, Rajasthan is the second biggest State in India. But the topography of the land does not in any way indicate potential prosperity. The Aravalli range intersects the State into two unequal parts, about three-fifths of the State lies to the north-west of this range and about two-fifths to the south-east. The north-western portion, comprising the divisions of Bikaner and Jodhpur and the Sikar and Jhunjhunu districts of Jaipur division, is more or less sandy with very scanty rainfall and low agricultural production. Rains increase as we move south-eastward and from this point of view the south-eastern Rajasthan is a favoured tract, it may be said shortly that from Bikaner division and Jaisalmer district in the north-west to the district of Banswara in the south, and Kotah and Jhalawar districts in the south-east, there is a very gradually increasing rainfall from about 6 to 40 inches, the annual average increasing rapidly after the Aravallis have been crossed. Southern Rajasthan comprising the division of Udaipur is hilly and full of forests, but the eastern region comprising the divisions of Jaipur and Kotah is more diversified, having large rivers, e.g., the Chambal, the Banas, the Banganga, etc., and large tracts of excellent soil. The greater part of Rajasthan, however, is either sandy or hilly, and thus the unproductive character of land is the outstanding feature of the Rajasthan economy. The extremes of climate and the fickle and untimely, and sometimes complete absence of, rainfall render the economy even more precarious.

The natural resources of Rajasthan should be reckoned with a good deal of caution. Broadly speaking, they are either poor or undeveloped. For example, forests cover only about 10 per cent of the total area and are mostly situated in the eastern half of the State. They are not only scanty in point of area but are poor in quality. In fact, Rajasthan suffers from an acute kind of floral poverty, there being no large timber forests in the State. Similarly, the

sources of power are either absent or undeveloped. The Jawai Project has been completed but unfortunately the hydro-electric part of the project has been held in abeyance for the present. The Chambal Project has not been included in the Five Year Plan to the great disappointment of Rajasthanis. The Bhakra Project will benefit the sandy tracts of northern Rajasthan only after a long time. In fact, the great hydro-electric projects of Rajasthan are still to materialise. They will require vast amounts of money far beyond the capacity of Rajasthan Government's finances.

In animal resources, however, the State can hold its own against any State in India. The quality of cattle and live-stock in northern and western Rajasthan is famous all over India. Nor is their quantity negligible. But in the eastern and southern parts of the State, the cattle have no speciality of their own and are imported from the neighbouring States.

The principal natural gifts of Rajasthan, however, consist in its vast developed and undeveloped minerals, metals and building materials. Among metallic minerals are found lead, zinc, silver, copper, iron, cadmium, tungsten, wolfram, manganese, titanium, columbium, tantalum, beryllium, etc., while the industrial and non-metallic minerals include glass-sand, soap-stone or talc, sodium sulphate, gypsum, salt-petre, mica, emerald, fullers' earth, barytes, calcite, limestones, clays, feldspar, quartz, and others found scattered all over Rajasthan. An inferior quality of lignite coal occurs at Palana near Bikaner. Moreover, Rajasthan is famous for its quality and quantity of building stones, marbles, red and yellow ochres and quartzites, sand-stones and other forms of building material which have given us the historic Taj Mahal, the famous Dilwara Jain Temples at Mount Abu., the Jumma Masjid and many other beautiful structures, monuments and edifices. With such rich minerals and with 1,500 mines and quarries spread all over Rajasthan, the State easily comes next to

Bihar and Madhya Pradesh in this respect. In point of variety Rajasthan stands first, and it may be called a veritable museum of different kinds of minerals and stones. About 15 years ago Dr A. M. Heron, the then Director of Geological Survey of India, observed: "Rajputana is not rich in mineral wealth, either actual or potential. . . Most of the economic minerals are of no importance, being merely unsuccessful prospects or the sites of extinct activity." Perhaps the opinion may have to be revised in view of the fact that during war-time, and also during post-war years, many new minerals have been discovered in Rajasthan, and in some cases new uses of old minerals have been found out, e.g., those relating to the production of atomic energy. Some of the very important and rare minerals like beryl and tungsten are found in Rajasthan. Emerald mines of Udaipur have no parallel in India. Rajasthan supplies large deposits of gypsum to the Fertiliser Factory at Sindri. The statement below shows the percentage production of minerals in Rajasthan as compared with India.

The mineral wealth of Rajasthan cries for extraction and development. The Department of Mines and Geology is already aware of its vast potentialities. The mineral industry gives employment to a considerable body of labour. Fully developed, it should be able to absorb surplus labour from agriculture by the time the latter is reorganised and mechanised.

Agriculture, with its allied occupation of cattle farming, is the most important single industry of Rajasthan giving sustenance to about

70 per cent of the total population. But agriculture is in a very backward state. According to official estimates the total area of the State is classified thus;

	(area in acres)
Total	8,28,45,498
Cultivated	2,56,78,400
Waste	3,63,20,378
(a) Uncultivable waste	1,49,37,872
(b) Cultivable waste	2,13,82,506
Irrigated	30,72,637

These figures, though not very reliable perhaps, tell something about the agricultural potentialities. The cultivated area, which has been shown as 30.9 per cent of the total, seems to have been inflated, and cannot be in any case more than 20 to 25 per cent of the land. A vast tract (25.8 per cent of the total area) is cultivable waste which calls for agricultural rehabilitation. In the whole of the desert area, except the bit served by the Gang Canal, agriculture is very uncertain, depending upon rainfall which is precarious, and more often than not, untimely. The southern and eastern portions, where there are plains and the soil is rich, black and alluvial, are fertile.

The means of artificial irrigation are undeveloped. According to the above table only about 12 per cent of the total cultivated area is artificially irrigated—and it may be even lower—out of which the system of perennial irrigation exists in the Gang Canal Colony only. Wells are the chief source of irrigation in most parts of Rajasthan. The larger rivers of eastern and

southern Rajasthan like the Chambal, the Banas, the Banganga and others are useless for irrigation, for their banks are too low to allow an economical utilisation of river water in the adjacent fields. The smaller rivers and their tributary *nalas* are more useful in this respect. In western Rajasthan, the Luni benefits its adjacent fields when its banks over-flow. When rains fail, there is no water in rivers, wells and tanks dry up and the whole tract succumbs to the blight of drought. The grand Jawai Project, which has recently been completed, will irrigate only 49,000 acres. The problem of water, both for drinking and irrigation purposes, is one of the most acute problems of Rajasthan. Water is worth gold here. In order to step up food production it is better if the Government concentrates on small irrigation works like wells, bunds and tanks, in preference to more ambitious schemes which take a long time to complete. Of course, for the all-out agro-industrial development of Rajasthan, these big schemes will have to be implemented.

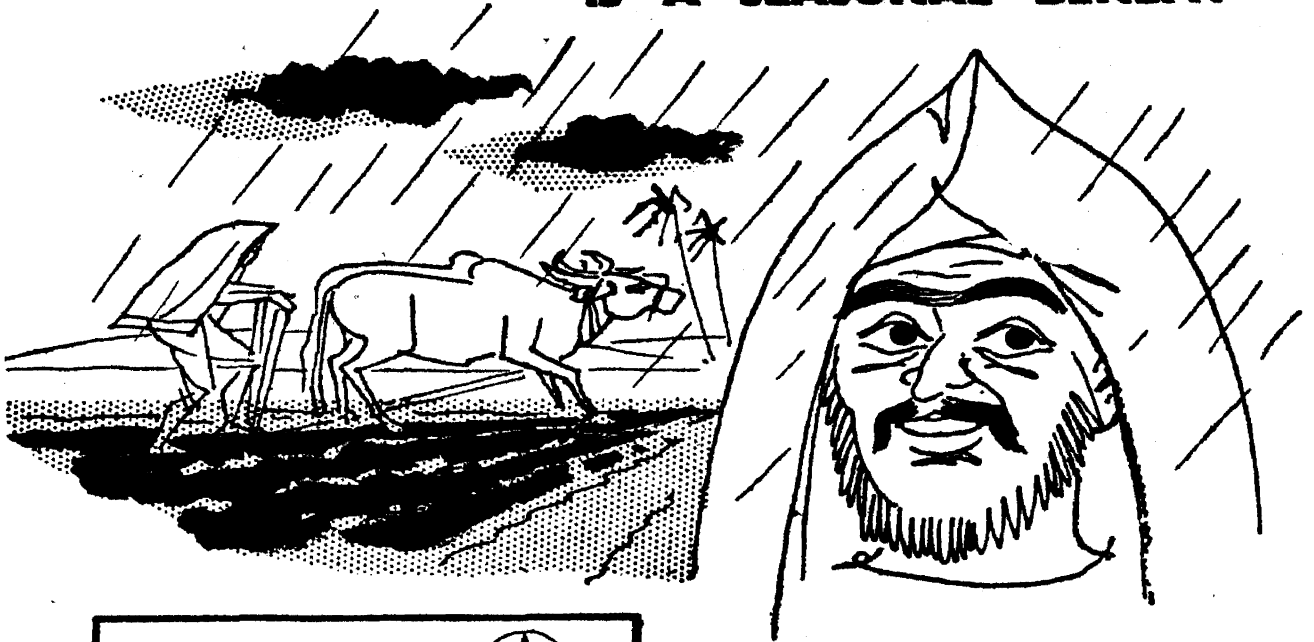
The climatic conditions, rainfall and soils determine the quantity and quality of agricultural production in Rajasthan. Broadly speaking, food, fibre, fats, sugar and spice crops constitute the principal agricultural products of Rajasthan. Normally the State grows exportable surpluses of pulses, oil seeds and to a smaller extent cotton. But it is deficient in cereals, particularly in wheat, which is about 40,000 tons short of the annual requirement and in rice, in which the shortage is of the order of 10,000 tons. Bajra and maize form the staple diet of the people in the desert zone. In the eastern zone bajra and barley constitute the principal diet of the masses, while in the south maize is the common food of the people. However, millets like bajra and jowar occupy the pride of place, and together with wheat and gram, comprise 50 per cent of the total cultivated area. Barley and maize each occupy more than 3 per cent and pulses about 5 per cent of such area. Rajasthan is a deficit State. But before taking up the food—population problem, it is better to discuss some of the other factors which account for the depressed condition of agriculture in Rajasthan;

(To be continued)

Minerals	Production in Rajasthan As percentage of all India		
	1947	1948	1949
Barytes	0.34	—	0.10
Bentonite	65.57	100.00	79.88
Building Materials	5.45	12.86	4.12
Calcite	73.45	100.00	27.80
China Clay	6.72	1.16	2.11
Fire Clay	.03	—	—
Coal	.20	.24	.21
Feldspar	.29	.50	10.83
Fullers' Earth	99.22	98.52	100.00
Gypsum	47.83	57.92	66.32
Mica	14.78	7.94	7.58
Ochre	2.58	3.31	2.43
Salt	32.27	19.12	19.03
Steatite	72.60	73.66	77.51

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