CHAPTER - VI

THE TRANSPORTATION SYSTEM

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References.
6.1 INTRODUCTION

The investigation of the hierarchical pattern of the periodical cattle market centres of the district has been made in the previous chapter. The eleven indicators of 55 scores have been used for the determination of hierarchical orders of cattle markets. The hierarchical study of cattle markets has provided the basis for regional planning and development. Three orders of cattle market centres have been searched out from the scores in the district. The first order cattle markets are from urban areas and they are the most vigorous cattle market centres as compared to the second order and third order market places. The second order market centres have limited market functioning. Besides, the third order market places have less economic activities and the social provisions are negligible. In spite of these three orders of cattle markets of hierarchy in the district, they have a distinctive significance for interrelationship. In other words, although they have different orders of cattle markets, they are correlated with one another.

The transport system plays an important role in the development of cattle markets. Therefore in this chapter, the transportation system of the district is expounded. The well developed infrastructural facilities in terms of transport technology has promoted the growth, development and expansion of marketing activities. The itinerant sellers, buyers, the cattle traders are dependant on the transport facilities to visit one market to another. The outward movement of cattle is mainly relied on the means of transport. The transport facilities are an index of accessibility of individual market centre. The roads and the railway lines can help to uplift rural cattle market places and they can reach the main stream of economic life. According to Mr. Saxena (1975) "Transportation and market centres are two
limbs of a single economic activity which essentially form a part of economic geography". Thus, transport provisions play a pivotal role, not only in aiding economic and social development, but also in creating new link with proximate periodic cattle market places in any region.

The transport system is very much related to the hierarchy of the cattle markets. The routes and means of transport by which the cattle are moved are of great significance. In this chapter, an attempt has been made to explain the existing transportation system, types of transport, intensity of transport system, the relationship of the network of transport with cattle markets, and the cross route nodes.

The transportation is the life and blood of civilization and constitutes an important item of infrastructure for socio-economic and cultural growth. It projects the standard of living of a particular place at a given point of life.

Market sites are mainly located on the roads, railways. The first grade and the second grade market centres are mostly located on the National Highways, State Highways and Railway lines. Such market centres are serviceable and convenient connections by buses with various market centres within or the outside region. The accessibility to market centres in Aurangabad district is facilitated by the bus frequency and rarely by train frequency.

The various types of goods, commodities etc. the living animals like horses, goats, buffaloes, cows, bullocks are transported by means of transportation. But there is a difference between the movement of goods and cattle. Firstly the movement of any animal or cattle requires day to day availability of water, fodder to feed them and in case of any disease in journey, the proper medical care is essential to
save such animals. Secondly, the cost of movement of cattle is comparatively higher than the goods. Thirdly, as compared to the transport of goods or various commodities, the more time requires for the transport of animals by trekking than that of goods to cover the same distance.

By walking distances the cattle are brought to the cattle market places by the professional cattle drovers or by the owners of the cattle. The transportation of cattle to the cattle market is an important marketing problem with which sellers, buyers or cattle traders are equally concerned. The selection of the means of transport to carry cattle is fixed by the sellers, purchasers or cattle traders according to the circumstances, which means of transport is to be used. For instance, when the distance involved is long and demand at the market place is very urgent, in such situation, the speedy means of transport is preferred. The fleshy cattle, milch cattle, especially milch buffaloes cannot travel longer distance on hoof. In such case if the longer distance is travelled by milch cows or buffaloes on hoof, the physical condition and the milk yielding capacity of them can reduce. Therefore Mr. Sidhu (1966) has rightly stated that "the need to transport animals by rail or by trucks is dependant on the availability and the distance involved".

In Aurangabad district, there are 42 cattle market places. Out of these cattle market places, 3 markets are linked with railway lines and 26 markets are linked with State Highways. 14 markets are connected with district roads and 3 of them by village roads. The first grade cattle markets namely Aurangabad, Paithan, Vaijapur and Kannad are linked with the major transport routes. Aurangabad cattle market is developed due to rail and road transport whereas Kannad and Paithan markets are developed due to convergance of roads from different sites. The rise and fall of the market place is mainly dependant on the transport facilities. In Aurangabad district, there is no such cattle
market place which is not approachable directly by bus or by railways, even on market day, during the market schedules or because of interior location.

6.2 MEANS OF TRANSPORT

The major means of transport are namely land transport airways and waterways. Aurangabad district has not coastal area, so waterways are not practised and airways are rarely used by cattle traders due to very high rates of fares of aeroplane. In emergent situation, the cattle traders can fly by aeroplane from Aurangabad aerodrome or can reach Aurangabad for marketing activities. Therefore the land transport is the most important for the participants to reach cattle markets; with or without cattle. The means of land transports used by the participants to visit cattle markets in the Aurangabad district with percentage are given in the following table.

Table No. 6.1

MEANS OF TRAVEL OR TRANSPORTS USED BY THE PARTICIPANTS FOR VISITING CATTLE MARKET IN AURANGABAD DISTRICT.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sr. No.</td>
<td>Means of Transport</td>
<td>Percentage of the Participants</td>
</tr>
<tr>
<td>1.</td>
<td>By trekking with the cattle.</td>
<td>35 %</td>
</tr>
<tr>
<td>2.</td>
<td>By S.T. Bus</td>
<td>20 %</td>
</tr>
<tr>
<td>3.</td>
<td>By bullock cart</td>
<td>12 %</td>
</tr>
<tr>
<td>4.</td>
<td>By truck and Matador</td>
<td>12 %</td>
</tr>
<tr>
<td>5.</td>
<td>By Bi-cycle</td>
<td>08 %</td>
</tr>
<tr>
<td>6.</td>
<td>By Railway</td>
<td>07 %</td>
</tr>
<tr>
<td>7.</td>
<td>By other means of transport</td>
<td>06 %</td>
</tr>
</tbody>
</table>

Source: - Field survey, cattle markets during 1994-1996
The participants and the cattle reach cattle markets by various means of travel or transport. The percentage is the highest of the participants by trekking or doing long journey with the cattle. Secondly, 20% participants use S.T. bus service to reach the markets. The sellers and buyers come to the market by Bullock Cart, by Truck and Matadors. Their total percentage is 24%. Nearly 8% participants use bi-cycle and 7% participants travel by train to reach the market places of the district. Remaining 6% participants use any other means of transport to visit cattle markets in the inaccessible areas of the district. There are no means of transport, especially in the hilly areas of Aurangabad district. In such case the people use animals like horse, donkey, buffaloes as the means of transport. According to the convinence and financial positions of the participants, the above mentioned means of transports are used to visit markets in the district.

6.3 TRENKKING WITH THE CATTLE

35% of the transport is carried by the means of trekking or moving long distance with cattle by the cattle drovers. The cattle are moved by the cattle drovers from one market place to another. Some of the well known cattle market places in Ahmednagar, latur, Dhule, Osmanabad districts are far away from the Aurangabad district. The distance is more than 150 kilometers which require five to seven days by trekking. Generally speaking, the cattle traders are acquainted with the cattle drovers. They have to keep watch on the physical conditions of the cattle. The traders also keep fairly relations with the cattle dealers. Their relationship helps in the business of cattle while selling or purchasing cattle. The drovers have to travel longer distance on foot with the cattle.
Although the cattle are entrusted to the drover, one partner or two partners of the drovers or the relatives of the trader are accompanied with him. The partner or the partners generally travel by the bus, ahead of the drover to make necessary arrangement of fodder supply or medicine for cattle in emergency. The arrangement for the stay or camp of the cattle is also made by the partner. At night the partner stays with the drover for taking care of cattle. Again in the morning, he moves for further camp by bus. Thus he can have proper check at every camp on the cattle drover. He observes that the cattle are properly fed and they are in a good condition.

One cattle drover controls about 10 to 12 cattle. According to distances and day, travel, the payment is made to the cattle drovers by the cattle traders. From Udgir to Aurangabad or from Nanded to Aurangabad, the cattle drover gets Rs. 150 to 200 for his service. In the journey, the drover has to protect cattle from wild animals. The cattle are to be protected from the sound of horns of buses, trucks, jeeps in the road and in the cities. The cattle are unfamiliar with the sound. If the cattle run astray because of unfamiliar sound, then it is very difficult to drive them. Again there is possibility of cattle to slip and fall on the road because of iron shoes as it takes time to get adjusted with the addition to hoofs. The crossing narrow bridges is a problem for cattle drovers. Sometimes long bridges become hurdles for cattle drovers due to heavy traffic. It finds difficult to the cattle drovers to cross Godavari bridge near Newase and other small bridges in the district with cattle due to heavy traffic of Trucks, Matadors and buses. Passing of cattle on the crowded city roads is also difficult for the drovers of cattle. "Livestock, still however is moved on foot through large cities of Asia where the traffic is mainly of people on foot
and by animal driven vehicles" (Burdettee 1981). In few cases, the cattle drovers use shortcuts to save time and distance for reaching cattle market places. Thus, the cattle are driven to the market place due to low cost of transport, less wages of cattle on the roads, by trekking drovers, possibility of marketing on the way of cattle, covenience of grazing of animals along the road site. Therefore the means of trekking is followed on a large scale.

6.4 ROAD TRANSPORT :-

The road transport is the major means of transport for cattle marketing activity. Aurangabad district has good network of roads. In the district 20% participants use S. T. bus and 12% participants use Trucks, Matadors, Jeeps etc as the means of transport to visit cattle market places.

The roads in India are mainly classified into four groups (i) The National Highways (ii) State Highways (iii) District Roads and (iv) Rural Roads.

The National Highways connects capital cities, major cities, ports. They are of the longer distance. They are under the control and management of the central Government of India. The length of the National highways in India is approximately more than 34000 Kms. 33% transport is carried out by these Highways, although they are only 2% of the total length of road transport in India. But these National Highways are not constructed in Aurangabad district. The state roads are managed and built by the State Government. The length of the State Highways in the district is 1088 Kms., approximately. The most of the state roads are connected with the National Highways in India. The third category of the road transport is the District roads. These roads are linked with the major towns and the
market places of the district. They are called district roads. They are managed by the Zilla Parishad. The length of major district and minor district roads is 1198 kms and 1089 Kms. respectively in the Aurangabad district. The rural roads or the village roads are mainly Kaccha roads. The transportation of Kaccha roads is not possible in rainy season. The bus service is stopped in rainy months on these roads of the district. The length of village roads is nearly 2730 Kms. The village roads are useful in carrying agricultural products and cattle to the market places of the district.

Out of the total geographical area of the district, the roads cover 49 Km. for 100 square km. area. The same figure in Maharashtra State is 56 Kms for 100 square km. area. For one lakh population of the district, the length of the road is 276 Km. Besides, S.T. Bus services, Trucks, Private Buses, Automobiles also provide service to the people of the district. The types of roads of the district are given in figure No. 6.1.
The hierarchical level of the cattle markets is determined by the transport system. It is the most important indicator for the determination of the hierarchical grades of the cattle markets. In Aurangabad district road transport has played an important role in the development of cattle markets. Most of the first order cattle market centres are connected with each other by the state highways. This type of road encourages itinerant sellers to attend the long distance market centres. The district roads serve the areas of the production of commodities and they are linked by highways and the railways with each other. The village roads connect interior or remote market places with each other and they provide links with the nearest district roads. In Aurangabad district it is observed that first order cattle markets are located on the cross roads or cross route nodes of the State Highways. Aurangabad, Paithan, Vaijapur, Kannad cattle markets are the examples of such locations of cross route nodes. The second order cattle markets in the district are also located on the state highways. For example, Fulambri, Silled, Bidkin, Adul, Pachod cattle markets are linked with the State Highways of the road system. Again the third order cattle markets are connected with the district roads and the village roads of the district. Thus, the hierarchical grades of cattle markets are mainly dependant on the road transport of the district.

The periodic cattle market centres and their functions also depend largely on the transportation technology or transport provisions. Since the trade itself means of exchange of cattle, other animals, exchange of commodities. Generally we can say that easy access to a market centre is paramount for its growth and therefore most of the higher order cattle market centres are developed where transportation routes coverage from various directions and cut each other. According to Mr. B. G. Tamaskar (1978)
"Generally periodic market centres have grown in size and activities and have prospects of stability and development where mettled roads cross each other to make the cross road node. The situation is comparable with cross route nodes". It is found that the status of market centre is determined by its cross road location. Other factors like nature of transport, volume of transport routes are also considered for the status or the grade of cattle markets in the district.

The types of road transportation are closely related to the distribution of the periodic cattle market centres. The following table indicates the relationship of road transport including their approximate length in Kms. with the number of periodic cattle market places of the district. Generally, the higher grade of transport routes increases the number of periodic cattle markets. The district roads are more closely related to the periodic cattle market places as compared to other roads of the district.

### Table No. 6.2
THE RELATIONSHIP OF ROADS WITH THE PERIODIC CATTLE MARKET PLACES OF AURANGABAD DISTRICT.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Type of Road Transport</th>
<th>No. of Market centres on the route</th>
<th>% of P.C. of markets on the route</th>
<th>Approximate length of routes in Kms.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>National Highways</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>State Highways</td>
<td>26</td>
<td>62 %</td>
<td>1088</td>
</tr>
<tr>
<td>3</td>
<td>District Roads</td>
<td>14</td>
<td>33 %</td>
<td>2287</td>
</tr>
<tr>
<td>4</td>
<td>Village Roads</td>
<td>02</td>
<td>05 %</td>
<td>2730</td>
</tr>
</tbody>
</table>

**Source:**
- (1) District census hand book Aurangabad District series 14
- (2) Field survey of cattle markets during 1994-1996.
There are no National Highways in the district. The 26 cattle markets are linked with state highways with 62% and 14 cattle markets with 33% are connected by District roads. Only 2 cattle markets are located on the village roads which have 5% of the Aurangabad district.

The roads must have their linkage with the second and first order markets. The first order markets should be linked through National Highways with big cities. But in Aurangabad district, National Highways are not constructed. The village markets are to be linked with proper roads. "Under the minimum needy programmes many villages have been interlinked" (Kurukshtra January 1988) The rural roads must complement and co-ordinate with railways and other means of transport. The present accessibility of villages to the road in the district is low and that of railways is very low. Nearly 62% cattle markets have all weather roads and remain 38% cattle markets have fair weather roads.

**FREQUENCY OF BUSES:**

Road transport is the major means of transport in the district which strengthens the economic activities of the cattle markets. The effectiveness and the strength of road transport is mainly dependant on the frequency of the buses. Nearly 600 buses run everyday from Aurangabad Bus Station. The frequency of buses from Aurangabad station is given in the following table.
Table No. 6.3
FREQUENCY OF BUSES FROM AURANGABAD STATION.

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Route</th>
<th>No. of Buses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aurangabad to Paithan</td>
<td>48</td>
</tr>
<tr>
<td>2</td>
<td>Aurangabad to Karmad</td>
<td>160</td>
</tr>
<tr>
<td>3</td>
<td>Aurangabad to Kannad</td>
<td>121</td>
</tr>
<tr>
<td>4</td>
<td>Aurangabad to Sillod</td>
<td>86</td>
</tr>
<tr>
<td>5</td>
<td>Aurangabad to Pachod</td>
<td>130</td>
</tr>
<tr>
<td>6</td>
<td>Aurangabad to Vaijapur</td>
<td>78</td>
</tr>
<tr>
<td>7</td>
<td>Aurangabad to Gangapur</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>Aurangabad to Soygaon</td>
<td>08</td>
</tr>
</tbody>
</table>


The frequency of buses from Aurangabad station is the highest at Karmad. The buses run to Jalna via Karmad from Aurangabad. This is State Highways No. 5. Everyday 160 buses run to Karmad. Although there is the highest frequency of buses at Karmad in Aurangabad district, the cattle market is not set up at this place. It is also the railway station on the South-Eastern Railway which is the only railway line in the district. Secondly, Aurangabad Pachod route has the frequency of 130 buses per day. This is the major State Highway No. 1. After Pachod this Highway reaches Beed, the district place in Marathwada.

The frequency of buses from Aurangabad to Kannad is 121. This is the major State Highway reaches
Chalisgaon from Kannad. Aurangabad-Sillod route has the 86 frequency of buses. The private buses, automobiles, Matadors also run on this route. From Sillod, the buses run mainly to Ajanta cave and Jalgaon. On the same route, Soygaon is located. The frequency of buses per day is 8 from Aurangabad to Soygaon. The route from Aurangabad-Sillod is the Major State Highways No. 8. Aurangabad-Vaijapur State Highway has the frequency of 78 buses per day. The private buses, automobiles also run on this route. From Vaijapur the buses run to Shirdi, Yeola, Nasik, Mumbai. Vaijapur has crossed the metalled roads and formed cross road nodes. This is favourable for the prospects, stability and development of cattle market place. Aurangabad Paithan route has 48 frequency of buses which is comparatively very low. The distance from Aurangabad to Paithan is approximately 50 Kms. Therefore the private buses, automobiles, autorikshaws etc. are used as the means of transport. Aurangabad - Paithan is the State Highway No. 30. From Paithan, the buses mainly run to Shevgaon and Shahagad. Aurangabad - Gangapur route has only frequency of 12 buses daily. This is the lower frequency of buses. One of the reasons of lower frequency is the State Highway No. 60. It has the distance of 15 to 20 Kms. from Gangapur. The buses from the State Highway No. 60 run to Ahmednagar-Pune, and frequency of buses on Aurangabad Pune route is more than 65. Extra buses are also used on the market day at every market place of the district. The frequency of buses from Aurangabad station to major routes is shown in figure No. 6.2
FREQUENCY OF BUSES
IN AURANGABAD DISTRICT
(FROM AURANGABAD STATION)
6.5 RAILWAY TRANSPORT:

The railway plays the major role in the distribution and development of cattle markets. But Aurangabad district is poorly served by this means of transport. Nearly 7% sellers, buyers or / and cattle traders visit the markets by railway. There is only broad gauge railway line of the South Central Railway from Mumbai to Kachiguda Hyderabad. The length of the broad gauge railway line in the district is only 102 Kms. There are 7 railway stations including 3 cattle market centres of the district. Lasur, Parsoda and Aurangabad are the cattle market centres, and Rotegaon, Daulatabad, Chikalthana and Karmad are the other railway stations. At these places, the cattle markets are yet to be started.

In figure No. 6.3 the South Eastern broad gauge railway, the railway stations and the area of the district over 30 Kms is shown for analysis.

From the figure, it reveals that Parsoda, Lasur, Aurangabad cattle markets have got the maximum benefit of the railway transport: The participants and the cattle can move to other places by the railways. Because Parsoda, Lasur, Aurangabad are the railway stations as well as cattle market places. Next to these railway stations; the cattle markets which are within the range of 30 Kms from the railway line, can get benefit to some extent. From such cattle market places, the cattle are moved to the railway station for further journey. Some of the cattle markets which are within the range of 30 Kms are Vaijapur, Loni (B.K.), Loni (Khurd), Manur, Savangi Bazar, Sultanpur, Vadod, Adul, Pimpri (B.K.) Pimpri (Khurd), Bidkin, Jigthan, Sidhanath—
RAILWAYS IN
AURANGABAD DISTRICT

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--- District Boundary
----- Taluka Boundary
--- Broad gauge Railway
::: Area over 30 kms. distance from the railway

Fig. 6.3
Wadgaon, Gangapur and Mahalgaon. There is an inaccessible area of the district from which the cattle are rarely moved to the railway stations. This area is over 30 Kms. from the railway line. Such market centres having inaccessibility are Kannad, Pishore, Shafepur, Zalki, Digar, Bharadi, Vadod (B.K.), Vadod (Khurd), Sillod, Deogaon, Pachod (B.K.), Pachod (Khurd), Dhorkin, Lohgaon (B.K.), Lohgaon (Khurd). Some of the cattle markets like Kannad, Pachod, Sillod are in the inaccessible areas of the railway. But they are developed due to the wide network of road transport. There is a frequency of 20 express and passanger trains at Aurangabad railway station per day. There is no special train on the market day. For the development of economic activities it requires the necessary construction of railways and its network covering other part of the district.

It is observed that cattle are reluctant to enter into a truck, matador or in a train. Therefore they are to be forced into the vehicles by using some tricks or force i.e. by closing their eyes; using preferable grass as temptations, keeping hands on the body of cattle with affection by the familiar person. Sometimes they are to be pushed into train, matador or truck by force. Their legs are tied by ropes to control their movement in transit. A special arrangement of a ramp is essential for loading and unloading of cattle in truck or railway wagon. For comfortable movements and firm foot holds, the ramp must have rough surface. Secondly, the slope that leads from one level surface to another must have proper steps. At few market places in Aurangabad district the ramps are constructed. The planning is being made in other market places for the construction of such ramps.
6.6 MEANS OF TRAVEL BY BULLOCK CARTS AND BY BI-CYCLE :-

The bullock carts and bicycles are used by the participants to visit cattle market places of the district. 12% participants and 8% participants reach the market places by bullock carts and by bicycle respectively. The bullock carts are a readily and easily available means of transport, where modern means of transport cannot be used, in such case, the bullock carts are used to visit rural periodic cattle market centres for marketing activities. Some buyers of cattle use bi-cycle to visit market places which are within the range of 3 to 6 Kms. distance from their residential places.

6.7 CROSS ROUTE NODES :-

After procuring cattle from the market places, they are driven to the fixed station or to the particular cattle market place. The cattle market places are the main assembly centres of cattle. The cattle market centres which have cross road nodes have more importance for the assembly of cattle.

In Aurangabad district Aurangabad, Vaijapur, Paithan, Kannad, Sillod are the main assembly centres of cattle because of convergence of roads. Most of the cattle dealers belongs to these nodal places. In the marketing season, the sale and purchase of cattle is practised even at night, and the cattle traders take rest at such big cattle market places. In Aurangabad district, Aurangabad cattle market is notable for the varieties of cows and Bullocks. From this centre, cattle are sent to slaughter houses and to the places of longer distances like Nanded, Mumbai. Sillod is another cattle collecting centre. The cattle useful for agricultural operations are mainly purchased from this centre. The cattle from Sillod market are mainly sent to Jalgaon, Bhusawal,
Indore etc. Paithan is another centre of road convenence. At Paithan market, the bullocks are mainly purchased for agricultural operations and cows for milk production. From Paithan, the cattle are moved by the State Highways to Ahmednagar, Pune and other places. Vaijapur and Kannad are also the major centres of assembly of cattle. The cattle are mainly sold / purchased for agricultural operations, slaughter purchases and for milk production. The cattle are moved from Vaijapur and Kannad to Yeola, Nasik and Dhule, Chalisgaon respectively. Thus, cross route nodal centres have more importance in the development of cattle marketing activities. Such cattle market centres have been grown in size. They have prospects of stability and growth.

6.8 CONCLUSION:-

From the foregoing discussion it reveals that the cattle traders and the outward movement of cattle are mostly relied on the means of transports. It is also observed that the transport of goods, commodities and the transport of cattle is different. The cattle traders have to face number of problems for the transport of cattle from one place to another.

In Aurangabad district road transport is predominant. The cattle are driven on the roads by trekking to the market places, because of low cost of transport, less wages of cattle drovers.

There is a requirement of National Highways which are linked with the capital cities, major cities, ports of longer distances in India. So far the National Highways have not crossed the area of Aurangabad district. However 26 cattle market places are connected with the major State Highways and minor State Highways.

The hierarchical level of cattle markets is determined by the transport system. Most of the first order
cattle market centres are located on the cross route nodes and they are linked with the major state highways. The second order cattle markets are mainly connected with the minor state highways, whereas third order markets in the district are mostly linked with the district roads. Thus, the hierarchical level of cattle markets is dependent on the types of road transport on the large scale. The higher grade of road transport has increased the grade or the order of cattle markets. In Aurangabad district, there is an urgent need to construct all weather roads. Because, still today, there are 38 % cattle market places with fair weather roads.

The effectiveness and strength of road transport is determined by the frequency of buses. Due to more frequency of buses, Kannad, Pachod, Vaijapur, Paithan have obtained the stability and growth of cattle markets. The frequency of buses from Aurangabad to Karmad is the highest. Moreover, Karmad is the railway station on the South Eastern Railway. Even then the cattle market is not set up at this place. There is potentiality to start cattle market centre at Karmad in the district. In Aurangabad district, the single broad gauge railway is constructed of 102 Kms. distance; which limits the cattle marketing activities.

There is necessity to construct railway lines to join cattle market places which are located in other parts of the district. Some of the participants travel by bullock carts and by bi-cycles to the market places. The village roads are mostly *Kaccha* roads. The necessary provisions for proper, suitable roads is essential for moving bullock carts and bi-cycles. The cattle are driven on the road from the longer distances by the cattle drovers. Their medical, veterinary care, protection from the theft and wild animals and other precautionary measures must be taken for the stability and the development of cattle markets in the district. Thus, in this chapter we discussed about the existing transport
system, intensity of transport system, types of transport, the relationship of hierarchical level of cattle markets with transport and also the relationship of the network of transport with the cattle market places of the district.

In the next chapter it is proposed to investigate the services available at cattle market places of the district. The services such as transport service, post and telegraph service, telephone and commercial bank services, veterinary services etc. are identified from the market places. The correlation between the services and the cattle market places is also analysed in the next chapter.
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