

\*\*\*\*\*

C H A P T E R - VI

\*\*\*\*\*

## IMPACT ON QUALITY OF LIFE

The changes caused by the industrialization and urbanisation have no doubt affected the quality of life not only in the industrial centres but also in the regions of their influence. These impacts can be both types, beneficial and harmful. Industrial development may exert heavy pressure on housing, water supply and health and educational facilities. At the same time, it facilitates and necessitates their expansion. It enhances the standard of living of the people by providing more employment opportunities and thereby raising income both in industrial townships as well as in the rural areas. Living conditions in rural areas are influenced directly and indirectly. Directly, people learn the modern way of life from urban centres and urban people. They get chance of raising their income not only by commuting and working at industrial centres but also by marketing their agricultural produces there. Concentration of educational and health institutions also provide services and awareness to the people. More and more people are tempted to use modern medical facilities even in rural areas. All these conditions have deep impact on thinking of the people. They are realising the significance of female education, maternity services, vaccination, bank facilities and even of insurance. All these developments have deeply influenced the way of life in the industrial triangle of Indore-Dewas-Ujjain.

The quality of life is an abstract thing but can be gauged by the level of living. The level of living itself is a relative concept and cannot be expressed in absolute terms.

However, the living conditions, views and adoption of modern way of life and way of working and sustained efforts for betterment express the level of living. Therefore, these variables have been discussed in this chapter. Information collected through household survey have extensively used for this purpose.

### LIVING CONDITIONS

As mentioned earlier, total 143 household living in 19 samplpe villages were interviewed; all of them have their own houses for living. Thus, there is not serious problem of housing in this triangle region. However, these houses vary in their construction materials and facilities available in them. On the basis of material used for construction and roofing, these houses can be classed as pucca and kutcha houses. Nearly nine-tenths (88.8 per cent) of the households have kutcha houses made of mud and thatched with tiles etc. Some of these houses are also made of stones and bricks but are plastered with mud. Only one -tenth of the houses are concrete houses made of stone, bricks, iron and cement. Out of 16 such households most are living in inner circles of the influence zone of industrial towns. They are Bhangarh, Nagukhedi and Amona. Other two villages are 5 to 10 Kms. from them. Thus urban influence on these houses is evident.

**ROOM PER HOUSEHOLD :** Though all of the surveyed households have their own houses, these are very small houses. On average, there are only 2.7 rooms per house in the region. This average varies from only 1.4 rooms per house in Jairampur village and 1.8 rooms in Hingonia and Kithoda villages to 4.7 rooms in

Jalodia. Households classified according to the room they possess, are presented in Table 6.1 below.

Table 6.1  
INDUSTRIAL TRIANGLE : SAMPLE HOUSEHOLDS CLASSIFIED ACCORDING  
TO ROOMS NUMBER OF PER HOUSEHOLD

No. of Rooms	1	2	3	4	5 +
No. of Households	39	49	29	14	12
Per cent of the total Households.	27.3	34.3	20.3	9.8	8.4

Source : Tabulated from the questionnaires.

It is evident from the table that 27.3 per cent of total households live in single room houses. Another 34.3 per cent of households have two rooms each. Only 30.46 per cent of houses and households have three and more rooms per house. Thus, majority of the people live in suppressed conditions just passing time in very inadequate personal space.

Number of rooms per house, according to the distance from the industrial centres to which they are linked also varies widely. However, it is difficult to generalise. Normally, houses in villages located sufficiently away from towns have larger number of rooms than those located nearer to the towns and cities. For instance, Jalodia, with highest number of rooms per house, is located at 29 Km. from the nearest town Dewas. Similarly, Binjana with the average of 4.1 rooms and Nagwan with the average of 3.8 rooms are also far away from the industrial towns. Contrary to it, small houses predominate in nearby

villages. For example, in village Talawali Kachra, only 8 Km. from Indore, there are only 2.1 rooms per house similarly, Jairampur, Hingonia and Amona with 1.4, 1.8 and 2.5 rooms respectively are close to towns. Thus, there is a tendency to adjust in smaller houses in villages nearer to towns and cities. It is also but natural because the cost of land is comparatively high in these villages as compared to those located far away. At the sametime, pressure of population is comparatively high, compelling to accommodate more people in smaller space.

Besides number of rooms, question was asked about the latrine facilities. Certainly it is an evident impact of urbanisation in Indian scene. It would take long time to reach flash latrine in villages. Out of 143 households only 5 households have flash latrine facilities in their houses. It is pertinent to mention that there are 16 pucca houses. It means majority of pucca houses also do not have flash latrine facilities. People use open space for this purpose. The households having latrine facilities lie in villages located very close to cities. These villages are Amona and Nagukhedi very near to Dewas, and Bhangarh and Nainod on the outskirts of Indore. Thus, this basic amenity could not percolate to the rural areas of this industrial triangle region.

**DRINKING WATER FACILITIES :** The quality of health and environmental hygiene depend on the source and quality of drinking water the best source of drinking water is tap providing filtered and purified water. But none of the villages has this facility. On the other hand, very few people obtain drinking water from

open dug well. Only 3 households reported wells as their own source of drinking water. Remaining people depend on handpumps for this purpose. But very few people could afford to have their own hand-pump. There are only 6 such households possessing their own hand-pumps. Majority of the people (119 out of 143 households) depend on public handpumps. So high dependency on handpumps may be because of the lowering of water-table in this region. Very high density of tubewells used for irrigation are causing lowering of the level of underground water. Therefore dug-wells have become worthless in this region. There are 15 families who use both the sources i.e. wells in rainy season and handpumps in other seasons. Water from handpumps is considered to be superior to that of the dug-well. Thus in this respect, people of this region have progressed remarkably, though the actual reason is else, not the impact of industrialization.

**USE OF ELECTRICITY :** Increasing use of electricity may be taken as an index of good life and raising the standard of living. It has been discussed in the previous chapter that all villages of the study region are electrified by now and per capita use of electricity has increased enormously. Despite hundred per cent electrification not all households could use electricity. 24 households out of 143 do not use electricity at all. They constitute 16.8 per cent of the total households interviewed. These households are living in villages far away from urban influence. Largest proportion of households not using electricity is in village Tawali Kachara (75.0 per cent) located very close to Indore. Asrabad (66.7 per cent) is next to it which is 12 Km. away from Indore. Others are Moradpura (60 per cent) Kajlana

(60 per cent), Nagwan (50 per cent), Jairampur (25 per cent) and Hingonia (25 per cent). It means there are pockets where impact of electrification are still to be felt in the outer circle of the influence zone of the industrial towns.

The electric consumption for different purposes is also revealing. Out of total consumers, more than fifty per cent (52.1 per cent) use electricity for domestic purposes, particularly for lighting only. At the same time, more than one-third (37.8 per cent) of consumers utilize it for agricultural purposes along with domestic purposes. Few households (7.6 per cent) are using for agricultural purposes only. They have electric connections at their agricultural fields only and not in residential houses. Commercial use is insignificant. Only three households have reported using electricity for commercial purposes along with domestic use. They are merchants by profession.

Thus it is significant to note that not only electrification has expanded but use of electricity for productive purposes is also increasing rapidly. Nearly half of the households use electricity for irrigation and other agricultural pursuits. This is certainly the symptom of urban influence on way of life otherwise tradition-bound farmers. All this has been made possible only through the raising the income of the rural people.

**MOVEMENT** : Development of transport facilities have also been elaborated in the previous chapter. Along with the growth of road net-work and economic development people try to have their own vehicles rather than depending on public vehicles. It is

very clear from the present survey. All households reported to own atleast one bicycle as a Bullock-cart. 138 households have bicycle which is very effective means of movement and even of carrying things on the footpaths and cart tracks of the villages.

Besides bicycles, scooters, motor cycles and tractor-trollies have reaches in villages and these are used for multi-purposes by the rural people. 21 households (14.7 per cent) reported to possessing either scooter or motor cycle. Largest number of motor cycles are (7) in Nainond, a village close to Indore. Farmers use motorcycles for transporting their perishable agricultural produces to Indore. Next to it is Bhangarh with 4 households out of 10 owning and using motor cycles. Usually motor cycles and scooters are becoming popular in villages which are not far away from industrial centres and which supply perishable commodities, such as vegetables and milk to them.

Since tractor-trolley is costly thing only few of household could have it. Only 10 households (7.0 per cent) have their own tractor and trolley. Tractor is used for agricultural purposes as well as for transporting commodities to and from the villages. Again, largest number of tractors (2) are in Nainod village located nearby Indore. This village is known for its horticulture and gardening produces, which need quick movement. Equally significant is Aslana, a villages falling in influence zone of Ujjain but located 10 Km. away from it. Other households owning one tractor-trolley each are living in Nagukhedi, Bhangarh, Binjana, Kajlana, Jalodia and Kithoda. Most of these villages



are around sawer, but away from the three industrial poles, Thus, it can be concluded that people are switching to those means of transport which are not only labour and time saving but which are also at their disposal. So that dependency on public vehicle can be minimized and people and goods can move in desired direction at convenient time. Declining dependency is a good index of improving quality of life of the people.

#### **EDUCATIONAL FACILITIES AND ACHIEVEMENTS**

Education may be viewed as an important input and is vitally linked with the industrial development. The differential spread of literacy can, therefore, be properly analysed in the system of interdependencies having bi-directional linkage with the development process (Raza and Agrawal, 1983 : 193). In consonance with the marked disparities in socio-economic conditions across the industrial triangle region, the level of response to educational opportunities also varies in space and as a consequence, certain areas acquire relative advantage over others in terms of human resources development. The high degree of temporal stability is an important feature of the regional disparities in the educational development of the region. It is largely the composite effect of the distortions embedded in the system during pre-independence period, on the one hand, and of the infirmities and limitations of the current development strategies, on the other (Raza et.al., : 1986).

A good deal of attention is focussed these days on the problem of regional imbalances in educational development in India. Since, education is a state subject, it is inevitable

to have disparities in educational development between different states as state governments lay varying emphasis on education (Tilak, 1979 : 140). A systematic and comparative analysis of education at tahsil level shows that there is a wide range of disparities between different tahsils (Table 6.2).

### **EDUCATIONAL INSTITUTIONS**

State Government is committed to the policy of universal primary education. The educational structure of 10+2+3 has been accepted as the common pattern. Three-tier educational system i.e. primary, middle and secondary schools system is prevailing in the region. The region has 1135 primary schools, 391 middle schools, 109 higher secondary schools, 22 colleges and 17 professional institutions.

The rural areas of the region have 668 primary schools with 64794 students, 139 middle school with 28131 students and 22 higher secondary schools with 3509 students (Table 6.2).

In a discussion on various infrastructural facilities, educational institutions deserve first priority. The educational institutions are broadly classified into school (Primary, middle, and higher secondary) college and university. Availability of these educational institutions per unit of area and per lakh population indicates the level of educational development and its pattern.

**PRIMARY SCHOOLS :** The primary schools lie at the base of the educational infrastructure. Their basic purpose is to provide literacy to all eligible children. Later on these children are educated at different levels making use of what they have

Table 6.2

## INDUSTRIAL TRIANGLE : EDUCATIONAL INSTITUTIONS IN RURAL AREAS 1984-85

Tahsils	Primary School		Middle School		Higher Secondary	
	No.	Students	No.	Students	No.	Students
Indore	117	11996	40	12390	7	1068
Sawer	123	11105	38	8662	4	839
Dewas	200	21647	27	4178	6	1123
Ujjain	228	20046	34	2901	5	479
Region	668	64794	139	28131	22	3509

Source : Block Statistical Handbooks 1984-85.

learnt at the primary stage. Therefore, density of Primary schools per hundred square kilometres and schools-population ratio and School per lakh of population are initially considered as basic indicators.

**DISTRIBUTIONS OF PRIMARY SCHOOLS :** Availability of primary schools per hundred Sq.km. has increased from 14.54 in 1960-61 to 27.43 in 1984-85 in the industrial triangle region. The density was higher in Indore tahsil than the regional average of 27.43 schools in 1984-85. Average for the state was 19.9 schools of all types of schools. Thus this region is at much higher level than the state. Within the region itself, Indore tahsil ranks first while sawer tahsil is at bottom in the density of primary schools. Thus, it has direct relation with the industrial development.

Growth of primary schools per hundred Sq.km. was highest 124.0 per cent, in Ujjain tahsil followed by Dewas tahsil. Lowest growth was recorded in Sawer tahsil (Table 6.3).

**POPULATION PRIMARY SCHOOL RATIO :** Number of primary schools per lakh of population has increased slightly from 64.20 in 1960-61 to 64.42 in 1984-85. This ratio is inversely related with the density of population. Where there population density is high, number of primary schools per lakh population is comparatively low. For instance, it is lowest (49.46) in Indore tahsil which has highest population density and highest in Sawer (113.68) which supports lowest density in the region. The growth in this ratio was high in the tahsils known for resources in the region. The highest growth was recorded in Ujjain tahsil (23.50)

Table 6.3  
**INDUSTRIAL TRIANGLE : CHANGES IN THE DENSITY AND POPULATION:SCHOOL RATIO  
 OF PRIMARY SCHOOLS, 1960-61 TO 1984-85**

Tahsil ..	Number of Primary School					
	Per Hundred Sq. Kilometres.			Per Lakh of Population		
	1960-61	1984-85	Per cent Change	1960-61	1984-85	Per cent Change
Indore	27.54	50.50	83.37	54.98	49.46	10.04
Sawer	10.24	16.88	64.06	110.74	113.68	2.65
Dewas	11.72	23.28	98.63	97.00	100.54	3.65
Ujjain	9.21	20.62	124.00	53.18	65.68	23.50
Region	14.54	27.43	88.65	64.20	64.42	0.34

Source : Tabulated District Census Handbooks 1961 and Block Statistical Handbooks 1985.

followed by Dewas and Sawer tahsils, while it has declined in Indore tahsil which recorded phenomenal population growth during this period. Thus, educational institutions could not cope with the increasing population in this tahsil.

**MIDDLE SCHOOLS :** It is a link between and higher secondary schools. There were 139 middle schools in this triangle region in 1985, in which 28131 students were enrolled. Thus density of middle schools per hundred Sq. kms. is 9.45 . There are 22.2 middle schools per lakh population in the region.

**DENSITY OF MIDDLE SCHOOLS :** On average, there are 9.45 middle schools per hundred Sq.km. in the region. It was only 2.21 in 1960-61. This density varies from 4.37 in Dewas to 24.72 in Indore tahsil in 1984-85 (Table 6.4). Only Indore tahsil 24.72 has recorded higher ratio than the regional average (9.45). The density increased by 327.6 per cent during 1960-85. Highest growth of middle schools per hundred square kilometres was recorded in Sawer tahsil followed by Indore tahsil. The lowest growth was recorded by Ujjain tahsils with 177.22 per cent.

**MIDDLE SCHOOLS PER LAKH POPULATION :** Middle schools per lakh of population too increased from 9.77 in 1960-61 to 22.2 in 1984-85. This ratio varied from 54.18 in Sawer tahsil to 16.00 in Ujjain tahsil during the period 1984-85. Higher proportion of middle schools per lakh of population is recorded in Sawer and Indore tahsils than the regional average of 22.2 during the period 1984-85. The highest growth was registred in Sawer (376.93 per cent) and Indore tahsil (158.48 per cent) while the lowest growth was in Ujjain tahsil (53.00 per cent).

Table 6.4  
**INDUSTRIAL TRIANGLE : CHANGES IN DENSITY AND POPULATION SCHOOL RATIO  
 OF MIDDLE SCHOOLS, 1960-61 TO 1984-85**

Tahsil	<u>Schools Per Hundred Sq. Kilometres.</u>			<u>School Per Lakh Population</u>		
	1960-61	1984-85	Per cent Change	1960-61	1984-85	Per cent Change
Indore	4.69	24.72	427.08	9.37	24.22	158.48
Sawer	1.05	8.01	662.85	11.36	54.18	376.93
Dewas	1.10	4.37	297.30	9.04	19.00	110.17
Ujjain	1.80	4.99	177.22	10.47	16.00	53.00
Region	2.21	9.45	327.70	9.77	22.20	127.22

Source : District Census Handbook 1961 and Block Statistical Handbooks 1984.

**HIGHER SECONDARY SCHOOLS :** A great importance is rightly attached to the higher secondary school education since it provides a first recognised certificate to a person and enables his entry into the employment field or in higher institution of vocational and general education. Indore tahsil ranked first with 25 higher secondary schools followed by Ujjain with seven while Dewas and Sawer, tahsils had 2 and 1 higher secondary schools respectively during the year 1960-61. Indore tahsil had maintained its first rank with 63 higher secondary schools in 1984-85. Sawer tahsil with 5 such schools ranked last during 1984-85.

**DENSITY OF HIGHER SECONDARY SCHOOLS :** Number of higher secondary schools per hundred square kilometres has increased from 0.86 in 1960-61 to 2.63 in 1984-85. During 1984-85, it ranges from 6.62 in Indore to 0.65 in the Sawer tahsil. Only in Indore the density of higher secondary schools was higher in than the regional average of 2.63 during the year 1984-85. Contrary to it, Sawer has only 0.65 school per 100 Sq.km. of area. Contrary to it, growth in density pattern shows a different pattern. It is highest in Dewas tahsil (550.0 per cent) which had lowest density in 1960-61. It is followed by Sawer which was second lowest in 1960-61. Indore with highest density, recorded lowest increase in density (Table 6.5).

**HIGHER SECONDARY SCHOOLS PER LAKH OF POPULATION :** Table 6.5 shows the higher Secondary schools per lakh of population in the industrial triangle region. The ratio has increased from 2.7 in 1960-61 to 6.18 in 1984-85. It varies from 6.27 in Ujjain



Table 6.5

**INDUSTRIAL TRIANGLE : CHANGE IN THE DENSITY AND POPULATION SCHOOL RATIO  
OF HIGHER SECONDARY SCHOOLS, 1960-61 TO 1984-85**

Tahsil	Schools Per Hundred Sq. Kilometres			H.S.S. Per Lakh of Population		
	1960-61	1984-85	Per cent Change	1960-61	1984-85	Per cent Change
Indore	2.61	6.62	153.64	5.20	6.50	25.00
Sawer	0.13	0.65	400.00	1.42	4.44	212.70
Dewas	0.20	1.30	550.00	1.64	5.58	240.24
Ujjain	0.50	2.00	300.00	2.82	6.27	122.34
Region	0.86	2.63	205.80	2.70	6.18	120.63

Source : District Census Handbooks 1961 and Block Statistical Handbooks 1985.

tahsil to 4.44 in Sawer tahsil during 1984-85. The ratio of higher secondary schools was higher than the regional average in Indore and Ujjain tahsils followed by Dewas and Sawer (Table 6.5). The highest growth was recorded in Dewas tahsils followed by Sawer and Ujjain tahsils while the lowest growth was recorded in Indore tahsil (25.00 per cent). Again, it shows inverse, relation with the growth of population.

**COLLEGES :** College education is considered as passport to various jobs like administrative, engineering, medical, education and business. In 1960-61 the industrial triangle region had only 9 colleges which rose to 22 by 1984-85. Indore tahsils ranked first with 11 colleges and Sawer tahsil ranked last without any college in 1984-85. Number of colleges per hundred square kilometres and colleges per lakh of population have been shown in the table 6.6 .

Number of colleges per hundred square kilometres was only 0.23 in 1960-61 which rose to 0.5 in 1984-85 in the region. It varies from zero in Sawer to 1.16 in Indore tahsils. The proportion of colleges per hundred square kilometres was higher in Indore (1.16) and Ujjain tahsils than the regional average (0.5) during 1984-85.

There is on average, one college per lakh population in this region. It has increased from 0.9 in 1960-61 to 1.00 in 1984-85. The highest ratio was recorded in Ujjain (2.02) and lowest in Sawer (0.0). The proportion of colleges per lakh of population was higher in Ujjain (2.02) and Indore (1.13) than the regional average. On the other hand the highest growth

Table 6.6  
INDUSTRIAL TRIANGLE : CHANGES IN DENSITY AND POPULATION COLLEGE RATIO,  
1960-61 TO 1984-85

Tahsil	Colleges Per Hundred Sq. Kilometres			Colleges Per Lakh of Population		
	1960-61	1984-85	Per cent Change	1960-61	1984-85	Per cent Change
Indore	0.52	1.16	123.07	1.04	1.13	8.65
Sawer	-	-	-	-	-	-
Dewas	0.10	0.20	100.00	0.80	0.86	7.50
Ujjain	0.28	0.63	125.00	1.61	2.02	25.46
Region	0.23	0.50	117.39	.90	1.00	11.11

Source : District Census Handbooks 1961 and Block Statistical Handbooks 1985.

was recorded in Ujjain tahsil (25.46 per cent) and lowest in Dewas (7.5 per cent) tahsil.

### LITERACY

Literacy is a broad indicator of development and suitable measure to analyse the level of education in an area (Singh, 1986 : 120). It is widely assumed that before a nation can be benefitted from the natural blessings of modern science and technology, a very large share of its population must be literate and a substantial proportion must have secondary and college training (Bouge, 1969 : 181). Among the various indicators to access the quality of population, achievements in the sphere of literacy is the most important in the context of developing areas (Gosal et.al., 1980 : 92). It has been witnessed that a literate person makes a more productive labourer in a factory, a progressive farmers, an enlightened trader and an enterprising individual shows adjustablility and sociolibility. Spatio-temporal characteristics of literacy have been analysed in detail in chapter three and repetition of the same has been avoided. Literate persons accounted for only 41.71 per cent of total population in the region in 1981 while only 30.74 per cent in 1961. Female literacy was only 27.24 per cent while male literacy was 55.00 per cent in 1981. Table 6.7 shows regional literacy rate as compared with Madhya Pradesh. Total literacy of the region is 149.6 per cent of the state (27.87 per cent), while male and female literacy are 139.3 and 175.4 per cent of the state respectively. The higher proportion of literacy in the industrial triangle region has been due to the industrialization and urbanization for which it is a professional necessity. Of course there is urban-rural difference in literacy. On average, only 26.7 per cent

of ruralites have been returned as literates while proportion of literates in urban population is 55.7 per cent. Spatial distribution of literates has been shown on Plate 3.5 and changes in literacy rates during 1961-81 is presented on Plate 3.6.

Table 6.7

**INDUSTRIAL TRIANGLE : COMPARISON OF LITERACY WITH THAT OF  
MADHYA PRADESH, 1981**

Tahsils	Total	(Literates as percentage of total)	
		Male	Female
Indore	56.19	65.65	45.42
Sawer	28.38	45.38	10.20
Dewas	37.95	53.13	21.36
Ujjain	44.34	55.66	32.00
Region	41.71	55.00	27.24
M.P.	27.87	39.49	15.53

Source : District Census Handbook, 1981.

**VIEWS ABOUT EDUCATION :** Expansion of education and educational facilities has enlightened the people and has changed their attitudes towards education. As a consequence, majority of the sample households (86.0 per cent) deem education essential for their professions and successful performance of their functions. Such persons are distributed throughout the region. Only few people think that education is not essential for their work and are residing in remote villages. Among them, Kithoda, Aslana and Dyakheda are significant. Thus people now realise the importance of education even in such occupations like farming.

Questions were asked about the impact of local educational institution in inducing people to send their children to there institutions. It was found that more than two-thirds (67.8 per cent) of household prefer to send their children to schools, while one-third still fail to avail this facility. Most of

the people of later class belong to low income group and cannot afford to send their children to schools. Education has acquired such a significance that as much as 33 households are sending their children to other villages and nearby towns/cities for study. They do not find any serious problem in sending them to such institutions. Thus, local availability has neither created awareness nor location of schools of higher order in distant villages has hindered expansion.

Purdah system and conservative attitude have been major reasons of low literacy among females. A few girls schools have been opened. However, it cannot be opened everywhere. Therefore people have to send their daughters to schools providing co-education. It is found that nearly two-thirds (91 out of 143) households have favoured the co-education. They do not find any serious problem in sending their girls to such schools for studying along with boys. This change in attitude of the people is a very good symptom of modernization.

Still these are constraints in popularization of female literacy. People living in distant villages still are not favouring co-education. Along with this, people belonging to muslim communities and higher Hindu castes also have a different view about co-education. Amona village has the lowest proportion of such households (12.5 per cent) while Hingonia has the highest (80.0 per cent). The first is very close to Dewas while latter is located 11 Km. away from Indore. Besides Hingonia, other villages having higher proportion of households against co-education than the regional average include Bhangarh,

Nagukhedi, Jairampur Tawali Kachra, Muradpura, Jalodia and Kithoda villages. Most of them are located on the fringes of urban influence and therefore are least influenced by modernization and educational development. It is pertinent to mention that, despite disagreement with the co-education, people desire to educate girls as well as boys.

#### HEALTH CONDITIONS AND HEALTH FACILITIES

Industrialization influences the health of the people in several ways. Health facilities are created. Such developments can be seen around any industrial city. Health, which directly affects the wellbeing and the productivity of the population, is one of the basic considerations in regional development (Kayastha et al, 1981 : 29). It is described as the state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity (Agnihotri, 1987 : 215). According to stamp, "the good health, whether applied to man or to any living animal or plant, implies that the complex organism is functioning correctly and in harmony with its environment", (Stamp, 1964 : 16). That is why health planning has become a major component of national development planning. Health planning is necessary for the economic and rational utilization of material man-power and resources. The main purpose of this planning is to improve the health services and control the rapid growth of population.

Human community has been suffering since long from various diseases due to lack of health care facilities. The condition becomes more severe in the region where lack of

transport facilities are discouraging people to approach health centres. Illiteracy, conservative behaviour prevailing in rural society and low economic level are some allied factors adversely effecting human health. The development of health care facilities, therefore, must be intrinsically woven into total socio-economic development as the healthy workers produce more for the society than sick workers.

#### MEDICAL INSTITUTIONS

Total number of medical institutions in different blocks of the region are presented in table 6.8. In all, there are 60 allopathic hospitals and dispensaries, 5 primary health centres, 52 mini-primary health centres and 18 homeopathic and ayurvedic medical institutions in 1984-85.

Table 6.8

#### INDUSTRIAL TRIANGLE : NUMBER OF MEDICAL INSTITUTIONS 1984-85.

Block	Allopathic Hospit. & Desp.		P.H.C.	PHSC	Homeopathic Hospital	Total
	No.	Beds				
1. Indore	35	1302	1	9	4	49
2. Sawer	3	36	1	18	2	24
3. Dewas	4	160	1	11	7	23
4. Ujjain	17	583	1	9	2	29
5. Ghatiya	1	6	1	5	3	10
Region	60	2087	5	52	18	135

Source : Block Statistical Handbooks 1985.



The situation of the health facilities in the region is far better than the average condition in the state. The density of hospitals and dispensaries comes to 32.63 per 100 Sq.km. and is four times more as compared to Madhya Pradesh. Hospitals and dispensaries per lakh population are 7.7 in the region which again is higher than the state average. Similarly density of beds available in the region comes to 504.4 per thousand Square Kilometres which is about ten times more of the Madhya Pradesh (55 beds per thousand square kilometres). The number of beds per lakh population is 118.46, which is more than double of the state average of 46.75 per lakh population.

Table 6.9

**INDUSTRIAL TRIANGLE : BLOCKWISE DENSITY AND POPULATION-MEDICAL  
INSTITUTION RATIO, 1984-85.**

Block	All Medical Institutions		No. of Beds	
	Density per 1000 Sqkm.	Per Lakh Population	1000 Sq.km.	Per Lakh Population
Indore	51.6	5.0	1370.5	134.2
Sawer	3.5	21.3	47.3	32.0
Dewas	23.0	10.0	159.2	68.7
Ujjain	39.2	7.7	788.7	156.0
Ghatiya	14.7	13.8	9.0	8.3
Region	32.6	7.7	504.4	118.5
M.P.	8.3	7.0	55.0	46.8
Region as per cent of State	395.0	108.6	917.0	253.4

Source : Block Statistical Handbooks 1985.

It is evident from the above table that the density of medical institutions also has been highest in Indore followed by Ujjain block. It has been lowest in Sawer block with 3.5 per thousand Sq.kms. . But population hospital ratio (number of total medical institutions per lakh population) is highest in Sawer followed by Ghatiya, Dewas, and Ujjain blocks while it is lowest in Indore block. It means, inspite of very high density in Indore, pressure of population on medical institutions is very high. Contrary to it, Sawer with lowest density also has lowest pressure on these centres.

The number of beds in hospitals and dispensaries per thousand square kilometres has been highest in Indore block followed by Ujjain and Dewas Blocks. These blocks contain industrial poles of the region and support very high density of population. Contrary to it, Sawer and Ghatiya Blocks are industrially lagging and therefore, limited medical facilities are available at a distance. Density of such institution is very low. At the same time, their number per lakh population has been highest in Ujjain followed by Indore and Dewas. Sawer and Ghatiya blocks are again lacking in this facility also. Thus, there is evident impact of industrialization and urbanization on the distribution of medical institutions in this region. These two phenomena place this region far ahead the state average.

**ACCEPTANCE OF MEDICAL CASE :** Simply creation of medical facilities doesnot say any thing about the behaviour of people towards them. As mentioned earlier, several types of medical institutions

have been established in this region as through out the state. But less than two-thirds (59.4 per cent) of households avail these facilities. Proportion of households solely dependent on government institutions is very small (8.4 per cent). It means government institution fail to create confidence among people of this region. About half of the households who visit government health centres also go to private medical practioners; while two-fifths (40.6 per cent) of the households consult only private doctors and do not go to government institutions. They express the view that neither doctors pay due attention nor they get free medicine from these government hospitals. Further, for seeing the government doctor one has to spent a long time waiting for the doctor. The same doctor practising privately takes case of the patient, gives him psychological boosting and remains available in time usually medicines are available from the chemist's shop attached to the doctor's clinic. Thus, all facilities are available at a door step.

Delivery system can be taken as an index of adoption of modern medical care. In the traditional system prevailing in rural areas old woman of the village helps in child birth. In this region also more than three-fourths of (80.4 per cent) households take help of such old women, called 'dai' But one-fourth of the people have adopted and utilized modern facilities. About 20 households avail the facilities of maternity homes. Other seven households take help of trained nurses for child delivery. Thus people are prone to use better facilities even for such traditional bound process as the child-birth. Ofcourse, such developments are confined in villages either with P.H.C. or are very close to urban centres.

Child-care is getting more importance in comparison to other issues. It is evident from the fact that majority of pregnant women get vaccinated. Even after child-birth they take their children to health centres for vaccination. Such households constitute more than 85.0 per cent of the total households in the region. In fact, people of such villages which have easy access to vaccination centres try to utilize the available facility in pre and post maternity period. It provides protection against total diseases to both the child and the mother certainly it improves the quality of life at present as well as in future.

#### COMMERCIALIZATION OF ATTITUDE

Among the attributes of modern life, its commercial orientation is important. Commercial activities have been performed since long but their mode and forms were quite different. Barter system was most prevalent. Money-lenders performed the functions of the modern banks and so on. But now, scene has changed. Net-work of marketing system has developed and cooperative societies are playing significant rôle in this respect. People are becoming customers of commercial banks at an increasing rates. And most often, they avail loan facilities available through these banks.

It is very significant that about 50.0 per cent (71 out of 143) households have opened accounts in one or the other commercial bank. People residing in villages either are having banking facilities or are close to towns and cities, are more prone to use these facilities. It is simply because of the

nearness of the banks. However, it shows their confidence on modern banking system.

Not only that about one-third of the people have taken loan from these banks. This proves that majority of the people have the bank accounts for their savings and only few of them borrow from them. Most of them, borrow the amount for purchasing either agricultural implements and machines (18 households) or for purchasing pumping sets (23 households). It is pertinent to mention that loan provided for purchasing milk animals under the Integrated Rural Development programme is also granted through banks. There are twelve such households in this region. Thus, people, most often, have borrowed for agricultural purposes.

To avail credit facilities people are also obtaining the memberships of the cooperative societies. Again only one-third (49 out of 143) households are the members of the cooperative societies. Cooperative societies are less popular in inner circles of the industrial cities. But their significance increases with the increasing distance from them and they assume significant place in intermediate and outer zones. It would be clear from the fact that highest proportion of households having shares in cooperative societies are in Jalodia (71.4 per cent) followed by Nagwan and Gulawat villages (66.7 per cent in each) and all of them are 15 kms. away from their principal towns.

**INSURANCE POLICY :** The combined effect of increasing literacy and awareness to the risk to the life has compelled people to think about the life insurance scheme. People of this region also are taking policy, though their proportion (16.8 per cent)

in total households is quite low. But this can be taken just beginning of a major change. It tells about the orientation of the people and their leaning towards modern policies and programmes. Out of 24 households having insurance policy, 13 have insured their lives, nine have policies against their property and only two have policy for animals.

### CONCLUSIONS

Like other aspects of economy and society, the way of life of the rural people of this region has been influenced by the industrial development. The first and prime influence is urbanization. Urbanization has been defined as the distinct way of life from pure ruralites. It is characterised by the predominance of non-agricultural pursuits accompanied by high literacy, more medical and other facilities, and orientation of people towards modern way of life. These characteristics are present in the region.

Because of high density, caused due to industrialization, living conditions have been influenced. Houses are comparatively smaller near to the industrial centres and their size increases with the increasing distance from these industrial centres. But there are more provisions in houses close to towns. People are prone to use modern type of flush latrines.

Modernization has increased the dependency of the people on electricity. And as such majority of the people use electricity for domestic as well as for agricultural purposes. Impact of industrial towns declines from core to periphery zones in this respect also. Never the less, use of electric power for

productive purposes is the consequence of urban influence. Industrial centres have boosted the agricultural development of this region by providing ready and vast market for agricultural produce and by providing inputs required for raising production.

Means of transport and movement of the people also have changed enormously since life has become faster and more mechanised, people of rural areas desire to have their own vehicles. Therefore, they are switching gradually from bullock-carts to Bicycle and from bicycle to motor cycle and scooter. Number of tractors and trollies is also increasing. These vehicular means of transport are also facilitating the transport of perishable agricultural produces to markets.

Impact of industrialization on distribution of educational institutions and level of literacy is very evident. Density of these institutions per unit of area as well as population institution ratio is very high in this industrial triangle region in comparison to the state. It has manifested in very high literacy in this region. On average, 41.7 per cent of the people are literate in this region in 1981 while average of the state is only 27.9 per cent. There is definite difference in both male and female literacy. Female literacy (27.2 per cent) is nearly double of the state average of female literacy (15.5 per cent). Again, there is tendency of concentration of these characteristics in the inner zones of the industrial hubs of the region. But the increased literacy has a definite impact on attitude and behavior of the rural people. They are willing to send their daughters to schools, and try to avail

facilities if they are available in villages located at a distance such changes are very good omen.

Medical facilities are also not only providing medical care but also changing the orientation of the people. These facilities are more frequent in industrialized blocks. Nevertheless the over all density of all medical institutions is very high in the region as well as in rural areas. It is strange that people prefer to consult private practioners rather than going to public institutions. It defeats the purpose of establishing these institutions. However, people are readily accepting modern medical practices. For instance, vaccination of pregnant women and children has become popular in rural areas. Even the delivery system is changing. People are taking help of trained nurses and even are utilizing facilities of maternity homes developed for the purpose in the region.

Commercialization of orientation of the people is higher level of development. People are increasingly using bank facilities and credit facilities of cooperative societies. Realizing the risk of life and property they are also investing in insurance policies. All these changes are raising the standard of living and improving the quality of life in the region.