(1) பக்கங்களின் எண்ணிக்கை 40

(2) புதுக்கித் திருப்பிய நாள் அக்டோபர் - 1994

(3) ஆதாரங்குறிப்பவர் சருக்கொப்பம்

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

P.W.D துறை

அரசாணை எண். —
மு. கோப்புத் தாள் எண். 1269-S.C

அச்சகம்
பலவகை

நாள் : 10-5-1893

198 .

படிக்கவோ கண்டபடி கையாளவோ கூடாது

ஆவண. கா-1—18,000—15-6-87.

1269 S-R
1

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following papers :—

Proceedings of the Board of Revenue (Land Revenue), dated 3rd March 1893, Mis. No. 1476.

Read—the following letter from W. A. WILLOCK, Esq., Agent to the Governor, Vizagapatam district, to the Secretary to the Commissioners of Land Revenue, Madras, dated 11th February 1893, No. 416-J :—

I have the honour to address the Board regarding the utilization of the surplus revenues of the Jeypore and Bissemcuttack estates. The principle enunciated in Court of Ward's Proceedings, No. 2824, dated 15th August 1892, apply with equal force to their balances, and are, in fact, being adopted to some extent at present, but I would like to do so much more vigorously in the hope of pushing on the development of the areas concerned.

2. The chief objects on which money could be spent in order of importance are—

I. Communications.	III. Irrigation.
II. Forests.	IV. Purchase of lands.

The first is the most promising object on which funds can be expended. The opening of the Jeypore country above the ghats to cart traffic has already in my opinion improved the income of the estate by at least half-a-lakh of rupees and will rapidly produce a still greater improvement. No work on a similar scale remains to be executed—unless, indeed, a steam tramway is attempted—but much can be done in extending the area it affects and placing the north-eastern thannas in thoroughly good communication with the plains. The following description of the road system will aid the Board in understanding my proposals on this subject. There are now two main lines of communication between the Agency and the plains. Both are of an arterial description and consequently should be made and maintained at the cost of Government, rather than of the estates, under G.O., No. 1541, Judicial, dated 20th July 1888. These are the Salúr–Central Provinces road, which passes through Jeypore itself and has tapped the surrounding country, and the Párvatipur–Central Provinces road through Ráyaghada and Bissemcuttack. The former has been made as far as Jeypore as a first-class metalled road, but beyond that only fair-weather, earthen tracks exist. The main road extends in this condition through Nowrangapur and Omerkota to the borders of the Central Provinces at Raighar, some 100 miles north of Jeypore. A branch takes off at Borigumma, 14 miles from Jeypore, and goes into Bustar through Kotipád, and is consequently also an arterial road, and a most important one too. The Párvatipur–Central Provinces road has only been made for a distance of 15 miles beyond Párvatipur. From that on until its exit into Kalahandy near Ombodola, about 95 miles from Párvatipur, it also is a mere fair-weather track much cut up by enormous nullahs though tolerably good going between them. 35 miles beyond Párvatipur a branch leaves it which traverses the Singapur estate, which has just come under Jeypore's possession, and then passes into Kalahandy by the Longa-ghati. It is therefore also an important arterial road. The Gunupur thannas' natural market is the Ganjam district, with the road system of which it is in close contact. Main roads are consequently of but little importance here.

3. It is the intention of Government to make the remainder of the two main lines referred to above from public funds. An estimate for constructing the section of the Central Provinces road between Jeypore and Nowrangapur (28 miles) has been prepared by the Public Works Department, and was to have formed one of the principal works in the charge of Mr. French, the Estate Engineer, but Government has been unable to provide any funds either this year or next, and it does not seem likely that it will fare any better in the near future. An estimate for continuing the Párvatipur–Central Provinces road up to Ráyaghada (an addition of 15 miles to the part already finished) has been sanctioned, and work was in rapid progress this season, but I have had to stop it for want of funds, and as only Rs. 5,000 are allotted for next year its construction may also be regarded as indefinitely postponed. It is of vital importance to the development of the estates concerned that the roads, the construction of which is thus suspended, should be brought into a condition to allow of cheap and easy transport for produce during the dry season as quickly as possible, but I do not think that they are so deeply interested in their being made available for wet-weather traffic as to justify any large expenditure for that purpose. At that season of the year the ryots and bandymen are all busily engaged in agricultural operations and the roads would chiefly be used by ordinary travellers and classes whose interests are not by any means those of the estates. Regarding the enormous pecuniary advantage the estates will derive from any reduction in the cost of transport of their surplus produce to the markets along the coast, there can be no doubt, and I think that the steps which I am about to propose will reduce the transit charges by 30 per cent. at least. Carts will, by desperate efforts, manage to carry a full load over a few yards of heavy going or up excessive gradients, but when such obstacles are met half-a-dozen times in each day's journey the weights must be greatly reduced. I therefore now propose to take up all sections of these roads which offer special obstacles to fully-laden carts in the fine weather and make them at the expense of the estates, reserving the portions which are good going to be completed by Government later on. This will involve finally marking out the roads not already estimated for, but this may as well be done now as later on. The natural features of the country of themselves define many points through which the roads must pass, and work already done on a considerable scale has some weight in fixing others. Above the ghâts the amount to be done to bring the bad places into permanently good order will not be very heavy, for steady progress has been made for many years past and nullahs have been systematically bridged and swampy sections embanked, but the Parvatipur–Central Provinces road is sadly in want of such treatment. The present track is almost everywhere identical with that which I laid out in 1874–78 as Senior Assistant Agent, when I had very small funds at my disposal and could not deal with obstacles in anything but the most economical way. Much money has been annually spent on improving this track which should have been devoted to dealing with difficulties more effectively by means of diversions, and, as the country is intersected with huge nullahs at frequent intervals, the result of this not having been done is a fair-weather road which, though fairly safe for carts, only admits of light loads being carried owing to the excessive gradients of the ascents and descents.

4. As already stated, the road for the second half of the distance between Párvatipur and Ráyaghada has been estimated for and some work has been done. From the estimate I have selected three sections which form most serious obstacles to traffic and propose to carry them out at estate expense. The first, or new Jammadevipeta ghât, is a new ascent from a low level on to a high plateau, access to which is at present only obtained by an excessively steep unimprovable ascent. The second, or Marrighati-Laddaghati, section is a place where the road becomes unavoidably involved in a network of huge ravines for a distance of nearly 2 miles, and in the third it has to be led along the rocky face of a steep hill overhanging a river for about a mile and then descends about 120 feet into its bed and ascends the same height on the opposite side. Here also the gradients are altogether prohibitive to heavy loads. I propose to reduce them to a ruling gradient of 1 in 20 throughout. The estimates for the first two sections are ready and have been sanctioned by Government and are as follows:—

	Rs.
Jammadevipeta Ghât (½ mile)	2,420
Ladda and Marrighatis (2 miles)	6,816

About Rs. 100 worth of work has been done on the first, and Rs. 2,468 on the second, from this year's Agency grant, so that Rs. 6,768* will be needed to complete them. The estimate for the third portion has also been sanctioned, but on my recent visit I altered the line considerably and a fresh one will have to be prepared. Beyond Ráyaghada I have finally settled the line to be adopted as far as Bissemcuttack except in a few places where diversions are advisable and need to be investigated. As, however, the road must, owing to the general features of the country, pass through certain fixed spots, the diversions which may be adopted will not involve any general changes in its position, and the fact that they are under consideration need not interfere with immediate steps being taken to deal with bad places on other parts of the line.

5. The branch from near Ráyaghada (from Komatlapeta, 5 miles north of that town) to Singapur is almost as important as the road through Bissemcuttack and its bad sections should be dealt with in the same way, but, I think, the greater part of it will have to be retraced and I propose to put this in hand also.

6. Above the ghâts I propose to deal with the Jeypore–Nowrangapur section of the Sálúr–Central Provinces road and the branch to Kotipád in the same way, and will submit estimates if my present proposals meet general approval. The other roads required there are essentially estate ones and are, with one exception, being dealt with at present as well as the supply of labour at our disposal will admit. Two of these are of great importance—the Jeypore–Galiconda road and that from Jeypore to Malkangiri. The first, which constitutes the exception just referred to, I cannot propose to do much to unless I see my way to making the Galiconda ghât. In G.O., No. 1027 F., dated 3rd October 1892, the Public Works Department is called on to report on this subject. Considering the fact that Government can give nothing at present for the Jeypore–Central Provinces road and only Rs. 5,000 per annum for that from Párvatipur to the Central Provinces, this practically shelves the question indefinitely. As regard the Jeypore–Malkangiri road we are at present doing nearly as much as the resources of the country in the way of labour will allow, but this road will never be of real service in opening out this wild and fertile tract, which will eventually be peopled by the overflow population of the plains, until the block caused by the Koláb river is removed. This is a deep, rapid stream about 7 miles west of Jeypore, which can only be crossed by carts without the help of boats in the height of the dry season, and even then with difficulty. Its violent current, liability to sudden heavy floods, and bad landings, make it impossible to establish a satisfactory ferry across it, and heavy traffic will, I fear, have to confine itself to traversing it at considerable risk, expense and delay in dug-outs during the dry season and be practically suspended at other times for an indefinite period unless it is bridged. The chief Engineer, East Coast Railway, has kindly prepared a rough estimate of the cost of bridging it with the help of what information I have been able to give him, and finds that it would come to Rs. 65,000, or allowing for the extra cost of works in the Agency, say, Rs. 80,000. I strongly recommend that the work may be put in hand. It will in the future, be invaluable in developing the resources of Malkangiri and the west of the Jeypore taluk (including the removal of timber from the saw mills) and it is most improbable that it will ever be built by Government. Indeed, considering that it would be constructed entirely in the interest of the estate, it would not be fair to expect Government to undertake it, even if it had the means. The erection of this bridge would go far towards opening up about 4,000 square miles of very fine country with unfailing rainfall, and would, if combined or when combined with a pucka road, lead to immigration into Malkangiri on a large scale. The pucka road can be made at any time, but if the bridge is not built now it never will be. It would be a fine, permanent memorial of the management, and, if it increased the revenue of Malkangiri by the small sum of Rs. 4,000 per annum, would fully repay its cost.

* The balance required, deducting expenditure up to date, will be reported by wire.

7. Should the Board think that the construction of works of the sort is admissible, I would also recommend dealing with the third of the serious obstacles on the Párvatipur–Ráyaghada section of the Parvatipur–Central Provinces road (the Ráyaghada ghât) by means of a bridge. After winding along a rocky hill side for nearly a mile the road suddenly descends into the bed of a rapid river, 110 feet below, and rises about 120 feet on the other side to the level of the plateau on which Ráyaghada stands. At the point where the descent begins, the river runs in a narrow, rocky bed so close beneath that one can throw a stone across. Foundations in solid rock seem available about 60 feet above the bed of the river and less than 50 feet apart, and a 50 or 60 feet girder bridge would bring the road straight into Ráyaghada almost on a level if laid on piers about 40 feet high. I do not think that this will cost more than Rs. 12,000 at the most. Against this would have to be set the cost of about two-thirds of a mile of additional road, up and down a most intricate mass of ravines, necessary to cross the river by descending into its bed, and the annual maintenance thereof capitalised, to say nothing of the saving to traffic. The former will probably cost Rs. 4,500, and the maintenance may be set at Rs. 133 per annum capitalised, or, say, Rs. 2,500, making a total set-off Rs. 7,000.

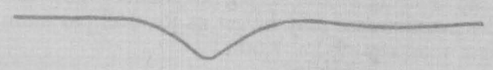
8. Should the Board approve of my views regarding these bridges, I will have an estimate prepared for that at Ráyaghada and will have that for the Koláb amended after an examination of the site in each case by a competent Engineer, with regard to which I hope to be helped by the Chief Engineer, East Coast Railway.

9. The next question is—What can be done for the forests of the estate? They will be of immense value in the future if taken care of now, but if not, there will be hardly any timber worth preserving in a few years. I would like to demarcate and secure as many promising areas in accessible localities as possible. I propose to do this by means of very simple rules under the Forest Act which I am now transmitting to the Board in another letter. All that seems to me to be necessary after the areas have been selected and demarcated is to prohibit the felling of sal and teak trees of above 3 feet in girth. In dealing with forests such as those of Jeypore and Bissemcuttack, I think that there will be no need to interfere further with the customs of the inhabitants. All I want to do is to preserve the jungle where it contains big trees of these species. The hill men will not fell the small ones for kondapodu cultivation where the shade of the larger ones would injuriously affect crops, so that reproduction and growth will proceed unchecked in the selected localities. I feel certain that we shall be able to select an ample area capable of being conserved under some simple rule like this. Whether the Board accept this way of obtaining my end or not, I think it is evident all valuable jungle should be selected, demarcated and conserved somehow without delay. The ranger sanctioned in Board's Proceedings, No. 118, dated 9th March 1892, is doing good work of this sort in Nowrangapur and will have ample to occupy him there and in the Jeypore taluk for a couple of years. I would like to see work of the same kind set on foot in the Párvatipur Agency. I have recently gone over some of the Bissemcuttack forests and found some very fine sal wood, though the areas in which it now exists in fairly accessible country are not numerous. The areas which would be selected are almost all somewhat small, but I do not object much to this, as my idea is to avoid pressing on the hill-men by leaving them ample space for cultivation everywhere; and to obtain this end I would rather take up a large number of small plots than a few big ones, relying, as I do, on the rules being implicitly obeyed as executive orders rather than as having legal sanction so long as they do not seriously interfere with the exercise of the customary destructive habits of the inhabitants. In addition to the Bissemcuttack forests, I have seen some very promising sal on the slopes of the Kylasacota range on the east of the Ráyaghada valley and hear of others in Singapur. These should all be selected and demarcated at once, and I request permission to entertain another ranger on Rs. 100 per mensem for the purpose. I think it highly probable that I shall hereafter apply for more assistance of this sort. The poorest jungle which I would deal with contains probably 200 cubic feet of matured sal per acre which would be worth Rs. 32,000 per square mile at 4 annas per cubic foot—a

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rate which I hope to realise if I do not greatly exceed it very shortly, and as communications improve the value of each square mile will improve vastly. The above figures show the magnitude of the estate interests involved in this direction.

10. Irrigation offers a much less hopeful field for expenditure. Jeypore above the ghâts does not need it owing to its ample rainfall and the physical features of the thannas below the ghâts rarely lend themselves to tank construction. Narainapatnam is too rough. Ráyaghada, though it contains a vast amount of level ground, is everywhere intersected by numerous nullahs of great depth which occupy the depressions where tanks would be naturally located, and has in addition a soil in which storage of water for any length of time is impossible. In Singapur, Bissemcuttack and Gunupur, the invariable tendency of the surface is for the valleys to increase rapidly in steepness towards their lines of drainage, so that they present a section like the following:—



This, of course, renders the construction of profitable tanks out of the question. In my recent tour through Ráyaghada, Singapur and Bissemcuttack, I looked carefully for sites for channels, but only found one. It is a very promising one, as the water of a stream which drains about 25 square miles of hill country can here be brought on to the level of the country at very small cost by means of an anicut. Though I saw nothing else myself and see much against many similar opportunities existing, I think the country should be investigated by a professional man and the courses of all the chief streams below the ghâts examined from where they enter the comparatively level country to their outfalls into the main rivers. Two overseers would be required for this. They should be good men with some irrigation experience and I would suggest salaries of Rs. 200 and Rs. 150 for them. Even if they only discovered and executed one good project each, the estates would be well repaid.

11. As to the purchase of lands, I will lose no reasonable opportunity to secure any good bargain which may turn up.

12. To sum up, I propose to—

(1) take up the construction of all sections of the Párvatipur–Central Provinces and Sálúr-Central Provinces roads which offer obstacles to heavy cart traffic at estate expense and reduce all gradients to a maximum of 1 in 20;

(2) to bridge the Koláb and Ráyaghada rivers at a cost of Rs. 80,000 and Rs. 12,000, respectively (about);

(3) to improve the Singapur and Kotipád roads at the estate expense in the same way, though not to the same extent, as those mentioned above;

(4) to demarcate all valuable forest in accessible sites with a view to its preservation either under the Act or by an executive order;

(5) to construct an anicut across the Donelly stream;

(6) to investigate the irrigational capabilities of Jeypore below the ghâts by professional men.

13. To enable me to carry out these proposals I will want—

	Rs.
1 Overseer on Rs. 200	200
* 2 Overseers on Rs. 150 each	300
9 Overseers' peons on Rs. 6 each	54
1 Forest ranger	100
4 Rangers' peons on Rs. 6 each	24
Total	678

or Rs. 8,136 per annum.

* One would be wanted for road work chiefly.

14. The Forest-officer's pay I would debit to the Jeypore and Bissemcuttack estates according to the number of days spent in camp in each estate in the year. The overseers employed in the Ráyaghada and Bissemcuttack taluks might be charged to the Jeypore estate and to Bissemcuttack in proportion of 3 to 1, taking Jeypore interest in the area at Rs. 90,000 and Bissemcuttack at Rs. 30,000. The income of the latter is about Rs. 40,000, but allowance must be made for the fact that it pays 15,000 per annum to Jeypore, and that the latter may at any time enhance the tribute. I propose to employ two of the overseers in this area and each would have both road and irrigation work to look after, and as the interests of each estate in the former would not be confined to the work actually done within its limits, I think this course would be the fairest to adopt. One overseer I would employ in Gunupur, where work would be entirely in the interests of Jeypore. The rates of pay I suggest had better be regarded as maximums, as it is by no means certain that I shall be able to get men worth the money offered, in which case I must do my best with inferior materials. As regards the works entered in paragraph 12, I request orders by wire as to whether I may go on with them, as this is the working season.

Telegram from the Agent to the Governor, Vizagapatam, dated 15th February 1893, informing, in continuation of his letter, No. 416-J, dated 11th February 1893, that the expenditure is Rs. 2,468 and the balance needed is Rs. 6,768.

Resolution—dated 3rd March 1893, Mis. No. 1476.

The Board approves generally of the proposals contained in the first paper read above and submits them for the favourable consideration of Government; but before the Agent is authorised to take action in respect to the works referred to in clauses (1) to (3) of paragraph 12 of his letter, he should, the Board thinks, submit more detailed information regarding the expensive bridges proposed to be erected. He should also state how far, if at all, the principal or interest of the expenditure thereon, as also on such portions of the roads as may be newly laid out, could be recovered from tolls; and whether the Estate Engineer can be safely entrusted with such very large works; or whether the services, or at least the opinion, of a Government Engineer are not necessary. The investigation of the irrigational capabilities of the estate should also, the Board thinks, be made by an experienced Public Works officer.

2. Financially, the Jeypore estate can well afford the expenditure proposed by Mr. Willock. Its budget for Fasli 1302 shows a surplus balance of Rs. 7,45,499, and the minor will not attain the age of 21 for nearly 3 years.

The estimated closing balance of the Bissemcuttack estate for Fasli 1302 is Rs. 27,650.

(True Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Chief Secretary to Government, Judicial Department.

ORDER—dated 14th April 1893, No. 769, Judicial.

Mr. Willock's proposals appear judicious and meet with the general approval of Government; in some respects, however, they require further elaboration.

2. The proposal to improve sections of the Párvatipur-Central Provinces road and of the Sálúr-Central Provinces road and also to improve the roads in Singapur and Kotipád is sanctioned; the work should be entrusted to the Estate Engineer and should be put in hand as soon as possible.

3. The Agent's suggestions regarding the bridging of the Koláb and Ráyaghada rivers will be considered in the Public Works Department. That department will be requested to state whether a competent Engineer can be deputed (if possible before the monsoon) to examine the localities and prepare plans and estimates. If no Government Engineer is available, the Agent will be authorized to negotiate for the deputation of one of the Railway Engineers employed upon the East Coast Railway.

4. The proposals regarding irrigation and the demarcation of the forests can be disposed of by the Board of Revenue.

5. It will be pointed out to the Board of Revenue that Act VIII of 1851 does not authorize the imposition of tolls for the benefit of a private individual, and it is doubtful whether Madras Act II of 1868 is still in force. That Act was not absolutely repealed by Act IV of 1871; it was only repealed in those circles whereto Act IV of 1871 was applied. Act IV of 1871 was never applied to the Vizagapatam Agency, but, on the other hand, Act II of 1868 was also never extended thereto. The question is, whether it is now possible by an order under section 2 or under section 5, Act XIV of 1874, to extend Act II of 1868 to the Vizagapatam Agency. The Government desires to have the opinion of the Advocate-General on this point.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Board of Revenue (Land Revenue).
„ the Revenue Department.
„ the Public Works Department.
„ the Agent to the Governor, Vizagapatam.
„ the Government Solicitor.
„ the Financial Department.

Exd. A. Raitt.

Govt. of {1893} Madras.

JUDICIAL.

Issued

Read. Encl.

G.O., 14th April 1893, No. 769.

APRIL.

Jeypore and Bissemcuttack Estates.

Approving generally of the proposals of the Agent to the Governor, Vizagapatam, for the development of the —, but stating that in some respects they require further elaboration.

No 1269 Jud 10th May 1893

Communicated to the Superintending Engineer I circle

2. With reference to para 3, it is regretted that no officer of experienced subordinate can be spared for deputation on the special work in question

(Sd) Lucius J. M.

Supdg. Engr. I circle
Judicial dept

1269 SC
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(5)

14TH APRIL 1893, No. 769, JUDICIAL.

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4. As already stated, the road for the second half of the distance between Párvatipur and Ráyaghada has been estimated for and some work has been done. From the estimate I have selected three sections which form most serious obstacles to traffic and propose to carry them out at estate expense. The first, or new Jammadevipeta ghât, is a new ascent from a low level on to a high plateau, access to which is at present only obtained by an excessively steep unimprovable ascent. The second, or Marrighati-Laddaghati, section is a place where the road becomes unavoidably involved in a network of huge ravines for a distance of nearly 2 miles, and in the third it has to be led along the rocky face of a steep hill overhanging a river for about a mile and then descends about 120 feet into its bed and ascends the same height on the opposite side. Here also the gradients are altogether prohibitive to heavy loads. I propose to reduce them to a ruling gradient of 1 in 20 throughout. The estimates for the first two sections are ready and have been sanctioned by Government and are as follows:—

	Rs.
Jammadevipeta Ghât (¼ mile)	2,420
Ladda and Marrighatis (2 miles)	6,816

About Rs. 100 worth of work has been done on the first, and Rs. 2,468 on the second, from this year's Agency grant, so that Rs. 6,768* will be needed to complete them. The estimate for the third portion has also been sanctioned, but on my recent visit I altered the line considerably and a fresh one will have to be prepared. Beyond Ráyaghada I have finally settled the line to be adopted as far as Bissemcuttack except in a few places where diversions are advisable and need to be investigated. As, however, the road must, owing to the general features of the country, pass through certain fixed spots, the diversions which may be adopted will not involve any general changes in its position, and the fact that they are under consideration need not interfere with immediate steps being taken to deal with bad places on other parts of the line.

5. The branch from near Ráyaghada (from Komatlapeta, 5 miles north of that town) to Singapur is almost as important as the road through Bissemcuttack and its bad sections should be dealt with in the same way, but, I think, the greater part of it will have to be retraced and I propose to put this in hand also.

6. Above the ghâts I propose to deal with the Jeypore–Nowrangapur section of the Sálúr–Central Provinces road and the branch to Kotipád in the same way, and will submit estimates if my present proposals meet general approval. The other roads required there are essentially estate ones and are, with one exception, being dealt with at present as well as the supply of labour at our disposal will admit. Two of these are of great importance—the Jeypore–Galiconda road and that from Jeypore to Malkângiri. The first, which constitutes the exception just referred to, I cannot propose to do much to unless I see my way to making the Galiconda ghât. In G.O., No. 1027 F., dated 3rd October 1892, the Public Works Department is called on to report on this subject. Considering the fact that Government can give nothing at present for the Jeypore–Central Provinces road and only Rs. 5,000 per annum for that from Párvatipur to the Central Provinces, this practically shelves the question indefinitely. As regard the Jeypore–Malkangiri road we are at present doing nearly as much as the resources of the country in the way of labour will allow, but this road will never be of real service in opening out this wild and fertile tract, which will eventually be peopled by the overflow population of the plains, until the block caused by the Kolâb river is removed. This is a deep, rapid stream about 7 miles west of Jeypore, which can only be crossed by carts without the help of boats in the height of the dry season, and even then with difficulty. Its violent current, liability to sudden heavy floods, and bad landings, make it impossible to establish a satisfactory ferry across it, and heavy traffic will, I fear, have to confine itself to traversing it at considerable risk, expense and delay in dug-outs during the dry season and be practically suspended at other times for an indefinite period unless it is bridged. The chief Engineer, East Coast Railway, has kindly prepared a rough estimate of the cost of bridging it with the help of what information I have been able to give him, and finds that it would come to Rs. 65,000, or allowing for the extra cost of works in the Agency, say, Rs. 80,000. I strongly recommend that the work may be put in hand. It will in the future, be invaluable in developing the resources of Malkangiri and the west of the Jeypore taluk (including the removal of timber from the saw mills) and it is most improbable that it will ever be built by Government. Indeed, considering that it would be constructed entirely in the interest of the estate, it would not be fair to expect Government to undertake it, even if it had the means. The erection of this bridge would go far towards opening up about 4,000 square miles of very fine country with unfailing rainfall, and would, if combined or when combined with a pucka road, lead to immigration into Malkangiri on a large scale. The pucka road can be made at any time, but if the bridge is not built now it never will be. It would be a fine, permanent memorial of the management, and, if it increased the revenue of Malkangiri by the small sum of Rs. 4,000 per annum, would fully repay its cost.

* The balance required, deducting expenditure up to date, will be reported by wire.

7. Should the Board think that the construction of works of the sort is admissible, I would also recommend dealing with the third of the serious obstacles on the Párvatipur-Ráyaghada section of the Parvatipur-Central Provinces road (the Ráyaghada ghât) by means of a bridge. After winding along a rocky hill side for nearly a mile the road suddenly descends into the bed of a rapid river, 110 feet below, and rises about 120 feet on the other side to the level of the plateau on which Ráyaghada stands. At the point where the descent begins, the river runs in a narrow, rocky bed so close beneath that one can throw a stone across. Foundations in solid rock seem available about 60 feet above the bed of the river and less than 50 feet apart, and a 50 or 60 feet girder bridge would bring the road straight into Ráyaghada almost on a level if laid on piers about 40 feet high. I do not think that this will cost more than Rs. 12,000 at the most. Against this would have to be set the cost of about two-thirds of a mile of additional road, up and down a most intricate mass of ravines, necessary to cross the river by descending into its bed, and the annual maintenance thereof capitalised, to say nothing of the saving to traffic. The former will probably cost Rs. 4,500, and the maintenance may be set at Rs. 133 per annum capitalised, or, say, Rs. 2,500, making a total set-off Rs. 7,000.

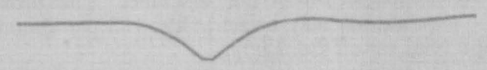
8. Should the Board approve of my views regarding these bridges, I will have an estimate prepared for that at Ráyaghada and will have that for the Koláb amended after an examination of the site in each case by a competent Engineer, with regard to which I hope to be helped by the Chief Engineer, East Coast Railway.

9. The next question is—What can be done for the forests of the estate? They will be of immense value in the future if taken care of now, but if not, there will be hardly any timber worth preserving in a few years. I would like to demarcate and secure as many promising areas in accessible localities as possible. I propose to do this by means of very simple rules under the Forest Act which I am now transmitting to the Board in another letter. All that seems to me to be necessary after the areas have been selected and demarcated is to prohibit the felling of sal and teak trees of above 3 feet in girth. In dealing with forests such as those of Jeypore and Bissemcuttack, I think that there will be no need to interfere further with the customs of the inhabitants. All I want to do is to preserve the jungle where it contains big trees of these species. The hill men will not fell the small ones for kondapodu cultivation where the shade of the larger ones would injuriously affect crops, so that reproduction and growth will proceed unchecked in the selected localities. I feel certain that we shall be able to select an ample area capable of being conserved under some simple rule like this. Whether the Board accept this way of obtaining my end or not, I think it is evident all valuable jungle should be selected, demarcated and conserved somehow without delay. The ranger sanctioned in Board's Proceedings, No. 118, dated 9th March 1892, is doing good work of this sort in Nowrangapur and will have ample to occupy him there and in the Jeypore taluk for a couple of years. I would like to see work of the same kind set on foot in the Párvatipur Agency. I have recently gone over some of the Bissemcuttack forests and found some very fine sal wood, though the areas in which it now exists in fairly accessible country are not numerous. The areas which would be selected are almost all somewhat small, but I do not object much to this, as my idea is to avoid pressing on the hill-men by leaving them ample space for cultivation everywhere; and to obtain this end I would rather take up a large number of small plots than a few big ones, relying, as I do, on the rules being implicitly obeyed as executive orders rather than as having legal sanction so long as they do not seriously interfere with the exercise of the customary destructive habits of the inhabitants. In addition to the Bissemcuttack forests, I have seen some very promising sal on the slopes of the Kylasacota range on the east of the Ráyaghada valley and hear of others in Singapur. These should all be selected and demarcated at once, and I request permission to entertain another ranger on Rs. 100 per mensem for the purpose. I think it highly probable that I shall hereafter apply for more assistance of this sort. The poorest jungle which I would deal with contains probably 200 cubic feet of matured sal per acre which would be worth Rs. 32,000 per square mile at 4 annas per cubic foot—a

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rate which I hope to realise if I do not greatly exceed it very shortly, and as communications improve the value of each square mile will improve vastly. The above figures show the magnitude of the estate interests involved in this direction.

10. Irrigation offers a much less hopeful field for expenditure. Jeypore above the ghâts does not need it owing to its ample rainfall and the physical features of the thannas below the ghâts rarely lend themselves to tank construction. Narainapatnam is too rough. Ráyaghada, though it contains a vast amount of level ground, is everywhere intersected by numerous nullahs of great depth which occupy the depressions where tanks would be naturally located, and has in addition a soil in which storage of water for any length of time is impossible. In Singapur, Bissemcuttack and Gunupur, the invariable tendency of the surface is for the valleys to increase rapidly in steepness towards their lines of drainage, so that they present a section like the following:—



This, of course, renders the construction of profitable tanks out of the question. In my recent tour through Ráyaghada, Singapur and Bissemcuttack, I looked carefully for sites for channels, but only found one. It is a very promising one, as the water of a stream which drains about 25 square miles of hill country can here be brought on to the level of the country at very small cost by means of an anicut. Though I saw nothing else myself and see much against many similar opportunities existing, I think the country should be investigated by a professional man and the courses of all the chief streams below the ghâts examined from where they enter the comparatively level country to their outfalls into the main rivers. Two overseers would be required for this. They should be good men with some irrigation experience and I would suggest salaries of Rs. 200 and Rs. 150 for them. Even if they only discovered and executed one good project each, the estates would be well repaid.

11. As to the purchase of lands, I will lose no reasonable opportunity to secure any good bargain which may turn up.

12. To sum up, I propose to—

(1) take up the construction of all sections of the Párvatipur-Central Provinces and Sálúr-Central Provinces roads which offer obstacles to heavy cart traffic at estate expense and reduce all gradients to a maximum of 1 in 20;

(2) to bridge the Koláb and Ráyaghada rivers at a cost of Rs. 80,000 and Rs. 12,000, respectively (about);

(3) to improve the Singapur and Kotipád roads at the estate expense in the same way, though not to the same extent, as those mentioned above;

(4) to demarcate all valuable forest in accessible sites with a view to its preservation either under the Act or by an executive order;

(5) to construct an anicut across the Donelly stream;

(6) to investigate the irrigational capabilities of Jeypore below the ghâts by professional men.

13. To enable me to carry out these proposals I will want—

	Rs.
1 Overseer on Rs. 200	200
* 2 Overseers on Rs. 150 each	300
9 Overseers' peons on Rs. 6 each	54
1 Forest ranger	100
4 Rangers' peons on Rs. 6 each	24
Total	678

or Rs. 8,136 per annum.

* One would be wanted for road work chiefly.

14. The Forest-officer's pay I would debit to the Jeypore and Bissemcuttack estates according to the number of days spent in camp in each estate in the year. The overseers employed in the Ráyaghada and Bissemcuttack taluks might be charged to the Jeypore estate and to Bissemcuttack in proportion of 3 to 1, taking Jeypore interest in the area at Rs. 90,000 and Bissemcuttack at Rs. 30,000. The income of the latter is about Rs. 40,000, but allowance must be made for the fact that it pays 15,000 per annum to Jeypore, and that the latter may at any time enhance the tribute. I propose to employ two of the overseers in this area and each would have both road and irrigation work to look after, and as the interests of each estate in the former would not be confined to the work actually done within its limits, I think this course would be the fairest to adopt. One overseer I would employ in Gunupur, where work would be entirely in the interests of Jeypore. The rates of pay I suggest had better be regarded as maximums, as it is by no means certain that I shall be able to get men worth the money offered, in which case I must do my best with inferior materials. As regards the works entered in paragraph 12, I request orders by wire as to whether I may go on with them, as this is the working season.

Telegram from the Agent to the Governor, Vizagapatam, dated 15th February 1893, informing, in continuation of his letter, No. 416-J, dated 11th February 1893, that the expenditure is Rs. 2,468 and the balance needed is Rs. 6,768.

Resolution—dated 3rd March 1893, Mis. No. 1476.

The Board approves generally of the proposals contained in the first paper read above and submits them for the favourable consideration of Government; but before the Agent is authorised to take action in respect to the works referred to in clauses (1) to (3) of paragraph 12 of his letter, he should, the Board thinks, submit more detailed information regarding the expensive bridges proposed to be erected. He should also state how far, if at all, the principal or interest of the expenditure thereon, as also on such portions of the roads as may be newly laid out, could be recovered from tolls; and whether the Estate Engineer can be safely entrusted with such very large works; or whether the services, or at least the opinion, of a Government Engineer are not necessary. The investigation of the irrigational capabilities of the estate should also, the Board thinks, be made by an experienced Public Works officer.

2. Financially, the Jeypore estate can well afford the expenditure proposed by Mr. Willock. Its budget for Fasli 1302 shows a surplus balance of Rs. 7,45,499, and the minor will not attain the age of 21 for nearly 3 years.

The estimated closing balance of the Bissemcuttack estate for Fasli 1302 is Rs. 27,650.

(True Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Chief Secretary to Government, Judicial Department.

ORDER—dated 14th April 1893, No. 769, Judicial.

Mr. Willock's proposals appear judicious and meet with the general approval of Government; in some respects however, they require further elaboration.

2. The proposal to improve sections of the Párvatipur–Central Provinces road and of the Sálúr–Central Provinces road and also to improve the roads in Singapur and Kotipád is sanctioned; the work should be entrusted to the Estate Engineer and should be put in hand as soon as possible.

3. The Agent's suggestions regarding the bridging of the Koláb and Ráyaghada rivers will be considered in the Public Works Department. That department will be requested to state whether a competent Engineer can be deputed (if possible before the monsoon) to examine the localities and prepare plans and estimates. If no Government Engineer is available, the Agent will be authorized to negotiate for the deputation of one of the Railway Engineers employed upon the East Coast Railway.

4. The proposals regarding irrigation and the demarcation of the forests can be disposed of by the Board of Revenue.

5. It will be pointed out to the Board of Revenue that Act VIII of 1851 does not authorize the imposition of tolls for the benefit of a private individual, and it is doubtful whether Madras Act II of 1868 is still in force. That Act was not absolutely repealed by Act IV of 1871; it was only repealed in those circles whereto Act IV of 1871 was applied. Act IV of 1871 was never applied to the Vizagapatam Agency, but, on the other hand, Act II of 1868 was also never extended thereto. The question is, whether it is now possible by an order under section 3 or under section 5, Act XIV of 1874, to extend Act II of 1868 to the Vizagapatam Agency. The Government desires to have the opinion of the Advocate-General on this point.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Board of Revenue (Land Revenue).
„ the Revenue Department.
„ the Public Works Department.
„ the Agent to the Governor, Vizagapatam.
„ the Government Solicitor.
„ the Financial Department.

Exd. A. Raitt.

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Govt. of {1893} Madras.

JUDICIAL.

Issued

Recd. Encl.

G.O., 14th April 1893, No. 769.

APRIL.

Jeypore and Bissemcuttack Estates.

Approving generally of the proposals of the Agent to the Governor, Visagapatam, for the development of the —, but stating that in some respects they require further elaboration.

No 1269 W dy 10 May 1893

Communicated to the Superintending Engineer Trichy

2. With reference to para 3, it is regretted that no officer or experienced Subordinate can be spared for deputation on the special work in question

Initialled J H

Supdg Engr Trichy
Judicial Dept

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following papers :—

Proceedings of the Board of Revenue (Land Revenue), dated 3rd March 1893, Mis. No. 1476.

Read—the following letter from W. A. WILLOCK, Esq., Agent to the Governor, Vizagapatam district, to the Secretary to the Commissioners of Land Revenue, Madras, dated 11th February 1893, No. 416-J :—

I have the honour to address the Board regarding the utilization of the surplus revenues of the Jeypore and Bissemcuttack estates. The principle enunciated in Court of Ward's Proceedings, No. 2824, dated 15th August 1892, apply with equal force to their balances, and are, in fact, being adopted to some extent at present, but I would like to do so much more vigorously in the hope of pushing on the development of the areas concerned.

2. The chief objects on which money could be spent in order of importance are—

I. Communications.	III. Irrigation.
II. Forests.	IV. Purchase of lands.

The first is the most promising object on which funds can be expended. The opening of the Jeypore country above the ghats to cart traffic has already in my opinion improved the income of the estate by at least half-a-lakh of rupees and will rapidly produce a still greater improvement. No work on a similar scale remains to be executed—unless, indeed, a steam tramway is attempted—but much can be done in extending the area it affects and placing the north-eastern thannas in thoroughly good communication with the plains. The following description of the road system will aid the Board in understanding my proposals on this subject. There are now two main lines of communication between the Agency and the plains. Both are of an arterial description and consequently should be made and maintained at the cost of Government, rather than of the estates, under G.O., No. 1541, Judicial, dated 20th July 1888. These are the Salúr–Central Provinces road, which passes through Jeypore itself and has tapped the surrounding country, and the Párvatipur–Central Provinces road through Rayaghada and Bissemcuttack. The former has been made as far as Jeypore as a first-class metalled road, but beyond that only fair-weather, earthen tracks exist. The main road extends in this condition through Nowrangapur and Omerkota to the borders of the Central Provinces at Raighar, some 100 miles north of Jeypore. A branch takes off at Borigumma, 14 miles from Jeypore, and goes into Bustar through Kotipád, and is consequently also an arterial road, and a most important one too. The Párvatipur–Central Provinces road has only been made for a distance of 15 miles beyond Párvatipur. From that on until its exit into Kalahandy near Ombodola, about 95 miles from Párvatipur, it also is a mere fair-weather track much cut up by enormous nullahs though tolerably good going between them. 35 miles beyond Párvatipur a branch leaves it which traverses the Singapur estate, which has just come under Jeypore's possession, and then passes into Kalahandy by the Longa-ghati. It is therefore also an important arterial road. The Gunupur thannas' natural market is the Ganjam district, with the road system of which it is in close contact. Main roads are consequently of but little importance here.

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* The balance required, deducting expenditure up to date, will be reported by wire.

7. Should the Board think that the construction of works of the sort is admissible, I would also recommend dealing with the third of the serious obstacles on the Párvatipur–Ráyaghada section of the Parvatipur–Central Provinces road (the Ráyaghada ghât) by means of a bridge. After winding along a rocky hill side for nearly a mile the road suddenly descends into the bed of a rapid river, 110 feet below, and rises about 120 feet on the other side to the level of the plateau on which Ráyaghada stands. At the point where the descent begins, the river runs in a narrow, rocky bed so close beneath that one can throw a stone across. Foundations in solid rock seem available about 60 feet above the bed of the river and less than 50 feet apart, and a 50 or 60 feet girder bridge would bring the road straight into Ráyaghada almost on a level if laid on piers about 40 feet high. I do not think that this will cost more than Rs. 12,000 at the most. Against this would have to be set the cost of about two-thirds of a mile of additional road, up and down a most intricate mass of ravines, necessary to cross the river by descending into its bed, and the annual maintenance thereof capitalised, to say nothing of the saving to traffic. The former will probably cost Rs. 4,500, and the maintenance may be set at Rs. 133 per annum capitalised, or, say, Rs. 2,500, making a total set-off Rs. 7,000.

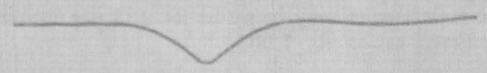
8. Should the Board approve of my views regarding these bridges, I will have an estimate prepared for that at Ráyaghada and will have that for the Kolâb amended after an examination of the site in each case by a competent Engineer, with regard to which I hope to be helped by the Chief Engineer, East Coast Railway.

9. The next question is—What can be done for the forests of the estate? They will be of immense value in the future if taken care of now, but if not, there will be hardly any timber worth preserving in a few years. I would like to demarcate and secure as many promising areas in accessible localities as possible. I propose to do this by means of very simple rules under the Forest Act which I am now transmitting to the Board in another letter. All that seems to me to be necessary after the areas have been selected and demarcated is to prohibit the felling of sal and teak trees of above 3 feet in girth. In dealing with forests such as those of Jeypore and Bissemcuttack, I think that there will be no need to interfere further with the customs of the inhabitants. All I want to do is to preserve the jungle where it contains big trees of these species. The hill men will not fell the small ones for kondapodu cultivation where the shade of the larger ones would injuriously affect crops, so that reproduction and growth will proceed unchecked in the selected localities. I feel certain that we shall be able to select an ample area capable of being conserved under some simple rule like this. Whether the Board accept this way of obtaining my end or not, I think it is evident all valuable jungle should be selected, demarcated and conserved somehow without delay. The ranger sanctioned in Board's Proceedings, No. 118, dated 9th March 1892, is doing good work of this sort in Nowrangapur and will have ample to occupy him there and in the Jeypore taluk for a couple of years. I would like to see work of the same kind set on foot in the Párvatipur Agency. I have recently gone over some of the Bissemcuttack forests and found some very fine sal wood, though the areas in which it now exists in fairly accessible country are not numerous. The areas which would be selected are almost all somewhat small, but I do not object much to this, as my idea is to avoid pressing on the hill-men by leaving them ample space for cultivation everywhere; and to obtain this end I would rather take up a large number of small plots than a few big ones, relying, as I do, on the rules being implicitly obeyed as executive orders rather than as having legal sanction so long as they do not seriously interfere with the exercise of the customary destructive habits of the inhabitants. In addition to the Bissemcuttack forests, I have seen some very promising sal on the slopes of the Kyimacota range on the east of the Ráyaghada valley and hear of others in Singapur. These should all be selected and demarcated at once, and I request permission to entertain another ranger on Rs. 100 per mensem for the purpose. I think it highly probable that I shall hereafter apply for more assistance of this sort. The poorest jungle which I would deal with contains probably 200 cubic feet of matured sal per acre which would be worth Rs. 32,000 per square mile at 4 annas per cubic foot—a

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rate which I hope to realise if I do not greatly exceed it very shortly, and as communications improve the value of each square mile will improve vastly. The above figures show the magnitude of the estate interests involved in this direction.

10. Irrigation offers a much less hopeful field for expenditure. Jeypore above the ghâts does not need it owing to its ample rainfall and the physical features of the thannas below the ghâts rarely lend themselves to tank construction. Narainapatnam is too rough. Ráyaghada, though it contains a vast amount of level ground, is everywhere intersected by numerous nullahs of great depth which occupy the depressions where tanks would be naturally located, and has in addition a soil in which storage of water for any length of time is impossible. In Singapur, Bissemcuttack and Gunupur, the invariable tendency of the surface is for the valleys to increase rapidly in steepness towards their lines of drainage, so that they present a section like the following:—



This, of course, renders the construction of profitable tanks out of the question. In my recent tour through Ráyaghada, Singapur and Bissemcuttack, I looked carefully for sites for channels, but only found one. It is a very promising one, as the water of a stream which drains about 25 square miles of hill country can here be brought on to the level of the country at very small cost by means of an anicut. Though I saw nothing else myself and see much against many similar opportunities existing, I think the country should be investigated by a professional man and the courses of all the chief streams below the ghâts examined from where they enter the comparatively level country to their outfalls into the main rivers. Two overseers would be required for this. They should be good men with some irrigation experience and I would suggest salaries of Rs. 200 and Rs. 150 for them. Even if they only discovered and executed one good project each, the estates would be well repaid.

11. As to the purchase of lands, I will lose no reasonable opportunity to secure any good bargain which may turn up.

12. To sum up, I propose to—

(1) take up the construction of all sections of the Párvatipur–Central Provinces and Sálúr-Central Provinces roads which offer obstacles to heavy cart traffic at estate expense and reduce all gradients to a maximum of 1 in 20;

(2) to bridge the Kolâb and Ráyaghada rivers at a cost of Rs. 80,000 and Rs. 12,000, respectively (about);

(3) to improve the Singapur and Kotipád roads at the estate expense in the same way, though not to the same extent, as those mentioned above;

(4) to demarcate all valuable forest in accessible sites with a view to its preservation either under the Act or by an executive order;

(5) to construct an anicut across the Donelly stream;

(6) to investigate the irrigational capabilities of Jeypore below the ghâts by professional men.

13. To enable me to carry out these proposals I will want—

	Rs.
1 Overseer on Rs. 200	200
* 2 Overseers on Rs. 150 each	300
9 Overseers' peons on Rs. 6 each	54
1 Forest ranger	100
4 Rangers' peons on Rs. 6 each	24
Total ...	678
or Rs. 8,136 per annum.	

* One would be wanted for road work chiefly.

14. The Forest-officer's pay I would debit to the Jeypore and Bissemcuttack estates according to the number of days spent in camp in each estate in the year. The overseers employed in the Ráyaghada and Bissemcuttack taluks might be charged to the Jeypore estate and to Bissemcuttack in proportion of 3 to 1, taking Jeypore interest in the area at Rs. 90,000 and Bissemcuttack at Rs. 30,000. The income of the latter is about Rs. 40,000, but allowance must be made for the fact that it pays 15,000 per annum to Jeypore, and that the latter may at any time enhance the tribute. I propose to employ two of the overseers in this area and each would have both road and irrigation work to look after, and as the interests of each estate in the former would not be confined to the work actually done within its limits, I think this course would be the fairest to adopt. One overseer I would employ in Gunupur, where work would be entirely in the interests of Jeypore. The rates of pay I suggest had better be regarded as maximums, as it is by no means certain that I shall be able to get men worth the money offered, in which case I must do my best with inferior materials. As regards the works entered in paragraph 12, I request orders by wire as to whether I may go on with them, as this is the working season.

Telegram from the Agent to the Governor, Vizagapatam, dated 15th February 1893, informing, in continuation of his letter, No. 416-J, dated 11th February 1893, that the expenditure is Rs. 2,468 and the balance needed is Rs. 6,768.

Resolution—dated 3rd March 1893, Mis. No. 1476.

The Board approves generally of the proposals contained in the first paper read above and submits them for the favourable consideration of Government; but before the Agent is authorised to take action in respect to the works referred to in clauses (1) to (3) of paragraph 12 of his letter, he should, the Board thinks, submit more detailed information regarding the expensive bridges proposed to be erected. He should also state how far, if at all, the principal or interest of the expenditure thereon, as also on such portions of the roads as may be newly laid out, could be recovered from tolls; and whether the Estate Engineer can be safely entrusted with such very large works; or whether the services, or at least the opinion, of a Government Engineer are not necessary. The investigation of the irrigational capabilities of the estate should also, the Board thinks, be made by an experienced Public Works officer.

2. Financially, the Jeypore estate can well afford the expenditure proposed by Mr. Willock. Its budget for Fasli 1302 shows a surplus balance of Rs. 7,45,499, and the minor will not attain the age of 21 for nearly 3 years.

The estimated closing balance of the Bissemcuttack estate for Fasli 1302 is Rs. 27,650.

(True Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Chief Secretary to Government, Judicial Department.

Order—dated 14th April 1893, No. 769, Judicial.

Mr. Willock's proposals appear judicious and meet with the general approval of Government; in some respects, however, they require further elaboration.

2. The proposal to improve sections of the Párvatipur–Central Provinces road and of the Sálúr–Central Provinces road and also to improve the roads in Singapur and Kotipád is sanctioned; the work should be entrusted to the Estate Engineer and should be put in hand as soon as possible.

3. The Agent's suggestions regarding the bridging of the Koláb and Ráyaghada rivers will be considered in the Public Works Department. That department will be requested to state whether a competent Engineer can be deputed (if possible before the monsoon) to examine the localities and prepare plans and estimates. If no Government Engineer is available, the Agent will be authorized to negotiate for the deputation of one of the Railway Engineers employed upon the East Coast Railway.

4. The proposals regarding irrigation and the demarcation of the forests can be disposed of by the Board of Revenue.

5. It will be pointed out to the Board of Revenue that Act VIII of 1851 does not authorize the imposition of tolls for the benefit of a private individual, and it is doubtful whether Madras Act II of 1868 is still in force. That Act was not absolutely repealed by Act IV of 1871; it was only repealed in those circles whereto Act IV of 1871 was applied. Act IV of 1871 was never applied to the Vizagapatam Agency, but, on the other hand, Act II of 1868 was also never extended thereto. The question is, whether it is now possible by an order under section 4 or under section 5, Act XIV of 1874, to extend Act II of 1868 to the Vizagapatam Agency. The Government desires to have the opinion of the Advocate-General on this point.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Board of Revenue (Land Revenue).
,, the Revenue Department.
,, the Public Works Department.
,, the Agent to the Governor, Vizagapatam.
,, the Government Solicitor.
,, the Financial Department.

Exd. A. Raitt.

Govt. of {1893} Madras.

JUDICIAL.

Issued

Read. Encl.

G.O., 14th April 1893, No. 769.

APRIL.

Jeypore and Bissemcuttack Estates.

Approving generally of the proposals of the Agent to the Governor, Vizagapatam, for the development of the —, but stating that in some respects they require further elaboration.

GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following papers:—

Proceedings of the Board of Revenue (Land Revenue), dated 3rd March 1893, Mis. No. 1476.

Read—the following letter from W. A. WILLOCK, Esq., Agent to the Governor, Vizagapatam district, to the Secretary to the Commissioners of Land Revenue, Madras, dated 11th February 1893, No. 416-J:—

I have the honour to address the Board regarding the utilization of the surplus revenues of the Jeypore and Bissemcuttack estates. The principle enunciated in Court of Ward's Proceedings, No. 2824, dated 15th August 1892, apply with equal force to their balances, and are, in fact, being adopted to some extent at present, but I would like to do so much more vigorously in the hope of pushing on the development of the areas concerned.

2. The chief objects on which money could be spent in order of importance are—

I. Communications.
II. Forests.
III. Irrigation.
IV. Purchase of lands.

The first is the most promising object on which funds can be expended. The opening of the Jeypore country above the ghats to cart traffic has already in my opinion improved the income of the estate by at least half-a-lakh of rupees and will rapidly produce a still greater improvement. No work on a similar scale remains to be executed—unless, indeed, a steam tramway is attempted—but much can be done in extending the area it affects and placing the north-eastern thannas in thoroughly good communication with the plains. The following description of the road system will aid the Board in understanding my proposals on this subject. There are now two main lines of communication between the Agency and the plains. Both are of an arterial description and consequently should be made and maintained at the cost of Government, rather than of the estates, under G.O., No. 1541, Judicial, dated 20th July 1888. These are the Salúr–Central Provinces road, which passes through Jeypore itself and has tapped the surrounding country, and the Párvatipur–Central Provinces road through Rayaghada and Bissemcuttack. The former has been made as far as Jeypore as a first-class metalled road, but beyond that only fair-weather, earthen tracks exist. The main road extends in this condition through Nowrangapur and Omerkota to the borders of the Central Provinces at Raighar, some 100 miles north of Jeypore. A branch takes off at Borigumma, 14 miles from Jeypore, and goes into Bustar through Kotipád, and is consequently also an arterial road, and a most important one too. The Párvatipur–Central Provinces road has only been made for a distance of 15 miles beyond Párvatipur. From that on until its exit into Kalahandy near Ombodola, about 95 miles from Párvatipur, it also is a mere fair-weather track much cut up by enormous nullahs though tolerably good going between them. 35 miles beyond Párvatipur a branch leaves it which traverses the Singapur estate, which has just come under Jeypore's possession, and then passes into Kalahandy by the Longa-ghati. It is therefore also an important arterial road. The Gunupur thannas' natural market is the Ganjam district, with the road system of which it is in close contact. Main roads are consequently of but little importance here.

3. It is the intention of Government to make the remainder of the two main lines referred to above from public funds. An estimate for constructing the section of the Central Provinces road between Jeypore and Nowrangapur (28 miles) has been prepared by the Public Works Department, and was to have formed one of the principal works in the charge of Mr. French, the Estate Engineer, but Government has been unable to provide any funds either this year or next, and it does not seem likely that it will fare any better in the near future. An estimate for continuing the Párvatipur–Central Provinces road up to Ráyaghada (an addition of 15 miles to the part already finished) has been sanctioned, and work was in rapid progress this season, but I have had to stop it for want of funds, and as only Rs. 5,000 are allotted for next year its construction may also be regarded as indefinitely postponed. It is of vital importance to the development of the estates concerned that the roads, the construction of which is thus suspended, should be brought into a condition to allow of cheap and easy transport for produce during the dry season as quickly as possible, but I do not think that they are so deeply interested in their being made available for wet-weather traffic as to justify any large expenditure for that purpose. At that season of the year the ryots and bandymen are all busily engaged in agricultural operations and the roads would chiefly be used by ordinary travellers and classes whose interests are not by any means those of the estates. Regarding the enormous pecuniary advantage the estates will derive from any reduction in the cost of transport of their surplus produce to the markets along the coast, there can be no doubt, and I think that the steps which I am about to propose will reduce the transit charges by 30 per cent. at least. Carts will, by desperate efforts, manage to carry a full load over a few yards of heavy going or up excessive gradients, but when such obstacles are met half-a-dozen times in each day's journey the weights must be greatly reduced. I therefore now propose to take up all sections of these roads which offer special obstacles to fully-laden carts in the fine weather and make them at the expense of the estates, reserving the portions which are good going to be completed by Government later on. This will involve many [illegible] finally, marking out the roads not already estimated for, but this may as well be done now as later on. The natural features of the country of themselves define many points through which the roads must pass, and work already done on a considerable scale has some weight in fixing others. Above the ghâts the amount to be done to bring the bad places into permanently good order will not be very heavy, for steady progress has been made for many years past and nullahs have been systematically bridged and swampy sections embanked, but the Parvatipur–Central Provinces road is sadly in want of such treatment. The present track is almost everywhere identical with that which I laid out in 1874–78 as Senior Assistant Agent, when I had very small funds at my disposal and could not deal with obstacles in anything but the most economical way. Much money has been annually spent on improving this track which should have been devoted to dealing with difficulties more effectively by means of diversions, and, as the country is intersected with huge nullahs at frequent intervals, the result of this not having been done is a fair-weather road which, though fairly safe for carts, only admits of light loads being carried owing to the excessive gradients of the ascents and descents.

4. As already stated, the road for the second half of the distance between Párvatipur and Ráyaghada has been estimated for and some work has been done. From the estimate I have selected three sections which form most serious obstacles to traffic and propose to carry them out at estate expense. The first, or new Jammadevipeta ghât, is a new ascent from a low level on to a high plateau, access to which is at present only obtained by an excessively steep unimprovable ascent. The second, or Marrighati-Laddaghati, section is a place where the road becomes unavoidably involved in a network of huge ravines for a distance of nearly 2 miles, and in the third it has to be led along the rocky face of a steep hill overhanging a river for about a mile and then descends about 120 feet into its bed and ascends the same height on the opposite side. Here also the gradients are altogether prohibitive to heavy loads. I propose to reduce them to a ruling gradient of 1 in 20 throughout. The estimates for the first two sections are ready and have been sanctioned by Government and are as follows:—

	Rs.
Jammadevipeta Ghât (½ mile)	2,420
Ladda and Marrighatis (2 miles)	6,816

About Rs. 100 worth of work has been done on the first, and Rs. 2,468 on the second, from this year's Agency grant, so that Rs. 6,768* will be needed to complete them. The estimate for the third portion has also been sanctioned, but on my recent visit I altered the line considerably and a fresh one will have to be prepared. Beyond Ráyaghada I have finally settled the line to be adopted as far as Bissemcuttack except in a few places where diversions are advisable and need to be investigated. As, however, the road must, owing to the general features of the country, pass through certain fixed spots, the diversions which may be adopted will not involve any general changes in its position, and the fact that they are under consideration need not interfere with immediate steps being taken to deal with bad places on other parts of the line.

5. The branch from near Ráyaghada (from Komatlapeta, 5 miles north of that town) to Singapur is almost as important as the road through Bissemcuttack and its bad sections should be dealt with in the same way, but, I think, the greater part of it will have to be retraced and I propose to put this in hand also.

6. Above the ghâts I propose to deal with the Jeypore–Nowrangapur section of the Sálúr–Central Provinces road and the branch to Kotipád in the same way, and will submit estimates if my present proposals meet general approval. The other roads required there are essentially estate ones and are, with one exception, being dealt with at present as well as the supply of labour at our disposal will admit. Two of these are of great importance—the Jeypore–Galiconda road and that from Jeypore to Malkangiri. The first, which constitutes the exception just referred to, I cannot propose to do much to unless I see my way to making the Galiconda ghât. In G.O., No. 1027 F., dated 3rd October 1892, the Public Works Department is called on to report on this subject. Considering the fact that Government can give nothing at present for the Jeypore–Central Provinces road and only Rs. 5,000 per annum for that from Párvatipur to the Central Provinces, this practically shelves the question indefinitely. As regard the Jeypore–Malkangiri road we are at present doing nearly as much as the resources of the country in the way of labour will allow, but this road will never be of real service in opening out this wild and fertile tract, which will eventually be peopled by the overflow population of the plains, until the block caused by the Koláb river is removed. This is a deep, rapid stream about 7 miles west of Jeypore, which can only be crossed by carts without the help of boats in the height of the dry season, and even then with difficulty. Its violent current, liability to sudden heavy floods, and bad landings, make it impossible to establish a satisfactory ferry across it, and heavy traffic will, I fear, have to confine itself to traversing it at considerable risk, expense and delay in dug-outs during the dry season and be practically suspended at other times for an indefinite period unless it is bridged. The chief Engineer, East Coast Railway, has kindly prepared a rough estimate of the cost of bridging it with the help of what information I have been able to give him, and finds that it would come to Rs. 65,000, or allowing for the extra cost of works in the Agency, say, Rs. 80,000. I strongly recommend that the work may be put in hand. It will in the future, be invaluable in developing the resources of Malkangiri and the west of the Jeypore taluk (including the removal of timber from the saw mills) and it is most improbable that it will ever be built by Government. Indeed, considering that it would be constructed entirely in the interest of the estate, it would not be fair to expect Government to undertake it, even if it had the means. The erection of this bridge would go far towards opening up about 4,000 square miles of very fine country with unfailing rainfall, and would, if combined or when combined with a pucka road, lead to immigration into Malkangiri on a large scale. The pucka road can be made at any time, but if the bridge is not built now it never will be. It would be a fine, permanent memorial of the management, and, if it increased the revenue of Malkangiri by the small sum of Rs. 4,000 per annum, would fully repay its cost.

* The balance required, deducting expenditure up to date, will be reported by wire.

7. Should the Board think that the construction of works of the sort is admissible, I would also recommend dealing with the third of the serious obstacles on the Párvatipur-Ráyaghada section of the Parvatipur-Central Provinces road (the Ráyaghada ghât) by means of a bridge. After winding along a rocky hill side for nearly a mile the road suddenly descends into the bed of a rapid river, 110 feet below, and rises about 120 feet on the other side to the level of the plateau on which Ráyaghada stands. At the point where the descent begins, the river runs in a narrow, rocky bed so close beneath that one can throw a stone across. Foundations in solid rock seem available about 60 feet above the bed of the river and less than 50 feet apart, and a 50 or 60 feet girder bridge would bring the road straight into Ráyaghada almost on a level if laid on piers about 40 feet high. I do not think that this will cost more than Rs. 12,000 at the most. Against this would have to be set the cost of about two-thirds of a mile of additional road, up and down a most intricate mass of ravines, necessary to cross the river by descending into its bed, and the annual maintenance thereof capitalised, to say nothing of the saving to traffic. The former will probably cost Rs. 4,500, and the maintenance may be set at Rs. 133 per annum capitalised, or, say, Rs. 2,500, making a total set-off Rs. 7,000.

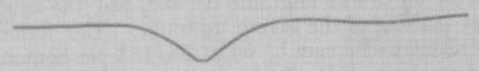
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This, of course, renders the construction of profitable tanks out of the question. In my recent tour through Ráyaghada, Singapur and Bissemcuttack, I looked carefully for sites for channels, but only found one. It is a very promising one, as the water of a stream which drains about 25 square miles of hill country can here be brought on to the level of the country at very small cost by means of an anicut. Though I saw nothing else myself and see much against many similar opportunities existing, I think the country should be investigated by a professional man and the courses of all the chief streams below the ghâts examined from where they enter the comparatively level country to their outfalls into the main rivers. Two overseers would be required for this. They should be good men with some irrigation experience and I would suggest salaries of Rs. 200 and Rs. 150 for them. Even if they only discovered and executed one good project each, the estates would be well repaid.

11. As to the purchase of lands, I will lose no reasonable opportunity to secure any good bargain which may turn up.

12. To sum up, I propose to—

(1) take up the construction of all sections of the Párvatipur-Central Provinces and Sálúr-Central Provinces roads which offer obstacles to heavy cart traffic at estate expense and reduce all gradients to a maximum of 1 in 20;

(2) to bridge the Koláb and Ráyaghada rivers at a cost of Rs. 80,000 and Rs. 12,000, respectively (about);

(3) to improve the Singapur and Kotipád roads at the estate expense in the same way, though not to the same extent, as those mentioned above;

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(5) to construct an anicut across the Donelly stream;

(6) to investigate the irrigational capabilities of Jeypore below the ghâts by professional men.

13. To enable me to carry out these proposals I will want—

	Rs.
1 Overseer on Rs. 200	200
* 2 Overseers on Rs. 150 each	300
9 Overseers' peons on Rs. 6 each	54
1 Forest ranger	100
4 Rangers' peons on Rs. 6 each	24
Total	678

or Rs. 8,136 per annum.

* One would be wanted for road work chiefly.

14. The Forest-officer's pay I would debit to the Jeypore and Bissemcuttack estates according to the number of days spent in camp in each estate in the year. The overseers employed in the Ráyaghada and Bissemcuttack taluks might be charged to the Jeypore estate and to Bissemcuttack in proportion of 3 to 1, taking Jeypore interest in the area at Rs. 90,000 and Bissemcuttack at Rs. 30,000. The income of the latter is about Rs. 40,000, but allowance must be made for the fact that it pays 15,000 per annum to Jeypore, and that the latter may at any time enhance the tribute. I propose to employ two of the overseers in this area and each would have both road and irrigation work to look after, and as the interests of each estate in the former would not be confined to the work actually done within its limits, I think this course would be the fairest to adopt. One overseer I would employ in Gunupur, where work would be entirely in the interests of Jeypore. The rates of pay I suggest had better be regarded as maximums, as it is by no means certain that I shall be able to get men worth the money offered, in which case I must do my best with inferior materials. As regards the works entered in paragraph 12, I request orders by wire as to whether I may go on with them, as this is the working season.

Telegram from the Agent to the Governor, Vizagapatam, dated 15th February 1893, informing, in continuation of his letter, No. 416-J, dated 11th February 1893, that the expenditure is Rs. 2,468 and the balance needed is Rs. 6,768.

Resolution—dated 3rd March 1893, Mis. No. 1476.

The Board approves generally of the proposals contained in the first paper read above and submits them for the favourable consideration of Government; but before the Agent is authorised to take action in respect to the works referred to in clauses (1) to (3) of paragraph 12 of his letter, he should, the Board thinks, submit more detailed information regarding the expensive bridges proposed to be erected. He should also state how far, if at all, the principal or interest of the expenditure thereon, as also on such portions of the roads as may be newly laid out, could be recovered from tolls; and whether the Estate Engineer can be safely entrusted with such very large works; or whether the services, or at least the opinion, of a Government Engineer are not necessary. The investigation of the irrigational capabilities of the estate should also, the Board thinks, be made by an experienced Public Works officer.

2. Financially, the Jeypore estate can well afford the expenditure proposed by Mr. Willock. Its budget for Fasli 1302 shows a surplus balance of Rs. 7,45,499, and the minor will not attain the age of 21 for nearly 3 years.

The estimated closing balance of the Bissemcuttack estate for Fasli 1302 is Rs. 27,650.

(True Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Chief Secretary to Government, Judicial Department.

ORDER—dated 14th April 1893, No. 769, Judicial.

Mr. Willock's proposals appear judicious and meet with the general approval of Government; in some respects, however, they require further elaboration.

2. The proposal to improve sections of the Párvatipur-Central Provinces road and of the Sádr-Central Provinces road and also to improve the roads in Singapur and Kotipád is sanctioned; the work should be entrusted to the Estate Engineer and should be put in hand as soon as possible.

3. The Agent's suggestions regarding the bridging of the Koláb and Ráyaghada rivers will be considered in the Public Works Department. That department will be requested to state whether a competent Engineer can be deputed (if possible before the monsoon) to examine the localities and prepare plans and estimates. If no Government Engineer is available, the Agent will be authorized to negotiate for the deputation of one of the Railway Engineers employed upon the East Coast Railway.

4. The proposals regarding irrigation and the demarcation of the forests can be disposed of by the Board of Revenue.

5. It will be pointed out to the Board of Revenue that Act VIII of 1851 does not authorize the imposition of tolls for the benefit of a private individual, and it is doubtful whether Madras Act II of 1868 is still in force. That Act was not absolutely repealed by Act IV of 1871; it was only repealed in those circles whereto Act IV of 1871 was applied. Act IV of 1871 was never applied to the Vizagapatam Agency, but, on the other hand, Act II of 1868 was also never extended thereto. The question is, whether it is now possible by an order under section 3 or under section 5, Act XIV of 1874, to extend Act II of 1868 to the Vizagapatam Agency. The Government desires to have the opinion of the Advocate-General on this point.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Board of Revenue (Land Revenue).
„ the Revenue Department.
„ the Public Works Department.
„ the Agent to the Governor, Vizagapatam.
„ the Government Solicitor.
„ the Financial Department.

Exd. A. Raitt.

Govt. of {1893} Madras.

JUDICIAL.

Issued

Recd. Encl.

G.O., 14th April 1893, No. 769.

APRIL.

Jeypore and Bissemcuttack Estates.

Approving generally of the proposals of the Agent to the Governor, Vizagapatam, for the development of the —, but stating that in some respects they require further elaboration.

G.O. No. 1269 W dt 10 May 89.

Copies to Chief Engineer Circle.

2 Dist references Para 3, if in regard that no officer or experienced subordinate can be spared for deputation to special work in question

(Sd) J. H.

S.E. I Cir
Genl. Dept

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GOVERNMENT OF MADRAS.

JUDICIAL DEPARTMENT.

READ—the following papers :—

Proceedings of the Board of Revenue (Land Revenue), dated 3rd March 1893, Mis. No. 1476.

Read—the following letter from W. A. WILLOCK, Esq., Agent to the Governor, Vizagapatam district, to the Secretary to the Commissioners of Land Revenue, Madras, dated 11th February 1893, No. 416-J :—

I have the honour to address the Board regarding the utilization of the surplus revenues of the Jeypore and Bissemcuttack estates. The principle enunciated in Court of Ward's Proceedings, No. 2824, dated 15th August 1892, apply with equal force to their balances, and are, in fact, being adopted to some extent at present, but I would like to do so much more vigorously in the hope of pushing on the development of the areas concerned.

2. The chief objects on which money could be spent in order of importance are—

I. Communications.	III. Irrigation.
II. Forests.	IV. Purchase of lands.

The first is the most promising object on which funds can be expended. The opening of the Jeypore country above the ghats to cart traffic has already in my opinion improved the income of the estate by at least half-a-lakh of rupees and will rapidly produce a still greater improvement. No work on a similar scale remains to be executed—unless, indeed, a steam tramway is attempted—but much can be done in extending the area it affects and placing the north-eastern thannas in thoroughly good communication with the plains. The following description of the road system will aid the Board in understanding my proposals on this subject. There are now two main lines of communication between the Agency and the plains. Both are of an arterial description and consequently should be made and maintained at the cost of Government, rather than of the estates, under G.O., No. 1541, Judicial, dated 20th July 1888. These are the Salúr–Central Provinces road, which passes through Jeypore itself and has tapped the surrounding country, and the Párvatipur–Central Provinces road through Ráyaghada and Bissemcuttack. The former has been made as far as Jeypore as a first-class metalled road, but beyond that only fair-weather, earthen tracks exist. The main road extends in this condition through Nowrangapur and Omerkota to the borders of the Central Provinces at Raighar, some 100 miles north of Jeypore. A branch takes off at Borigumma, 14 miles from Jeypore, and goes into Bustar through Kotipád, and is consequently also an arterial road, and a most important one too. The Párvatipur–Central Provinces road has only been made for a distance of 15 miles beyond Párvatipur. From that on until its exit into Kalahandy near Ombodola, about 95 miles from Párvatipur, it also is a mere fair-weather track much cut up by enormous nullahs though tolerably good going between them. 35 miles beyond Párvatipur a branch leaves it which traverses the Singapur estate, which has just come under Jeypore's possession, and then passes into Kalahandy by the Longa-ghati. It is therefore also an important arterial road. The Gunupur thannas' natural market is the Ganjam district, with the road system of which it is in close contact. Main roads are consequently of but little importance here.

3. It is the intention of Government to make the remainder of the two main lines referred to above from public funds. An estimate for constructing the section of the Central Provinces road between Jeypore and Nowrangapur (28 miles) has been prepared by the Public Works Department, and was to have formed one of the principal works in the charge of Mr. French, the Estate Engineer, but Government has been unable to provide any funds either this year or next, and it does not seem likely that it will fare any better in the near future. An estimate for continuing the Párvatipur–Central Provinces road up to Ráyaghada (an addition of 15 miles to the part already finished) has been sanctioned, and work was in rapid progress this season, but I have had to stop it for want of funds, and as only Rs. 5,000 are allotted for next year its construction may also be regarded as indefinitely postponed. It is of vital importance to the development of the estates concerned that the roads, the construction of which is thus suspended, should be brought into a condition to allow of cheap and easy transport for produce during the dry season as quickly as possible, but I do not think that they are so deeply interested in their being made available for wet-weather traffic as to justify any large expenditure for that purpose. At that season of the year the ryots and bandymen are all busily engaged in agricultural operations and the roads would chiefly be used by ordinary travellers and classes whose interests are not by any means those of the estates. Regarding the enormous pecuniary advantage the estates will derive from any reduction in the cost of transport of their surplus produce to the markets along the coast, there can be no doubt, and I think that the steps which I am about to propose will reduce the transit charges by 30 per cent. at least. Carts will, by desperate efforts, manage to carry a full load over a few yards of heavy going or up excessive gradients, but when such obstacles are met half-a-dozen times in each day's journey the weights must be greatly reduced. I therefore now propose to take up all sections of these roads which offer special obstacles to fully-laden carts in the fine weather and make them at the expense of the estates, reserving the portions which are good going to be completed by Government later on. This will involve finally marking out the roads not already estimated for, but this may as well be done now as later on. The natural features of the country of themselves define many points through which the roads must pass, and work already done on a considerable scale has some weight in fixing others. Above the ghâts the amount to be done to bring the bad places into permanently good order will not be very heavy, for steady progress has been made for many years past and nullahs have been systematically bridged and swampy sections embanked, but the Parvatipur–Central Provinces road is sadly in want of such treatment. The present track is almost everywhere identical with that which I laid out in 1874–78 as Senior Assistant Agent, when I had very small funds at my disposal and could not deal with obstacles in anything but the most economical way. Much money has been annually spent on improving this track which should have been devoted to dealing with difficulties more effectively by means of diversions, and, as the country is intersected with huge nullahs at frequent intervals, the result of this not having been done is a fair-weather road which, though fairly safe for carts, only admits of light loads being carried owing to the excessive gradients of the ascents and descents.

4. As already stated, the road for the second half of the distance between Párvatipur and Ráyaghada has been estimated for and some work has been done. From the estimate I have selected three sections which form most serious obstacles to traffic and propose to carry them out at estate expense. The first, or new Jammadevipeta ghât, is a new ascent from a low level on to a high plateau, access to which is at present only obtained by an excessively steep unimprovable ascent. The second, or Marrighati-Laddaghati, section is a place where the road becomes unavoidably involved in a network of huge ravines for a distance of nearly 2 miles, and in the third it has to be led along the rocky face of a steep hill overhanging a river for about a mile and then descends about 120 feet into its bed and ascends the same height on the opposite side. Here also the gradients are altogether prohibitive to heavy loads. I propose to reduce them to a ruling gradient of 1 in 20 throughout. The estimates for the first two sections are ready and have been sanctioned by Government and are as follows:—

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	Rs.
Jammadevipeta Ghât (¼ mile)	2,420
Ladda and Marrighatis (2 miles)	6,816

About Rs. 100 worth of work has been done on the first, and Rs. 2,468 on the second, from this year's Agency grant, so that Rs. 6,768* will be needed to complete them. The estimate for the third portion has also been sanctioned, but on my recent visit I altered the line considerably and a fresh one will have to be prepared. Beyond Ráyaghada I have finally settled the line to be adopted as far as Bissemcuttack except in a few places where diversions are advisable and need to be investigated. As, however, the road must, owing to the general features of the country, pass through certain fixed spots, the diversions which may be adopted will not involve any general changes in its position, and the fact that they are under consideration need not interfere with immediate steps being taken to deal with bad places on other parts of the line.

5. The branch from near Ráyaghada (from Komatlapeta, 5 miles north of that town) to Singapur is almost as important as the road through Bissemcuttack and its bad sections should be dealt with in the same way, but, I think, the greater part of it will have to be retraced and I propose to put this in hand also.

6. Above the ghâts I propose to deal with the Jeypore–Nowrangapur section of the Sálúr–Central Provinces road and the branch to Kotipád in the same way, and will submit estimates if my present proposals meet general approval. The other roads required there are essentially estate ones and are, with one exception, being dealt with at present as well as the supply of labour at our disposal will admit. Two of these are of great importance—the Jeypore–Galiconda road and that from Jeypore to Malkangiri. The first, which constitutes the exception just referred to, I cannot propose to do much to unless I see my way to making the Galiconda ghât. In G.O., No. 1027 F., dated 3rd October 1892, the Public Works Department is called on to report on this subject. Considering the fact that Government can give nothing at present for the Jeypore–Central Provinces road and only Rs. 5,000 per annum for that from Párvatipur to the Central Provinces, this practically shelves the question indefinitely. As regard the Jeypore–Malkangiri road we are at present doing nearly as much as the resources of the country in the way of labour will allow, but this road will never be of real service in opening out this wild and fertile tract, which will eventually be peopled by the overflow population of the plains, until the block caused by the Kolab river is removed. This is a deep, rapid stream about 7 miles west of Jeypore, which can only be crossed by carts without the help of boats in the height of the dry season, and even then with difficulty. Its violent current, liability to sudden heavy floods, and bad landings, make it impossible to establish a satisfactory ferry across it, and heavy traffic will, I fear, have to confine itself to traversing it at considerable risk, expense and delay in dug-outs during the dry season and be practically suspended at other times for an indefinite period unless it is bridged. The chief Engineer, East Coast Railway, has kindly prepared a rough estimate of the cost of bridging it with the help of what information I have been able to give him, and finds that it would come to Rs. 65,000, or allowing for the extra cost of works in the Agency, say, Rs. 80,000. I strongly recommend that the work may be put in hand. It will in the future, be invaluable in developing the resources of Malkangiri and the west of the Jeypore taluk (including the removal of timber from the saw mills) and it is most improbable that it will ever be built by Government. Indeed, considering that it would be constructed entirely in the interest of the estate, it would not be fair to expect Government to undertake it, even if it had the means. The erection of this bridge would go far towards opening up about 4,000 square miles of very fine country with unfailing rainfall, and would, if combined or when combined with a pucka road, lead to immigration into Malkangiri on a large scale. The pucka road can be made at any time, but if the bridge is not built now it never will be. It would be a fine, permanent memorial of the management, and, if it increased the revenue of Malkangiri by the small sum of Rs. 4,000 per annum, would fully repay its cost.

* The balance required, deducting expenditure up to date, will be reported by wire.

7. Should the Board think that the construction of works of the sort is admissible, I would also recommend dealing with the third of the serious obstacles on the Párvatipur–Ráyaghada section of the Parvatipur–Central Provinces road (the Ráyaghada ghât) by means of a bridge. After winding along a rocky hill side for nearly a mile the road suddenly descends into the bed of a rapid river, 110 feet below, and rises about 120 feet on the other side to the level of the plateau on which Ráyaghada stands. At the point where the descent begins, the river runs in a narrow, rocky bed so close beneath that one can throw a stone across. Foundations in solid rock seem available about 60 feet above the bed of the river and less than 50 feet apart, and a 50 or 60 feet girder bridge would bring the road straight into Ráyaghada almost on a level if laid on piers about 40 feet high. I do not think that this will cost more than Rs. 12,000 at the most. Against this would have to be set the cost of about two-thirds of a mile of additional road, up and down a most intricate mass of ravines, necessary to cross the river by descending into its bed, and the annual maintenance thereof capitalised, to say nothing of the saving to traffic. The former will probably cost Rs. 4,600, and the maintenance may be set at Rs. 133 per annum capitalised, or, say, Rs. 2,500, making a total set-off Rs. 7,000.

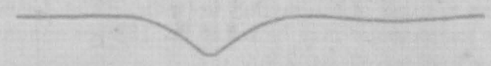
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This, of course, renders the construction of profitable tanks out of the question. In my recent tour through Ráyaghada, Singapur and Bissemcuttack, I looked carefully for sites for channels, but only found one. It is a very promising one, as the water of a stream which drains about 25 square miles of hill country can here be brought on to the level of the country at very small cost by means of an anicut. Though I saw nothing else myself and see much against many similar opportunities existing, I think the country should be investigated by a professional man and the courses of all the chief streams below the ghâts examined from where they enter the comparatively level country to their outfalls into the main rivers. Two overseers would be required for this. They should be good men with some irrigation experience and I would suggest salaries of Rs. 200 and Rs. 150 for them. Even if they only discovered and executed one good project each, the estates would be well repaid.

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or Rs. 8,136 per annum.	

* One would be wanted for road work chiefly.

14. The Forest-officer's pay I would debit to the Jeypore and Bissemcuttack estates according to the number of days spent in camp in each estate in the year. The overseers employed in the Ráyaghada and Bissemcuttack taluks might be charged to the Jeypore estate and to Bissemcuttack in proportion of 3 to 1, taking Jeypore interest in the area at Rs. 90,000 and Bissemcuttack at Rs. 30,000. The income of the latter is about Rs. 40,000, but allowance must be made for the fact that it pays 15,000 per annum to Jeypore, and that the latter may at any time enhance the tribute. I propose to employ two of the overseers in this area and each would have both road and irrigation work to look after, and as the interests of each estate in the former would not be confined to the work actually done within its limits, I think this course would be the fairest to adopt. One overseer I would employ in Gunupur, where work would be entirely in the interests of Jeypore. The rates of pay I suggest had better be regarded as maximums, as it is by no means certain that I shall be able to get men worth the money offered, in which case I must do my best with inferior materials. As regards the works entered in paragraph 12, I request orders by wire as to whether I may go on with them, as this is the working season.

Telegram from the Agent to the Governor, Vizagapatam, dated 15th February 1893, informing, in continuation of his letter, No. 416-J, dated 11th February 1893, that the expenditure is Rs. 2,468 and the balance needed is Rs. 6,768.

Resolution—dated 3rd March 1893, Mis. No. 1476.

The Board approves generally of the proposals contained in the first paper read above and submits them for the favourable consideration of Government; but before the Agent is authorised to take action in respect to the works referred to in clauses (1) to (3) of paragraph 12 of his letter, he should, the Board thinks, submit more detailed information regarding the expensive bridges proposed to be erected. He should also state how far, if at all, the principal or interest of the expenditure thereon, as also on such portions of the roads as may be newly laid out, could be recovered from tolls; and whether the Estate Engineer can be safely entrusted with such very large works; or whether the services, or at least the opinion, of a Government Engineer are not necessary. The investigation of the irrigational capabilities of the estate should also, the Board thinks, be made by an experienced Public Works officer.

2. Financially, the Jeypore estate can well afford the expenditure proposed by Mr. Willock. Its budget for Fasli 1302 shows a surplus balance of Rs. 7,45,499, and the minor will not attain the age of 21 for nearly 3 years.

The estimated closing balance of the Bissemcuttack estate for Fasli 1302 is Rs. 27,650.

(True Extract.)

(Signed) W. S. MEYER,
Acting Secretary.

To the Chief Secretary to Government, Judicial Department.

ORDER—dated 14th April 1893, No. 769, Judicial.

Mr. Willock's proposals appear judicious and meet with the general approval of Government; in some respects, however, they require further elaboration.

2. The proposal to improve sections of the Párvátipur-Central Provinces road and of the Sálúr-Central Provinces road and also to improve the roads in Singapur and Kotipád is sanctioned; the work should be entrusted to the Estate Engineer and should be put in hand as soon as possible.

3. The Agent's suggestions regarding the bridging of the Kolab and Ráyaghada rivers will be considered in the Public Works Department. That department will be requested to state whether a competent Engineer can be deputed (if possible before the monsoon) to examine the localities and prepare plans and estimates. If no Government Engineer is available, the Agent will be authorized to negotiate for the deputation of one of the Railway Engineers employed upon the East Coast Railway.

4. The proposals regarding irrigation and the demarcation of the forests can be disposed of by the Board of Revenue.

5. It will be pointed out to the Board of Revenue that Act VIII of 1851 does not authorize the imposition of tolls for the benefit of a private individual, and it is doubtful whether Madras Act II of 1868 is still in force. That Act was not absolutely repealed by Act IV of 1871; it was only repealed in those circles whereto Act IV of 1871 was applied. Act IV of 1871 was never applied to the Vizagapatam Agency, but, on the other hand, Act II of 1868 was also never extended thereto. The question is, whether it is now possible by an order under section 2 or under section 5, Act XIV of 1874, to extend Act II of 1868 to the Vizagapatam Agency. The Government desires to have the opinion of the Advocate-General on this point.

(True Extract.)

J. F. PRICE,
Chief Secretary.

To the Board of Revenue (Land Revenue).
„ the Revenue Department.
„ the Public Works Department.
„ the Agent to the Governor, Vizagapatam.
„ the Government Solicitor.
„ the Financial Department.

Exd. A. Raitt.

Govt. of {1893} Madras.

JUDICIAL.

Issued

Read. Encl.

G.O., 14th April 1893, No. 769.

APRIL.

Jeypore and Bissemcuttack Estates.

Approving generally of the proposals of the Agent to the Governor, Vizagapatam, for the development of the —, but stating that in some respects they require further elaboration.

S.C. I Cir
Jud. Dept.

G.O. No. 1269 W dt 10 May 93

Comms to the Superintending
Engineer I circle

2 With reference to para 3,
this regarding status officer
can be spared for deputation
on the special work in questn

(Sd) J. H.