Section III
CHAPTER - I
CONCLUSIONS AND SUGGESTIONS

Correlation between educational development and indications of economic growth in 1951 and 1961

In Section I of the thesis an extensive survey has been made from 1950-51 to 1960-61 to show the development in the field of education. The educational development of Gujarat State is viewed in the light of the country's development and in the background of Bombay State.

The comparative study was done with a view to explaining the situation of the bigger area during the different historical periods. The facts for Bombay State are true for its component i.e. Gujarat State as most part of the latter was in the former for a very long time.

To study the different levels of education separately, Section I was divided into three parts. Part I deals with primary education in which it was shown that the total enrolment in the field of primary education increased by 85% during the decade. Similarly it was also shown that in the beginning of the decade only 8% of the population of the State was under primary education which increased to 11% at the end of the decade. As regards the expenditure, it increased by 83% in the state.

Part II deals with secondary education. In this part it is shown that in the field of Secondary Education the enrolment increased by 97% in the decade, and the expenditure by 98% and the teacher by 75%.

Part III deals with higher education. An unprecedented growth was noted in the field of higher education. The institutions of higher learning increased by 136% and the enrolment by 251%, while the expenditure increased by 385%.
In the case of primary education it was shown in Part I that the population - pupil ratio varied from 100:6 to 100:13. It was generally found that industrially advanced districts showed higher enrolment. But the difference of enrolment between the backward districts and the advanced districts was very small owing to compulsory primary education.

In the field of secondary education the impact of economy is seen clearly. Those districts which were advanced in economy were also advanced in secondary education.

If higher education is a barometer of educational progress then it is seen that out of seventeen districts of Gujarat State only five had provision for five to six faculties of higher education. These districts were either industrial areas or commercial centres or places with cash crop economy.

The main purpose of this thesis is to correlate between educational development and indications of economic growth during the period under study. Section III i.e. the present chapter is thus devoted to bring out the relation between the two discussed in Section I and II. The following method is followed to complete the two types of developments.

**METHOD**

Ranks were first given to different districts as per the enrolment in primary schools, secondary schools and higher institutions in them as seen in Section I.

The problem of ranking was difficult to be decided in the matter of economic development. It was thought better if the important indicators of economic development were correlated separately with those of primary, secondary and higher education. The work involved would be quite sizeable but worth doing.
The next question to be considered was the basis of ranks. First, the ranks were given on the basis of enrolments i.e. the district which had the maximum enrolment was given the first rank and the district with the lowest enrolment was given the last rank. But it was observed that this method was unscientific because the district with the maximum population would naturally get the first rank in enrolment. Hence the criterion of ranking the districts as per enrolment was abandoned.

It was then decided to rank the districts on the basis of the proportion of population in education at all levels, for example, (1) district "X" had higher population then district "Y", but with regard to primary education if 4% of the population of the district "X" was in primary schools, and "Y" district had 5% then the first rank would naturally go to the district "Y" inspite of its lower population. In short, the basis of ranking became the percentage of population at different levels of education. This involved a lot of calculations but it seemed to be worthwhile because the districts of Gujarat State had very disporportionate distribution of population and naturally the lower population districts would not show any marked change in the field of educational activity.

RANKS PER ECONOMIC INDICATORS

As regards ranking in the field of economic activities, a simpler method was adopted. First of all the
important indicators of economic growth were selected. The selection basis of economic indicators was not arbitrary. Several economists of Gujarat State were consulted and then the indicators were selected on their advice. The following indicators of economic growth are taken into account:

1. Population
2. Density
3. Urbanisation Towns and villages
4. Backward population
5. Literacy
6. Population in primary sector
7. Population in secondary sector
8. Population in tertiary section
9. Consumption of electricity
10. Total number of factories
11. Total district income
12. Per capita income

All these indicators which were discussed in the second section of the thesis were given ranks on the basis of quantity. The ranks of these indicators were compared with those of the enrolment in primary education, secondary education and higher education.
<table>
<thead>
<tr>
<th></th>
<th>Correlation with the enrolment of Primary pupils</th>
<th>Correlation with enrolment of Secondary pupils</th>
<th>Correlation with the enrolment of Higher students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>.5950</td>
<td>.6340</td>
<td>.8320</td>
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<td>Density</td>
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<td>.4828</td>
<td>.7288</td>
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<tr>
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<td>.4354</td>
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<td>.3776</td>
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<td>Backward Population</td>
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<td>.1936</td>
<td>.4548</td>
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<td>Literacy</td>
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<td>.6460</td>
<td>.6640</td>
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<tr>
<td>Age of population in Primary Sector</td>
<td>.1846</td>
<td>.6164</td>
<td>.2744</td>
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<tr>
<td>Age of population in Secondary Sector</td>
<td>.0350</td>
<td>.4636</td>
<td>.3380</td>
</tr>
<tr>
<td>Age of population in tertiary Sector</td>
<td>.2042</td>
<td>.5360</td>
<td>.4168</td>
</tr>
<tr>
<td>Electricity</td>
<td>.3520</td>
<td>.8482</td>
<td>.8513</td>
</tr>
<tr>
<td>Factories</td>
<td>.4696</td>
<td>.8686</td>
<td>.8538</td>
</tr>
<tr>
<td>Total District Income</td>
<td>.5986</td>
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<tr>
<td>Secondary Sector</td>
<td>.4306</td>
<td>.8488</td>
<td>.8992</td>
</tr>
<tr>
<td>Tertiary Sector</td>
<td>.3274</td>
<td>.5632</td>
<td>.6400</td>
</tr>
<tr>
<td>Per Capita Income</td>
<td>.1490</td>
<td>.2738</td>
<td>.1192</td>
</tr>
</tbody>
</table>
of population had higher development of primary education. The same was the case of higher education. But for secondary education the density might not have played a similar role. The spread of secondary education and the establishment of secondary schools depended upon the various other factors, such as need for secondary schools, financial assistance from the community and feeding. In the case of higher education, density, population and urbanisation were the vital factors for its growth.

(3) BACKWARD POPULATION

As stated previously in Section II, Gujarat State has a large number of Scheduled Castes and Scheduled Tribes population. This population is unevenly distributed. Even then it did not influence primary education adversely. That is why the correlation between backward population and primary education is .7. The districts like Surat, Ahmedabad and Broach remained progressive in spite of backward population. Some of the districts like the Panchmahals, Baroda and Sabarkantha must have been unfavourably affected due to the higher rate of backward population. In the case of secondary education and higher-education, the correlation is either insignificant or very low. It is very difficult to say anything about the backward class population and higher education, because the percentage of higher education in any district was very low. So it cannot be said that the backward population was a hindrance to the growth of higher education.
The correlation between towns and primary education was very significant. This must be due to urban population and density of population in those areas. For example, a district like Kaira ranked first in number of towns and in number of primary pupils.

In some cases the ranks in towns was higher than the ranks as per enrolment in primary schools. For example, the district like Kutch had higher rank in towns than the rank in enrolment. It is generally observed that the districts of Saurashtra had higher ranks in number of towns. But the ranks as per enrolment were not so high. In case of the districts of old Gujarat the difference between these two ranks is not very significant.

As regards enrolment in secondary education and number of towns the correlation is seen to be more significant. For example, the districts like Kutch, Banaskantha, Sabarkantha, the Panchmahals and Surat had similar ranks as per number of towns and enrolment in secondary schools.

The ranks as per number of towns should not be considered to be more significant because the development of towns is to be understood in the light of urbanisation. In some districts the ranks per urbanisation were higher than those per number of towns. For example, Ahmedabad, Surat, Rajkot had higher ranks in urbanisation.
The significance of this correlation between towns and enrolment was important only in some districts.

As regards correlation between the ranks as per towns and those and as per enrolment in higher education, it was difficult to say anything because in 1951 only eight districts had colleges of higher education. In these eight districts, Rajkot had the same ranks in both. Whether all the other districts had slightly higher ranks or lower ranks in the growth of higher education in 1950-51 depended upon urbanisation. It would be seen that only at the end of the decade the number of towns became significant in increasing the growth of higher education.

VILLAGES AND EDUCATION

It would be seen from Table 1 that there is no relation between the number of villages and education. This must be due to the difference prevailing in population. In some districts the number of villages might be higher but the population in those villages might be thin. In some other districts, due to more urbanisation, the villages in the neighbourhood of cities had direct influence on education, while in rich agricultural districts primary education must have spread rapidly e.g. the districts like Jamnagar, Bhavnagar had identical ranks in both. Even a district like Surat had first rank as per the number of villages and second as per the enrolment in primary schools. In case of secondary
education and higher education, a large number of villages with big rural population must have been adversely affected, e.g., districts like Banaskantha, Sabarkantha, and the Panchmahals had poor facilities for secondary education and no facility for higher education. But in some cases, inspite of a large number of villages, their growth in education was not hampered.

LITERACY AND EDUCATION

Literacy was one of the indicators of economic growth. As such, one had to take literacy as one of the factors for correlation with educational growth. It is generally believed that literate parents care more for education of their children than the illiterate. On the basis of this belief, the correlation was to be studied. From Table 1, it would be seen that the correlation between primary education and literacy was .5, while in secondary education it was .6, and in higher education it was nearly .7. All these figures are very significant.

As regards primary education it was not the educated or uneducated parents that decided the fate of their children, but it was the government policy that decided it. If a child lived in the area of compulsory primary education, the parent had to send his child to school. Over and above this, the facility of schooling, free education and encouragement decided the growth of primary education. Thus, literacy
might not be the only factor in primary education.

In case of secondary education, literacy might be a very important factor because literate parents encouraged their children for secondary education. This could be explained by some evidence. The districts like Ahmedabad, Kaira, Surat and Baroda had higher ranks in literacy and secondary education. But in some cases like Amreli, Mehsana and Broach, despite higher ranks in literacy, the districts did not have equally higher ranks in secondary education. The reasons were to be found in their historical set up. In the first two districts, free and compulsory primary education prevailed during the last two decades (before 1950-51). There was, however, inadequate facility for secondary education. Despite all these drawbacks, the correlation between literacy and secondary education is very encouraging.

In the case of higher education, the correlation between these two factors was higher e.g. districts like Ahmedabad, Baroda, Kaira and Surat had higher ranks in literacy and in higher education. But it is to be borne in mind that higher education had not always spread in proportion to literacy. Rajkot had a lower rank in literacy but a higher rank in higher education. The same was the condition of Bhavnagar, Jamnagar and Baroda. It is not very difficult to explain this. These were the districts of the native states in the British days, wherein facility for
higher education obtained. But this facility was not provided from the needs of the then society of the states. It was the policy of these states to encourage higher education. But in the case of Surat, Kaira and Ahmedabad districts, one can see a perfect correlation between literacy and higher education.

POPULATION IN PRIMARY SECTOR AND EDUCATION

It was seen from Table 1 that correlation between primary pupils and primary sector was .1, while with secondary enrolment .6 and with enrolment in higher education .2. It was very difficult to explain all these corrections. It can be said that districts with higher percentage of population in primary sector ought not be favourable to education, e.g. the Panchmahals, Banaskantha, Sabarkantha and the Dangs with predominant agricultural community had lower ranks in primary education. So there was an inverse relation. A district like Ahmedabad had last rank in primary sector, but fourth rank in primary education. Some of the districts with large agricultural community had remained backward. Some other districts, although they had a large number of agricultural community, did not seem to be backward in primary education. This must be due to the fertility of the land and its products. The area where cash crop was taken, the spread of primary education seemed to be higher, e.g. Kaira, Baroda, Mehsana and districts of Saurashtra were the areas of cash-crops and their ranks in primary education were also higher.
As regards the correlation between secondary education and primary sector, no valid explanation could be given. But in the case of higher education the correlation was .2, and hence it could be said that there was very little scope for higher education in area where agricultural community lived.

POPULATION IN SECONDARY SECTOR AND EDUCATION

It is seen from Table 1 that there is negligible correlation between secondary sector and primary education. This must be due to the peculiar role of primary education. As regards secondary education the correlation is .4. This can be explained by the fact that higher the population of middle class, higher was the development of secondary education. The correlation with higher education is nearly .5. This also can be explained by saying that the industrial and urban areas had higher development of secondary education. It goes without saying that in the areas with factory establishment and small enterprises, in the areas with facility for communication, in the areas with different types of offices, offering collar jobs, or in the areas with commerce and transport facilities there ought to be a facility for secondary and higher education.

TERTIARY SECTOR AND EDUCATION

The tertiary sector was the main indicator of economic growth. Because it was in this area that one could
find persons like lawyers, doctors, teachers, professors and men of public services, men of different professions, liberal arts, government servants and men of administration. The correlation of this sector with primary education is negligible, but with secondary education it is .5, and with higher education .4.

ELECTRICITY AND EDUCATION

The progress of power production and distribution was very slow in this state. Most of the towns had been electrified during the decade under review. But very few villages had been electrified. With growing emphasis on industrialization and large scale and small scale development of industries, the pattern of utilization of power by different consumer groups went on changing and it was shown in previous tables. From those tables it is seen that power distribution was unequal. The correlation of electrical consumption and primary education is .3. But with the secondary level of education it is .8 and with higher education .85. Thus, it can be said that the areas which were electrified had higher scope for secondary and higher education.

FACTORIES AND EDUCATION

It was seen from Table 1 that there was a moderate correlation between primary education and factories. But so far
as secondary education and higher education were concerned the correlation was .8. This correlation is very high. From these three correlations it can be said that at primary level of education industrialization or non-industrialization did not matter, but at secondary and higher levels of education industrialization and education went hand-in-hand, i.e. the districts like Ahmedabad, Surat, Kaira, Bhavnagar, Baroda and Rajkot had adequate facilities for secondary and higher education.

**TOTAL DISTRICT INCOME AND EDUCATION**

The correlation between district income and education at the primary level was .5, at the secondary level .8 and at the higher level .9. These three correlations were very important, because at the primary level of education the poverty of a district did not matter much. Whether the district was poor or rich, the burden of the expenditure of education did not fall on the local habitants. It was the state government that shouldered the responsibility of primary education. It was a fact that poor peasants could not afford to send their children for schooling. That was why the correlation was .5.

It was in the field of secondary and higher education that the correlation could be appreciable. The districts which were rich either due to industrialization,
or commercial enterprise or cash crops, showed spread of secondary and higher education. The factory owners of Ahmedabad extensively helped the spread of higher education. The same was the case with Sirat, Bhavnagar, Kaira and Rajkot. In some of the districts of Gujarat business communities also donated large amounts for higher education. In some districts, where cash crop economy was predominant, rich peasantry also helped to build up secondary schools. In some of the cities the rich middle class started its own schools. Thus the district income was a sure indicator of educational growth. The higher the district income, the higher was educational development.

PER CAPITA INCOME

Table 1 showed most unusual relation between per capita income and educational growth. It is seen from the table that the correlation is most insignificant. At primary level it is .1, at secondary level it is nearly .3 and at higher level of education it is .1. From this it can be said that poverty of the district might not influence the spread of primary education. At secondary level less than one per cent of the population was in schools and hence there was no scope for correlation between the large number of poor masses and the educational activity. Same was the condition with regard to higher education.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation with the enrollment of Primary Pupils</th>
<th>Correlation with the enrollment of Secondary Pupils</th>
<th>Correlation with the enrollment of Higher Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>.6586</td>
<td>.7030</td>
<td>.7576</td>
</tr>
<tr>
<td>Density of Population</td>
<td>.7678</td>
<td>.6862</td>
<td>.7096</td>
</tr>
<tr>
<td>Urban Area</td>
<td>.5110</td>
<td>.4002</td>
<td>.9136</td>
</tr>
<tr>
<td>Backward Population</td>
<td>.5842</td>
<td>.4013</td>
<td>.3256</td>
</tr>
<tr>
<td>Towns</td>
<td>.3204</td>
<td>.5398</td>
<td>.6700</td>
</tr>
<tr>
<td>Villages</td>
<td>.3936</td>
<td>.2002</td>
<td>.1936</td>
</tr>
<tr>
<td>Literacy</td>
<td>.7834</td>
<td>.9130</td>
<td>.8368</td>
</tr>
<tr>
<td>Age of population in Secondary Sector</td>
<td>.4546</td>
<td>.7858</td>
<td>.8483</td>
</tr>
<tr>
<td>Age of population in Tertiary Sector</td>
<td>.5110</td>
<td>.6514</td>
<td>.6256</td>
</tr>
<tr>
<td>Factories</td>
<td>.5890</td>
<td>.7822</td>
<td>.9400</td>
</tr>
<tr>
<td>Workers</td>
<td>.7222</td>
<td>.7906</td>
<td>.7984</td>
</tr>
<tr>
<td>Distribution of industrial workers</td>
<td>.6958</td>
<td>.9190</td>
<td>.9520</td>
</tr>
<tr>
<td>Age of Income to state income</td>
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<td>.8382</td>
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<tr>
<td>Industrial Centres</td>
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<td>.7972</td>
<td>.9146</td>
</tr>
<tr>
<td>Total Factories</td>
<td>.5333</td>
<td>.7990</td>
<td>.8752</td>
</tr>
<tr>
<td>Per Capita Income</td>
<td>.1066</td>
<td>.5372</td>
<td>.6070</td>
</tr>
<tr>
<td>Rank as per director</td>
<td>.6346</td>
<td>.3038</td>
<td>.3368</td>
</tr>
</tbody>
</table>
So far, the correlation between indicators of the economic growth and the educational development were shown for the year 1950-51. This year, being the basic year, there was very little scope for interpretation. Over and above all, the indicators of the economic growth could not be taken due to non-availability of data. At times, the data were either insufficient or limited. But in 1960-61, more data were available, and hence the predictability was also extensive.

**Population**

From Table 2, it is seen that correlation between the enrolment in primary education and population is .75, while at the secondary stage it is .70 and at the higher stage it is .65. From these figures, it can be said that facilities for education were growing and more and more pupils were coming to schools, where population was larger. The districts like Surat, Mehsana, Ahmedabad and Broach had higher proportion of pupils compared to their respective population. It should be mentioned, however, that not all the low-populated areas had lower ranks in primary education.

At the secondary stage, the correlation changed from .6 to .7. It indicates that bigger the population, the higher was the scope for secondary education.
In the case of higher education, the correlation from .8 to .6. This might be due to limited scope and limited spread of higher education. Besides, higher education did not spread on the basis of population. It was stated in the previous section that institutions of higher education were opened in rural areas and in some of the small towns. It was also shown that some of these institutions came into existence due to competition among village people or due to the need of the community. Less-populated areas like Amreli and the Dangs had no institution of higher education, however.

CORRELATION BETWEEN DENSITY OF POPULATION AND EDUCATION

In 1950-51, the correlation between density of population and education was very moderate. But at the end of the decade the correlation became very high, which can be seen from Table 2. From the result, it can be said that the growth of primary education largely depended upon the density at a certain period. It may be remembered that at the end of the decade, the spread of primary education took place only in those areas which were not covered so far. Thus, the areas which were covered up by primary education where the densely populated ones.

At the secondary stage the correlation changed from .4 to .6. This was a very significant change because during the decade under review, more and more pupils
were joining secondary schools, or the facility for secondary education was growing in thickly-populated areas.

**CORRELATION BETWEEN URBAN AREAS AND POPULATION**

It was surprising to see that correlation between primary education and urban areas changed from .4 to .9. This meant that there was a very big movement to spread education in urban areas. This might be due to anxiety on the part of poor parents to impart education to their children. Besides, a number of new schools must have opened up in urban areas.

In the field of secondary education, there was no vital qualitative change and hence the correlation also did not change materially. As a matter of fact, new secondary schools which came into existence were in rural areas mostly.

In the field of higher education also, the enrolment figures did not increase to that extent, and the colleges which came into existence were in rural areas mostly. It should also be remembered that the definition of urban areas changed during this decade. Due to the restriction of this definition it was difficult to say anything about the spread of education in urban areas.
CORRELATION BETWEEN BACKWARD POPULATION AND EDUCATION

It is seen from Table 2, that there was low correlation between backward population and education. In the case of primary education and backward population the correlation is .3. At the secondary stage, it is .4, and at the higher stage of education it is .5. These figures indicate that there was no obstacle of backwardness of population in the spread of primary education. In some districts backward population was very small, but in some other districts its proportion was very high. Though, Surat district was first in backward population, it was also first in primary education. Broach district was fourth in both of them. Some of the districts with backward population were definitely backward in the field of primary education. Districts like the Panchmahals, Sabarkantha and Banaskantha were backward in the field of primary education and this must be due to their large backward population.

In the field of secondary education the correlation changed from .1 to .4, during the decade. This must be due to low percentage enrolment in secondary schools. Backward population might not have influenced adversely the field of secondary education. Otherwise the conclusion would have been, higher the backward population, higher the scope for secondary education. It was just possible that
the enrolment of non-backward population in these districts might be very high and so there was no adverse effect on enrolment.

In the field of higher education, the correlation changed from .4 to .5. This correlation also indicated that time was not ripe when backward population would prove to be a hindrance in the growth of higher education. As a matter of fact, a very small percentage of population was in higher education.

**CORRELATION BETWEEN TOWNS AND EDUCATION**

Table 2 showed that at the primary stage, the correlation was .6, at secondary stage .5, and at college level .3. These figures indicate that at the primary stage the correlation was medium. It is a well-known fact that the spread of primary education did not depend upon towns. The number of towns had nothing to do with largeness of towns. In some of the areas the number of towns was small but there were many large cities and hence the urban population was larger. But in some districts, especially in Saurashtra the spread of primary education was due to the large number of towns. This was also true in the case of commercial towns. But in the case of industrial districts there was a gap between urban area and rural area (with regard to the spread of primary education particularly). In the field of secondary education the correlation should be considered as a safe
indicator. It is seen that the number of secondary schools were opened in towns, during this decade.

In the field of higher education the correlation is .8. This might be due to the limited spread of higher education.

LITERACY AND EDUCATION

It was seen from Table 2, that there was very encouraging correlation between the enrolment in primary education and literacy. The correlation is .8. This indicates that as the literacy spread the need and scope of primary education also expanded. More and more literate parents sent their children to primary schools.

In the case of secondary education, the correlation is still higher. It is .9. It can be explained through some examples. Ahmedabad district was first in literacy and also first in secondary education. Kaira was second in literacy and second in secondary education. Similarly, Baroda was third in both. Surat was fourth in literacy but fifth in secondary education. In some of the districts both these ranks did not go together. This was due to the fact that the expenditure on secondary education was a matter of need and capacity to spend, while literacy depended upon the number of primary schools.

In the field of higher education the correlation changed from .6 to .7 during this decade. This showed that those districts which were advanced in literacy were also advanced in higher education. For example, the districts
like Ahmedabad, Kaira, Baroda, Surat, Rajkot and Bhavnagar were advanced in literacy and in the field of higher education too. On the other hand districts like the Dangs, Banaskantha, the Panchmahals, and Sabarkantha were backward both in higher education and in literacy.

POPULATION IN SECONDARY SECTOR AND EDUCATION

It is seen from Table 2, that the correlation of secondary sector with primary education is .8, with secondary education .7, and with higher education .4. These figures indicate that the spread of primary education depended upon the spread of industries, trade and commerce. Even in the field of secondary education the correlation increased during the decade, and same was the condition in the field of higher education. This point would be clarified by comparing Tables 1 and 2.

POPULATION IN TERTIARY SECTOR AND EDUCATION

It was seen from Table 2 that the correlation between the population of tertiary sector and education increased from .2 to .6 at primary level from .5 to .6 at secondary level of education and from .4 to .5 at the level of higher education at the end of the decade. This showed that as the intellectual and middle classes grew educational development also increased.

CORRELATION BETWEEN FACTORIES AND EDUCATION

In 1960-61, the data of the exact number of factories
was available and so there was a scope for finding out the correlation between these two. It was seen from Table 2, that the districts with more factories had higher scope for education. Even in the case of primary education, the spread of industries must have played an important part. The same can be said about secondary and higher education.

If the correlation of factories, workers and distribution of industrial workers are seen together from Table 2, it can be noticed that the industrialization played a very important part in the spread of education.

DISTRICT INCOME AND EDUCATION

The results of correlation of Tables 1 and 2, show the contradictory relation between district income and education. Table 2 indicates that higher the district income, higher was the spread of primary education. Same was the case with secondary education. As regards higher education, the higher correlation was not maintained. For this, various reasons can be attributed. First of all, higher education was meant for a negligible minority; secondly, those who received higher education, spent from their own pockets. The expenditure on higher education was not always made by the district people and hence at higher level perhaps district income might not be responsible for the spread of education.

PER CAPITA INCOME AND EDUCATION

Table 2 shows the correlation between per capita
income and three levels of education. From this it is seen that at primary level the correlation is medium, which means the spread of primary education was not influenced by the poverty of the districts. Even at secondary level the correlation is medium. This can be explained by saying that a very small percentage of population went for secondary education and hence a large mass of people might not have influenced the correlation in either way. The same argument could be extended to explain the correlation between higher education and per capita income.

**GENERAL REMARKS ABOUT CORRELATION**

The isolated correlation of each indicator of economic growth with educational development may not perhaps bring out a consolidated picture. So if all the indicators are taken together for study, the following conclusions can be drawn:

I. Industrial Districts like Ahmedabad, Baroda, Surat and agriculturally rich districts like Kaira and Mehsana were advanced in education.

II. Similarly, districts like Jamnagar, Rajkot and Bhavnagar also showed great educational development due to their growing industrialization and rich cash-crops.

III. Some of the districts which were economically backward remained backward in the field of education too. These were Banaskantha, the Dangs, the Panchmahals and Kutch.
The following facts were also observed during the study of the problem:

**PRIMARY EDUCATION**

1. The growth of primary schools was 93% in Gujarat State during the decade under review.
2. The number of school-less villages reduced from twelve thousand to twelve hundred.
3. The area of compulsory primary education expanded and the distance between schools and homes reduced.
4. In 1950-51, 7% of the general population of Gujarat State was in primary schools. It increased to 11% at the end of the decade.
5. The enrolment in primary schools increased by 35%.
6. In 1950-51, 64% of the children in age group 6 to 11 were in primary schools. It increased to 72%.
7. The increase in primary teachers was 60%. And the percentage of trained teachers which was 44 became 43.1.
8. The expenditure in the field of primary education increased by 116%, but the total direct expenditure on primary education reduced from 52.76% to 43%. The per capita expenditure increased to some extent.
9. The population per school reduced from 1956 to 1114.
10. The average area per school also reduced.
SECONDARY EDUCATION

In the field of secondary education Gujarat State showed remarkable progress.

1. The number of secondary schools increased by 96%.

2. During this decade the ratio between primary schools and secondary schools did not change.

3. In 1950-51, 116% per 10,000 population were in secondary schools. It increased to 176% per 10,000 in 1960-61.

4. In 1950-51 the population per secondary school was 28,092. At the end of the decade, it reduced to 18,755.

5. The enrolment in the field of secondary education increased by 97%, which means the enrolment at primary and secondary levels increased in the same proportion.

6. The increase in secondary teachers was 75% and the percentage of trained teachers changed from 43 to 59.

7. The growth of expenditure in the field of secondary education was to the tune of 98%. But the proportion of this expenditure to the total direct expenditure changed from 27% to 23%, and hence the proportion of expenditure of primary to secondary
changed in favour of primary education.

3. It is also worth noting that per capita expenditure on secondary pupils decreased.

**HIGHER EDUCATION**

1. In 1950-51, there were two universities in the state and the number increased to three at the end of the decade.

2. The increase of higher institutions was 153%.

3. As the number of colleges increased the number of faculties also increased, and the colleges for the faculties which were in existence, also increased. In short, not only the types of colleges but the number of colleges within one type increased during the decade.

4. The enrolment in higher education increased by 364%, while at the university stage it increased by 251%.

5. The facultywise distribution of enrolment did not change materially. The enrolment of general education changed from 68% to 65% of the total enrolment, and in the colleges of professional education it changed from 31% to 34%. So the trend towards professional education was very slow.
6. In 1950-51, 841 persons of each 1 million of the population received instruction in higher education. At the end of the decade the figure rose to 2956.

7. The expenditure in the field of higher education increased by 385%. It is also worth noting that the expenditure on non-recurring items increased substantially.

8. The per capita expenditure differed vitally from university to university. The per capita expenditure of affiliating universities was lowest.

9. The percentage of higher education to the total direct expenditure changed from 12 to 20 during the decade. Thus, the decade witnessed a great change in favour of higher education in Gujarat State.
If education is the most important factor in achieving rapid economic development, then education planning should be more realistic.

The results so far achieved in this work show that inspite of the planning in the field of education, there was a sort of laissez-faire at secondary and higher levels of education. These two fields went on developing on the basis of competition. In some districts the educational facilities were more. Economically backward districts did not get adequate facilities for education. Thus advanced districts got more facilities by virtue of their advancement in economic growth. Hence following suggestions can be kept in view to equalize educational facilities.

(1) A district should be the basis of educational planning.

(2) Pockets should not be allowed to grow as centres of education. Instead of this, there should be decentralisation of educational institutions. This will help to spread cultural and educational activities.

(3) The government should impose more restrictions on the opening of new secondary schools in the urban areas to avoid competition. In rural areas the scope of sufficient number of pupils should be a criterion for opening new schools.

(4) In backward districts encouragement should be given to open new secondary schools.
Higher institutions should be allowed to be opened only on the basis of the need of that particular area. Over and above this, the area, having no higher institutions should be given preference.

As regards expenditure, Gujarat State will have to review its policy regarding finance of education. (a) This State will have to spend between 3 to 4 per cent of the State income on education. At present, it is only 2.7 per cent.

(b) The State Government must contribute between 60 and 65 per cent of the total direct expenditure on all education. At present this trend is towards lowering the expenditure.

(c) The Gujarat Government will have to increase the share of the State budget between 20 and 24 per cent. At present the Government of Gujarat is spending on education 17 to 19 per cent of its budget.

(d) The help, in the form of endowment or help from other sources is very meagre. The private enterprise will have to bear six to seven per cent of the total educational expenditure. The policy of charging fees to the students shall have to be reconsidered looking to the expansion of education.

(e) The time has come when industries of different districts and cash crops producing areas will have to be taxed for the cause of education.
(7) As regards distribution of students in different faculties in higher education, it is seen that 65 per cent. of the students have been studying in Arts and Science colleges and 34 per cent. for professional education. There should be some change in this ratio; at least it should be changed to 60:40.

(8) More and more professional colleges should come into existence to bring about the change in the ratio.

(9) It is a well-known fact that Gujarat is a land of rich fertile soil, hence the state income from agriculture will rise, and for this scientific method of agriculture will have to be adopted. This depends upon agriculture colleges, but in 1961 only one per cent. of the total enrolment in higher education was in agriculture colleges. This should increase at least up to 5 per cent. in future. This increase of enrolment will demand more and more agriculture colleges. Hence there should be one college of this type in every district which sounds like a dream at present. In the interim period therefore there should be one college for every three districts.

(10) The number of universities is increasing and as a result the administrative expenditure is also increasing. This expenditure takes away 10 percent. of the total direct expenditure on higher education. This expenditure will have to be controlled so that it may not hamper the growth of higher education.

(11) At present very meagre facilities are given to research workers to collect data in the field of education. The reports of the State Government are very inadequate. A new method of reporting should be adopted and extensive data should be provided by the government.
TABLE A-I-AREA, HOUSES AND POPULATION

BRIEF ACCOUNT OF CHANGES IN AREA OF THE STATE AND
DISTRICTS FROM 1901 TO 1961

1. Gujarat came into existence as a separate State from May 1, 1960 on the division of the composite state of Bombay into Gujarat and Maharashtra. The 17 districts of which it is comprised are:

Ahmedabad, Kaira, Mahesana, Banaskantha, Baroda, Panchmahals, Broach, Surat, Dangs, Bhavnagar, Amreli, Surendranagar, Rajkot, Jamnagar, Junagadh and Kutch.

Plus

(i) 47 villages and 3 towns of Thana district and
129 villages of West Khandesh district included in Surat district and

(ii) 27 villages of West Khandesh district included in Broach district.

Numerous changes have taken place since Independence in the areas of these districts, though the boundaries of various units comprised therein practically remained unchanged between 1901 and 1941. Three principal stages in which these changes have come about during the post-Independence period are: (i) those that came in the wake of Independence after 1947; (ii) those that took place on the Reorganisation of the State in 1956 and (iii) those that resulted from the bifurcation of the bilingual Bombay State in 1960.
Prior to 1947 the units now forming part of Gujarat State were known as Ahmedabad, Kaira, Panchmahals, Surat and Broach districts of the former Province of Bombay, the former Agency of Gujarat States, the Sabarkantha Agency (Banas and Sadra Divisions) of the former Western India States Agency, the Indian States of Baroda, Diu, Radhanpur, Vijaynagar, Palanpur and Danta except Abu Road Taluka, the State of Kathiawar and Kutch included in the former Western India States Agency and the former Dangs State.

After 1947, the Province of Bombay was transformed into the State of Bombay considerably enlarged in size by the addition of new territories from princely states rising the total number of its districts to 28, some which were created anew, while others were expanded by the addition of more territories. It then contained 11 out of the existing 17 districts of Gujarat. The 1951 territorial units constituting the present set-up of Gujarat were:

(i) Ahmedabad, Kaira, Panchmahals, Surat and Broach districts of the former Bombay State;

(ii) Newly created district of Amreli, Banaskantha, Sabarkantha, Mehsana, Baroda and Dangs;

(iii) Five districts of part B State of Saurashtra formed on the merger of Kathiawar States into the United State of Kathiawar, viz. Ghilwad, Zalawad, Madhya Saurashtra, Halar and Sorath and

(iv) Kutch then part C State.

While details of 1951 territorial units constitution, the present set-up of Gujarat State are given in Appendix I, territorial changes during 1941-51 extracted from Part II-A of Volume IV of the Census of India, 1951, Bombay, Saurashtra and Kutch: (PP.7-10) are given in Annexure E. An attempt has also been made to trace in Annexure A various constituents of the state together with their areas in square miles as they existed from 1901 to 1941, in order to have clear and comprehensive picture of the political metamorphosis the country has undergone in recent times.

Effect of States Reorganisation in 1956.

2. Under the state Reorganisation Act No.37 of 1956, the composite State of Bombay was formed with effect from 1-11-1956 on the merger of Saurashtra and Kutch States. The territories of Bombay State as reorganised in 1956
which go to make up the present state of Gujarat are:

(i) Eleven districts of the former Bombay states, viz., Mehsana, Sabarkantha, Ahmedabad, Kaira, Panchmahals, Baroda, Broach, Surat, Dangs, Amreli and Banaskantha minus Abu Road taluka transferred to Rajasthan;

(ii) The territories of the former part B state of Saurashtra sub-divided into five districts, Scholru, Zalawad, Madhya Pradesh, Halar and Sorath later remained as Bhavnagar, Shreevandhanagar, Rajkot, Jamnagar and Junagadh district respectively under the Government of Bombay notification No.TLC.3958(a)-C dated 19-6-1959;

(iii) The territories of former part C state of Kutch constituted into a separate district and

(iv) 47 villages and 3 towns of thana district and 156 of West Khandesh district included in Surat and Broach districts.

FULL ACCOUNT AND SURVEY OF CHANGES IN JURISDICTION OF THE STATE

As a result of reorganisation of the states in 1956, whole the states of Saurashtra and Kutch were included in the bilingual Bombay State, Abu Road thana taluka of Banaskantha district was transferred to Rajasthan, the set-up of other district of Gujarat as they existed period to reorganisation remained unchanged for the time being except for the formation of divisions under divisional Officers. The 17 districts of the state were distributed as under vice Government of Bombay, Revenue Department Notification No.RVA-1556-R dated November 1, 1956.

<table>
<thead>
<tr>
<th>Division</th>
<th>District</th>
<th>Divisional Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ahmedabad</td>
<td>Sabarkantha, Banaskantha, Ahmedabad, Mehsana, Kaira, Panchmahals, Baroda, Broach.</td>
<td>Divisional Officer, Ahmedabad.</td>
</tr>
<tr>
<td>2. Bombay</td>
<td>Surat, Dangs,</td>
<td>Divisional Officer, Bombay.</td>
</tr>
</tbody>
</table>
Later on these Divisions were replaced by Commissioners' Divisions. The 17 districts now comprised in Gujarat were then included in the following divisions of Bombay State.

(i) Rajkot Division -
Rajkot, Surendranagar, Bhavnagar, Jamnagar, Junagadh, Amreli and Kutch districts.

(ii) Baroda Division -
Banaskantha, Sabarkantha, Mehsana, Ahmedabad, Kaira, Panchmahals, Baroda and Broach districts.

(iii) Bombay Division -
Surat and Dangs districts.

After reorganisation, several territorial changes were effected in 1959 particularly in all the district of Saurashtra except Kutch. Similar changes took place in Mehsana, Banaskantha, Baroda and Panchmahals districts also. The details of all these changes have been given district by district and for all the affected talukas in Appendix to Table A-II along with the relevant notifications. Broad changes have that have taken place between 1951 and 1961 are, however, listed below:

Jamnagar: The district comprises the former Halar district and Okhamedal taluka of Amreli district.

Rajkot: This district comprises the former Madhya Saurashtra district, less Babra taluka minus 10
villages and Kunkavav taluka minus 14 villages. Two villages of Junagadh district known as Sorath district were also added to it.

Surendranagar: This district consists of the former Zalawad district and one town one village of Ahmedabad district.

Bhavnagar: This district consists of former Gohilwad district less all villages of Rajula mahal except one Jafrabad mahal, Lilia mahal, Lathi mahal minus 17 villages, 17 villages of Kundla taluka, 2 villages of Umrala mahal and 2 villages of Gondada mahal.

Ghogho mahal, 7 villages of Daman mahal and 3 villages of Rajula mahal of Amreli District were also included in it.

Amreli: This district was constituted by the inclusion of former Amreli district less (i) Okhamandal taluka, (ii) Ghogha mahal, (iii) 7 villages of Daman mahal and (iv) 3 villages of Rajula mahal. The following areas also added:

(i) Rajula mahal minus one village, Jafrabad mahal Lilia mahal, Lathi mahal minus 12 villages, 17 villages of Kundla taluka, 2 villages of Gadhada mahal of Bhavnagar district formerly known as a Gohilwad district.

(ii) Babra taluka minus 10 villages and Kunkavav taluka minus 13 villages and one town of Rajkot district known as a Madhya Pradesh district.

(iii) 25 villages of Junagadh district known as Sorath district.

Daman mahal was abolished.

Junagadh: This district consists of the former Sorath district less 27 villages.

Banaskantha: This district continues with the addition of Radhanpur taluka minus 10 villages and Santalpur taluka of Mehsana district, less Abu Road taluka transferred to Rajasthan.

Mehsana: This district continues less Radhan taluka minus 10 villages and Santalpur taluka transferred to Banaskantha district and one village transferred to Ahmedabad District.
Ahmedabad : This district continues with the addition of one village of Mehsana district, less one town and one village transferred to Surendranagar District.

Panchmahals: Only 33 villages were taken away from it and included in Baroda district.

Baroda : 33 villages of Panchmahals district added to it.

Broach : This district continues with addition of 27 villages of Western Khandesh district.

Surat : This district includes Surat District plus one more taluka, viz. Umbergaon and two more mahals, viz. Uchhal and Nizer, formed from 47 villages and 3 towns of Thana district and 129 villages of West Khandesh district as a result of bifurcation of the composite Bombay State.