CHAPTER VII

IMPACT ON SOCIAL MORPHOLOGY

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7.1.0 Introduction

The accelerated pace of industrialization is the basic fact behind rapid urban growth in Karnataka. Industrialization in a comparatively short span of time has created wide scope for employment and lessened the burden upon the rural agricultural economy by initiating the migration of an agricultural labour to industrial towns. The actual process of industrialization brings profound changes in the pattern of living which calls for considerable social adjustment and adaptation. The social consequences of industrialization are most direct and obvious in the urban areas. Development of economic activities help in the growth of amenities of towns life. The rapid industrial transformation could quite conceivably aggravate all the country's socio-economic problems.

The establishment of large industries and development of economic activities is expected to give rise to important changes in the pattern of social morphology. The large scale influx of the rural population to the towns in
the wake of industrial growth has resulted in an acute shortage of drinking water, housing, electricity, educational and medical facilities and sanitation. Besides, expansion of social services required in this region, it is also expected that new social service would be established here, under the impact of various industries. This is the virgin field of research for social scientists, who can analyse the socio-economic problems pertaining to industrialization.

It is therefore very important to examine the ways in which industries have made their impact on the above types of social services. Similarly it is worthwhile studying the life style, and behaviour of people in the twin towns and surrounding villages which may have changed in this area since the industrial growth caused their impact on them.

The present study is proposed to highlight the problems associated with rapid industrial growth on (a) Education, Housing accommodation, Medical facilities Water, Electrification, Sanitation, urban transport, recreation and clubs, slums and pollution (b) Life styles in twin towns (c) Life styles in villages.
7.2.0 **Education**

Presently Davangere is one of the important educational centres in the Karnataka State accounting for twelve colleges at various localities affiliated to the Mysore University, 45 primary schools and 15 high schools. The establishment of these institutions shows that most of them have been established in the last two decades and all these institutions have sought financial aid from the industrialist and other public sources.

<table>
<thead>
<tr>
<th>Name of Institutions</th>
<th>Total</th>
<th>Aided Institutions</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower primary schools</td>
<td>32</td>
<td>14</td>
<td>43.75</td>
</tr>
<tr>
<td>Higher primary schools</td>
<td>34</td>
<td>18</td>
<td>52.94</td>
</tr>
<tr>
<td>High schools</td>
<td>26</td>
<td>21</td>
<td>80.76</td>
</tr>
<tr>
<td>Colleges</td>
<td>18</td>
<td>13</td>
<td>72.22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>110</td>
<td>66</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Source: Municipal Office and A.E.O. Davangere and Harihar

The growth of educational facilities naturally runs parallel to the general development of the twin towns.
One hundred and ten educational institutions are run in Davangere and Harihar units. All of these institutions have directly or indirectly taken financial help from industries. Table - 1 depicts the number of institutions which have taken financial and other aid from industrial owners. The higher educational institutions fully depend on the contributors. Nearly 72.22% of the colleges are run by the industries. The names of those institutions indicate the contribution of the donors (Chapter-3).

Nearly 650 people consist of the staff and 19000 students avail themselves of education in these schools and colleges.

The map shows the location of education institutions (Fig. 1 & 2).

The growing collegiate educational facilities in and around the twin towns have come to the stage of establishing post-graduate courses in Davangere. There is an acute demand for it. In this regard Mysore University has planned a post-graduate centre at the Davangere unit.

7.3.0 Housing Accommodation

In view of the existing economic situation one would be surprised if the cities were not faced with such problems like inadequate housing low per capita area and

* A.E.O. Davangere.
DAVANGERE COMMUNITY FACILITIES

Fig: 1

- CEMETERIES
- TOWN HALL
- LIBRARY
- HOSPITAL
- MARKET
- COLLEGE
- PRIMARY SCHOOL
- CINEMA THEATRE
- SLAUGHTER HOUSE
- MEDICAL SHOP
- HIGH SCHOOL
- COMMUNITY BUILDING & CLUBS
- VETERINARY HOSPITAL
- RELIGIOUS BUILDING
- POST & TELEGRAPH
- SWIMMING POOL
- CATTLE MARKET
absence of basic amenities. There is an acute shortage of housing accommodation in Davangere and Harihar. This is primarily due to big commercial, cultural and industrial establishments. Secondly, the fresh migrants were somehow cramped into the existing living space to the agony and discomfort of the previous occupants in both units.

In Indira Nagar, Azad Nagar, Market area in Davangere 7 to 10 persons live in 2 to 3 rooms, and in temples and market areas 4 to 8 persons live in 2 to 4 rooms in Harihar. This shows an acute shortage of houses. The houses have been built of mud with tiled roofs, they have no electricity and latrines. Field observation shows in these areas that in most cases, the front rooms have been turned into grocers, repairshops, printing press and tea stalls with very minor adjustments and by the putting up of sign boards. This has further reduced the total living space in congested areas. (Photos ).

As industries, commerce, education, have brought in more and more people to the twin towns, the problems of over crowding and congestion have become accentuated. A survey reveals that about 28% of the residential houses have one to two rooms, 32% have three rooms, 22% have four rooms and 18% have five and more living rooms*. However

* The theme has been discussed with the Town Planning Officer, Welfare Officer, Davangere and Harihar, 1977.
residential spaces undergo changes, both in location and in character, as a result of obsolescence, city growth and technological advances. The visible effect of this is the construction of multi-storied buildings in the Davangere unit. Most of the houses in business areas have added second and third storeys; the ground floor accommodates shops, the second has a bank, doctors clinic, or office, and the third is used as a hotel or for residential purpose.**

Recently industrial concerns have started construction of quarters at various places with planned layouts at both units. These developments have decreased congestion to some extent but there is much to be done in this field. It is interesting to note that, there is a great disparity in the income levels of the different groups of population, the pattern of distribution by social areas and historic unit is also noticeably different i.e., Lingayats in old city, Muslims in Azad Nagar, Marathas in Shivaji Nagar are predominant. In Harihar the Lingayat and Brahmins live near temples and with Brahmapuri area, Muslims in Machikeri and Marathas in factory quarters of Kirloskar, and Gujarathies in Polyfibre factory quarters. As industrial areas developed it reduced the social and cultural traits i.e., M.C.C. colony, Indira Nagar, P.J. extension and labour colony, etc.

* Based on Field observation.
in Davangere and labour colony, A.K. Colony, etc., in Harihar. In these localities all kinds of castes and communities have settled, but these are also influenced by the level of incomes. However, these disparities and isolation retard the organic growth of the city; therefore, effective measures are necessary to minimise the level of disparities between the newly developed social areas and historic units.

7.4.0 Drinking Water

The supply of water is one of the neglected aspects of urban geography. There is a wide gap between the quantity of water required, and the quantity supplied. The problem is further accentuated by huge concentrations of population from external sources, particularly in the industrial and mining towns which cannot possibly cater for the supply of drinking water to the urban population. The achievements of the water works department measured in quantitative terms are impressive. Progress has been made in tapping additional sources of water supply, extending distribution lines, and providing new connections.

In 1900, water was supplied to Davangere with eight-inch pipe from the Tungabhadra river near Harihar.

As it expands the previous sources do not meet the needs, and water supply has to be augmented. Therefore the 8 inch pipe was adjusted to the former in 1940. But again the problem arose in the year 1955 due to industrial growth and increase of population. That year 16 inch pipes were fixed to meet the need of the industries and population. For this the Municipal Office spent about Rs. 2500,000.

From 1960 to 65 four tanks have been constructed with a capacity of 2,00,000 gallons each in the city. Totally 12 to 14 lakh gallons of water was supplied. As Davangere expanded the previous sources could not supply sufficient water. To meet the required amount of water, it is supplied from Bati Kere (Bati tank), Bnd Bhandra channel near Shiramagendun halli.

Presently there is no scarcity of water in the city. Recently some more bore wells have been constructed by the private and Government enterprise for industries and the people. Totally from 30 wells water is used in Davangere*.

In the case of Harihar also, there is no scarcity of water supply, because it is located on the Banks of the river Tungabhadra. Mysore Kirloskar, Ltd., and Harihar

* Field observation and Enquiries.
Polyfibre factories are located on the bank of the river. Eighty per cent of water at Harihar town is supplied by tap system, and twenty per cent supplied by local wells.

Thus the water supply in the twin towns have influenced much to gear up its urban activities.

7.5.0 **Electrification**

Davangere is the biggest sub-station in the district with a capacity of 15 m.v.a. The Hydal power produced at the Mahatma Gandhi Hydro-electric station at Jog (Shimoga district) and in the Bhadra power station at Lakkavalli is supplied to this station. This station also has been geared to received electric energy from the Tungabhadra power House. The Harihar sub-station also is fed from the Jog Power House.

So far 90 per cent of houses in Davangere and 85 per cent of houses in Harihar have been electrified*. The remaining houses and huts of the backward families still use Kerosene oil for lightning, as these families cannot afford to take electricity. These families mostly belongs to labour classes. The Municipality has provided

street lights and road lights in almost all parts of the twin towns. Table - 2 reveals the number of connections used for different purposes.

Table - 2

ELECTRIFICATION : NUMBER OF CONNECTIONS

<table>
<thead>
<tr>
<th>Purposes</th>
<th>Davangere</th>
<th>Percentage</th>
<th>Harihar</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>9809</td>
<td>59.7</td>
<td>2733</td>
<td>74.2</td>
</tr>
<tr>
<td>Industrial</td>
<td>1339</td>
<td>8.2</td>
<td>52</td>
<td>1.4</td>
</tr>
<tr>
<td>Commerce</td>
<td>3091</td>
<td>19.0</td>
<td>535</td>
<td>14.5</td>
</tr>
<tr>
<td>Road lightening</td>
<td>2050</td>
<td>12.4</td>
<td>350</td>
<td>9.5</td>
</tr>
<tr>
<td>Others</td>
<td>120</td>
<td>.7</td>
<td>15</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>16409</td>
<td>100.00</td>
<td>3685</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source : Town Directory, Karnataka Government 1971 and Based on Karnataka Electricity Board.

The above table depicts that totally 16,409 connection in Davangere and 3,685 in Harihar have been given. The number of connections used for domestic purpose is very high in both units. This is mainly to facilitate the public. The same is also true in commerce. In all 1339 and 52 connections have been given in Davangere and Harihar for industrial purposes.
The field survey reveals that many industries are not sufficiently getting electric energy namely Chandrodaya Oil Mill, Ravi Vegitable Power Oil Mills, Ganeshar Textile Mill etc., on account of shortage. However now and then the city faces fluctuation in the flow of electricity. To avoid this the Karnatak Electricity Board has planned to establish two to three additional transformers with 30,000 Kw. Thus the increasing provision of electricity in twin towns will be bound to gear up multi various developmental activities.

7.6.0 Medical Service

Over crowding in the dwelling units by labourers and others has intensified the problem of public health in the twin towns. This has resulted in sub-standard living conditions, poverty and malnutrition, lowering of morality and lack of hygienic sense. Prior to 1960, there were very few consulting physicians and surgeons at both units. With the establishment of J.J.M. Medical College in the year 1965, the number of doctors has considerably increased. At present Davangere and Harihar are teeming with consultants specialized in various fields of medicine and surgery (Fig. 1 & 2). The table - 3 shows the number of government hospitals and beds in the twin towns.
Table - 3

HOSPITALS DISPENSARIES AND BEDS

<table>
<thead>
<tr>
<th>Davangere</th>
<th>Hospitals/Dispensaries</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>6</td>
<td>1550</td>
</tr>
<tr>
<td>Dispensaries</td>
<td>5</td>
<td>164</td>
</tr>
<tr>
<td>T.B.C.</td>
<td>2</td>
<td>85</td>
</tr>
<tr>
<td>Others</td>
<td>140</td>
<td>175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Harihar</th>
<th>Hospitals/Dispensaries</th>
<th>Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>1</td>
<td>98</td>
</tr>
<tr>
<td>Dispensaries</td>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>T.B.C.</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Others</td>
<td>26</td>
<td>65</td>
</tr>
</tbody>
</table>

| Total      | 184                    | 2173 |


The Table - 3 reveals the number of medical centres in the twin towns. Recently Government has opened a few family planning centres to propagate the birth control scheme in twin towns and in the surrounding villages.

Due to the industrial pollution and slum areas, many diseases are seen in the twin towns. It is a fact that most of the patients admitted in the hospitals are from slum areas.
Many persons severely suffer from Aslerm, T.B., G.C. high fever, Asthma, etc., on account of un-hygienic weather condition, drinking of impure water and living in slums. Daily about 900 persons from Chigatageri Hospital and 2000 persons from J.J.M. College resort to doctors. In all there are 750 beds in Chigatageri hospital and 850 beds in J.J.M. Medical College.*

In addition to these medical facilities, industries like D.S.M. Ravi vegetable oil mill, Harihar Polyfibre, Harihar Kirloskar Ltd., maintain efficient medical and health centres to give quick relief to the suffering workmen and to ensure a standard of sanitation in twin towns.

In addition to this, every Sunday the Lions Club, Rotary Club, Jayacee Club, etc., conduct free medical services with the help of Doctors of J.J.M. Medical College and Chigatageri Hospital in twins as well as in surrounding villages. The survey reveals in these camps that headache, whooping cough, diphtheria, Pneumonia are common ailments in children, and eye pain diseases fever, Asthma, T.B. leprosy, cancer, malaria etc., are common in adults. Nearly 50 per cent of industrial workers who are not able to avail in the hospitals due to low income and low education take advantage of these campus.

People in the slum-areas as well as socially backward families are still unaware of these medical facilities. To avoid the spread of diseases from slum areas and in agglomerated areas, etc., it is high time to provide maximum health facilities in such localities by the concerned authorities.

7.7.0 Sanitation

The sanitation system is very bad in both the units. 90 per cent of houses in Davangere and 80 per cent of houses in Harihar are without latrines. The table below shows the number of latrines in Davangere and Harihar units.

Table - 4

<table>
<thead>
<tr>
<th>Types of latrine</th>
<th>Davangere</th>
<th>Harihar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Borne</td>
<td>1591</td>
<td>260</td>
</tr>
<tr>
<td>Service</td>
<td>4071</td>
<td>1600</td>
</tr>
<tr>
<td>Other</td>
<td>579</td>
<td>350</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6241</strong></td>
<td><strong>2210</strong></td>
</tr>
</tbody>
</table>

The table reveals that the water borne latrines are fewer than service latrines in both units. The other types of latrines include the type underground.

Earlier to 1975, night soil was removed by the conservancy system by employing human labour. Now 80 percent of it is transported by the vehicles and some of them have been converted into septic tank latrines. However, in the growing twin towns, the sanitation problem is a very prime one.

The public gutters in the twin towns are not kept clean and not properly built. In some parts namely Annekonda, Kaipete, Azad Nagar in Davangere and temple road, Brahmapur area, Labour colony at Harihar, the dirty water flows on the roads, which increases, mosquitoes flies and emanates a foul-odour which is not at all conducive to the sanitary condition of an industrial centre. Public latrines are yet to be built in localities like Annekonda area, Labour colony, Azad Nagar and the old city in Davangere and Brahmapur area, the old town and the labour colony in Harihar. Public urinals which are very essential to the city life are not adequate in the Davangere and Harihar units. The field observation highlights the fact that existing urinals are not in a good condition and even any educated person cannot move anywhere near the
public urinals and latrines. However, beside providing these urinals in every part of the twin towns, the existing urinals and public latrines are to be improved with sufficient flow of water maintenance etc. Generally this system has created many problems, diseases and an ugly picture.

7.8.0 Urban Transport

The geography of transport is a separate problem, but it has its bearings on industrialization and urban growth. In the process of growth, particularly in the wake of the location of industries, the twin towns have exhibited rapid lateral expansion. Gradually the commercial areas and administrative hub stand beyond the normal walkable distance from newly expanded areas. In Davangere and Harihar many industries and educational institutions are located at a distance of 2 to 4 Kms. from the centre. But most of these industrial owners and educational institutions do not provide adequate mini-bus services. In order to make the 'journey to work' quick and cheap, public transport is most desirable in the twin towns. The dearth of this results in either a loss of working time or a lessening of leisure hours for the workers. Daily students and workers move on foot or by bicycle creating a grave problem in the traffic centres. Some of
the labourers and students move by private buses, Ricksha, Tongas, to their places of work. They have to pay high rates with no alternatives. This kind of high cost of transportation indirectly amounts to reduction in their earnings. The public transport and high freight rate of private villages buses, heavy concentration of workers near the place of work, results in congestion and over crowding. The researchers' field observation highlights the fact that cheap and adequate urban transport services have acted as a brake in the lateral growth. Congestion and over crowding are its undesirable results. Public buses and omni-buses services of industries, and educational institutions have to start immediately in Davangere and Harihar and even in Bati.

7.9.0 Recreation Facilities

The establishment of industries and rapid growth of population have considerably increased the need for healthy recreation in the Davangere and Harihar units. The recreational facilities of the twin towns may be classified into three categories. (1) Cinema houses, Drama theaters and clubs (2) Libraries, (3) Parks and scenic spots (Fig. 1 & 2, Photos-1).
4. Jayashree Cinema House

5. Sangam Motel with Park

6. Church— Harihar.
Cinema houses are very popular and attractive centres for the relaxation of public masses. At present the twin towns have nine cinema houses, seven at Davangere and two at Harihar and new types, namely Aruna, Ashoka, Getanjali, Moti, Shanti, Puspanjali and Vasant in Davangere and Jayasree, Shobha at Harihar. Puspanjali and Getanjali are the modern Cinema houses in the state *(Photo 11)*. These two are located near the market centre. As these are 'on modern lines, people prefer to frequent these movie/houses. It is learnt that on an average 700 people can be accommodated in each cinema houses for each film. In addition to this many films are exhibited by industrial centres for their workers. As the twin towns are developing it is very essential that the old talkies be equipped on modern lines, to suit the present need of the public.

Out of nine, six are constructed by industrial owners. These houses are not well distributed and people have to come from long distances. The new talkies should not be allowed in these localities.

There are seven open air theatres and they are maintained by educational institutions, municipal offices and cultural agencies in the twin towns. In addition to

* Souvenir, 1975, p. 135.*
this, many cultural agencies, namely Kannada Mitra-Vrunda, Bharati Mitra Vranda, Pratibha Vidya Vranda, Saigan Vranda Melody makers and Venkateshwers Sangeeta Vrunda, etc, provide recreational opportunities.

In Davangere and Harihar many social clubs have come up such as the Lions Club, the Rotary Club, the Jaycee Club, Davangere club, Labour club, Social club, Catholic club, etc., which provide social and recreational facilities. Davangere is much more advanced in cultural activities than the Harihar unit. Every year many national and state level tournaments are conducted in Davangere. For the past two years outdoor games such as Kabaddi, Basket ball, Foot ball, Khoko, etc., have been introduced in Davangere and Harihar.

7.9.2 Library

The Karnataka Government has opened a number of libraries in almost all the district headquarters and important towns of the state. Totally 34 libraries are run in the twin towns, 30 at Davangere and 4 at Harihar. In addition to these, there are 15 libraries* maintained by cultural organizations and private societies.

7.10.0 The Slums

The industrial environments of large towns have brought both pain and pleasure. The pain is experienced in slums, group fighting, traffic congestion, smoke and pollution. The pleasures are found in improved amenities, educational institutions, shopping centres, entertainment and cultural opportunities. The ramshackle dwellings of the poor are no better than slums. But a definition based on descriptions of the houses alone would be misleading. A slum is where decrepit men and women wage an almost hopeless battle to live decently\(^8\), or it refers to a social group as much as to a particular section of the city where the 'Social Pathologies' of alcoholism, disordered family life, prostitution and the like are common occurrences\(^9\). In addition, slums are neighbourhoods with given structural characteristics without social amenities like light, water, sanitation, etc.

Slums are close associates of industrialization\(^{10}\). Established low income areas, populated by working class especially industrial labourers can be thought of as 'stable slums'. Because the stable slums are associated with crime, violence, poverty, alcoholism, drugs and disorganization which are the prime features in the industrial slums of the twin towns.
SLUMS OF DAVANGERE

SLUM LOCALITIES

Fig: 3
The overflow of the population especially of the low income group from surrounding villages who have come without marketable skills are the main cause of the creation of slums. Organizational lapses, the inadequate public and private resources, and the nature of migrating population are responsible for the creation of slums. The researcher's field enquiry reveals that, initially, a few individuals and families make efforts and erect tentative shacks. If not evicted, they are soon joined by others. The process accelerates as the wards spread, until the whole area is covered by dozens of abysmally poor dwellings. Secondly the industries are not fully coped to accommodate these labourers. They want to settle in their own level of income where some groups have already settled. However, the shacks of migrants may be regarded as slums.

These slums have existed for a long time in Davangere and Harihar, because within the limited space, small scale industries, domestic and commercial activities are have continued i.e., Azad Nagar, Kaipete, Indira Nagar, Annekonda area in Davangere and the old town in Harihar (Fig. 3 & 4). These slums have the characteristics more of an urban jungle than an urban village. Even long life slum dwellers who have an idea about it are reluctant to make an effort clear the slums. The researcher's experiences in the field reveal that economically such populations,
SLUMS OF HARIHAR

SLUM LOCALITIES
because of their lack of marketable skills and their educational, emotional and mental liabilities, are virtually excluded from modern industrial life. Thus life in slums is often an unsuccessful attempt to minimize the negative aspects of daily life rather than maximizing its potentially positive aspects. So slums are places where hope is dead (Photos-\(\equiv\)).

7.11.0 Pollution

Public awareness of the problems of environmental pollution is perhaps the most important development in recent years. The most urgent problem relating to environment, is air and water pollution. Air is an important component of man's environment and its wholesomeness and cleanliness are essential for his healthy survival. Practically all the industrial manufacturing process lead to generation of pollutants, which are conventionally discharged into the atmosphere\(^ {12}\).

Air pollution is the presence in outdoor atmosphere of one or more contaminations such as dust, fumes, gas, mist, smoke in quantities of characteristics, and of duration such as to be injurious to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life\(^ {13}\). The geographical
concept of scale is the fundamental studies of air pollution. The importance of environmental perception in the cultural landscape has been discussed elsewhere. It is equally significant in the consideration of problems relating to the physical environment.

7.11.1 Air Pollution

The problem associated with the rapid change in human environment is seen in the intensified growth of industries and slums in the twin towns. It has been heard that the physical environment is becoming increasingly polluted. The man-made environment of slums, industrial smoke and fuels, restrict living space, and noise due to industries and automobiles are the worst in these areas. The emission of specific pollutants by industry are much more restricted both in air and number of sources.

Industrial activities are a major source of pollutants in the twin towns. The major pollutant industries in Davangere are the parching mills, cotton mills, and General engineering. These pollute the air by heavy smoke, gas and terrific noise. The parching mills especially disturb a quarter of the city area. Even if these are on a small scale pollution of air is very considerable. The trespassers in these areas cannot move with naked eyes and such heavy
pollution is seen in the areas of Azad Nagar, Indira Nagar, near the market area and Annekonda part.

Air pollution is mainly due to the location of Harihar Polyfibre factory near Harihar. This factory emits a huge quantity of foul smoke and gases. The field observation reveals that such bad air spreads even up to Challageri in north west and to Harapanahalli in the north, which are located between 10 and 30 Kms. respectively. Even though the height of the chimney is very high, the foul smell descends to ground level. This can be experienced at a distance of 2 to 3 Kms. from the factory area. Here also the parched rice mills pollute the atmosphere at ground level.

In addition to sulphur dioxide suspended particulate matter and oxides of nitrogen, industrial air pollutants include cadmium mercaptans and hydrogen sulphides to fluorides, chlorides and many other wastes and by products of technological processes.

7.11.2 Water Pollution

Water pollution is by no means a new evil; it is as old as community life. Water gets polluted when it is altered in composition or in a condition. This includes
changes in physical, chemical or biological properties of water.

After 1941 water supply has been increased and expanded without sewage and purity, keeping pace, resulting in crude domestic liquid wastes polluting the nearest water course. Nearly all the waste heat entering our streams comes from industrial processes in this region. Likewise while industrial expansion received an impetus, the treatment of industrial wastes deficient is most often and mere water pollution by such wastes has assumed serious proportions especially after 1971 in the river Tungabhadra. As a result of location of Harihar Polyfibre factory near Harihar, it has polluted the river water heavily. The Kirloskar and Polyfibre factory at Harihar have made the water foul and black in colour with an oilish content. The survey reveals that nearby villages from Harihar along the river course are fully effected by this polluted water, namely, at Nalwagal (7 Kms.) Nadihalli (6 Kms.) Irani (8 Kms.) and Hirebidare (16 Kms) Kuruvatti (21 Kms.).

The character and quantity of wastes from various industries varies depending on the nature of the product and processes. Thus even though the water is very harmful to animals and for domestic purpose, it is interesting
to know that this polluted water is extremely good for groundnut and cotton cultivation in the region. The research field investigation highlights the fact that the water is carried through the pipes to an extent of 15 Kms. from the river up to 40 Kms. along the path of the river. In this area these two crops have yielded a bumper crop since 1971. This is certainly due to the polluted water. No body has used this river water for domestic purpose. Many diseases like infective polyneurose, mental disease, etc., have been found in this area. To avoid this people use polluted water from the dug outs on the bank of the river.

To avoid this extreme harmful water, the public have complained. As a result, five tanks have been constructed to purify the water by the factory. Enquiries at the villages reveal that throughout the year water is not purified.

7.12.0 Life Styles in Twin Towns

The importance of environmental perception in the cultural landscapes has been studied in the psycho-geography elsewhere. The social consequences of industrialization are most direct and obvious in the urban areas.
The concentration of factory labour constitutes one of the major causes of urban social problems. Social and cultural conditions are associated more closely with economic than with the demographic changes. Cities and towns differ from rural areas not only in their size and patterns of economic activities, but also in their tone, texture and pace. Heterogeneity, variety and change are assumed, as a potpourri of different occupations, social classes, cultural background and interests.

The saying that India lives in villages in quite true here, not only of the rural population but also of a large section of the urban population. Despite the wealth of terminology, it is possible to categorise the study on the effects of human environmental perceptions on human spatial behaviour. The actual process of industrialization brings profound changes in the pattern of living which calls for considerable social adjustment and adaptations. Thus it is important to study the impact of industries on daily life, diets, dress, social disorganization, etc.

Change in dress and diet

The researchers' field observation and enquiries in the twin towns reveal that among the factory and office workers, the wearing of pants, shirts and even coats of
terine and terycotton is a very common feature which is purely foreign in style. Even though woollen and synthetic clothes are very uncomfortable during eight months, people prefer to use these clothes. Nearly 60 per cent of people have adopted this. Out of this 50 per cent belong to adults, which shows the recent innovation in change of dress. The poor and middle class women who work in factories or in offices wear fine silk or nylon saris. When they go from the places of their work, they change their dress. These are definite indications that they have become aware of the fashion or etiquette and are now more conscious of their dress, than what they were some decades ago. Such a fashion is due to the mixing of white collar people and improvement of education in this region.

Middle class people go by the styles made popular by film stars. Students of middle and rich classes also follow the same. Their dress is especially an instance. The impact of the silver screen on young minds has been tremendous.

In the diet the change is also seen. Many people do not like to take the meals in Indian style. They use dining tables, spoons and forks. The use of food items also has changed. Nearly 50 per cent of the people are non-vegetarians which is high in proportion to other cities. Now-a-days the sons and daughters of religious families
take non-vegetation food and alcohol due to the mixing of various cultures in the area. These semi-vegetarian people have to depend on the non-vegetarian hotels, as they would not get in the houses. As a result nearly twenty non-vegetarian hotels are in the twin towns which have been established after 1960.

Social Disorganization

The growing population with various castes and communities is noticed due to industrial growth in the twin towns. It is not surprising that researcher tends to emphasize the negative rather than the positive aspects of urban change. The alienation, and social isolation juvenile delinquency, suicide, mental illness, and divorce, etc., are the main aspects of social disorganization. Table-5 shows the number of thefts, robberies, etc., from 1965 to 1977.

Table - 5

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<tr>
<th>ASPECTS OF SOCIAL DISORGANIZATION IN THE REGION</th>
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<td>Thefts</td>
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<td>Non-fatal</td>
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Source: Police Station, Davangere and Harihar.

* Field observation.
Table - 5 depicts the social disorganization. As the slums developed, thefts, and cheating, etc., have increased. The enquiries reveal that most of such cases have been committed by slum dwellers. Nearly half of these have been registered in the police station. Secondly, inner areas and slums of the twin towns have experienced an increasing rate of crime, delinquency, desertions, consumption of drugs, and immorality. Thefts, cheating, etc., take place in the areas of the railway bridge, Mandipete, regulated market and older part in Davangere and on P.B. Road, fruit market, weekly market at Harihar where many cultural, economic, educational and Government offices are located.

Daily Life

The city creates a distinct way of life which is reflected in the behaviour, language etc. Due to the concentration of factory workers, merchants, and students in Davangere, the daily life of the people is a matter of interest. The merchants are busy in the day time in their work while at night they are free, whereas the factory workers have to work at night as the shift comes. City dwellers have many chances to enjoy by means of urban life. Thus city life is like a mechanical one.
Change in Culture

The traditional process resulting from the impact of certain traditions of the dominant regional society have long been operating and is therefore responsible for the resultant concepts like Hinduisation, caste, community continuum. The process on the other hand is characterised by factors like Christianity, urbanization and industrialization, westernisation and modernization.

The city has been the melting pot of races, people and cultures and a most favourable breeding ground of new biological and cultural hybrids. Davangere and Harihar have many mixed cultures.

Hindu Model

The traditional process in the past was solely responsible for bringing about change in the low castes and Hindu culture. This process forced a change in the culture on the regional pattern of the Hindu style of life. Since it was voluntary, continuous and automatic, the rate of transformation has been naturally slow, selective and integrative. All these have taken place because of the long continuous social contacts of the low castes with forward castes.
Westernised Urban Model

Christianisation of the poor people especially slum dwellers through western missionaries brought about a change in social, educational and economic status of the converted poor groups. Both secular models of westernisation operate in Davangere and Harihar through the introduction of industrial urbanization and the democratic machinery of administration. Slow welfare certainly has broken the stagnation and isolation of the slum dwellers and other poor people. All the these processes have released a set forces which is leading the poor communities from the phase of acculturation to that of accelerated cultural mutation. Communication media are the most important potent space adjusting techniques. It will inevitably affect human spatial behaviour. Secondly the introduction of monetised economy, spread of formal and modern education as well as industrial sources are the main cause of cultural change.

Preservation of some traditions and customs in Davangere and Harihar is seen in communal groups. This is evident from the names of streets and hostels. It is found even in slums. This is due to the blind beliefs of their cultural heritage. They do not want to mix with other communities and religions. Such isolation from other
groups in a geographical space is the strongest force promoting cultural diversity. The absence of spatial interaction with different people re-inforces and preserves cultural traits, for example Lingayats, Brahmins, Marathas, in Hinduism, Sikhs, Muslims, Jains, Christians are found their own area, within this small area. Recently spatial interaction like communication has reduced differences among groups because it has destroyed the isolation upon which cultural diversities depend. Such communication between groups is seen as a result of industrialization and urbanization in the twin towns.

7.12.1 Life Style in the Villages

The attitude and opinion of the elite play a significant role in setting the cultural framework of a society. It is the constellation of values and so long as the value system does not change or changes slowly but abruptly, the village will retain its identity. However, the economic and social life of the people, who were once linked with the soil for their sustenance, experience profound changes in the rural areas of the study regions.
Dress and Diet

Indian village life is a concept. It has its own cultural heritage. The village people do not want to come over to modern culture. But due to the advancement of education and economic system a change has been observed in the villages also. The field observation highlights the fact that the mode of dress is changing among the ruralites. Especially the youngsters prefer to change their dress. Even women also want to wear fashionable clothes such as Nylon, tericot etc. The poor class have a desire to change to fashionable attire but they cannot afford it. Thus the change is seen in their dress.

Non-vegetarian people are very few in the villages. This is they are found in the low class of Hindus, Muslim and Christian communities. The staying of workers and students from the village side has influenced the adoption of modern dress and food items. These clearly indicate that they have become aware of the fashions and conscious of their dress.

Daily Life

Due to the declining trend of village industries like spinning, weaving, brass ware, oil pressing, etc., in many instances, the self sufficiency of the villages
disappeared. The cheap manufactures displaced the craftsmen, depriving them of their hereditary skill. But the disruption of ecological balance meant a great loss to the social solidarity. Before industrialization (1950) the villages were like family units. With industrialization they turned into a veritable adjunct to factory life. However, this crumbling and shrinking of village life is of the utmost importance. Cultural activities of the village have given colour and bloom to the peasant's life.

Presently the nearby villages have been completely changed from rural metrics. Their life style has also changed like the urbanites. The researchers' enquiry in the villages experiences that the villager believed that life in Davangere and Harihar is at a rat race, but most urban people would not change even the stress of the 'rush hour' for what they regard as life in a rural buck water.

Change in Culture

In villages the traditional mythology is predominant since olden times. Recently we can see the same cultural change in the twin towns. The cultural change seen, lies in the fringes and within 10-15 Kms. from the twin towns. Recently conversion to Christianity from other religions
An important feature. As a result many changes in the cultural traits are found. Perception of distance from the urban centre is an important aspect in the cultural change. As the distance increases the trend of cultural change decreases. This is due to spatial interaction of urbanites. However, mankind seems to become more homogenous in the life style and cultural traits and yet at the same time it treasures cultural differences. Due to staying of commuters, urban contact, and foreign missionaries, the social isolation has been broken in the surrounding villages.
REFERENCES


ADDITIONAL REFERENCES


