CHAPTER - 7

CHARACTER OF RURAL TRANSPORT

Like urban transport, the character of rural transport also has a great importance for rural lives. Rural transport means a contact between the villages and the urban service centres through the trip made for marketing or other needs. Further, it can be mentioned as a movement of persons and goods between the rural areas and nearer markets. These markets are service centres for rural communities and the rural transport connects them well. Generally, the markets are established at the point where the local or inter-regional roads converge and the numerous villages existed around them\(^1\). In this way the rural transport denotes an interaction or relationship between rural and urban fringe. Generally, the markets are two typed - i.e. daily and periodic. The latter usually holds once or twice in a week and the former for a day-buyers and sellers dispersing before sun-set\(^2\). The permanent business class brings a wide range of things from rural areas into these markets. The main commodities handled between them are foodgrains, particularly rice, wheat and pulses, flour, cloth, stone, forest products, fruits, salt, sugar, spices and daily necessities of life. These markets having the character of primary and secondary markets are
significant being performing the functions of concentration, equilisation and dispersion. Concentration means the condence of commodities into the heart of markets. The function of pooling of urban and rural produce derived from various sources and equating them with the demand and supply, comes under the equalisation. It is obvious that the nature and degree of rural transportation totally depend on the nature, importance, attracting power and distributional patterns of markets.

**TRANSPORT ARTERIES:**

Generally, the rural areas experience the lack of link and feeder roads as well as metalled roads in a great extent. Although the figure 4.3 (chapter IV) represents that the most of villages come into high degree of accessibility in the region and get the gain of intercity arteries but reality is some what other. If a village nearer within one Kilometre of an intercity road is helpless and also not capable for the transport of its persons and goods owing to the no connecting link may be counted as a isolated island. In rural areas the cart-tracks are only the main transport-arteries which connect well the villages with the marketing centres but they are not evenly
distributed. Within the region some areas such as Jalaun, Moth, Banda etc. having clayey and black soils are banned during the rainy season. But in the areas of rugged terrain and bad drainage like the Lalitpur Upland gneissic Plateau, the pack animals play an important role in rural transport on other detached routes.

As early stressed that cart-tracks are the main transport arteries through which the marketing functions take place. Therefore, they are examined as the veins, through which the life blood of the rural areas circulates. Now a discussion related with the density and distribution of unmetalled roads is usually pertinent.

**DENSITY OF UNMETALLED ROADS**

The Lalitpur region suffers more from unmetalled roads due to the undulating topography of upland. On the other hand, the whole Hamirpur region including Hamirpur and Mahoba sub-regions is relatively better served by metalled roads due to the ease construction than the former. The sparse population is also responsible for this reduction of density. In the Banda and Karwi region the density of unmetalled roads
ranges below 5 kilometres per 100 sq. Kilometres (fig. 7.1A). The parts of Jhansi and Hamirpur districts including Jhansi, Mauanipur, Hamirpur and Mahoba regions depict 5-6 kilometres density per 100 sq. Kilometres. The former lies in the west while the latter in the mid and covers the ravine land of the Yamuna in the north and intersected with its tributaries. The important metalled roads pass through this region and the railway diverges towards the north, north-east, south and east. The higher density of 6-8 kilometres is found in the Orai region. The main arterial routes in this region diverge from Jalaun to the centres of Orai, Kalpi, Auraiya, Moth etc. The highest density of above 8 kilometres per 100 sq. Kilometres is spread over the whole region of Lalitpur. In this region numerous unmetalled roads coming longitudinally and traversely from the interiors connect to feeder routes and centres like Talbehat, Meironi, Lalitpur etc. The economy of the district of Lalitpur is less developed and depends more on its unmetalled roads.

There is another density of unmetalled roads based on population. Fig. 7.1B shows the varying relationship between the population
A

DENSITY OF UNMETALLED ROADS

PE 100 SQ. Km

< 5
5 - 6
6 - 8
> 8

Km

32 0 32 64 96

B

DENSITY OF UNMETALLED ROADS

PER 100,000 PERSONS

< 24 KILOMETERS
24 - 32
32 - 40
> 40

Km

32 0 32 64 96

Fig. 7.1
density and the density of unmetalled roads. There are four categories of such a density existing within the region.

(i) The area having below 24 Kilometres per 100,000 persons covers the eastern part of the region in terms of whole Banda district.

(ii) The second category of 24-32 Kilometres occurs over the Hamirpur and Jhansi regions.

(iii) The third category of 32-40 kilometres per 100,000 persons includes the whole Jalaun district in the north-west of the region.

(iv) The highest density of above 40 Kilometres per 100,000 persons is found in Lalitpur district due to the sparse population.

**MODES OF TRANSPORT IN RURAL AREAS**

From the pre-historic times till the coming of the railways, the usual means of transport were palanquins, horses, camels and vehicles driven by bullocks, buffaloes and horses. The
bulky goods was handled by the means of pack animals while valuable goods was carried by the carts and carriages. The tracts were the only links between habitations. The pack animals traversed long distance in large companies for business. They were called 'Cafilas' or 'Curvans', driven by 'Banjaras*'. In the medieval period people often used the wheeled vehicles for distant pilgrimages.

Probably the types of conveyances that were used in northern India were also in use in the region, among which were finely built carriages called bahals5, the oxen, the buffaloes and camels and always been the usual beasts of burden in the region and have been used for traction. Horses and ponies were very rarely used for drought purposes during Mughal Period. During rainy season their usefulness increases in the plains too when tracts get muddy and bullock carts can not ply. Since Ashok's period the 'tongas' are being used mainly to fulfil the needs of the rural masses. The carts were the forerunners of present day bullock carts and were suitably popular mainly for the transport of goods in rural areas. Though

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transport, the importance of wheeled vehicles and pack animals have declined only the main routes, but in case of bullock carts it can be put to its manifold uses and is employed by the people in the villages for different agricultural purposes as also for transport of people and goods during fairs and festivals and special occasions such as marriages. One great advantage enjoyed by this vehicle is that it can pass through roads which are unfit for mechanised transport. In old days camel, carts were a common means of transport which is disappeared now. Bicycles have also become very popular in villages because it is a very cheap means of transport. Generally, the milkmen also use bicycle for milk loading purposes from villages to city region. Because of numerous unmetalled roads existing in rural areas, the two-type vehicles e.g. wheeler (bicycle, tonga, bullock carts) and packed (horses, camels, ponies, mules, donkeys etc.) are more advantageous for rural lives. The following table (7.1) gives an idea of the density of pack animals per 1000 sq. kms. in various regions.
**TABLE 7.1**

**DENSITY OF PACK ANIMALS (1985)**

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>REGION</th>
<th>PACK ANIMALS PER 1000 KM²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Banda-cum-Karwi</td>
<td>447</td>
</tr>
<tr>
<td>2.</td>
<td>Hamirpur-cum-</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>Mahoba</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Orai</td>
<td>162</td>
</tr>
<tr>
<td>4.</td>
<td>Jhansi</td>
<td>164</td>
</tr>
<tr>
<td>5.</td>
<td>Mauanipur</td>
<td>80.</td>
</tr>
<tr>
<td>6.</td>
<td>Lalitpur</td>
<td>115</td>
</tr>
</tbody>
</table>

The above table shows that the Banda region contains the highest density of 447 pack animals per 1000 km². The Jhansi and Orai regions rank next with 164 and 162 respectively. The lowest density of 80 pack animals per 1000 km² is found over the Mauanipur region. The rest regions Hamirpur-cum-Mahoba and Lalitpur retain 159 and 115 pack animals per 1000 km².

* In finding out the density of pack animals the total pack animals of each region have been divided by the geographical area.
Thus, the study represents that the density of pack animals is high in those areas which are chiefly rugged and undulating, because these are more beneficial for transport purposes in such areas. Those villages that lie near the major district roads or near roads connecting one town with another, or through which such roads pass, now often have glimpses of mechanised transport as well as the low density of pack animals. Unlike other districts of the region, cycle-rickshaws are hardly to be seen in Jhansi district, probably due to the hilly nature of roads. The bullockcart is a suitable means of transport of agricultural areas. Their number increases as the house-holds increase. Majority of the agrarian society maintains it because it is a cheap and best as well as comfortable conveyance for the rural livies.

MARKETS AND THEIR DISTRIBUTION

Bundelkhand is a land of fairs and festivals. The local fairs, markets (Hats) and Bazars play an important role in regional trade and commerce. These are the main business centres for the rural inhabitants which cater to the daily needs of the people. Some of them have large umlands where the businessmen collect
from large distances and have their daily, seasonal and annual requirements. Some of these centres are good marts of cattle, foodgrains, vegetable, ghee, cloths, daily use article, countrymade shoes etc. In some of the urban centres, district and tahsil headquarters daily markets meet but in a few urban and rural centres weekly and bi-weekly markets are held. In the local fairs and markets the retail traders of all sorts play their trade.

Broadly speaking, the region has two types of markets: -

(i) Permanent or Daily markets and
(ii) Temporary or 'Haths'.

In Bundelkhand region daily markets are varied in size, layout and facilities available which are called 'Mandis'. These 'Mandis', may be in a specially laid out area enclosed by buildings and consisting of shops, godowns etc. These are such centres where the marketing of agricultural produce of all kinds is done daily. These markets are not suddenly developed

* 'Hats' are those markets where marketing is done weekly or bi-weekly.
but have grown up in a haphazard way. In starting their size is small but later on these service centres expand at considerable places due to increase of population. Jhansi and Mauranipur are typical examples. Other important urban centres of the region also come under this category.

The activeness of these marketing centres appears to be increased when their functions of 'haths' are absorbed. In the 'hats' people agglomerate once or twice in a week for exchange of commodities of needs. Locally these are called 'bazar' 'hat' Paith etc.

The following table shows the number and approximate percentages of weekly markets together with the bi-weekly markets in different areas.
<table>
<thead>
<tr>
<th>REGION</th>
<th>NO. OF TOTAL MARKETS</th>
<th>PERIODICITY BI-WEEKLY MARKETS</th>
<th>WEEKLY MARKETS AS PERCENTAGE OF THE TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banda</td>
<td>46</td>
<td>7</td>
<td>31 (67%)</td>
</tr>
<tr>
<td>Karwi</td>
<td>25</td>
<td>2</td>
<td>7 (28%)</td>
</tr>
<tr>
<td>Hamirpur</td>
<td>44</td>
<td>6</td>
<td>18 (41%)</td>
</tr>
<tr>
<td>Mahoba</td>
<td>57</td>
<td>5</td>
<td>47 (82%)</td>
</tr>
<tr>
<td>Orai</td>
<td>40</td>
<td>13</td>
<td>14 (35%)</td>
</tr>
<tr>
<td>Jhansi</td>
<td>21</td>
<td>5</td>
<td>11 (52%)</td>
</tr>
<tr>
<td>Mauranipur</td>
<td>73</td>
<td>10</td>
<td>51 (69%)</td>
</tr>
<tr>
<td>Lalitpur</td>
<td>49</td>
<td>6</td>
<td>37 (75%)</td>
</tr>
</tbody>
</table>

**Source:** Statistical Magazines of the Districts.

The density of these markets varies according to terrain of the region. It is mainly because of the comparatively sparse distribution of population. The percentage of weekly market is high 82% in Mahoba region and low 28% in Karwi region. The proportion of weekly markets to the total in Orai resembles that of the Hamirpur, while Banda is similar to Mauranipur area in this respect. Jhansi has 52% and the Lalitpur 75% weekly markets of their respective total.
More than 75% of weekly markets is found in both regions viz. Mahoba and Lalitpur. The activities of these markets appear a highest points once or twice a week.

The bi-weekly markets are different on an account of their distribution in rural areas. Karwi region has the lowest number of bi-weekly markets (table 7.2) due to the compact rural settlements but sparsely located, where the cost and time of movement is more considerable. The village has not surplus products to sell in the markets, because poverty is the chief reason of such backward 'hats'. Besides this, various other social and historical factors are also responsible for regional variations. The highest number of bi-weekly markets exists in Orai region followed by Mauranipur (10), Jhansi, Lalitpur, Hamirpur, Mahoba and Banda are the resemble regions which have 5-7 biweekly markets in this regard. For the various trends in the distribution of markets the two blunt factors viz. the agricultural development and the distribution of settlements are responsible more.
PATTERN OF RURAL TRAFFIC FLOW

The rural traffic handles from village to village and market to market. Therefore, it is also essential to analyse the patterns of the arrival of different commodities into these markets. Naturally these reflect the nature and characteristics of rural traffic in different regions. The arrival of foodgrains (as wheat, rice, Jowar, barley, gram, arhar, oilseeds etc.) in the main markets from the rural areas has considered as a rural traffic flow. The first, the fundamental characteristics are marked as a regional variations and monthly fluctuations in the arrival of commodities in different markets of the Jhansi Division. The second monthly fluctuations are associated with the regional crop's harvest. The difficulty of transport is experienced during rainy season. Between Kharif and Rabi crops the highest amount of arrival is recorded between March and June everywhere. Thirdly, the arrival of commodities abruptly declined in rural areas during rainy season and so the markets become inactive.

The regional variation have been discussed above, is marked in different parts of the region. In the north-western part of the region Kalpi,
Orai and Konch are the main markets with the higher amounts of wheat, gram and barley (1,95,000 metric tons). In the western and southern parts of the region Hardiganj market Jhansi and Lalitpur are the two most important 'Mandis' where Jaggery, wheat, gram, jowar, barley, arhar and oil-seeds are brought and sold. Jhansi is the biggest 'mandi' where about 55000 metric tons (1985) of agricultural products are being sold annually. There is, however, an inverse relationship in the Jhansi and Lalitpur regions, in that the former has less number of markets (21) and greater amount of grains (1,15000 metric tons) while the latter has greater number of markets (49) and lesser volume of grains (79000 metric tons).

In the mid, north-west and eastern part of the region Mauranipur, Hamirpur and Banda are the other main marketing centres which have great importance for wheat, rice, gram, linseed and barley. Atarra, a rice bowl of the region, is famous for paddy as well as for rice collection (65,600 metric tons) by all neighbouring villages during kharif season. In these areas the markets are enlarged more than the western part because of the plainy, fertile surface and village road connections.
There is an attractive feature of contradictory relationship between the crop production and grain arrival at the markets. Jhansi region is a typical example where the most important grain is the 'gram' but the amount of wheat flowing in the markets exceeds all other commodities. In Kharif crop's season the chief agricultural product is Jowar. Jhansi region covers the largest area under this crop in the whole study area. Barley is not favourable crop so it is grown mostly as a mixed crop with wheat, gram, mustard and linseed. It's arrival in the market has no significance for rural traffic flow.

The following causes are responsible for the above variational trends:

(a) The commodities of foodgrains mainly wheat and rice are exported by rail, road hence, little amount comes in the markets by road transport.

(b) There is a great difference between the villages distant from metalled roads. So the farmers bear an inability for arriving the agricultural products
in the markets. The following table gives an idea of number of villages which are inaccessible more.

**TABLE 7.3**

**NO. OF VILLAGES DISTANT FROM METALLED ROAD (1985)**

<table>
<thead>
<tr>
<th>REGION</th>
<th>WITHIN THE VILLAGE</th>
<th>WITHIN 1 KM.</th>
<th>1-3 KM.</th>
<th>3-5 KM.</th>
<th>5 KM AND ABOVE.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banda</td>
<td>122</td>
<td>10</td>
<td>97</td>
<td>86</td>
<td>364</td>
</tr>
<tr>
<td>Karwi</td>
<td>55</td>
<td>8</td>
<td>103</td>
<td>96</td>
<td>268</td>
</tr>
<tr>
<td>Hamirpur</td>
<td>80</td>
<td>12</td>
<td>47</td>
<td>59</td>
<td>122</td>
</tr>
<tr>
<td>Mahoba</td>
<td>82</td>
<td>36</td>
<td>105</td>
<td>101</td>
<td>286</td>
</tr>
<tr>
<td>Orai</td>
<td>183</td>
<td>42</td>
<td>156</td>
<td>240</td>
<td>342</td>
</tr>
<tr>
<td>Jhansi</td>
<td>82</td>
<td>17</td>
<td>75</td>
<td>71</td>
<td>147</td>
</tr>
<tr>
<td>Muraunipur</td>
<td>64</td>
<td>7</td>
<td>72</td>
<td>73</td>
<td>161</td>
</tr>
<tr>
<td>Lalitpur</td>
<td>108</td>
<td>27</td>
<td>84</td>
<td>80</td>
<td>382</td>
</tr>
</tbody>
</table>

**Source:** Statistical Magazines of the Districts.

(c) Markets are not available at proper distance from villages. Therefore, in lack of 'hat' mass of village products does not get a bright chance for selling. The following table stresses that only few villages get a benefit of adjoining markets.
TABLE 7.4

NO. OF VILLAGES DISTANT FROM 'HAT'/MARKET

<table>
<thead>
<tr>
<th>REGION</th>
<th>WITHIN THE VILLAGE</th>
<th>WITHIN 1 KM.</th>
<th>1-3 KM.</th>
<th>3-5 KM.</th>
<th>5 KM AND ABOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banda</td>
<td>16</td>
<td>18</td>
<td>35</td>
<td>66</td>
<td>539</td>
</tr>
<tr>
<td>Karwi</td>
<td>06</td>
<td>09</td>
<td>26</td>
<td>67</td>
<td>423</td>
</tr>
<tr>
<td>Hamirpur</td>
<td>15</td>
<td>10</td>
<td>24</td>
<td>50</td>
<td>209</td>
</tr>
<tr>
<td>Mahoba</td>
<td>27</td>
<td>14</td>
<td>23</td>
<td>62</td>
<td>483</td>
</tr>
<tr>
<td>Orai</td>
<td>23</td>
<td>10</td>
<td>51</td>
<td>153</td>
<td>714</td>
</tr>
<tr>
<td>Jhansi</td>
<td>06</td>
<td>05</td>
<td>29</td>
<td>37</td>
<td>305</td>
</tr>
<tr>
<td>Mauranipur</td>
<td>38</td>
<td>02</td>
<td>35</td>
<td>36</td>
<td>266</td>
</tr>
<tr>
<td>Lalitpur</td>
<td>20</td>
<td>07</td>
<td>18</td>
<td>55</td>
<td>579</td>
</tr>
</tbody>
</table>

Source: Statistical Magazines of the Districts.

(d) Considerably those commodities appear in the markets which have higher price. As gram in comparison to other food-crops is higher priced and because of low production it is not transhipped to other regions by rail or road, but locally is brought to the markets for money fetching. Wheat and rice come next for this variation.

Besides these variational trends related with grain traffic there is another type of
rural traffic between the villages and market centres or rural areas and urban centres having a number of daily needs like vegetable, milk, fruits, fuel, woods, etc. which form a major part of the land use in umland. The umland of these markets is confined by the daily range of the rural conveyances. The spacing of the market town becomes as their hierarchical order.

In addition to non-wheeled conveyances (pack animals), the wheeled transport (like cycles, trucks) came into being after 1930 as working in rural areas. Because of its door to door service and cheap price, the cycle is virtually choiced by all people. In modern cycle age most of the perishable commodities like milk, vegetable, fruits, etc., are carried on them from rural areas to the urban centres. In some ways trucks and private stage carriages penetrate into interior areas and also originate from interior villages. Trucks play a significant role in case of supplying the goods between the rural and urban areas. With the rising of mobilized vehicles around the big cities influentially the rural conveyances also appeared to be increased.

Conclusively it may be said that at
present the rural transport is not more satisfactory. The agricultural produce is the main item of rural traffic flow. The flow pattern is rather eccentric. During the rainy season the volume of traffic flow is scarced more than the summer - because the condition of carts does not allow a small measure for the sudden disposal of commodities. Therefore, the economy of the rural areas goes to greatly unbalanced. Comparatively, those rural areas lying around urban centres are beneficial in transport facilities than the interior. The means of rural transport play a significant role for rural economic development.
REFERENCES

3. Ibid. P.125.
5. District Gazetteer, Jhansi, 1965, P.169
7. Ibid. P.170.