

Public Works (1899) Department.

RAILWAY BRANCH.

G.O., No. 795. Ry.

DATED 20th July 1899

[Despatch Abstract.]

Review on the Capital & Revenue
Accounts of the Madras Ry. system

Coming to the Agent, & the Secy. Ry. Dept.
letter from the Govt. of India forwarding
for info. Copies of a — including K. G. Ry.
& the Madras Ry. system. Summary section of
the Bury for the 2nd half of 1898.

P. W. Rg.
CURRENT No. 931.

From The Govt. of India

Communicated to the Agent
and Manager, Maroa Railway
and the Examiner, Guaranteed
Railway Accounts.

No. 426 R. Stat

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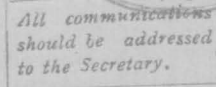
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SUBJECT.

Review on the Capital
& Revenue accounts of
the M. Ry. Systems.

40



GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY STATISTICS.

The Joint Secretary to the Government of Madras,
Public Works Department, Railway Branch.

Sir,

I have the honour to be,

Sir,

Your most obedient servant,

W. J. McCreary Captain, R.E.,
Offg. Under Secretary.

Documents accompanying:-

12 copies of Review referred to.

REVIEW ON THE CAPITAL AND REVENUE ACCOUNTS OF THE

MADRAS RAILWAY, INCLUDING THE KOLAR-GOLD FIELDS RAILWAY AND WASHERMENPET-ENNUR SECTION OF THE BEZWADA-MADRAS RAILWAY, for the half-year ending with the 31st December 1898.

The mean length of railway worked was 857·67 miles, the same as in the previous corresponding half-year. The total capital outlay, including suspense, on the mileage open to the 31st December 1898, was Rs. 12,33,05,454 against Rs. 12,28,34,522 to the 31st December 1897.

2. The gross earnings from all sources decreased from Rs. 58,15,043 in the second-half of 1897 to Rs. 52,01,569 in the half-year under review, or 10·55 per cent. The earnings under coaching fell from Rs. 22,91,951 to Rs. 18,04,231, under goods from Rs. 33,88,270 to Rs. 32,97,038, and under miscellaneous from Rs. 1,34,822 to Rs. 1,00,400.

The gross earnings per mean mile worked per week were Rs. 233 against Rs. 261 in the second-half of 1897.

3. The total number of passengers booked fell from 5,519,860* to 4,146,051,* or 24·89 per cent.; and the earnings from passenger traffic from Rs. 19,65,833 to Rs. 15,20,552, or 22·65 per cent. The passenger unit-mileage decreased 25·69 per cent. The average distance travelled by a passenger was 30·19 miles against 30·51 miles and the number of passengers carried one mile per mean mile worked was 145,936 as compared with 196,380 in the previous corresponding period.

The decrease, both in the earnings and in the number of passengers carried, was chiefly due to the plague restrictions.

4. The earnings from this source decreased from Rs. 3,26,118 to Rs. 2,83,679, or by Rs. 42,439. The decreases were chiefly under "Military baggage" and "Parcels for the public." The decrease under "Military baggage" was chiefly due to an abnormal military traffic during the second-half of 1897, and that under "Parcels for the public," partly to the introduction of conference rates under the mileage system and partly to the plague.

5. The weight of goods lifted was 712,450* tons against 735,250* tons in the second-half of 1897, a decrease of 3·10 per cent. The ton-mileage showed a decrease of 1·80 per cent. The average distance over which a ton of goods was hauled was 106·94 miles against 105·52 miles and the number of tons of goods carried one mile per mean mile worked was 88,834 as compared with 90,462 in the previous corresponding half-year.

The principal variations were a decrease of Rs. 2,48,403 under "Merchandise general" and an increase of Rs. 1,29,087 under "Coal (including locomotive revenue)."

The decrease under "Merchandise, general" was due to the following causes: Decrease of 21,573 tons and Rs. 1,33,614 under "Rice not in the husk," due to a falling off in the local traffic chiefly in consignments from Arcot and Katpadi and in the through traffic received *via* Katpadi and Arkonam; of 5,627 tons and Rs. 55,594 under "Gram and pulse," due to the decreased traffic from Coimbatore, Tiruppur and Morappur and to the traffic forwarded *via* Raichur and Bangalore City; of 6,781 tons and Rs. 96,631 under "Hides and skins," chiefly in the traffic forwarded *via* Raichur and in consignments

* The number of passengers and the tonnage of goods interchanged between the different railways forming the system are counted over twice, as the figures are given separately in the half-yearly capital and revenue accounts.

Statement No. I.

Statement comparing the results of working the Madras railway (including the Kolar Gold fields railway and the Washermenpet-Ennūr section of the Bezwada-Madras railway) during the second-half of each of the years 1893 to 1898, also comparing the results with the Great Indian Peninsula railway (including the Wardha Coal, Dhond-Manmád, Khámgaon and Amráoti railways) and the Oudh and Rohilkhand State railway, including the Cawnpore-Burhwal railway (metre gauge link) during the second-half of 1898.

2

received from the Great Indian Peninsula railway and beyond *via* Raichur; of 14,441 tons and Rs. 39,062 under "Iron," due to the decrease in the local traffic consigned from Salt Cotaurs; and an increase of 5,510 tons and Rs. 55,688 under "Cotton, raw," due partly to the bookings from Adoni and Raichur and to the traffic from the Southern Maharatta railway and beyond *via* Guntakal.

The increase under "Coal" was in the public traffic, principally in consignments from Rayapuram station.

6. The decrease in the earnings from miscellaneous sources amounted to Rs. 34,522, and was chiefly under "Mileage and demurrage of vehicles over foreign lines" and "Profits of workshops for work done for State railways"

7. The total working expenses amounted to Rs. 28,22,849 against Rs. 28,47,274 in the previous corresponding period.

The principal fluctuations were an increase of Rs. 73,558 under "Maintenance of way, works and stations," a decrease of Rs. 23,045 under "Locomotive expenses," and a decrease of Rs. 78,175 under "Carriage and wagon expenses." The increase under "Maintenance of way, works and stations" was chiefly due to covering sand ballast with broken stones, and to the heavier renewals of rails. The decrease under "Locomotive expenses" was mainly due to the carriage of revenue stores and to loss by exchange. The decrease under "Carriage and wagon expenses" was chiefly due to repairs to a smaller number of vehicles and to a more economical working of the department.

8. The net earnings amounted to Rs. 23,78,720 against Rs. 29,67,769, giving a percentage for the half-year on the total capital outlay on open line of 1.93 as compared with 2.42 in the previous corresponding period.

Results of working and comparative cost of the several departments.

9. The statements appended to this review show:

(i) the results of working the Madras railway (including the Kolar Gold-fields railway and Washermenpet-Ennūr section of the Bezwada-Madras railway), during the second-half of each of the years 1893 to 1898, as compared with the results of working the Great Indian Peninsula railway (including the Wardha Coal, Dhond-Manmád, Khámgaon and Amráoti railways), and the Oudh and Rohilkhand State railway, including the Cawnpore-Burhwal railway (metre gauge link), during the second-half of 1898;

(ii) the cost of the several departments on the Madras railway (including the Kolar Gold-fields railway and Washermenpet-Ennūr section of the Bezwada-Madras railway), during the second-half of each of the years 1893 to 1898, as compared with the Great Indian Peninsula railway (including the Wardha Coal, Dhond-Manmád, Khámgaon and Amráoti railways), and the Oudh and Rohilkhand State railway, including the Cawnpore-Burhwal railway (metre gauge link), during the second-half of 1898.

10. From the first statement it will be observed that the percentage of working expenses on gross earnings, 54.27, was higher, while the percentage of net earnings on capital outlay, 1.93, was lower than in any of the five previous corresponding half-years.

The percentage of freight upon capacity hauled, lowest class, 41.19, was lower than in any previous corresponding half-year shown in the statement, due to a decrease of 4.46 per cent. in the passenger train mileage against a decrease of 25.69 per cent. in the unit-mileage of passengers.

The percentage of freight upon capacity hauled for goods traffic, 38.46, was lower than in any previous corresponding half-year shown in the statement.

Item numbers of analysis.	Particulars.	MADRAS RAILWAY INCLUDING THE KOLAR GOLD-FIELDS RAILWAY AND THE WASHERMENPET-ENNŪR SECTION OF THE BEZWADA-MADRAS RAILWAY.						GREAT INDIAN PENINSULA RAILWAY SYSTEM.	ODDH AND ROHIL-KHAND STATE RAILWAY, INCLUDING THE CAWNPORE-BURHWAL RAILWAY (METRE GAUGE LINK.)
		2nd-half, 1893.	2nd-half, 1894.	2nd-half, 1895.	2nd-half, 1896. †	2nd-half, 1897. †	2nd-half, 1898. †	2nd-half, 1898.	2nd-half, 1898.
2	Mean mileage worked ... Miles.	839.22	830.22	849.22	857.67	857.67	857.67	1,491.31	1,012.98
...	Capital outlay ... Rs.	12,03,61,825	12,05,29,868	12,15,53,451	12,24,75,655	12,28,34,522	12,33,05,454	29,82,05,064	11,63,58,468
...	Gross earnings (excluding steam-boat) ... Rs.	52,18,323	51,47,080	55,84,683	55,33,615	58,15,043	52,01,569	1,49,50,988	45,45,425
...	Gross earnings (including steam-boat) ... Rs.	52,18,323	51,47,080	55,84,683	55,33,615	58,15,043	52,01,569	1,49,50,988	45,45,425
...	Working expenses ... Rs.	26,37,589	26,91,555	26,95,520	28,32,044	28,47,274	28,22,849	98,48,792	23,42,377
...	Net earnings ... Rs.	25,80,734	24,55,525	28,89,163	27,01,571	29,67,769	23,78,720	51,02,196	22,03,048
...	Train-mileage ... Train-miles	1,342,258	1,234,088	1,294,668	1,275,064	1,352,633	1,302,972	4,298,859	1,394,409
...	Train-mileage per mean mile worked. } Coaching ...	788	775	773	766	756	722	1,426	675
...	Train-mileage per mean mile worked. } Goods ...	811	696	752	721	821	797	1,454	702
...	TOTAL ...	1,599	1,471	1,525	1,487	1,577	1,519	2,880	1,377
6	Percentage of net earnings (including steam-boat) on capital outlay ... Per cent.	2.14	2.04	2.38	2.21	2.42	1.93	1.71	1.89
17	Percentage of working expenses on gross earnings (including steam-boat) ... Per cent.	50.54	52.29	48.27	51.18	48.96	54.27	65.67	51.53
9	Gross earnings (excluding steam-boat) per mean mile worked per week ... Rs.	239	236	253	248	261	233	386	173
33	Average sum received for carrying a unit one mile—lowest class ... Pies.	1.64	1.64	2.11	2.10	2.09	2.11	1.92	2.50
79	Average cost of hauling a coaching unit one mile, per passenger unit ... Pies.	0.90	0.89	0.96	1.04	0.98	1.24	2.45	1.31
23	Coaching earnings per train-mile ... Rs.	2.95	3.23	3.64	3.47	3.54	2.91	1.76	3.02
77	Average cost of hauling a coaching train one mile ... Rs.	1.40	1.52	1.45	1.53	1.46	1.44	1.65	1.41
69	Percentage of freight upon capacity hauled—lowest class ... Per cent.	49.61	58.13	50.66	48.03	48.72	41.19	33.57	39.05
...	Average sum received for carrying a ton of general merchandise one mile ... Pies.	8.83	9.13	8.97	9.09	9.06	9.68	6.26	6.02
...	Average sum received for carrying a ton of coal (public) one mile ... Pies.	4.15	4.19	4.69	4.93	4.98	4.66	3.00	3.95
93	Average sum received for carrying a ton of goods (including stores and coal carried both for Capital works and Revenue) one mile ... Pies.	8.25	8.52	8.34	8.43	8.37	8.30	6.95	5.64
115	Average cost of hauling a ton of goods including stores and coal one mile ... Pies.	4.30	4.67	4.48	4.70	4.49	4.66	3.89	3.47
91	Goods earnings per train mile ... Rs.	4.62	5.10	4.87	5.07	4.61	4.82	5.09	2.93
113	Average cost of hauling a goods train one mile ... Rs.	2.41	2.60	2.61	2.83	2.58	2.71	2.85	1.89
104	Percentage of freight upon capacity hauled ... Per cent.	45.11	45.74	40.65	40.35	40.16	38.46	47.84	39.83
119	Percentage of coaching traffic on gross earnings ... Per cent.	37.41	40.78	42.82	41.24	39.41	34.69	25.05	45.35

* Including the Kolar Gold-fields railway.
† Including the Kolar Gold-fields railway and the Washermenpet-Ennūr section of the Bezwada-Madras railway.
‡ Excluding charges incurred direct by the State.

Statement No. II.

Statement showing the cost of the several departments on the Madras railway (including the Kolar Gold-fields railway and the Washermenpet-Ennur section of the Bezvada-Madras railway) during the second-half of each of the years 1893 to 1898 in comparison with the cost on the Great Indian Peninsula railway (including the Wardha Coal, Dhond-Mannad, Khamgaon and Amravati railways) and the Oudh and Rohilkhand State Railway, including the Cawnpore-Burhwal railway (metre gauge link) for the second-half of 1898.

Item numbers of analysis.	Particulars.	MADRAS RAILWAY INCLUDING THE KOLAR GOLD-FIELDS RAILWAY AND THE WASHERMENPET-ENNUR SECTION OF THE BEZWADA-MADRAS RAILWAY.						GREAT INDIAN PENINSULA RAILWAY SYSTEM.	OUDDH AND ROHIL-KHAND STATE RAILWAY, INCLUDING THE CAWN-PORE-BURH-WAL RAILWAY (METRE GAUGE LINK).
		2nd-half, 1893.	2nd-half, 1894.*	2nd-half, 1895.*	2nd-half, 1896.†	2nd-half, 1897.†	2nd-half, 1898.†	2nd-half, 1898.	2nd-half, 1898.
	Total gross ton-mileage ... Ton-miles	366,941,064	346,943,507	369,610,739	370,978,049	353,133,330	378,210,795	1,285,557,316	366,978,547
	MAINTENANCE OF WAY, WORKS AND STATIONS.								
	Mean mileage maintained ... Miles.	839.22	849.22	849.22	857.67	857.67	857.67	1,491.31	1,012.98
	Total miles of track, including sidings ...	1,013.89	1,024.84	1,031.64	1,046.60	1,046.66	1,047.21	2,232.85	1,155.72
	Maintenance and renewal of permanent-way.								
	Per mile of track, including sidings ...	254.09	216.32	222.40	257.45	286.16	316.47	426.13	330.03
137-a	Total maintenance expenses—Per mean mile of line maintained ... Rs.	724.29	702.83	697.98	783.49	758.48	844.24	1,352.90	749.85
137-b	Per mile of track, including sidings ... Rs.	599.51	579.60	574.56	642.07	620.94	691.44	903.59	651.08
137-c	Per 1,000 gross ton-miles ... Rs.	1.66	1.72	1.60	1.81	1.66	1.91	1.57	1.95
123	Per cent. on gross earnings Per cent.	11.65	11.45	10.62	12.14	11.99	13.92	13.49	16.53
	LOCOMOTIVE EXPENSES.								
	Fuel, average price.								
	Per ton ... Rs.	13.37	14.78	14.67	14.79	15.40	15.86	11.05	9.57
	Fuel, average quantity consumed (in terms of cost).								
	Per train-mile ... lbs.	47.82	45.77	48.97	52.35	50.92	51.28	44.58	54.96
	Per 1,000 gross ton-miles ... lbs.	174.07	165.16	171.53	179.93	173.14	176.60	148.92	136.05
	Total locomotive expenses.								
145-a	Per train mile ... Annas	11.90	12.54	12.93	13.50	13.09	13.31	13.17	16.06
145-b	Per 1,000 gross ton-miles ... Rs.	2.72	2.83	2.83	2.90	2.82	2.86	2.78	3.28
124	Per cent. on gross earnings Per cent.	19.13	18.83	18.73	19.44	19.03	20.83	23.64	10.87
	Total locomotive expenses, excluding cost of fuel.								
	Per 1,000 gross ton-miles ... Rs.	1.63	1.74	1.71	1.71	1.63	1.61	2.02	0.70
	Average miles run per locomotive per diem ... Miles.	52.04	49.22	50.01	49.76	52.93	52.76	43.60	53.37
	Percentage of locomotives constantly under repairs on the total stock on the list Per cent.	25.00	24.55	22.29	21.03	22.29	22.02	26.12	16.66
	CARRIAGE AND WAGON EXPENSES.								
	Total vehicle-miles run by home vehicles ... Vehicle-miles.	26,856,469	24,276,410	26,595,377	27,888,666	30,435,561	27,620,385	73,001,233	37,795,918
	Total carriage and wagon expenses.								
151-b	Per 1,000 vehicle-miles run by home vehicles ... Rs.	9.62	14.23	11.13	11.21	10.50	8.74	25.54	39.64
	Per cent. on gross earnings Per cent.	4.95	6.64	5.30	5.65	5.49	4.64	12.48	8.02
125	Percentage of 3rd or lowest class coaching vehicles constantly under repairs on the total stock on the list ... Per cent.	6.91	6.19	7.98	6.23	5.33	8.63	11.17	11.83
	Percentage of goods stock constantly under repairs on the total stock on the list Per cent.	3.30	4.76	6.62	6.45	4.82	3.43	8.72	14.17
	TRAFFIC EXPENSES.								
	Station and train staff.								
163-a	Cost of station staff per total train mile ... Annas	2.94	2.43	2.36	2.41	2.35	2.39	2.41	2.35
154-a	Cost of train staff per total train-mile ... Annas.	0.39	0.64	0.62	0.66	0.73	0.75	1.51	0.76
	Total traffic expenses.								
162-a	Per total train mile ... Annas.	5.43	5.48	5.15	5.34	5.10	5.42	5.42	4.71
	Per 1,000 gross ton-miles ... Rs.	1.25	1.24	1.13	1.15	1.10	1.17	1.13	1.06
126	Percentage of traffic expenses on gross earnings (excluding steam-boat) ... Per cent.	8.77	8.24	7.46	7.70	7.42	8.48	9.73	9.02
	GENERAL CHARGES.								
173-a	Per total train mile ... Annas.	3.28	3.62	3.58	3.68	3.43	3.43	2.44	2.44
124	Percentage of general charges on gross earnings (excluding steam-boat) ... Per cent.	5.28	5.44	5.19	5.31	4.98	5.38	4.38	4.68
	APPENDIX II OF ANALYSIS.								
	Percentage of empty home vehicle-mileage on total home vehicle-mileage on home line Per cent.	23.50	21.68	23.92	23.74	24.25	25.52	21.01	24.29

* Including the Kolar Gold-fields railway.

† Including the Kolar Gold-fields railway and the Washermenpet-Ennur section of the Bezvada-Madras railway.

‡ Excluding compounds.

§ Broad gauge only.