6. TRANSFORMATION OF INFRASTRUCTURAL FACILITIES

6.1. INTRODUCTION

Infrastructural facilities play a catalytic role in transforming the rural environment. Most of the infrastructural facilities such as transport, power, banking, and communication etc. are extended along with the pace of urban development, while their non-availability in any region causes the adverse effects on growth of the city and its adjoining areas. The existence of these facilities has a direct impact on urbanisation and in accelerating the pace of modernisation. The development of infrastructure network emerges as a prerequisite to reduce the regional disparities (100, Kuchhal, 1979, p.239) as the non-availability of adequate infrastructure facilities become the prime factor for the backwardness in several cases. It is with this purpose that spatio-temporal analysis of transport, power, banking and communication facilities has been attempted to gauge their role in transforming the rural environment in the study region.

6.2. TRANSPORT

In the present age no human settlement and its residents can survive in isolation. Some form of contact even through primitive means of transport becomes essential. The growth of economy to a large extent depends upon the development of efficient, safe, fast and dependable transport network of roads. The development of cheap and efficient means of transport becomes necessary to ensure the progress of a region with improved frequency of movement. Mobility is a sign of modernisation and development which becomes possible with the development of proper roads and railways for the inter and intra regional connectivity. Railways require huge investments for the construction and maintenance of rail tracts that is why even in the highly developed countries each and every human settlement could not be connected by rail links. Further keeping in mind the geographical environs of an area on the other hand, roads provide the most satisfactory routes for the movement of people and commodities (205, Tiwari, 2004, p.178).

Transport has been recognized as a primary infrastructure not only for socio-economic development of an individual settlement but also for a region or state as a whole, and the region under study is not an exception to this. Transport is an important means through which social, cultural and economic interactions of the people living in the region are improved. Gradually transport has become essential to the life of mankind by saving both time and labour.

Transport system is also an important element of geography and has been helping in measuring the inter and intra regional relationship between various areas and regions with the study region. It provides dependable linkages between the developed, developing and the potential regions. Thus with developing a transport network attempts have been made to reduce the gap between the developed and developing areas even in the study region. Transport has been used for the safe movement of men and material from one place to other. It is a known fact that men have struggled hard for a long time, to develop and improve the means of transport. Various products and resources can be properly utilized by transport facilities. Transport helps in carrying the products to their destination within a minimum time to ensure the availability of materials as per the growing requirements of various regions.

Transportations is considered as the backbone of economic development of any region. It has also been recognised as an important indices for initiating the urban and industrial development in a region as has been witnessed in the Ahmedabad City Taluka region.

Transport facilities too expand alongwith the development of urban and industrial activities, while their availability in a region ensures the concentration of industrial and other allied activities as has been witnessed in the study region. The availability of diversified facilities have positively favoured the pace of industrialization. The development of urban and/or rural society entirely depends on the availability of efficient transport system ultimately through which the society is benefited.

Industrial production and their distribution is directly related to the development of an efficient and fast transport system in a region and/or country. It is rightly expressed that transport in the first phase is the process of production as variety of raw materials and products are transported to the production centres and to the consumers living in different parts of the region, state or country and study region is not exception to this.

The nature and type of transport and the commercial centres of any area/region are considered as indicator for measuring the inter and intra regional relationship. The level of economic and commercial activities and their functional interrelations mainly depends upon the nature and efficiency of the transport system available in the region. The study of transport in reference to urbanisation becomes essential because transport system effects the urbanisation. Transport and urbanization are supplement to each other. Both of the activities operate side by side. Urbanisation paves a way for the development of transport at one hand while transport supports the development and expansion of the city. Transport network and means of transport are considered as the main factor in facilitating the functioning level of these activities of industrial and commercial activities and in turn these favours transformation of the transport system to meet the growing needs in any area. Because of the growing industrial activities, the concentration of diversified transport system on large scale and human perception about using the availability of transport in and around urban centers also reflects the social environment.

6.2.1. TRANSPORT SYSTEM IN RURAL AREA

Transport and means of communication of any area is considered as an important indicator in gauging the pace of development. That is why the areas having improper and inadequate transport and communication facilities are considered as socio-economically backward areas. Nature and type of transport system also depends on the pattern of landuse in the area. Pattern of land use directly influences the transport accessibility and the transport frequency in the region.

Accessibility has emerged as a problem in some of the selected sample villages because of the dilapidated condition of roads as well as the poor frequency of bus service. In the absence of proper culverts in the study region some of sample villages have been facing the problem of free movements specially during the monsoon season. Transport system is good in most of the sample villages. Barring a few which have less frequency of buses while others are well connected with the city either by Buses, shared jeeps or autos. Large part of the population also owns two wheelers for convenience. The sample villages are influenced with high degree of urbanisation can be classified as Asarwa, Bodakdev, Danimbda, Ghatlodiya, Godasar, Bodakdev, Jodhpur, Kotarpur, Memnagar, Odhav, Ranip, Vatva and Vejalpur enjoy the excellent connectivity with the rest of the city and availability of multiple options of transport.

The other category of villages include the ones where bus frequency is not good include Kali, Piplaj and Saijpur Gopalpur villages. Hanspura does not have an AMTS connection and GSRTCB bus plies between the village and the city. Some of the villages like Lambha, Hathijan, Vastral and Hanspura have got the direct benefit of Sardar Patel Ring Road and now there are more options for commuting. Sarkhej- Okaf has been connected to Ahmedabad since the seventees by AMTS buses. It was the first village which was connected by AMTS bus service. Now almost all villages are connected to the main roads and / or junctions by CNG autos. This facility has improved the vision of people as they have become more closer to the city and a direct effects can be seen on education, especially of girl child. (Table No.6.1)

S.	Sample Villages	Distance from	Туре	Rail	Railway Station		
No.		Ahmedabad city (in km)	of Road	Distance	Name of Railway Station		
1	Asarwa	4	Pucca	0.0	Asarwa		
2	Bodakdev	3	Pucca	3.0	Ambli Road		
3	Danilimbda	7	Pucca	2.0	Maninagar		
4	Ghatlodiya	12	Pucca	2.0	Chandlodiya		
5	Ghodasar	1	Pucca	3.0	Maninagar		
6	Hanspura	10	Pucca	4.0	Naroda		
7	Hathijan	17	Pucca	5.0	Vatva		
8	Jodhpur	6	Pucca	2.0	Vastrapur		
9	Kali	15	Pucca	0.0	Kali		
10	Kotarpur	9	Pucca	3.0	Sabarmati		
11	Lambha	11	Pucca	7.0	Vatva		
12	Memnagar	10	Pucca	6.0	Vastrapur		
13	Odhav	8	Pucca	8.0	Ahmedabad		
14	Piplaj	9	Pucca	8.0	Maninagar		
15	Ranip	8	Pucca	2.0	Sabarmati		
16	Saijpur Gopalpur	6	Pucca	5.0	Maninagar		
17	Sarkhej Okaf	12	Pucca	0.0	Sarkhej		
18	Shilaj	15	Pucca	5.0	Ambli Road		
19	Tragad	14	Pucca	2.0	Kali		
20	Vastral	12	Pucca	7.0	Maninagar		
21	Vatva	11	Pucca	0.0	Vatva		
22	Vejalpur	9	Pucca	1.0	Vastrapur		
23	Visalpur	17	Pucca	8.0	Sarkhej		

Table 6.1 - Ahmedabad City Taluka Region: Rail and Road Accessibility to Sample Villages

Source: Based on Village Questionnaire

Accessibility through the railways is also good with four villages having a Railway Station in less than 2 kilometers. Nine Villages have distance between 2.00 and 5.00 kms. Only Saijpur Gopalpur, Vastral, Hanspura, Piplaj and Visalpur villages have Railway Station at a distance greater than 7.00 kilometers. Bullock carts are a redundant means of transport in the sample villages. In the region practically every household has atleast one bicycle, while some families have more than one bicycle.

Transformation of Infrastructural Facilities



ASARWA



ODHAV



DANILIMBDA



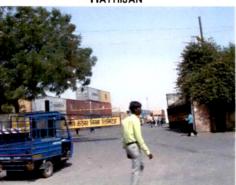
VASTRAL



HATHIJAN



SARKHEJ OKAF





KALI GHATLODIYA Photo Plate 6.1 – Ahmedabad City Taluka Region: Transport Linkages Source: Photographed by Scholar

Transformation of Infrastructural Facilities



VEJALPUR JODHPUR Photo Plate 6.2 – Ahmedabad City Taluka Region: Transport Linkages Source: Photographed by Scholar

6.3. IMPACT OF TRANSPORT

6.3.1. AGRICULTURE

In last two decades with the expansion and development of transport facilities and with the induction of various type of vehicles transport has played an important role in transforming the agricultural and other allied activities in all villages. In the sample villages one can witness an overall transformation of the rural environment. With the improvement of transport facilities ensuring the availability of modern inputs and direct accessibility to urban market agricultural production in the region should have increased substantially but the rate of converting agricultural land into non- agriculture land is higher than any other factor. Though the direct connectivity has improved the accessibility to various villages with the declaration of TP schemes. The process of development in the sample villages has reached the higher level outcourse with variations.

6.3.2. COMMERCIAL ACTIVITIES

Along with the agricultural development and expansion with the development of transport facilities the prevailing commercial activities in the sample villages too have been transformed. With these changes in the sample villages the attitude of people, approaches being adopted by them too have changed. It has been found that most of the people have started ancillary activities in and around the industrial areas, converted available land into storehouses and warehouses, etc. as leading non-agricultural activities. Over the period of time with enhanced commercial activities the frequency of the rural people visiting Ahmedabad city to sell their products and to collect the urban products have become possible only with the availability of dependable fast and safe transport system.

6.3.3. EDUCATION

Transport has also played an important role in promoting and creating educational facilities. The available data from the sample villages confirms that with improved accessibility through metalled roads and its frequency with various type of vehicles the literacy rate too has improved substantially in comparison to the villages which do not have adequate facility of transport. Among the sample villages lowest literacy rate was found in Kotarpur village while the highest literacy is found in Memnagar village.

6.3.4. HEALTH FACILITIES

During the field work most of the respondents have expressed that with the development of transport facilities accessibility to the health centres have improved. This has positively facilitated the residents to avail the health facilities as and when required without loosing time even during the rainy season.

6.3.5. EMPLOYMENT OPPORTUNITY

During the interactions it has been mentioned by the villagers that with the development of transport network and improved accessibility frequency of inter and intra regional movement has substantially improved. With this improved movement of men and materials the occupational structure of various sample villages has changed. Such a change has also improved the movement, and the composition of shops, cloth stores and hair saloon etc. The proportion of the people employed in the construction works and various industrial sectors located in Ahmedabad city taluka region has increased.

This is how various processes of transformation occured and still occuring in the region with the expansion and development of transport facilities. This has emerged as the most effective way to initiate the changes in the rural life and to a great extent influenced the activities of local people. Transport is considered as the blood vessels of Indian rural economy and Ahmedabad city taluka region under study is not an exception to this.

6.4. MEDICAL FACILITIES

In several ways health of the people has been influenced by the pace of urbanisation. Though over the period of time health facilities have been created and further strengthen along with other developmental activities in and around the urban centres. Health, which directly affects the capability, working skill and well being of the population, is one of the basic considerations in regional development (89, Kayastha and Singh,1981, p.29). It is described as the state of complete physical, mental and social well being and not merely an absence of disease of infirmity (1, Agnihotri, 1987, p.215). According to stamp "the good health, whether applied to men or to any living animal or plant, implies that the complex organisation is functioning correctly and in harmony with its environment. That is why health planning has become a major component of development planning from national to local level. In last few decades health planning has become necessary for the economic and rational utilization of manpower, material and resources (Table no.6.2).

Human community has been suffering since long from various diseases due to non-availability of adequate health care facilities and efficient system. This is an area where most of the villagers remained dissatisfied by the level of health facilities available in their respective villages. Respondents expressed that at times they have to cover long distance even more than 12 kilometers to reach Civil hospital. Most of the villages have no health facility and are without medical store except some routine medicines available with the grocery stores. There are three civil hospitals where people usually go i.e. Civil Hospital in Meghaninagar and Maitri Hospital in North, Sola Civil Hospital in West and L. G. Hospital, Maninagar in East. However, there are good health facilities available in Sabarmati and D-cabin which is the Railway Yard area. Isanpur in east also has some good health facilities. Residents of the sample villages usually have to go to one of these hospitals which ever is closer in their respective direction or the transport facility is available to them.

Sarkhej-Okaf has a hospital in the village area itself. With the expansion of private medical facilities, medical stores are also available in large numbers. Urbanised villages like Asarwa, Bodakdev, Danimbda, Ghatlodiya, Godasar, Bodakdev, Jodhpur, Kotarpur, Memnagar, Odhav, Ranip, Vatva and Vejalpur have good health facilities, even some of them housing state of art specialized medical facilities. These villages also have the variety of choices to pick and choose considering their need and affordability.

S.	Sample villages	Hospitals		Medical Stores	
No.		Distance (in km)	Place	Distance (in km)	Place
1	Asarwa	1	Asarwa	0	Asarwa
2	Bodakdev	0	Bodakdev	0	Bodakdev
3	Danilimbda	0	Danilimbda	0	Danilimbda
4	Ghatlodiya	1	Sola	0	Ghatlodiya
5	Ghodasar	3	Maninagar	0	Ghodasar
6	Hanspura	4	Naroda	4	Naroda
7	Hathijan	10	Maninagar	4	Vatva
8	Jodhpur	0	Jodhpur	0	Jodhpur
9	Kali	2	Sabarmati	0	Kali
10	Kotarpur	2	Hansol	0	Kotarpur
11	Lambha	5	Narol	0	Lambha
12	Memnagar	0	Memnagar	0	Memnagar
13	Odhav	0	Odhav	0	Odhav
14	Piplaj	10	Isanpur	2	Shahwadi
15	Ranip	5	Asarwa	0	Ranip
16	Saijpur Gopalpur	10	Isanpur	2	Shahwadi
17	Sarkhej Okaf	0	Sarkhej	0	Sarkhej
18	Shilaj	3	Theltej	0	Shilaj
19	Tragad	2	Sabarmati	2	Sabarmati
20	Vastral	4	Odhav	4	Odhav
21	Vatva	0	Vatva	0	Vatva
22	Vejalpur	0	Vejalpur	0	Vejalpur
23	Visalpur Based on Village Quest	6	Sarkhej	0	Visalpur

Table 6.2 - Ahmedabad City Taluka Region: Medical Facilities - Government and Private

Source: Based on Village Questionnaire; includes private facilities also

The villages like Visalpur, Vastral, Shilaj, Piplaj, Saijpur Gopalpur, Lambha, Hathijan and Hanspura are severely lagging behind in medical facilities. People of these villages have to depend on the medical infrastructure available in the city not only for emergency but even for routine checkups.

Vetenary doctors are also not readily available. Respondents of the sample villages usually call doctors from the nearby villages like Lambha, Naroda, Kowah (20 km from Hathijan), Chandlodiya and Kasindra.

6.5. COMMUNICATION

The history of modern postal system in India may be traced back to 1937 when postal services were started to the general public. The postal department was set up in 1854 (211, Vashistha, 1985, p.214). Today it is playing a vital role and is considered as an important index of infrastructure facilities helps in transforming the areas. All the sample villages have post offices and with the present day improvements in telecommunication, there are private, public telephones along with a very strong network of mobile phones. Every village has one or more service provider having a tower in the village further improving the communication level of the study area. However after the addition of various private companies in this sector the facility practically has reached to all villages. With the expansion of the communication facilities apart from the availability of these facilities it has also provided employment to unemployed and educated youths.

6.6. DRINKING WATER FACILITIES

Assured and adequate supply of pure and treated drinking water is an essential requirement of every one and the residents of the region are not an exception to this. All villages get drinking water from the bore wells,

which were originally made by Panchayats and now are operated by Ahmedabad Municipal Corporation. Water is supplied twice in a day for 1-2 hours. Almost all houses have independent tap connection. Supply timings are staggered in different areas to maintain the pressure of water flow. There were exceptions in Visalpur and Lambha villages where tap connections in Scheduled Tribe areas were not independent but are shared by 3-4 families.

Quality of drinking water is bad in Kali where people have to buy water from outside sources. In Kotarpur quantity is not adequate and the people collect water from nearby societies. Gutter line and drinking water line are getting mixed up in Kali and Piplaj villages and gradually the problem is becoming deeper and serious due to non-accomplishment by the functinaries of Ahmedabad Municipal Corporation. However in the recent past most of the works were being accomplished in minimum time under the Panchayats. With the analysis of collected data has helped the researcher to understand the prevailing situation about the availability of water, their sources and improper management.

6.6.1. SCARCITY OF DRINKING WATER

As the problem of scarcity of adequate fresh water has start emerging in the recent years even in most of the rural areas of the study region. Growth of population, changing life style, increasing use of water in irrigation, depleting water sources and poor management of water resources together can be made responsible for the prevailing situation. Similarly depleting water levels too can be made responsible for the present situation. Even some of the perennial water sources are being used to supply water through tankers to the adjoining urban localities neglecting the rural poor. On the other hand the changes in the pattern of rainfall too has been recorded considering the quantum of rainfall, number of rainy days, changing duration of rains and the frequency of rainfall too is responsible for the slow recharge of water levels.

Depletion of ground water level has constantly been reported and in Odhav, Vatva and Hanspura villages the problem of ground water pollution and streaking water level has been reported.

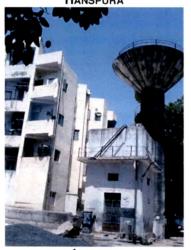
As contact with urban people is increasing and due to the improvement in the awareness cent per cent villagers have start voicing against certain social evils like Child marriage, Untouchability and traditional customs etc. As a result of increasing urban influence most of residents of these villages are getting better opportunity of employment and their life scheduled has also become very busy, so they can not participate/involve in social and community activities, while they extend financial support for the conduct of such activities. In case of female education, among these villages the ratio of educated women has increased. They have also been inspired with urban environment and have start thinking to live like the urban women. Their standard of living and life style too has changed. Accordingly to improve their living they have start using new products available from the market instead of the old

traditional items. As a result at times their expenses during certain occasions like festivals has increased. Due to busy schedule at work place most of the people fail to spent their time with family, relatives or to participate in social activities.





LAMBHA



JODHPUR



Photo Plate 6.3 – Ahmedabad City Taluka Region: Status of Water Supply Source: Photographed by Scholar

6.7. DRAINAGE SYSTEM

Villages need gutter lines to dispose off wastewater generated through day to day activities. There are few villages which have gutter lines for the last 20-30 years, while recently some of them have also been provided with this facility, as late as 2001-02. Still there are some sample villages which do not have proper gutter lines. This adds to the unhygenic surroundings in village and with high intensity the problems relating to mosquitoes accelerates. Hanspura, Kotarpur, Vatva, Vastral and Shilaj villages do not have gutterlines. While 80.00 per cent of gamtal is covered by gutter-line in Visalpur village. The provision of this facility mainly depends on the grant allocated to each village under various expenditure heads. In Lambha village some areas has been covered with the gutter line. There are open gutter lines in Sarkhej-Okaf adding to the mosquito misery. Maintenance of gutter lines by AMC is also a problem in most of the sample villages having the gutter lines as has been reported by the residents of Piplaj and Kali sample villages.





VISALPUR

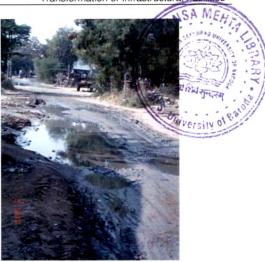




HATHIJAN LAMBHA Photo Plate 6.4 – Ahmedabad City Taluka Region: Drainage Source: Photographed by Scholar

Transformation of Infrastructural Facilities





KALI VASTRAL Photo Plate 6.5 – Ahmedabad City Taluka Region: Drainage Source: Photographed by Scholar

6.8. Power And Energy

Electricity is vital part of infrastructure, which is required for development. It is considered as a major input for initiating development in various fields has a various types of socio-economic and social implication (47, Desinga,1975, p.681). Human progress depends upon the nature and availability of energy and the capacity to work. Indeed the advancement of civilization has been marked or enriched by improvement in the supply and use of energy in different phases. The power sector of economy is an integral part of sound infrastructure and to a great extent serves the variety of economic activities hence electric power is a vital factor in enhancing the pace of development of an economy (184, Singh, 1978, p.28).

Over the years the development of transmission network to electrify the rural areas has emerged as an important and necessary infrastructural facilities. Rural electrification has significantly transformed the rural areas, specially in irrigation, commercial and rural industrial sectors, along with domestic and civic sector. With expansion of electrification not only individual families but all villagers have been benefited individually and collectively with the provision of electrification. Increasing use of electricity is considered as an indicator to gauge the living standards of the rural people. All selected sample villages in the region are electrified, and in last few years per capita consumption of electricity has increase substantially. Generally, in most of the sample villages electricity is used by the domestic sector followed by irrigation, commercial and industrial sectors. The supply of electricity to the region is by two different sources. Gujarat Electricity Board (GEB) provides electricity for agriculture for about 8 hours per day in varying time periods. Power cuts are very common in the GEB supplied electricity. Ahmedabad Electricity Company supplies electricity for domestic, commercial and industrial purposes. The power supply is not subsidized and usually remains uninterrupted.

The facility of streetlighting is also an important facility that has been provided practically in all the sample villages and is installed by Panchayats. However the problem of its maintenance is being reported from every villages. However Hanspura, Vastral and Piplaj villages especially have expressed their dissatisfaction about the poor maintenance resulted the non-functioning.

Villagers are also using electricity for the commercial activities and smallscale industrial units existing in the villages. Most of the residents are having the domestic connections and also use it for various nonagricultural and other activities. Electricity has also yielded large number of direct and indirect benefits to individuals and to the village community. An attempt has been made to analyse the perception of these benefits relate to gainful activities as an outcome of rural electrification and its impact on the reading habits and improvement of entertainments facilities. Under the commercial uses of electricity includes the business, shops, hotels and other allied activities. In most of the sample villages the shops and hotels are being developed in the small portion of their residential houses. All these are the part of their houses.

6.9. BANKING

The development of banking is a function of necessity, facility and propensity mix. The first condition is that the people should feel the need of having a bank in an area for which their perception of Banks have to be changed. This relates to the level of their economy. The second condition is the availability of the banking organisations. Lastly, the propensity to use banking facilities is related to the educational level of the people.

Even in the Urbanised villages like Asarwa, Bodakdev, Danilimbda, Ghatlodiya, Ghodasar, Jodhpur, Memnagar, Odhav, Ranip, Sarkhej-Okaf, Vatva and Vejalpur are having the banking facilities. Some of the villages have witnessed the opening of new branches of banks in recent years. Hathijan has Bank of Maharashtra, Shilaj has Dena Bank branch and Visalpur has a branch of State Bank of India. There are no banks in Hanspura and adds to another factor for dependency on Naroda. Kotarpur has Bank branches on the outskirts of the villages in the urban areas surrounding it. Kali village has a infrastructural support from the container terminal and D cabin. Lambha has no bank facilities, the nearest bank is at Narol village but there is a Sewa Sahekari Mandal which gives loan to villagers for purchase of seeds, etc. In Tragad village people have accounts in branches of banks located at D cabin. There is no bank in Action Force Camp. There is a Sahekari mandal to help for dairy and agricultural activities.

In the study region 66.76 per cent households are using banking facilities. Urbanised villages like Asarwa, Danilimbda, Jodhpur and Memnagar most of the respondents have their accounts in one or the other bank. This is followed by Kali, Vatva, Ranip, Sarkhej Okaf and Visalpur with 90.48, 90.00, 83.33, 76.47 and 75.00 per cent respectively. On other hand Ghatlodiya, Ghodasar, Shilaj, Bodakdev, Tragad, Odhav, Hathijan and Piplaj have medium proportion with 69.57, 64.29, 62.50, 60.87, 60.00, 59.09, 50.00 and 40.00 per cent respectively. Whereas in the remaining six villages minimum proportion 12.50per cent in Vejalpur to 34.62 per cent in Vastral are availing banking facilities (Table no.6.3)

In the region more than 47.16 per cent households are availing banking facilities for commercial activities, followed by housing, agriculture, vechile and dairy activities i.e. 35.55, 6.55, 5.68 and 5.16 per cent respectively. In case of agricultural activities banking facilities are mainly used for the purchase of tractor, electric pump, sprinkler, tube well and fertilizers etc.

In case of loan for commercial activities Vejalpur and Kotarpur sample villages have used cent percent loan for commercial activities only, followed by Kali, Ghatlodiya, Memnagar, Ghodasar, Jodhpur, Asarwa, Lambha and Saijpur Gopalpur villages having medium proportion with 63.16, 62.50, 60.00, 5.55, 55.17, 50.00, 50.00 and 50.00 per cent respectively. While in Hanspura, Piplaj, Hathijan and Tragad non of the respondents have taken loans for commercial activities. The banking facilities are used mainly for engineering works, cloth stores and grocery shops etc.

Availing loan facilities for housing purpose has recorded substantial increase in the last five years. Villagers have started constructing building houses with all the latest facilities and furnishing as is done in any urban center. With 35.55 per cent of the total respondents using bank facilities for housing this trend is further reinforced. In Bodakdev and Ranip villages more than 50.00 per cent of the respondents have availed the banking facilities for housing activities. Still there are some villages like Hanspura, Piplaj, Hathijan, Visalpur, Saijpur Gopalpur, Vejalpur and Kotarpur where villagers have not availed the loans for housing as provided by banks under various schemes.

Due to decrease in agricultural activities there is a decline in availing the banking facilities and with a meger 6.55 per cent have used banking facilities in the sample villages ascertains such changes. Only 43.48 per cent villagers have been using bank facility for agriculture activities ranging from 100.00 per cent in Hanspura to 7.69 per cent in Sarkhej- Okaf.

With the pace of urban expansion vehicles have become and important means of connectivity and positively helping to enhance business opportunity for people living in the sample villages. This is ascertained by the fact that 5.68 per cent respondents have taken loan for the purchase of different types of vehicles. The proportion is maximum in Hathijan with 50.00 per cent respondents availed the banking facilities for this purpose. Still in 65.22 per cent villages non of the respondents have taken loan for the purchase of the purchase of vehicles.

With reducing space of gaucher land and with rising rates of land conversion to non-agriculture purpose, activities relating to livestocks are being adversely affected. Though due to increasing pressures of urbanisation, demand of milk has gone up but this could not stop selling of cattle in high proportions. With only 5.16 per cent respondents in the villages of Danilimbda, Kali, Asarwa, Odhav, Saijpur Gopalpur and Piplaj villages are investing in dairy production. It appears that this activity will require some more time for further development in the rural areas beyond the Ahmedabad urban expansion.

S.	Sample Households Purpose of Utility						
No.	Villages	availing Banking Facilities	House	Business	Agriculture	Dairy	Vehicle
1	Asarwa	100.00	30.00	50.00	0.00	20.00	0.00
2	Bodakdev	60.87	50.00	35.71	14.29	0.00	0.00
3	Danilimbda	100.00	47.62	42.86	0.00	9.52	0.00
4	Ghatlodiya	69.57	37.50	62.50	0.00	0.00	0.00
5	Ghodasar	64.29	33.33	55.55	11.11	0.00	0.00
6	Hanspura	33.33	0.00	0.00	100.01	0.00	0.00
7	Hathijan	50.00	0.00	0.00	50.00	0.00	50.00
8	Jodhpur	100.00	44.83	55.17	0.00	0.00	0.00
9	Kali	90.48	26.31	63.16	0.00	11.65	0.00
10	Kotarpur	33.33	0.00	100.01	0.00	0.00	0.00
11	Lambha	20.00	25.00	50.00	25.00	0.00	0.00
12	Memnagar	100.00	40.00	60.00	0.00	0.00	0.00
13	Odhav	59.09	23.08	38.46	0.00	30.77	7.69
14	Piplaj	40.00	0.00	0.00	50.00	50.00	0.00
15	Ranip	83.33	53.34	46.67	0.00	0.00	0.00
16	Saijpur Gopalpur	33.33	0.00	50.00	0.00	50.00	0.00
17	Sarkhej Okaf	76.47	38.46	23.08	7.69	0.00	30.77
18	Shilaj	62.50	40.00	40.00	0.00	0.00	20.00
19	Tragad	60.00	33.33	0.00	33.33	0.00	33.33
20	Vastral	34.62	33.33	22.22	33.33	0.00	11.11
21	Vatva	90.00	22.22	44.44	0.00	0.00	33.33
22	Vejalpur	12.50	0.00	100.00	0.00	0.00	0.00
23	Visalpur	75.00	0.00	33.33	50.00	0.00	16.67
Tota		229	81	108	15	12	13
Perc	Percent 66.76		35.55	47.16	6.55	5.16	5.68
Source:	Source: Based on Household Questionnaire						

Table 6.3 - Ahmedabad City Taluka Region: Availability of Banking Facilities

Source: Based on Household Questionnaire

Due to the nearness with Ahmedabad city and availability of frequent and fast transport, different modes are available to the villages like other facilities similar to Ahmedabad city. People in sample villages are constructing their own houses in these villages. As a result these villages are speedily urbanised in last three decades and the socio-economic status of these villages has further been increased substantially.

6.10. EDUCATION

Education is the most important cultural quality of the population. In fact, it is the education, which distinguishes between culture and societies. It sharpens the inherent qualities, widens the levels of perception and modernises the attitude of the local people. Thus, it increases the possibilities of interaction and it prepares the platform for launching developmental programmes/ activities. Though there is no direct and clear-cut cause and effect relationship between education and development. With this fact in mind, Bogue concluded that 'a creation at a minimum level of literacy seems to be required for a population to break out of the vicious circle of subsistence economy into full participation in the modern world economy based on complex technology and intricate system of specialisation and exchange' (21, Bogue, 1969, p.96).

All villages in the region have a facility of primary school managed by Gujarat State Primary school education which provides teaching up to class 7. The level of urbanisation and the year when they have become a part of AMC can classify the sample villages. Thus Asarwa, Bodakdev, Danilimbda, Ghatlodiya, Godasar, Jodhpur, Kali, Kotarpur, Memnagar, Odhav, Ranip, Sarkhej-Okaf, Vatva and Vejalpur villages do not have all types of educational facilities in the village but the surrounding areas havemany private schools, colleges, training centers, institutes, etc. Options to study in different medium such as English, Gujarati, Hindi and Urdu are also available. This is due to the mixed migrant population and demand for the same. Though people have different perception about educational standards. About government schools, general feeling is that the standard of teaching and sincerity of the teachers in these schools is always questionable. The teachers are not serious about their pupil. Since they come from different areas in and around Ahmedabad, the attendance and duration of their stay in schools is always minimum and casual. The number of students is also manipulated since it determine the number of teachers suppose to be present for teaching.

Respondents in Godasar expressed that the pre-school nursery which was run by Panchayat has proved to be very beneficial to the villagers but was discontinued due to AMC format of schooling. There are certain villages that are in transition era and schools directly suffer in standards because of this. The students have to move elsewhere for further studies, which at times become difficult with the parents having limited income and affordability to such private schools has an issue. Students of Hanspura move to Naroda, Lambha move to Shah Alam, while students from Piplaj move to Isanpur, from Shilaj go to Theltej, Tragad move to D Cabin, Vastral move to Odhav and in Visalpur people who can afford sent their children to good English medium schools covering a distance of 17.00 kilometers at Ahmedabad.

With the availability of developed infrastructure facilities the economy of villages has been strengthened and as a whole with the establishment of infrastructure, process of their development, not only the functioning has been transformed but the quality of life and qualitative as well as quantitative changes in the living standards too have been noticed in many sample villages of the study region.

6.11. SPECIAL DEVELOPMENT OF VILLAGES

With the expansion of Ahmedabad City area, Ahmedabad Urban Development Authority has been created to initiate the Development Plan 2011 and various Town planning schemes have been proposed for the adjoining areas located on periphery of the city including the villages, which have been recently included to the Ahmedabad Municipal Corporation. The list of TP schemes proposed for the sample villages of the study region have been tabulated in table 6.4.

	 Ahmedabad City Ta 	aluka: TP Schemes by AUDA
S.No.	Sample Villages	TP Scheme no.
1	Asarwa	Part of Ahmedabad City
2	Bodakdev	1/A, 1/B, 50, 51, 52, 213
3	Danilimbda	Part of Ahmedabad City
4	Ghatlodiya	Part of Ahmedabad City
5	Ghodasar	Part of Ahmedabad City
6	Hanspura	109
7	Hathijan	72, 116
8	Jodhpur	Part of Ahmedabad City
9	Kali	Part of Ahmedabad City
10	Kotarpur	Part of Ahmedabad City
11	Lambha	
12	Memnagar	Part of Ahmedabad City
13	Odhav	1, 2, 3, 104, 112
14	Piplaj	-
15	Ranip	Part of Ahmedabad City
16	Saijpur Gopalpur	-
17	Sarkhej Okaf	-
18	Shilaj	53/A, 216, 217
19	Tragad	-
20	Vastral	105, 106, 113, 114
21	Vatva	Part of Ahmedabad City
22	Vejalpur	Part of Ahmedabad City
23	Visalpur	
Source: /	AUDA	

Table 6.4 - Ahmedabad City Taluka: TP Schemes by AUDA

Finally it is concluded that with the expansion and improvisation of various infrastructure facilities rural environment of the sample villages under study has been transformed. This easily can be gauged by interacting with the residents and can be witnessing with the pace of non agricultural activities being introduced and gradually transformed within a short period of time.