

CHAPTER VII.

MEANS OF COMMUNICATION.

ROADS—Their condition in 1852—Extension during famines—Present condition—
Rivers unbridged—Avenues scarce—The chief metalled roads—Travellers’
bungalows and choultries. FERRIES—Basket-boats. RAILWAYS—The Madras
Railway—The Southern Mahratta Railway—Lines under construction.

CHAP. VII. THE roads of the district are a creation of the last half century.
Writing in 1852 Major R. Henderson, C.B., then ‘Civil Engineer’
in charge of this part of the country, said¹ :—

ROADS.

Their
condition
in 1852.

“Roads there are none deserving the name. There certainly are
“ tracks through some parts marked out by aloe and milk-bush
“ hedges, but from want of bridges and drains these tracks are divided
“ into isolated portions by the rivers that intersect them. At present
“ there is not a single arched bridge throughout the district, though
“ it is intersected by rivers and streams in every direction. The district
“ is actually locked up from the surrounding provinces and without
“ means either for the export of its produce or for the introduction of
“ European articles of commerce.”

Europeans could reach Bellary through Mysore without much
trouble, but there “the traveller to the northward must stop from
“ want of either roads or bungalows. The line north-eastward
“ to Kurnool is merely a track made by the wheels of country carts.
“ No attempt has ever been made for its formation or to make those
“ portions passable that are either intersected by streams or subject
“ to inundations. The same may be said of the road northward by
“ Adóni.” The state of even the main lines of road was, in short,
so execrable “as to compel the use of bullocks generally for the
transport of traffic.” For the minor roads throughout an area of
nearly 13,000 square miles the maintenance allowance was Rs. 650,
or about nine pies per square mile, per annum!

The carriers of the country were the Lambádis and Korachas,
who kept large herds of pack-bullocks and travelled once or twice
a year down to the west coast, taking with them the cotton and
piece-goods of Bellary and bringing back in return salt, areca,
cocoanuts, etc. But the cost of this slow carriage was enormous,
amounting in the case of cotton to one-fourth of its value in
Bellary.

¹ Report on important Public Works for 1852, No. X of “Selections from the
Records.”

The carts in use had small solid wheels, made of flat circular pieces of wood or stone, and the axles revolved with the wheels. Even in 1855 it was stated that wheels with spokes were only just "coming into general use." Solid stone and wooden wheels are now restricted to the temple cars and the carts used for transporting stone, and the axles of these latter are usually of iron and no longer revolve with the wheels.

In 1851 Government made a beginning by sanctioning the construction of the road from Bellary towards Dharwar through Hospet as far as Hampáságaram and the line from Bellary through Hiréhálu to the Mysore frontier. The main argument urged in favour of the former line was that it would provide an outlet for the cotton of the district to the ports of South Canara, which affords a striking instance of the manner in which railways have revolutionised former trade routes. The cotton now goes to Bombay or Madras by rail. In 1851 the traffic to the west coast was estimated to amount to ten lakhs annually.

The construction of roads which was thus begun received a great impetus during the famines of 1866 and 1876. In a district which contained so few tanks or irrigation channels the making of roads formed almost the only possible relief-work. In the 1876 famine alone, 56 lakhs were expended on new roads and 12 lakhs on repairs to existing lines in the Bellary and Anantapur districts.¹ Owing to circumstances which prevail in every famine, the value of the work obtained for these large sums was, however, much less than if it had been expended under normal conditions, and it has been calculated that the value of the labour on the new roads was only eleven lakhs and of that on the repairs only three lakhs.

Much still remains to be done. In the red soil areas the ground is so firm and dries so readily that a road once made needs little care or expenditure beyond the periodical cleaning of the drains along its sides and an occasional coating with the coarse gravel which can usually be dug out of its margins. But the frequent nullahs which traverse this kind of country still for the most part remain to be bridged. In the cotton-soil areas the difficulties are immensely greater, as the foundation of the roads easily becomes water-logged, the soft soil of the slopes is rapidly cut into channels by rain, and suitable metal and gravel is only found at considerable intervals and costs much to transport to the spot where it is required.

CHAP. VII.

ROADS.

Their
condition
in 1852.

Extension
during
famines.

Present
condition.

¹ It is not now possible to separate the expenditure in the two districts.

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ROADS.Rivers
unbridged.Avenues
scarce.The chief
metalled
roads.

The larger rivers of the district, the Tungabhadra, Hagari, Chinna Hagari and Chikka Hagari, are none of them anywhere bridged or even provided with causeways, and in the rains traffic is frequently delayed.

Avenues have only been planted along some 110 miles of the roads and are rarer than in any other district in the Presidency except the Nilgiris.

Leaving out of account short lines of railway feeders, the chief metalled roads of the district are at present the following :—

- From Bellary to Dharwar, *via* Hospet and Hampáságaram.
- „ „ the Mysore frontier, *via* Hiréhálu.
- „ „ Siruguppa.
- „ „ Kurnool frontier, *via* Moka.
- „ Ádóni to Siruguppa.
- „ „ Nágaladinne.
- „ Mádhavaram to Aspari, *via* Ádóni.
- „ Hálvi to Málapalli, *via* Kosgi.
- „ Kúdligi to Sómálápúram.
- „ Hospet to the Sandur frontier.

Travellers'
bungalows
and
choultries.

A list of the travellers' bungalows maintained, with the accommodation available in each, will be found in the separate Appendix to this Gazetteer. The Local Boards also keep up 31 choultries for native travellers. Fees are only charged in one of these, that at Hospet, and then only when the traveller stays in it beyond a certain fixed length of time. Only one of the choultries, Bápú Rao's at Hampáságaram, possesses any endowment. Besides the Local Fund institutions there are one or two choultries, like the "Ráni Chattrams" at Rayadrug and Bellary, which have been built from public subscriptions.

FERRIES.

The District Board controls 50 ferries across the Tungabhadra and 11 across the Hagari. Passengers are charged small fees and the right of collecting these is sold by auction. Judging from the bids, the ferry at Kampli in Hospet taluk is the most frequented in the district, while those at Talárigattu, (between the Hamp ruins and Ánegundi), at Siruguppa in Bellary taluk, and near the ruined anicut at Modalukatti in Hadagalli taluk come next. The Hagari is seldom in flood for more than a few days together and the ferries over it are comparatively unimportant.

Basket-
boats.

At all these ferries basket-boats are used. They are curious circular affairs, from eight to twelve feet in diameter, made of a strong bamboo frame-work covered outside with hides, and provided with a false bottom to protect passengers and freight from the water which leaks through the hides and collects inside. They

draw very little water, and thus are hardly affected by even strong currents, and they are propelled by two men armed with paddles or, when the stream is low enough, with poles. They are a very old institution, as Paes says they were in use in Vijayanagar in 1520. Herodotus mentions seeing similar boats on the Euphrates¹ and other parallels are afforded by the similar constructions used on the Cauvery and the coracles of Wales and Ireland.

CHAP. VII.
FERRIES.

Basket-boats.

In the campaigns fought in this part of the country they were the usual means employed to transport troops across the river. In 1803 Munro was asked to have 100 of them ready at Hampáságar in case the army should require to cross there. Colonel Briggs in a footnote in his translation of Ferishta (ii, 371) says "a detachment of the British army crossed its heavy guns without even dismounting them over the Tungabhadra in 1812 in these basket-boats."

When no boats are available the big shallow iron pans which are used to boil down sugar-cane juice make useful substitutes at a pinch. They will carry a country cart in safety if it is first unloaded, and can then make further trips to bring across its contents.

Bellary is fairly well served with railways. Just outside the centre of its eastern frontier, and connected by rail with the district head-quarters, is the important junction of Guntakal, whence lines radiate to Bombay, Bezwada, Madras, Bangalore and Hubli. The first and last of these traverse the district. Just beyond the southern frontier of Harpanahalli taluk runs another railway, the metre gauge branch of the Southern Mahratta Railway between Hubli and Bangalore. This is of much service to the southern parts of Harpanahalli and Kúdligi taluks.

RAILWAYS.

The line from Guntakal towards Bombay is the North-west line of the Madras Railway and is on the standard gauge. It was opened in December 1870, passes through Alúr and Adóni taluks and crosses the Tungabhadra on the frontier by a girder bridge of 58 spans of 64 feet each. The girders in this have recently been replaced by a new and stronger set.

The Madras Railway.

¹ "The most wonderful thing of all here, next to the city itself, is what I now proceed to describe: their vessels that sail down the river to Babylon are circular, and made of leather. For when they have cut the ribs out of willows that grow in Armenia above Babylon, they cover them with hides extended on the outside, by way of a bottom; neither making any distinction in the stern, nor contracting the prow, but making them circular like a buckler. . . . The vessel is steered by two spars, and two men standing upright, one of whom draws his spar in and the other thrusts his out." (Bk. I, 194, Cary's translation.)

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RAILWAYS.

The
Southern
Maharatta
Railway.

The line from Guntakal to Hubli crosses the Hagari at Paramádévanahalli by a bridge of 34 spans of 64 feet each, passes through Bellary and Hospet and crosses the Tungabhadra on the frontier by a bridge of 38 spans of 60 feet each. The section from Guntakal to Bellary was opened in 1871 and that from Bellary to Hospet in 1884. The former was constructed, and originally worked, by the Madras Railway, and was then on the standard gauge. It was of the greatest possible service during the 1876 famine in bringing grain into the district. It was made over to the Southern Maharatta Railway Company, by which it is now worked, in February 1887, and was converted to metre gauge in May of the same year.

The bridge over the Hagari gave some trouble in construction, owing to the difficulty of establishing a satisfactory foundation in the sandy bed of the river. Cast-iron cylinders filled with concrete were eventually used instead of masonry piers. The lowest depth of the foundations below rail level is 80 feet.

Lines under
construction.

Two branch lines from this railway are at present under construction, one from Bellary to Rayadrug and the other from Hospet to Kottúru in Kúdligi taluk. They are mainly designed to protect the south of the district against scarcity of grain in bad seasons. Both are to be on the metre gauge and in both, to reduce the cost of construction to a minimum, the experiment of crossing nullahs without bridges is to be tried. When the streams are full, traffic will be temporarily suspended. In the case of the line to Rayadrug even the Chinna Hagari river is to be crossed without any bridge. The rails will be laid on the sand in the bed of the river and merely protected from being washed away by a low masonry wall constructed on the down-stream side. This line runs for much of its length alongside the existing road from Bellary to Rayadrug, and in this manner its construction has been further cheapened. The alignment of the Hospet-Kúdligi branch has had to be greatly altered, as much of the original route will be eventually submerged by the water of the huge reservoir to be constructed at Málápúram on the Tungabhadra in connection with the Tungabhadra Project. This line has to cross the northward extension of the Sandur hills, and it does so by the saddle over which runs the present road from Hospet to the south. A deep cutting and a bank over 70 feet high on the southern side of the saddle will, however, be necessary.