Opinion is divided whether India as a whole is over populated or not. People have their own reasons which are adduced either to prove or disprove one contention or the other. But one thing is beyond doubt that questions of this type which belong to the social sciences are extremely intricate and a mere proving - if that is possible at all - of one thing or the other will not take us any where. As Mr. Huxley tells us social sciences unlike the Earth, are not round but flat and no amount of walking in the opposite direction will ever bring us to the goal.

Indian population problem can perhaps be best reviewed if we study the population movements in different regions of the country. India is a vast country of enormous size containing different varieties of castes, creeds geographical conditions, modes of living, customs and manners. Though India may be described as a land of villages peopled by agriculturists, agriculture itself is carried on under diverse conditions. Agriculture is the principal occupation of the people and as it is carried on under many diverse conditions a regional approach is likely to give more realistic picture. The
law of averages which is applied to the vital statistics — notoriously defective and most untrustworthy — does not give us the correct picture of each region and only God knows whether it is a faithful picture of India as a whole. "In a land of wide regional contrasts the population problem must be approached regionally. For there is not one Indian population as such, but there are many Indian populations ......... It (Optimum theory) applies more appropriately to regions in a country like India, where in spite of the rails and roads, there is a great degree of isolation, in rural parts."

A region is a natural unit. It is an area in which the conditions of physical environment are essentially similar throughout as are also the human adaptations to these conditions. In Saurashtra the geographical conditions, though not identical according to the above definition, are almost the same for the whole region. The region is separated from the main land of Gujarat by a barren and arid belt. The soil also is much less fertile than the soil of Gujarat. The climate is on the whole temperate — excluding the central and northern parts. The rainfall on an average is about 22 inches. Besides Saurashtra's political unity, it has a common language, common traditions, common history, common

dress and a common way of life. As Saurashtra was a land of the Bapu's for all these years, it has also developed a unity of common sense of wrongs and sufferings undergone together in the past. Saurashtra's comparatively sparse density of population indicates on the one hand its geographical unity and on the other its dis-similarity (so far geographical environments and natural resources in soil and rainfall are concerned) with the more densely populated Gujarat.

It is believed that Kathiawar - modern Saurashtra - was quite different in the Ice-Age. It was an island and a land of forests and pastures. In these early ages climate was also more moderate and rainfall abundant. With many geological upheavals, the river Indus changed her course and Saurashtra became a peninsula.

Saurashtra lies on the West Coast of India between 20°.40' and 23°.25' north latitude and 68°.56' and 72°.20' east longitude. According to the 1951 census of India it has an area of 21,451 square miles. It is almost a square peninsula which stands out boldly into the Arabian sea between the smaller projection of Cutch and the straight line of the Gujarat coast. The extreme length of the peninsula is about 220 miles and its greatest breadth about 165 miles. As pointed out already, it may have been once an island, but now it is a peninsula. The climate becomes intemperate as we
go from the south towards the north. The rainfall also
decreases towards the north. Half way along its north-
ern border stretches a flat desert called the Rann
which in the rainy season is bare of vegetation and
studded with deposits of salt. A belt of sand land,
with occasional marshes and pools, between Kathiawar and
Gujarat, shows that at one time a channel joined the Rann
with the gulf of Cambay and that the whole northern
margin of Kathiawar, from the gulf of Cutch to the Gulf
of Cambay was once washed by the sea. The State of
Saurashtra is bounded on the south and south-west by
the Arabian sea on the north-west by the Gulf of Cutch
and on the east by the Gulf of Cambay. From the apex
of these two Gulfs, the Ranns of Cutch and Cambay,
waste tracks half salt morass half sandy desert, stretch
inland towards each other and complete the isolation of
Saurashtra, except one narrow neck which connects it on
the north-east with the mainland of Gujarat.

Saurashtra illustrates a transition from the barren-
ness of the deserts of Sind to the parts of the most
wooded Konkan." Its shores resemble the coasts round
the head of the Arabian sea and inland it shows every
variety of scenery, from the arid sandy tracts of Okha-
mandal in the west and Jhalawad in the east covered with
cactus and desert bushes, to the forests of the Gir,
where perennial streams flow through romantic glades;
from the desolate waste of the Rann to the south-western sea board where throughout the year shady groves and green fields delight the eye .... and from the ever sterile hills of Halar and Jhalawad to the lofty splintered peaks of the Girnar towering over the wooded ranges of Sorath."  

The surface of Saurashtra is for the most part undulating with low ranges of hills running in very irregular directions. The highest hills are in an acre across the south of the peninsula. The Girnar clump of mountains is an important granite mass, the highest peak of which rises to 3,666 feet above the sea. These hills fall away towards the north the last conspicuous eminence being an isolated hill at Chotila which is 1173 feet high.

Saurashtra has neither big rivers nor a chain of lofty mountains sub-dividing the land into various geographical sub-divisions. It is really divided by nature from Gujarat by a belt of salt land with occasional marshes and pools. Hence Saurashtra can be looked upon as a compact geographical unit. The variations in rainfall, surface and climate make a difference of degree only and not of kind.

The climate of Saurashtra is generally pleasant and healthy. In the coastal regions it is temperate but the variations increase as we go towards the north.

In the hottest season the maximum temperature generally reaches 110° but sometimes even 118°. But generally in the hot season it is between 102° and 104°. In the cold season it is seldom below 42° though under exceptional circumstances it has touched as low a level as 35° (e.g. in 1945 January). As in other parts of India the monsoon begins after the first week of June and ends in October. Junagadh gets the heaviest rainfall in Saurashtra (sometimes even 50 inches). The wettest months of the year are from July to September.

Saurashtra is very fortunate in having a vast coastline. People in Saurashtra are inborn traders and have made trading contacts from times immemorial and amassed riches. Long before Bombay and Karachi were developed as modern ports, the maritime trade of Saurashtra was in a flourishing condition. It had trade contact with Africa, Arabia, Persia and other countries. It was also very fortunately situated so far as the foreign traders were concerned and was easily accessible. Even in times of Ptolemy the ports of Saurashtra were flourishing centres of trade and commerce. At the beginning of the 16th century Barbosa, a Portuguese traveller, describes Mangrol as a good port where many ships from Malabar touched for horses, wheat, rice, cotton and vegetables, and brought coconuts, cardamoms and other spices. The geographical position as also the coast line gave
a peculiar colouring to the economic life of Saurashtra in ancient as well as medieval times. This advantage and peculiarity of Saurashtra is sure to affect its economic life in modern times when trade and commerce are so very important.

Notwithstanding its extent, the coast of Saurashtra has no really good natural harbour, except perhaps Bet at the north-east corner of Okhamandal where boats can lie throughout the south-west monsoon. Along the Gulfs of Cambay and Cutch, siltation limits and controls to a great extent the prospects of the ports situated on their shores though the waters of the Gulfs, with the innumerable creeks diverging from them offer protection to shipping and opportunities for port development. The ports on the west coast are open roadsteads with harbour facilities at different stages of construction. Bhavnagar, Bedi and Navlakhi have been transformed into well developed modernized ports where the big liners from abroad can load and unload the cargo throughout the year. Port Okha possesses the natural advantages in addition to all the advantages enjoyed by the above ports. Kathiawar maritime States spent enormous amounts of money after 1917 when Viramgaon Dhanduka Land customs cordon was removed and the maritime States were included in the British Sea Customs Union. Thus, Jamnagar spent about one crore and sixty-six lakhs of rupees for the development
of port Bedi. Junagadh spent Rs. fifty-nine lakhs after Veraval while rupees forty-five lakhs were expended on port Okha.

The geographical advantage enjoyed by the Saurashtra ports and their nearness to the upcountry markets of Northern India were the factors responsible for attracting an ever increasing volume of trade to Saurashtra ports. The Government of India's customs revenue showed a marked decline and so it resulted in the reimposition of the Viramgaon-Dhanduka customs cordon in 1927 against the maritime States of Saurashtra.

Though the maritime States tried to develop their ports with the idea of increasing their revenue it cannot be said that they have exploited all the economic opportunities that are existing. The ports have given a key to trade and the coastal creeks have furnished the marine resources from which many industries can be developed. There are possibilities of developing fishing, pearl fishing, alkali manufactures, salt and other by-products. The maritime States, except perhaps Baroda have neglected these potential resources. Ports and creeks are of special significance in Saurashtra as it has a sea-board of more than 500 miles and as no place is more than 75 miles away from the coast. Before the era of the railways and the steamships these creeks and the small ports in Saurashtra were humming with economic
activity. Water transport is cheaper than land transport and so it is here that development should take place so that once again these small ports and the natural water ways are pressed into service. Their development will certainly facilitate to a considerable extent the trade and commerce of Saurashtra.

It is not necessary to go into the details of the geology of Saurashtra to fathom out the potentialities of the province, but a general idea is sufficient for our purpose. Saurashtra is rich in building stone. The miliolite or the Porbandar stone is usually seen to rest on a bed of clay, sandy or even conglomeratic towards the base. Miliolite limestone occurs in greater or less quantities almost anywhere except in Jhalwad where sandstones prevail and in the Bhal. In the North eastern Kathiawar -on the borders of the Rann, there is a large alluvial tract continuous with the alluvium of Ahmedabad. A belt of recent alluvium follows the southern coast and there are large alluvial areas in the eastern part of the peninsula near the Gulf of Cambay. The rocks of Girnar contain the somewhat uncommon mineral alacolite and some of them belong to the exceptional class of rocks known as monchiquites. Most of the groups of rock that occur in Gujarat are also found in Kathiawar. In the north of the province, especially in Jhalawad, there is a large area of sandstone belonging to the Umia group of Cutch. These
Umia beds are of Jurassic age and are the oldest rocks met in the province.

Saurashtra is particularly rich in building stone. (the Porbandar stone). It is largely quarried about twelve miles from Porbundar from which it is shipped to Bombay and other places. Pearls of good quality, but inferior in lustre to those of the Persian Gulf, are found in the Gulf of Cutch within Navanagar limits. A few ones are also found in Junagadh and Bhavnagar near Bherai and Chanch. The principal metal found in Kathiawar is iron. In 1638, six iron foundries were in regular work and two or three more were occasionally used. The two principal foundries were at Ranavav (in Porbandar) and at Ranpur in Navanagar. Bakharala, Palikhra and Visavadar supplied ore to Ranavav while Ranpur was supplied ore from Rann about fourteen miles west of Khambalia. These foundries had to be closed due to the absence of coal, the scarcity of wood and above all, the cheapness of European iron. Large iron ore resources in the Navanagar State were not exploited due to a woeful lack of initiative. According to Mr. Howard Adye, Director, Geological Survey of Navanagar, a good blast furnace at Asota Mota or Bhatia could have been very easily established. The possibilities of reviving the defunct iron industry in the former Porbandar State area should be explored.
Gypsum is another mineral which is commercialized to a very great extent. It abounds in various districts of Saurashtra, but notably in Morvi, Porbandar and Navanagar. Saurashtra is not very fortunate in coal deposits though traces were found near Than in Morvi. A very large area belonging to the Umia group exists in the north of Saurashtra where there are possibilities of finding coal according to Mr. Eunson who had undertaken the Survey of the Geology of Morvi State.

But on the whole, Saurashtra is not very rich in mineral resources. The only mineral which is developed to some extent is the building stone; Jhalawad abounds in laterite and sandstone. In the south-west, limestone admirably suited for building is found. The Porbandar miliolite and the grey sandstone of Dhrangadhra are quite famous. Besides these, numerous varieties of trap and basalt are much used as building stone. In Girnar, granites are found. But even here the natural advantage is not properly developed and on good authority, it is possible to state that building stone better than Porbandar miliolite or the Dhrangadhra grey sandstone can be found in the former State of Navanagar.

Except the Gir forest, Saurashtra is thinly wooded and even there, the timber is of little value. The Imperial Gazetteer mentions 1500 square miles as the area
of the Gir forest in 1908 while according to official
statistics of the Forest Department of the Saurashtra
Government, now the Gir forest extends only to an area
of 576 square miles. The forest area is obviously de-
creasing. In the Five Year Plan of the State Government,
provision has been made for systematic afforestation. It
is also planned to have a small forest for each village.
It is proposed to spend Rs.4.53 crores by the end of the
Second Five Year Plan of the Saurashtra Government. Though
the forest resources of the State today are quite negli-
gible, there is a possibility of increasing the forest
in Saurashtra, as once there were big jungles in Saurashtra.

Though the soil in Kathiawar is not as fertile as
the soil in Gujarat, parts of Kathiawar are certainly suited
to a prosperous agriculture. The soil is of two main
classes - black and red - the red being considered less
valuable. Of the black soil, the Kampal variety is most
suitable for the growth of cotton, while the better kinds
of red soil favour the production of irrigated wheat and
barley. A saltish earth, impregnated with clay and
impervious to water is not uncommon.

Some of the richest tracts lie along the course of
the Bhadar river and at Mahuva and Lilia where excellent fruits and vegetables are grown. Sugarcane is grown with success in the same locality. Chorwad in Sorath is well known for its betel-vines while Gondal cotton is quite famous. In the northern and eastern districts of Jhalawad, much cotton is grown. Halar in the west, yields excellent Jowar, Bajra and other grains and Sorath in the south is rich both in cotton and in grain. In Limbdi, and on the eastern coast of Kathiawar bordering the Gulf of Cambay, wheat, cotton and grain are produced from a rich silt which requires no manure. Turmeric and mug are common products.

The leading crops of Saurashtra are cotton, jowar, bajri, wheat, groundnuts, oil seeds and onions. "Kathiawar has the essential features of a prosperous agricultural country. The climate is, on the whole, temperate, the rainfall moderate, streams abound, ponds and wells are fairly numerous and there is much variety in the texture, quality and depth of soil." But in Saurashtra, agriculture is not at all in a happy position. Various causes such as the precariousness of the rainy season, lack of equipment, sub-division and fragmentation of the land, lack of irrigation facilities and the lack of manures have conspired to make agriculture unremunerative. With the

-----------------------------
increase in population the sub-division and fragmentation of land is increasing as would become clear from Table No. 1.

**TABLE NO. 1**

showing the decrease in area cultivated from 1912-13 to 1934-35

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Durbari Kheduts</th>
<th>Total area cultivated by them in acres</th>
<th>Area per Khedut in acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1912-13</td>
<td>19,857</td>
<td>8,19,119</td>
<td>41.2</td>
</tr>
<tr>
<td>1932-33</td>
<td>22,243</td>
<td>8,01,048</td>
<td>36.0</td>
</tr>
<tr>
<td>1933-34</td>
<td>24,552</td>
<td>7,76,173</td>
<td>31.6</td>
</tr>
<tr>
<td>1934-35</td>
<td>29,827</td>
<td>7,95,395</td>
<td>26.6</td>
</tr>
</tbody>
</table>

It can be seen that the area fell from 41.2 acres per agriculturist in 1912-13 to 26.6 acres per Khedut in 1934-35. These holdings are further sub-divided and shared by other sub-partners whose names do not appear in the register.

The yield per acre is also declining as will be clear from Table No. 2 compiled by Trivedi from "An Atlas of the Progress in the Navanagar State" by John De La Valette.

* Adapted from A.B. Trivedi, Kathiawar Economics, page 100.
It was a volume primarily intended as a panegyric of the late Jamsaheb, Sir Ranjitsinhji's Administration. Table No. 2 shows the declining yield per acre in the Navanagar State from 1906-07 to 1929-30.

**TABLE NO. 2**
(Declining yield in Navanagar State from 1906-07 to 1929-30)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Yield in lbs. per acre 1906-07</th>
<th>Yield in lbs. per acre 1929-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bajri</td>
<td>151</td>
<td>144</td>
</tr>
<tr>
<td>Jowar</td>
<td>152</td>
<td>94</td>
</tr>
<tr>
<td>Cotton</td>
<td>110</td>
<td>160</td>
</tr>
<tr>
<td>Sesamum</td>
<td>795</td>
<td>54</td>
</tr>
<tr>
<td>Gram</td>
<td>167</td>
<td>131</td>
</tr>
<tr>
<td>Castor</td>
<td>247</td>
<td>119</td>
</tr>
</tbody>
</table>

The Table is taken from a chart which was supposed to be a panegyric of the Raja and relates to a State which was perhaps the largest and the most advanced State in Kathiawar. Even then it shows that the yield per acre

* A. E. Trivedi, Kathiawar Economics, page 90.
has appreciably declined in all the above crops except cotton. On an average the productivity of the soil in the Navanagar State declined by about 30% in less than 25 years. If this is the story of the most advanced State the condition prevailing in less fortunate parts can be very well left to the imagination of the more intelligent readers. Saurashtra is obviously following the footsteps of the other Mahajanias in other parts of India who really qualify to be described as a poor people inhabiting a rich country.

In the field of industrialization there is great scope in Saurashtra for a speedy development. In fact before the advent of the British factory goods, Saurashtra's trade and commerce and industries were in a most prosperous condition. Industries, however, were destroyed due to the laissez-fair policy of the Government of India together with the peculiar political circumstances that were obtaining in Saurashtra just before the merger of all the States into the Union of Saurashtra. Even under adverse circumstances a variety of industries existed in Kathiawar such as the textile industry, oil mills, pottery works, cement factories salt works, iron works and pharmacies and chemical works.

There are enough raw materials and natural resources which, if harnessed and exploited properly, Saurashtra can be a highly industrialized state in the Indian Union.
But at present the number of big industrial concerns is very small considering the vastness of the area and the availability of raw materials. There are hardly twenty factories in the whole of Saurashtra which employ more than 100 men.

Saurashtra is very favourably situated for the production of cotton textiles. Raw cotton in huge quantities was exported from Kathiawar to foreign countries. The total exports of raw cotton from Kathiawar amounted to Rs. 28.93 lakhs in 1931-32 and reached the peak figure of Rs. 2 crores in 1933-34. Before the merger Saurashtra had only nine textile mills producing rough and medium cloth. These mills could not face competition after the cessation of hostilities as they were using obsolete machinery and were not working with maximum efficiency.

Thanks to the efforts of the Saurashtra Government the production of cotton cloth was doubled during 1951-52 as a result of the Government drive.

Woollen industry also can be developed in Saurashtra especially at Jamnagar. The total value of exports of raw wool to foreign countries was Rs. 60 lakhs in 1938-39 of which Navanagar's share was Rs. 55 lakhs 93 thousand. The wool exported is also of good quality. It is possible to develop the woollen industry and a new woollen mill with 8000 spindles and 100 looms is shortly going to be started. The sea-coast of 500 miles is almost "one vast
natural salt pan" in Saurashtra. Salt was produced in large quantities in olden times in Saurashtra, but during the latter half of the 19th century the commercial policy of the British Government adversely affected the production of salt in Kathiawar. Saurashtra salt was not allowed to enter British territory and there were restrictions on the production of salt in Saurashtra. But later on, Kathiawar was allowed to export salt to Bengal and other foreign territories only by sea though it could not be exported via land to other parts of India.

In 1947 there were six salt works. After the establishment of Saurashtra, the Salt Expert Committee was appointed by the Government. The Government acted on the Report of this Committee and the production of salt went on increasing. It was 8.25 lakhs of tons in 1953. Now there are thirty-one salt works in Saurashtra. The Union Government has started a Salt Research Laboratory at Bhavnagar to experiment and put the salt industry on sound foundations. Experiments regarding the possibility of the production of other allied products such as soda-ash, magnesium sulphate, sodium carbonate and calcium carbonate are being conducted by it. There are possibilities of increasing the production of soda ash and calcium chloride at Dhrangadhra. Dhrangadhra may lead in this direction. At Porbundar, Birla Brothers
have decided to put a plant producing 200 tons of Soda ash which will shortly go into production.

There are good possibilities of developing the production of cement in Saurashtra, in fact, the second cement factory in India was started with the cement factory going into production in 1914. The production of cement can greatly be increased with the opening of the new factories at Porbandar, Veraval, Bhavnagar, Port Victor and Jafarabad.

There are possibilities of developing the fisheries in Saurashtra with its extensive coast. This industry is only in infancy at present, but can be very well developed.

We have already referred to the possibility of producing iron in the Porbandar area in Saurashtra. There is also the possibility of the revival of iron industry in the former Navanagar State area. This industry has not been developed due to the lack of coal, competition of imported iron and above all, the woeful lack of initiative on the part of the States.

Saurashtra is peculiarly suited for the development of oil industry. Exports of ground-nuts and castor-seeds to foreign countries has gone on increasing. Thus, in 1931 ground-nuts to the extent of Rs. 30 lakhs were exported while in 1938-39 the exports rose to Rs. 1 crore and 90 lakhs.
The exports of castor rose from 2.32 lakhs of rupees in 1931 to Rs. 3.1 lakhs in 1938-39. Efforts are being made to increase the quantity and better the quality of ground-nut in Saurashtra and a ground-nut research institute has been started at Junagadh, but more oil mills can profitably work in Saurashtra.

In addition to the above industries, the development of chemical and pharmaceutical industries, lime factories, leather industry and glass factories is quite possible in view of the existence of the necessary raw materials.

As Mr. Trivedi points out, there is no dearth of cheap labour. Labour in Saurashtra is able to adjust and adopt itself to new surroundings and undertakings as is clear from the existence of so many industries in the State at present. There will be the need of the experts for the successful working of industry on modern lines.

Perhaps the greatest handicap of Saurashtra is the shyness of capital for industrial purposes. The joint-stock principle was not used to an appreciable extent and enterprises were run by either an individual or in partnership. The most important cause for the shyness of capital in the past was the great risk involved in investing large amounts of capital when nobody knew as to when the Bapu would clamp down upon it. In the past, when an industry was flourishing, the State authorities might think
of running it themselves under some pretext or the other.

Now the whole position is changed and if the Government shows little regard to the susceptibilities of the people and if nationalization is held in abeyance for some reasonable period (say 25 to 40 years) there is no reason why the small investor should not come out of his shell and subscribe whole-heartedly to the industrial development of his State.