

ANNUAL PROGRESS REPORT
OF THE
DEPARTMENT OF PUBLIC WORKS
IN MYSORE

FOR THE YEAR 1862—63.

The Budget for the year amounted to 13,79,000, the approximate outlay as compared therewith being as follows —

	Allotment in the Budget	Expenditure during the year	Compared with the Budget	
			Less	More
Original works (including Reserve) .	7,60,971	5,45,258	2,15,713	„
Repairs.....	4,00,000	4,65,067	„	65,067
Establishments.....	1,98,029	2,28,258	„	30,229
Kalihaut labor corps	20,000	22,424	„	2,424
Total	13,79,000	12,61,007	2,15,713	97,720

Total less expended Rupees —1,17,993

2. The less expenditure under original works arose from discussions regarding the new Public Offices, and Central Jail at Bangalore, the Division Jail at Shemogah, and the large bridges at Saklaspore and Bailoor: which either prevented the works being undertaken, or delayed their commencement.

3. Regarding the excess outlay under Repairs, it is in a great measure attributable to the Classification which has been adopted, much of the expenditure being of a nature to admit of its being put at option under the heading "Original works" and chargeable to "Reserve."

4. The excess charge for establishments will be explained under that heading, here it will suffice to observe that the total outlay is very little over 18 per cent on the above expenditure, in fact it is less than this if compared with the actual cash transactions which amounted to Rupees 12,99,712

5. The Distribution of outlay under the main headings of the Budget vizt., Military, Civil Administration, and Public Improvement was as follows —

CLASS.	DEPARTMENT.	ORIGINAL WORKS.	REPAIR.	TOTAL.
Military.....	Army.....	"	982	982
	Revenue.....	21,611	1,004	22,615
Civil Administration.	General.....	68,344	13,881	82,225
	Ecclesiastical.....	1,071	31	1,102
	Educational.....	2,202	1,580	3,782
	Judicial.....	40,035	3,462	43,497
Public Improvement	Municipal.....	44,045	5,087	49,132
	Agricultural.....	87,032	1,64,058	2,51,090
	Communications.....	2,80,918	2,47,784	5,28,702
Total by Public Works' Officers.....		5,45,258	4,37,869	9,83,127
Petty works carried out by Civil authorities..		"	27,198	27,198
Grand Total....		5,45,258	4,65,067	10,10,325

CASH TRANSACTIONS.

6. Balance of Cash on hand on the 30th April, 1862.....	33,613
Cash drawn from Government Treasuries during the year 1862—63.....	12,74,364
Total <i>bona fide</i> Receipts from other sources.....	15,106
	13,23,083
Deduct Balance of Cash on hand on the 30th April 1863.....	23,371
Total Net cash transactions during the year 1862—63...vizt.	
Expend by the Department.....	12,72,514.
—Do—by the Civil authorities for Petty works.....	27,198.
	12,99,712
Outlay as per No. 1.....	12,61,007
Difference being attributable to stock &c.....	38,705

7. The greater portion of outlay now shewn against stock, was incurred in laying in seasoned timber for the new Public Offices—a matter of the highest importance. The amount is fairly debitable to original works, and would *pro tanto* lessen the difference shewn under this head in the first table.

PART I. ORIGINAL WORKS.

II. CIVIL ADMINISTRATION.

C. REVENUE

- 8 No work was executed in the *Bangalore Division* under this head.
9. In *South Asatgram* the principal work has been the conversion of the old

Estimate Rupees 10,000 Palace Seringapatam into a Sandal-wood Store, and the expenditure on this during the year amounted to Rupees 3,120. A large sum has already been realized from the sale of the dismantled timbers of the Palace, and the whole expected to be disposed of in this manner amounts to Rupees 12,000. The work may be considered completed.

10. A Talook Cutcherry has been in progress in the *North Asatgram Division* at Auloor in Maharajdroog. It was intended to have completed the work in the year, so great however were the difficulties in procuring brick-layers and work-people generally that only Rupees 2,464 were expended. The roofing had however been commenced and the work will soon be finished. The Cutcherry at * Banawar
* Estimate Rupees 6,350 has been completed.

11. In *Nuggur* the Talook Cutcherry at * Turrikerry has been reported finished. * Estimate Rs 10,210 that at † Chickmuggloor is also rapidly approaching completion. † Revised Estimate Rs 12,750 The progress of this latter work has been most unsatisfactory partly from the inefficiency, sickness, and perpetual change of Subordinates, coupled with the impossibility of procuring common or skilled labor. Much the same difficulties have beset the construction of the Talook Cutcherry at * Hurryhurpoor which has likewise been in progress: All that could be done was to build the foundations and basement.
* Estimate Rs 7,590

12. Fair progress has been made with the Talook Cutcherry at * Kortigherry in the *Chittledroog Division*; that at † Tiptoor has however been slow
* Estimate Rs 7,372 † —Do— Rs 7,372 and unsatisfactory. This is in a great degree attributable to the Subdivision Officer having been changed so often, (4 times in the course of the year) more might however have been done by energetic action on the part of the Executive Engineer.

The † Powgud Talook Cutcherry in the same Division, is progressing fairly the walls being about half raised.
† Estimate Rs 7,200

D. GENERAL.

13. At Bangalore the clearing of the site for the proposed * Public Offices has been proceeded with, and satisfactory progress made, as sanction for the building has however not as yet been communicated by Government, no further operations are at present contemplated
* Estimate Rs 3,72,580

14. A new Executive Engineer's † Office and Workshop has been executed at the same station for the Bangalore Division. A commencement has also been made in enlarging the † Offices of the Superintendent and the work is progressing rapidly.
† Estimate Rs 9,610
† Estimate Rs 4,187

15. In the other Divisions the expenditure under this head, has been confined to the construction of 4 Overseers' Lodges in each, *i. e.* one for every Subdivision. The Estimates for these buildings, which provide dwellings and offices for the Upper Subordinates, vary from Rupees 950 to 972. Some of those in *Nuggur*, *Chittledroog*, and *South Asatgram* have made very unsatisfactory progress—others are however well advanced, and one or two almost completed.

16. A small sum was also expended in the *North Asatgram Division* in completing the Executive Engineer's * Office, and Rupees 1,737 on the construction of 13 Anchay (Mysore Post) Sheds.
* Estimate Rs 5,210

E. ECCLESIASTICAL

17. No expenditure worthy of record has taken place under this head.

F. EDUCATIONAL

- 18 A Talook school-house was nearly completed at Nursapoor in the North
 * Estimate Rs. 3,150. *Astagram Division*. No outlay in others.

G. JUDICIAL

19. The Central Jail at Bangalore commenced in October 1862—intended to
 † Estimate Rs. 1,50,922 accommodate 1,000 Prisoners—made very fair progress during the
 year, and could if necessary be completed in the current one. It will provide for all
 life and long term prisoners in Mysore, and is built on the radiating plan employed in
 the Punjab. Expended Rupees 40,000.

20. A Jail and Hospital was also proposed for Shemogah in the *Nuggur Division*,
 with an assignment in the Budget of Rupees 25,000, the difficulties however of selecting
 a suitable site, coupled with the objections of Government to the Plan for the work, has
 allowed of little or nothing being done.

III. PUBLIC IMPROVEMENT.

H. MUNICIPAL

21. The only municipal work of importance on hand was the drainage works for the
 Estimate Rs. 1,36,101. Sudder Bazar, the nature of which was briefly explained in last year's
 progress report. It will suffice here to observe that although the com-
 pletion of these works, required attention to much minute detail not at first foreseen,
 they have been finished very satisfactorily, and the inhabitants of the Bazar, as well as
 others using the Ulsoor Tank, admit that these works have effectually ensured the water
 of this most useful reservoir, from being contaminated (as was formerly the case) by the
 sewage from the Bazar and Cantonments. It is now in fact quite pure, and the sewage
 is delivered into a Nullah at a distance of nearly 2 miles from the Town, and is thence
 transported into a tank at a considerable distance. Means have also been provided for
 flushing the sewer occasionally in the dry season; during the monsoon this is effected
 naturally at every heavy fall of rain.

K. AGRICULTURAL

22. Under this heading the heaviest expenditure has been in the *South Astagram*
 Estimate Rs. 63,209 *Division* where the amount for the year has been Rupees 72,868. Of
 this amount Rupees 43,247 fell to the Muddoor Anicut, which is the
 most important irrigation work now on hand in the Province. The work comprises the
 construction of a masonry dam across the Shumsha river, in lieu of an old native work at
 the same place, and will feed an irrigation channel with eight tanks under it. The an-
 ticipated revenue on outlay amounts to 16 per cent.

- 23 Arrangements had been made for completing the work before the close of the
 year, but a most unprecedented fall of rain in March crippled the operations so much,
 that spite of every effort the work cannot be completed till next season. The river
 came down in heavy flood several times washing away portions of the green brick-work,
 while the rain spoilt a large quantity of raw brick.

24. The Supervisor in charge of the work fell ill, cholera broke out and dispersed
 the work-people, in fact every thing at the most critical time for the work, combined to
 prevent its completion.

- 25 Though flood after flood has however since poured over the dam, no injury of
 any consequence has as yet occurred, and work will be resumed with the best prospects
 at the close of the monsoon.

26. The * Hallhully anicut in the same Division, has likewise been delayed from
 * Estimate Rs. 7,700 cholera breaking out among the work-people and other causes.
 Spent Rupees 3,758. Rupees 4,000 have also been expended on
 † Estimate Rs. 8,810 the † Anchayhully Aqueduct, which is progressing favorably although
 similarly delayed.

27. Cholera also interfered with the progress of work on the Cullully Tank and
 Estimate Rs. 13,664 feeder, upon which only Rupees 4,000 were expended. * The contrac-
 tor is however reported to be able to push on rapidly with the work now. Though of
 no great magnitude this work is of importance, as being the first of many which will
 probably yet be carried out in this portion of the Province, S.W. of the town of
 Mysore, which at one time is understood to have been populous and highly cultivated.

28. The original agricultural works in other Divisions, require no special mention,
 * Estimate Rs. 9,330. excepting perhaps the * Coodloor anicut on the Yagachy river in
North Astagram, upon which Rupees 2,886 were expended in the year. The anicut and
 head sluice are complete; a little more work is however required to the Channel

L. COMMUNICATIONS.

29. Much has been done during the past year in opening up new roads in the
 Province. In the *Bangalore Division* Rupees 1,28,072 have been thus expended and the
 general progress and quality of the work—all executed on Contract—has been very
 satisfactory.

30. The aggregate of work by the Executive Engineer's statement was as follows
 125½ miles of road cleared, 112½ miles formed and bridged, and 101 Bridges and drains
 built.

31. The terminal portion of the new Cuddapah Road—15½ miles—was completed
 Estimate Rs. 41,880 with bridges and drains, and, with the exception of a few small works
 on the Madras side, the line is now open for through traffic, i. e. from Bangalore to
 Cuddapah.

32. Five important Railway feeders east of Bangalore, have progressed very
 Aggregate of Estimates rapidly under Contract; most of them are now nearly finished, and
 Rupees 47,732 all will be out of hand by the 1st. of November.

33. The road leading from Kankanhully to Bangalore—30 Miles—also made
 Estimate Rs. 27,278 fair progress; it has been cleared throughout, and was formed and
 bridged for two thirds of its length.

34. The * Yellahunka-Dodaballapoor road—13½ Miles—, Dodaballapoor-Daven-
 * Estimate Rs. 10,144
 † Estimate Rs. 23,295 hully and thence to † Jangumcottah—20 miles—have been pushed on
 very satisfactorily, and will be completed within a few Months.

35. In the immediate neighbourhood of Bangalore, many short but important su-
 burban roads have been commenced, and some of them completed, it is needless however
 to specify them.

36. The progress of work under this head in *South Astagram* has also been very
 fair. Rupees 26,000 were expended on the Mysore-Manmottoddy road. Very little now
 remains to be done besides the culverts, which were subject to unavoidable delay. 2
 miles remain to be put in hand, and 8 miles to be gravelled, so that—including the 10
 miles completed the previous year—49 miles have now been opened.

37. The Muddoor-Sevasamoodrum road—26 miles—has not progressed satisfactorily,
 Estimate Rs. 23,938 owing to various causes, chiefly misconduct on the part of the Con-
 tractor; 7 miles have however been commenced, and 5 miles com-
 pleted. The work will be easily finished without bridges next season.

38. A bridge and aqueduct on the Bangalore-Mysore road, and crossing the Southern branch of the Cauvery at Seringapatam, would have been completed by the Contractor but for the breaking out of cholera. It was more than two thirds finished, and will soon be out of hand.

39. In *North Astagram* work was chiefly confined to metalling and raising to 2nd Class, the portions of the *Bangalore-Munzerabad and †Mysore Shemogah roads within the Division. Only 11 or 12 miles were completed during the year owing chiefly to great difficulties connected with labour. Better progress is however promised in the current year.

40. In the same Division the work of opening out the *Boond Ghaut for cart traffic, was also delayed partly from the late date of sanction, (November) and partly in consequence of the difficulties connected with labor. 1½ miles of Ghaut were opened out to 6 yards, clear width. As several companies of Khalihauts (Mysore Labor Corps) are to be despatched to the work soon, more satisfactory progress will it is hoped be shewn.

41. The construction of Bridges and Drains on the main road between Chenroy-patam and Arsekaira, has made very unsatisfactory progress, the work having now been on hand more than two years. Their completion is promised in next month.

42. On the Kempakull Bridge at foot of the Munzerabad Ghaut, work to the extent of Rs. 1,915 has been performed. The greatest difficulty has been experienced in procuring skilled workmen on account of the unhealthiness of the locality: some of those engaged this year were soon attacked with fever and left the work.

43. Among other minor road works, a feeder to the Boond Ghaut has been traced between Moodgherry and Bailoor, by which when completed, Hassan will be placed in direct communication with the ghaut.

44. In *Nuggur* 12½ miles of the †Benkipore-Doomce road were completed, making 19½ miles now open. It should soon be finished with the exception of bridging, which has yet to be executed. Scarcity of labor has affected this work like all others in the Division.

45. 11 Miles of the *Teerthully-Annatapoor, and 6 of the †Mundeguddah-Yedhully road were completed. They will both be finished with the exception of bridging next season.

46. The †Turrikerry-Adjampore road—9 miles—and three bridges on the Turrikerry-Angoombee ghaut road were nearly completed. Two other bridges on the latter line, as also one on the Shemogah-Talgoo-pah road, would have been far advanced if not finished, were it not for unforeseen difficulties.

47. In the *Chittledroog Division* the *Seerah-Mudgherry road—24 Miles—and the †Chittledroog-Doomce road—30 Miles—have been nearly completed with the exception of bridging. The latter line is a continuation of that from Benkipore to Doomce in the Nuggur Division, and when finished will prove of considerable importance: the bridges will however require 2½ years to construct.

48. Of the new northern road from †Mudgherry to Powgud, 11 Miles were opened in the year, as also 24 Miles of that connecting § Mudgherry and Daballapoor to the South West.

49. Under the Sub-head *Accommodation for Travellers*, several bungalows and moosafir-khanas have been built during the year. In the *Bangalore Division* *Second

* Aggregate Estimate
Rupees 5,553

class Traveller's bungalows have been constructed at Raulpaul and Thulgarah on the Cuddapah road: some Chuttrums and Soldiers' sheds were also commenced.

50. A second class Travellers' Bungalow was put in hand at † Mullavelly in *South Astagram*. In *Nuggur* the bungalows at Saugor and * Anantipoor made good progress, and are now nearly completed; little has however been done to those sanctioned for † Talgoopah on the Garsuppa road, and Sacrabyle.

51. In *Chittledroog* two Travellers' bungalows one at * Ivamungalum, the other at † Bomenkerry were commenced, and their completion is promised at an early date. A § Moosafikhana at Herrioor was also completed.

PART II. REPAIRS.

52. As observed in last year's Progress Report, the expenditure under the two main classes, *Military* and *Civil Administration*, has been so trifling as to require no remark:

III. PUBLIC IMPROVEMENT.

53. The chief outlay was confined to Agricultural and Communications.

K. AGRICULTURAL

54. The several sums expended under which in the different Divisions has been as follows.—

	Rupees.
BANGALORE.....	26,419
SOUTH ASTAGRAM.....	31,200
NORTH ASTAGRAM.....	24,220
NUGGUR.....	5,572
CHITTEDROOG.....	76,647
	<u>1,64,058</u>

55. In *Bangalore* several large Tanks were reconstructed, and others repaired. From an incomplete Statement furnished by the Executive Engineer it would appear that an annual increase of revenue is looked for, to the amount of Rupees 7,328, from the repair of 16 Tanks—about half the number dealt with in the year.

56. In *South Astagram* 30 irrigation channels, and 27 Tanks were put in order.

57. Several important anicuts were repaired in *North Astagram*, Rupees 2,401 having been expended on a brick facing to the Streeramdavar anicut, Rupees 2,291 on the Bomdihully, Rupees 2,169 on the Keetoor &c. The repairs of 9 irrigation channels (on which Rupees 8,608 were expended) were either completed or well advanced. The length of these channels aggregated 112 miles, and the revenue secured by the repairs amounted to Rupees 39,170. 38 Tanks were also repaired at a cost of Rupees 8,910 the revenue secured being estimated at Rupees 8,053.

58. In *Nuggur* 13 Tanks, 2 anicuts, and 2 channels were repaired, and in *Chittledroog*, 79 Tanks were dealt with, the ryots agreeing to increase the revenue under them to the extent of Rupees 26,991 annually. Had these repairs not been executed, the loss to Government is estimated at Rupees 18,251.

59. It is necessarily a difficult matter to estimate the value of agricultural repairs, the above statements however will convey a general view of the work done with the results.

L. COMMUNICATIONS.

60. The outlay on road repairs during the year was as follows for the different Divisions.

	Rupees.
BANGALORE.....	65,742
SOUTH ASTAGRAM.....	31,720
NORTH ASTAGRAM.....	38,351
NUGGUR.....	29,769
CHITTEDROOG.....	82,202
	<u>2,47,784</u>

61. 423 Miles of road with tunnels and bungalows were kept in order in the *Bangalore Division*, 278 miles in *South Astagram*, 417 miles in *North Astagram*, 307 in *Nuggur* and 476 in *Chittledroog*, making an aggregate of all classes of communications amounting to 1,900 miles. The work done has been satisfactory, still however several lines require to be raised to a higher class than they are at present, and others to have certain portions dealt with on Special Estimate. On the whole it may be safely said that a fair advance has been made during the year.

PART III. ESTABLISHMENTS.

62. The total outlay on Establishments Rupees 2,28,258 may be classed as follows:—

1. Direction		
Fixed Salaries....	54,223	
Travelling allowance.	775	54,998
2. Construction.		
Engineering.	1,04,099	
Office.	32,105	
Travelling allowance.	22,962	1,59,166
3. Contingencies		
Direction....	10,598	
Construction....	3196	11,094
	<u>Total.....</u>	<u>2,28,258</u>

63. This outlay is Rupees 30,220 in excess of the Budget sanction, chiefly owing to several new appointments made to the Department during the year, and to the expense attending the transfer of Upper Subordinates from the Punjab and Bengal to this Province.

64. A considerable portion of the excess, is also due to Pay of Officers of the Staff Corps, unprovided for in the Budget; to a heavy charge during the first seven months of the year, on account of the Coorg Establishment; and to unforeseen expenditure on account of instruments &c., a large supply of which it was found necessary to procure.

Notwithstanding however these several unlooked for charges, the total cost of the Department only amounts to 17.3 per cent on the Cash outlay.

GENERAL OBSERVATIONS.

A thorough re-organisation of the departmental Establishment, in the Executive, Subordinate, and Account branches, took place during the year—both being placed on a more efficient (though even now inadequate) footing than formerly; great changes have therefore resulted in the *personnel* of the Department.

One full, and one Assistant Overseer were dismissed, and another pensioned. One Assistant Supervisor was reduced to Overseer, one Overseer to Assistant Overseer, and two Assistant Overseers to Sub-overseers (of the latter one has lately been promoted.)

To supply the place of these men, and complete the Establishment on the new footing sanctioned by Government, several subordinates were transferred from the Punjab and Bengal to this Department [three of these have resigned.] Five students of the Civil Engineering College Madras also joined as Assistant Overseers [one lately dismissed] and one Probationary Assistant Overseer, with two Sub-overseers previously in the Department were promoted to the positions of Assistant Overseers.

These changes were accompanied by even more extensive ones in the lower Executive Establishment, a small number of Sub-overseers having been substituted for a badly paid, and inefficient class of Talook maistries and Mootsuddies, who formerly comprised the bulk of the Department.

The Account branch was also with the sanction of Government, definitely re-organised in August on the following strength, viz., 1 Accountant 2nd class, 2 Assistant Accountants 2nd class, and 2 ditto 3rd class.

Notwithstanding these organic changes, and the fact that the majority of the new appointments were quite new to their positions, the general results as above shown in the statement of work will it is hoped be considered satisfactory, and to promise well for the future.

The Bengal system of account is also now thoroughly introduced, and a month's work has been secured. Still in both the Executive and Account branches much remains to be done.

As yet from the very small scale of Establishment sanctioned, coupled with the great unhealthiness which has prevailed among the subordinates of some Divisions, and the fact that many of the men transferred from the Punjab and Bengal proved deficient in the requisite qualifications, it has been found impossible hitherto, to place all Divisions under charge of Upper subordinates. Executive Engineers have thus been performing duties incompatible with the proper administration of their Divisions, and have been consequently impossible to enforce the requisite exactitude in the working of the Department.

These and other considerations, have led to a proposal for a slightly increased Establishment, being laid before the Government of India.

Were other proof wanting as to the improved working of the Department during the year, it would suffice to compare the time now occupied in the execution of similar works, with that of the previous year, which in itself exhibited considerable improvement on those before.

The Progress Reports of Executive Engineers for April 1862, shew in all 333 reports in hand during the month, with an average outlay of Rupees 182 on each, while

those for April 1863 give 352 works under execution, with the average outlay during the month of Rupees 301. Generally speaking therefore the progress was 50 per cent better than during the same month of the previous year.

76. This result is not however entirely due to the improved position of the Establishment, much of it being doubtless owing to the increasing facility, with which works have been given out, and executed under Contract. It may now be safely asserted, that tenders can be received for the execution of two thirds of the work done by the Department, and in some places a healthful competition has already sprung up. In the station of Bangalore every thing is given out on Contract, and so great is the competition that for one work lately no less than 32 tenders were received. There has also been considerable competition, for the repairs of the provincial roads, and many other works.

77. Though the Contract rates are higher than those which prevailed some years past, they are quite as low as the existing Departmental ones, and where the requisite supervision has been exercised, Contractors have sought to recommend themselves for further employment, as much by the excellence of their work, as by speedy execution.

78. When it is considered that these results have been secured, while rigidly enforcing the rule of making no advances, (only paying up monthly for measured and approved work) there is little doubt that in a few years, all departmental work can be executed by Contract on the most favorable terms.

79. In the Report for 1861-62, it was shewn that the Civil authorities had expended Rupees 11,930, in the execution of 416 minor works, each being under 100 Rupees. They have during the past year however availed themselves to a much greater extent of the powers thus entrusted to them, having according to the returns received, (imperfect it is feared) apparently executed 988 works of this class, at an aggregate outlay of Rupees 27,198, out of the total amount allotted of Rupees 35,000. The particulars of these would seem to be as follows.

No of works under each		Total of sanction under each Class
	<i>I Military</i>	
	<i>II Civil Administration</i>	
213	REVENUE	
148	GENERAL	4,792
74	JUDICIAL	3,975
	Total	2,291
	<i>III. Public Improvement</i>	
7	MUNICIPAL	
492	AGRICULTURAL	392
54	COMMUNICATIONS	21,219
	Total	1,163
988		22,774
	GRAND TOTAL Rs	33,835

The amount however actually laid out by the Cash returns, is as above stated Rupees 27,198.

80. This shews a marked advance upon last year, and now that more extended powers are immediately to be confided to the Civil Authorities, especially with reference to Agricultural repairs, very beneficial results may be looked for.

81. Their accounts have it is true, been rendered somewhat tardily, and in-

accurately, but this was to be expected at first, and it is probable that in future great improvement will be made in this respect.

82. The past year was the first during which, the charge for the Kalihaut labor corps, was dealt with under the new system. *i. e.* charging off all ordinary pay to the works on which the several companies were engaged, while batta &c., was considered a special charge under the heading "Kalihaut Corps," debitable to "Reserve." A round sum of Rupees 20,000 had been placed in the Budget to meet this latter charge, and as will be observed from the Table at the commencement of the report, it was only exceeded by Rupees 2,421.

83. At the beginning of the year the Corps consisted of 777 men, and at its close of 933, one company having been disbanded for misconduct, and two new ones raised. As a general rule they have not given satisfaction, only working well where strictly supervised. Considering however the great difficulties of procuring labor in some parts of the Province, and that in future they will mostly be employed in these places, it appears advisable still to maintain the Corps at its present strength.

84. The dearth of labor in Nuggur, and in the country generally along the Western Ghats, has been very much felt, and what with the increasing competition caused by the extension of Coffee plantations, and the large works undertaken by the Bombay Government in North Canara, promises to increase rather than diminish. The rate of skilled and unskilled labor has alike increased to fully double its former standard, and how much higher it is likely to go, would be difficult to say, as the supply is very limited and there would appear to be little chance of supplementing the want by the introduction of foreign laborers, the climate being most unhealthy for all such.

85. There is but little worthy of notice to be recorded, in regard to new executive details, or modes of work employed during the past year.

86. The Muddoor Dam furnishes an example of a solid work being constructed across a considerable stream, with only a casing of masonry—the core or heart of the work being simply rubble stone grouted with a mixture of 5 parts sand and 1 part lime—and although left in an unfinished state, with at times floods pouring over the work—withstanding the action of the river successfully.

87. An experimental oblique arch has also been turned on one of the roads in the neighbourhood of Bangalore, on a plan which appears applicable under many circumstances in this country. Instead of cutting regular skewbacks, and laying the voussoir bricks in the usual spiral courses, the arch has been made to consist of succession of small arches (with ordinary perpendicular courses) one being placed in advance of the other, in such a manner as to give the desired obliquity.

88. The plan is one much followed on the continent of Europe, and is valuable as enabling difficult oblique bridges being carried out by ordinary workmen, and with common materials.

89. In conclusion, it affords me much pleasure to endorse the opinion expressed by Colonel Lawford last year of the high professional qualifications, great aptitude for business and zeal in the discharge of his duty, of Major R. H. Sankey Assistant Chief Engineer.

90. With the Executive Engineers and Assistants, I am on the whole well pleased, considering the short period of my acquaintance with them, and I have seen enough to record that they are all earnest and attentive in the discharge of their duty, and anxious to effect improvements.

91. Many of the subordinates are most promising young men, and their merits are not to be estimated by the recommendations for promotion, which are comparatively few, simply because the most deserving men, are not of long enough standing to entitle them to promotion. Mr. G Carpenter Head Accountant has continued to give entire satisfaction. I regret being unable to report as I would like of Mr. M. Ross * temporary Sub Engineer and Mr. Supervisor O'Neill † the former has not established the reputation that would warrant his being recommended for permanent appointment, and his health is so bad that a voyage to sea will be requisite, which will sever his connection with the Department. Mr. O'Neill who was favorably reported on last year, has not earned commendation latterly, either for attention to orders, or accuracy and method in his accounts, and he has in consequence of bad health, been a good deal absent from his duty at the Muddoor Annicut.

* Order of Govt. of India
No. 3763 dated 26th Sept. 1862.
† Order of Govt. of India No
4709 dated 2nd Decr 1862

MYSORE PUBLIC WORKS DEPARTMENT,
CENTRAL OFFICE.

BANGALORE, }
26th June 1863. }

J CARPENDALE, Lieut Col R E
Officiating Chief Engineer

ANNUAL PROGRESS REPORT

FOR THE

DEPARTMENT PUBLIC WORKS

IN COORG

FOR THE YEAR 1862—63.

During the past year the works in Coorg, were for the first time entirely placed under the Chief Engineer in Mysore, with regular Establishment for their supervision. Up to that time the maintenance of the Sumpengee and Perambaddy Ghauts, had been provided for out of the Madras Budget, while the rest of the work was met from a small special assignment for Coorg, with however no other supervision than that which could casually be furnished by the Mysore Department.

2. In the year under review, the Budget for Coorg amounted to Rupees 25,000, while subsequently Rupees 22,187 were provided partly by transfer from the Madras Budget, partly by assignments from the Income Tax. The expenditure under these allotments was as follows.—

		Allotments.			Expenditure in 1862—63.	Compared with sanctioned outlay	
		In the Budget	Additional sanction	Total		Less	More
COORG PROPER.	Original works including reserve }	16,310	2,000	18,310	17,774	536	..
	Repairs	7,900	..	7,900	8,800	..	900
	Establishment. . .	790	..	790	2,299	..	1,509
	Total .	25,000	2,000	27,000	28,873	536	2,409
Transferred from Madras Budget	Original works..		11,500	11,500	10,012	1,488	..
	Repairs		10,987	10,987	10,177	810	..
	Total ..		22,487	22,487	20,189	2,298	
	Grand Total .			49,487	49,062	2,831	2,409

Less expended Rupees 125

3. Considering the very inefficient manner in which the works in Coorg, had been provided for in previous years, it is almost needless to observe that on an Assistant Engineer being appointed specially for their supervision, it was found that roads, Travellers' Bungalows and other Government works, were in a deplorable condition. Repairs which had been sanctioned as long as five years previously had not been completed, contractors

who had received advances had made little or no progress with the works &c.; it is therefore not to be wondered at, that deviations from the Budget assignments have taken place.

4. This was in fact only to be looked for, and would have been quite proper, had the Assistant Engineer adopted in all cases the correct mode of proceeding, and obtained the requisite sanction. This he failed to do in some instances, thereby producing inconvenience with reference to the accounts. He has however worked with the most praiseworthy energy, and it is fully recognised that the works and repairs carried out by him have been all highly judicious, and in nearly all cases absolutely essential to save the State from loss.

5. With this explanation regarding the expenditure on works, it is only necessary to note the difference between the amount Rupees 790, entered in the Budget for Establishment, and the actual outlay Rupees 2,299.

6. The first merely provided for a Sub-overseer with the travelling allowance; subsequently however the Government of India saw fit to sanction a regular Establishment of one Assistant Engineer, and two Assistant Overseers with their Offices, which taking effect from the 1st January 1863, necessarily entailed a larger outlay than had been originally provided for.

7. The expenditure under all main headings was approximately as follows

CLASS	DEPARTMENT	ORIGINAL WORKS	REPAIRS	TOTAL
Military	<i>I From Budget Coorg proper.</i>			
	Army		433	433
	Revenue	4,064	880	4,944
	General	..	91	91
	Educational	...	91	91
	Judicial		264	264
Civil Administration	Communications	13,710	7,081	20,791
Total		17,774	8,840	26,614
Public Improvement	<i>II From Madras Allotment</i>			
	Communication	10,012	10,177	20,189

The total net cash transactions amounted to Rupees 51,246, the difference between which and the outlay shewn in the first table, is due to Stock transactions &c.

PART I. ORIGINAL WORKS.

C. REVENUE

8 The outlay under this head Rupees 4,064 took place on the Fraserpett *Distillery, a work which having been undertaken by the Civil Authorities in the previous year on the understanding that it would be finished,

was not provided for in the Budget for 1862-63. It was given out to Contract under this Department and was very nearly finished by the close of the year.

L. COMMUNICATIONS

9. The chief outlay here has been on the new road *from Mercara to Coadhipett—
 14½ Miles—upon which nearly Rupees 12,000 were expended in the year, making a total of Rupees 26,777 laid out on the work since its commencement. 18½ Miles of the road were opened out to a clear width of 4 Yards which with the previous year's work makes 12½ Miles completed in such a manner as to allow a cart to traverse it. The Assistant Engineer reports, that it will be open from end to end early this monsoon.

10. Much dense bamboo jungle had to be worked through, and rocky portions to be blasted, the amount of work executed must therefore be considered satisfactory.

11. As yet none but temporary log bridges have been provided, and a rough stone causeway constructed across the deepest stream, (that at Madoodpoor) consequently a great deal of work still remains to be accomplished, in order to bring the road up to the requisite standard.

12. The original Estimate for this great length of road, through an extremely difficult country, was wholly inadequate, a revised Estimate for a large amount is therefore on the point of being submitted to Government.

13. The Assistant Engineer Mr. A. Stoddard, felled some timber for the large bridges on the line, but no further action has been taken regarding them, awaiting the orders of Government on the project submitted last year.

14. From the amount Rupees 11,500, transferred from the Madras Budget under original works, Rupees 4,433 were expended in metalling 2½ Miles of the Sumpengee Ghaut, between the 1st and 5th Miles, and Rupees 5,579 on 3½ Miles of the Perambaddy Ghaut, between the 36th and 39th Miles. The heavy mileage outlay thus shewn is attributable to the expense of labor in this part of the country &c.; it would however appear that the work has been executed in the most thorough manner.

PART II. REPAIRS.

15. The expenditure under "Army"—Rupees 433—and, "Revenue"—Rupees 880—took place at Mercara, and was chiefly confined to the Hospital and a few Military buildings, also to the Superintendent's Office and Quarters. A trifling sum comes also under "Judicial" for the repairs of the Jail. The only large outlay occurred under

L. COMMUNICATIONS,

Rupees 7,080 having been expended from the funds assigned to Coorg proper, and Rs. 10,177 from the amount transferred from the Madras Budget.

16. Of these amounts, Rupees 2,395 were expended on the repair of 24 Miles of the line, connecting Mercara with Perambaddy, but via Veerajendrapett, several portions of which were greatly improved by thorough gravelling.

17. Rupees, 5,071 were expended in the repairs of the Fraserpett Mercara and Sumpengee roads—39½ miles—and Rupees 5,103 on the portion of the Mysore Cannanore road in Coorg. 29 miles of the first named road were given out to contract with generally unsatisfactory results; but the Assistant Engineer reports, that the other portion near Fraserpett was much improved under Government Agency.

78972788/103
18. The eastern portion of the Cannanore road—21 miles—was taken over from the Madras Authorities in a very neglected condition, and several portions had so much deteriorated as to require thorough re-

19. A large amount—Rupees 1,680—falls to the sul-head *Accommodation for Travelers*. At the beginning of the year the Bungalows throughout Coorg were in a most wretched condition, and the outlay here shewn has only sufficed to avert their complete ruin. The Wottacolli Bungalow on the Perambaddy Ghaut had almost to be rebuilt

PART III. ESTABLISHMENT.

20. This has been sufficiently dwelt upon at the opening of the report—only one of the Assistant Overseers sanctioned by Government (Mr. ⁶Plumbe) has as yet been appointed.

MYSORE PUBLIC WORKS DEPARTMENT,
CENTRAL OFFICE

BANGALORE, }
1st July 1863.

igned) J CARPENDALE, *Lieut Col R. E*
Officiating Chief Engineer

89786.3 Dated

From The Officiating Chief Engineer

in Mysore No 2788.

To The Secretary to Govt.
Public Works Department
Madras.

Dated } 22nd July 1863.
Despatched }

Received 23rd

Enclosures No 1

No 719

Subject

Forwards for information
one copy of the Annual
Progress Report of the
D.P.W. in Mysore for
the year 1862/63.

141 1863

ForWARDED
By Chief Engineer in Mysore

23rd July 1863
Chief Engineer

141
1863
ForWARDED