A GEOGRAPHICAL APPROACH TO PLANNING

B.J. Collins in his "Development Plans Explained" calls Town and Country Planning 'the organising of building and land use in pursuance of an express scheme of urban or rural evolution."\(^1\) Town and Country Planning is the technique of using the land, deciding the character and location of buildings, and communication lines so as to derive the maximum degree of beauty, economy and service.

All development of land is in a sense planned. A town grows in a region as a result of the regional demands for a collecting, distributing and service centre, an administrative centre or a social and cultural centre or an industrial centre. A particular settlement in a region attracts to itself these functions because it has a nodality. This nodality may be the result of centuries of growth, technical developments in communication, social, political and economic changes in the region. A town is able to support its population only if it can draw upon the primary resources of the region. In a planned economy the nodality of the town and its capacity to draw upon the region, is achieved through conscious

---

planning of the communications, of the mineral and agricultural resources of the region and the functions of the town. In an "unplanned" economy all these factors exist but they evolve as the need arises.

Whether planned, or unplanned a town is part of a region and the planning of a town cannot be undertaken without due consideration given to its region. They are mutually dependent on each other. The town draws its raw materials from the urban field while the urban field gets the services of the town. There is a strong economic bond between the town and the urban field. Development of the urban field will increase the commercial activities and industrial productions of the town. Economic conditions of the farmers in the urban field will ultimately affect the prosperity of the town. Poor economic conditions of the farmers can be improved by the improvement of agriculture.

Kispenswanj has grown as a small industrial and commercial centre mainly by utilising the cotton and groundnut grown in the region. The cotton growing villages of the region lack irrigation facilities. There are few wells in this region but due to rocky bed they do not supply water throughout the year. The Government authorities can help the farmers by constructing tube-wells
or canals from the Kadana Dam which is being constructed on the Mahi River. The groundnut growing villages have better facilities of well irrigation but many of them are still without electric pumps. Apart from these irrigation facilities, soil conservation schemes should be implemented which will preserve the fertility of the soil. A scientific rotation of the crops, use of pesticides and insecticides and improved varieties of seeds and implements would improve the productivity of the region on which Kapadwanj depends for its industries and commerce. The few schools which give courses in agriculture are not adequate enough to train the farmers in the techniques of farming.

Increased production in the urban field should be supported by the improvement of the transport lines which link the town with the country. Six roads converge on the town and of these, four are tar roads and two are metalled roads. The metalled roads are to the north of the town and connect the town with important villages like Moti Zer where groundnut is a very important crop. These roads should be improved and extended to Choila via Narsipur. The groundnut growing villages of the north need better roads to transport the commodity to the town. In the west the River Vatrak cuts off the link between the villages and the town during rainy-season.
If this river is bridged at Attarsumba and the Attarsumba road is extended upto Ahmedabad, Kapadwanj will be able to draw the resources of a larger region. The Kapadwanj - Balasinor road is kachcha and should be tarred so that the cotton growing villages of this area have better communications to the town.

The mode of transport is still mainly the bullock cart. A few rich farmers use trucks or tractors to bring the commodities to the town. Individual farmers cannot afford to own trucks but the Gram Panchayat or the Agricultural Produce Market Committee can purchase the trucks and rent these to the farmers on a no profit - no loss basis.

The railway links of Kapadwanj are poor. It is away from the Ahmedabad-Bombay railway line. It is joined to this main line only by a narrow gauge line from Nadiad. This narrow gauge line has done little to facilitate the commercial activities of the town. This line should be converted into a broad gauge line and extended to Udaipur so that the cotton and groundnut growing areas may take advantage of this line. Another broad gauge railway line should be constructed connecting Kapadwanj with Ahmedabad and Indore via Godhra. This
line will encourage the commercial activity between Gujarat and Madhya Pradesh, the western part of which also grows cotton.

Cotton Ginning and Pressing and oil crushing are the two main industries of the town. Apart from these industries other small scale establishments are those making glass and soap, rice, pulse and flour mills. There is good scope for the expansion of these industries. At present the seeds of Digvijaya cotton are sent outside for extraction of oil. But these industries can be established in the town itself.

Milk and vegetables are commodities needed by almost all the people in the town. There is no organised system for the distribution of milk in the town. The Amul Dairy (Anand) collects milk from the surrounding villages and takes it to Anand. In collaboration with the Amul Dairy the distribution of bottled milk can be arranged for the town.

Non-perishable vegetables come to the town from other towns of Gujarat but perishable vegetables are collected from the surrounding villages. Villages like Torna and Antroli are the main contributors of this commodity. Preservation of the vegetables can be done by the construction of a cold storage plant in the town. There is also scope for a poultry farm in Kapadwanj. There are a good number of Muslims in the town who are non-vegetarians. A poultry farm can help them.
"In planless urban growth, congestion and slums overtake the city, traffic condition get chaotic, sanitation becomes a casualty and need capital improvements, services and facilities lag behind. The eradication of these evils and deficiencies at a subsequent date costs much more than their timely provision on the basis of foreseen requirements." The residents and administrative authorities of the town should make collective effort to eradicate these evils.

WATER SUPPLY AND CONSERVANCY SERVICES:

The Municipal authorities have constructed two R.C.C. reservoirs which can store 230,000 litres of water. There are 5811 houses which accommodate 30,748 persons in the town. There are however, only 2,000 tap connections and 96 standposts in the town. The number of connections and standposts should be increased and the water made available throughout the day.

The town has underground drainage system but most people cannot make use of this facility because of low incomes. The socio-economic survey reveals that 32% of the houses, accommodating 33.95% of the population are without lavatories and only a few have flush latrines.

The Municipality is responsible for keeping the town clean but there are very few dust-bins in the town, so that the refuse is thrown anywhere making the town quite dirty.

HOUSING:

In 1951 there were 4607 houses and 22,319 people in Kapadwanj giving an average of 4.8 people per house. Since then the population has increased to 30,748 and the number of houses to 5811 in 1971 which gives about 5.3 people per house. These 5811 houses are built in about 1030 acres giving an average density of 5.6 houses per acre. This congestion of houses affects the ventilation of the town. There is no open space within the town wall. Houses are built in all available space. The socio-economic survey reveals that 22% of the houses surveyed are Kachcha. Crowded and poorly built houses give the townscape a very poor appearance. Hanumanpura, Islampura, Gopalpura and Karsanpura are areas where Kachcha houses predominate. The residents of Islampura have very few facilities and it is an area which should be improved.

All the Kachcha houses should be improved and should be given better facilities. New residential localities should be constructed along the Nadiad and Dakor Road. The area along Modasa road may be maintained exclusively for industries.
STREET AND ROAD PATTERN:

The network of streets and roads show that while their total length is sufficient their pattern is archaic. The existence of irregular Wadas in olden days and the tendency of people to stay as near as possible to each other have created the present network of streets. These streets are very narrow and winding. To reach the main road one has to pass many crooked lanes. Easy approach to the main road by straightening the side roads will greatly benefit the town people. The two main roads, the Bazaar road and the Antisar gate road have the maximum amount of shops and all the commercial activities are along these roads. The Antisar gate road is comparatively straight but the Bazaar road is very crooked. Both these roads are also very narrow in width and there are not provided with foot-paths. The shops are so small that customers cannot enter them and they have to buy goods standing on the roads. This type of buying and selling creates congestion on the roads. The congestion is made worse by the presence of water stands on the Bazaar road. These two roads must be widened and water stands provided in a more suitable place.

Lambi Sheri which connects Antisar gate road and Azad Chowk also needs widening. Some scattered shops are
combing up along these streets and many will come up in the future. The road which separates Patelwada and Nani Voharwad should be extended up to the town wall and exit should be created for Nani Voharwad by demolishing the town wall. Gopalpura is connected with the Modasa road and Station road by Kachcha roads. These two kachcha roads should also be made pakka. Traffic between the railway station and the S.T. bus stand.

TRAFFIC:

The S.T. Bus Depot and the Industrial Zone of the town are the two traffic generating points in the town. The present site of the Bus stand is opposite the J.B. Mehta General Hospital on the Nadiad Road. Buses run on this road from early morning to late night and cause inconvenience to the patients in the hospital. Islampura area would be a more suitable site to locate the Bus stand as roads from Modasa, Dakor and Nadiad meet at the present site of Islampura. The railway station is also near this site. Bus services should be provided also from the railway station to the college campus. Railway passengers can also take advantage of these bus services.

The traffic to the Industrial Zone does not enter the town as the Zone is outside the old walled town. But the trucks coming from Attarsumba in the west have to go through the town to reach the Industrial Zone. This
traffic may be diverted to the north of the present town.

**INDUSTRIES:**

The Industrial Zone is outside the Antisar Gate and it is away from the residential area. Only two industries i.e. cotton and groundnut oil are situated in this area. The area is quite extensive to accommodate the present industries and its transport facilities are adequate. But there is scope for other industries in the town. As mentioned earlier a plant for the extraction of oil from cotton seeds should be started in this zone. Other industries like glass and soap making industries may be expanded and located in this zone. A factory for Agricultural implements could also be started. There is a good demand for tiles and hume pipes in the surrounding villages for constructing houses and irrigation lines. Some service industries like electrical repair works, repairs of oil engines, turbine pumps, tractors etc. are also needed in the town.

**SHOPPING AREA:**

Small service centres should be located in different residential localities. At present the Main Bazaar Area serves not only the residents of the town but it also serves the surrounding region. Residential buildings situated in the M.B.A. should be converted into commercial shops or other establishments.
HOSPITALS:

There are a good number of dispensaries and hospitals in the town but there is a scarcity of specialists like Dentists.

RECREATION:

Public gardens and cinema theatres play an important role in recreation. There are two cinema houses in the town but only one public garden (Gandhi Baug) which is not sufficient for town population.

EDUCATIONAL INSTITUTIONS:

There are a good number of educational institutions in the town but a separate institution should be started for advanced training in agriculture and dairy farming.