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MADRAS RECORD OFFICE.

Government of Madras.

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PUBLIC WORKS DEPARTMENT.
FORT SAINT GEORGE,
18th July 1867.

No. 2,156.

No. 438.
To

THE SECRETARY TO THE GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT.

SIR,

CIVIL WORKS, No. 63.

1. In forwarding the Progress Report of Public Works in the Madras Presidency for the year 1866-67, I am

directed to offer the following remarks.

2. The year's allotment was Rupees 64,70,723, and the expenditure under the Budget heads, as far as yet ascertained, amounted in the aggregate to Rupees 62,04,006, as shown below:—

	New Works.	Repairs.	Total.
	RS.	RS.	RS.
Military	8,22,640	1,49,404	9,72,044
Civil Buildings	6,55,550	76,080	7,31,630
Agricultural	4,40,929	8,75,346	13,16,275
Communications	5,84,132	9,99,838	15,83,970
Miscellaneous Public Improvement	26,366	7,770	34,136
	25,29,617	21,08,438	46,38,055
Tools and Plant	...	...	88,414
Establishments	...	...	14,77,537
			62,04,006

3. The largest outlay on New Works under "Military" was incurred in the district of Coimbatore and in the executive charge of Bangalore. Of the aggregate expenditure* in Coimbatore, Rupees

* Rupees 1,65,924.

1,33,970 represent the outlay on the

Lawrence Asylum buildings in completing the Hospital, forming approaches, and providing huts for the Police. The principal buildings which were under execution in Bangalore were the Cavalry and Artillery Barracks on the Race Course, and the addition of three blocks to the Barracks intended for the accommodation of a Regiment of Infantry. At the Presidency, large sums were spent on the construction of a Bakery and the provision of accommodation for the stores of the Commissariat Department. In Malabar, the outlay on Military Works was Rupees 87,377, which was appropriated chiefly to the construction of Barracks and Married Quarters for the Artillery at Cannanore. The available funds in Bellary were employed in the erection of quarters for the Non-Commissioned Officers and

married men of Artillery, improving the Artillery Barracks, constructing school-rooms and places of worship, and providing wash-houses and other subsidiary buildings.

† Rupees 6,55,550.

4. Nearly one-half of the total expenditure under "Civil Buildings" was incurred in the construction or improvement of District and Central Jails. The Central Jail at Salem is completed; that at Coimbatore is nearly so; good progress is being made with the construction of the Rajahmundry Central Jail, and those at Vellore, Trichinopoly and Cannanore, and the District Jails at Calicut and Madura, have only just been commenced. Much has to be done in the way of providing subsidiary Jails in the various talooks of this Presidency, and the Government are now receiving well considered reports of the accommodation which is absolutely necessary in this respect.

5. The aggregate outlay on Irrigation New Works was Rupees 4,40,929, nearly one-half of which was spent in the execution of works for the extension of irrigation in the Deltas of the Godavery and Kistna. A sum of Rupees 61,683 was laid out in excavating the channels connected with the Madras Water Supply project, and Rupees 50,025 were expended on the re-construction of a part of the Lower Coleroon Anicut in the district of Tanjore.

6. The allotment for New Works under "Communications" having been very small, the operations of the Department under that head were necessarily much restricted. The largest outlay was in the Coimbatore and Malabar Districts, in which a sum of Rupees 2,46,000 was spent in opening up the Coonoor, Goodaloor, Burghoor, Karkoor, Tambracherry and Periah ghauts, and the roads on the Neilgherries and on the plateau of the Wynad. The canals from the Chilka lake to Ganjam and from Negapatam to Vedarniem were on hand, and Rupees 30,730 were spent upon them during the year. The progress of the former was much retarded owing to the great difficulty experienced in procuring labour, and the latter is advancing to completion, but it is feared that it will be maintained with much difficulty and at a heavy cost, owing to the probability of a rapid deposition of silt unless preventive measures can be devised and carried out. The attention of the Superintending Engineer is now engaged on this subject.

7. The introduction of the Road Cess Act into the districts of this Presidency has been recently sanctioned, and as the collections from that source are likely to amount to a considerable sum, the Government hope to be able, at no distant date, to relieve the Imperial revenues of the maintenance of all minor roads, and thus to set free larger grants for those new works under "Communications" which have hitherto made but little progress with the small assignments which it has been possible to set apart for them in the Annual Imperial Budgets.

8. I am to add that the Department has, on the whole, been efficiently administered during the past year. With but few exceptions, this Government have had every reason to be satisfied with the members of the Engineer Establishment who have evinced much skill and energy in the performance of their executive duties. Most of the members of the Upper Subordinate Establishment in charge of Ranges have proved themselves fully equal to their responsibilities, and this Government have recently advanced some of the most deserving of them to the Engineer grades, and further promotions will be necessary to fill vacancies in the Department as

they occur, no Military Officers for employment in it being now obtainable in this Presidency, and the supply of Engineer Officers from England having for some time past been suspended. From this latter cause the proportion between the Military and Civil element in the Department is rapidly undergoing a change, and the latter will, ere long, greatly predominate. This is a state of things which, in the opinion of this Government, is far from desirable, and, meanwhile, they have great difficulty, not only in maintaining the Department in an efficient state, but also in selecting from it a sufficient number of qualified Officers for employment in the investigation of irrigational projects, and in the executive charge of the execution of those of higher importance already sanctioned, and which it is so desirable to have pushed on with the utmost rapidity.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Ed. S. T. Augustin.

previous years and Rs. 1,92,833 surplus of
below the outlay in
the

married men of Artillery, improving the Artillery Barracks, constructing school-rooms and places of worship, and providing wash-houses and other subsidiary buildings.

† Rupees 6,55,550.

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they occur, no Military Officers for employment in it being now obtainable in this Presidency, and the supply of Engineer Officers from England having for some time past been suspended. From this latter cause the proportion between the Military and Civil element in the Department is rapidly undergoing a change, and in the latter will, ere long, greatly predominate. This is a state of things which, in the opinion of this Government, is far from desirable, and, meanwhile, they have great difficulty, not only in maintaining the Department in an efficient state, but also in selecting from it a sufficient number of qualified Officers for employment in the investigation of irrigational projects, and in the executive charge of the execution of those of higher importance already sanctioned, and which it is so desirable to have pushed on with the utmost rapidity.

I have the honour to be,

Sir,

Your most obedient servant,

(Signed) CHARLES A. ORR, Colonel, R. E.,
Secretary to Government.

Erd. S. T. Augustin.

Annual Progress Report of Public Works. in the Madras Presidency for the year 1866-67.

• Allotment
and
Expenditure.

Inclusive of private contributions, the allotment and outlay on Public Works from Imperial funds during the eleven months ended 31st March 1867 amounted to Rupees 64,70,723 and 62,04,006 respectively, distributed as follows.

	<u>Allotment</u>	<u>Expenditure</u>
• New Works.	25,82,088	25,29,617
Repairs	21,65,294	21,08,438
Tools and Cart	1,59,102	88,414
Establishments	15,64,239	14,77,537

Expenditure compared with allotment and with previous years' outlay. — the expenditure was Rupees 1,09,327 less than the allotment, and Rs. 1,92,833 ^{in excess of} below the outlay in the

the preceding fiscal year, the ^{full sum of} ~~entire~~ grant for which ~~was~~ that for 1866-67 by Rupees 1,75,165.

+ Detailed statements will be found in the appendix of the expenditure in each District, and of the outlay, as compared with the Estimates and allotments, on the more important works which were under execution, and regarding the progress of which a few particulars will now be given.

Military

Statements of expenditure given in Appendix

Progress made upon important works.

Military

Military Buildings in Bellary

~~and~~

2
Four wash houses were built for the Regiment at Bellary, and six others were under construction, at a total outlay of Rupees 21,295. A collar maker's and Carpenter's workshop and a blacksmith's forge were in progress, and Rs. 6830 were spent in raising the walls of the buildings to a height of 10 feet and preparing the wood work. School rooms and places of worship for Protestants and Roman Catholics were in course of erection, and would have been completed during the year, ~~under the~~ outlay of ~~which was~~ Rs. 12,095, but for difficulties which were experienced in procuring the iron and wood work, and the granite stones for the flooring. An expenditure of Rupees 34,192 was incurred in constructing a set of Rifle Ranges; in providing Quarters for the Hospital Surgeon and for the non Commissioned Officers and married men of the Artillery, and in altering and improving the Artillery Barracks and subsidiary buildings. An Armourer's shop for European Infantry, a shed for the accommodation of sick carts attached to the Medical at Bellary, and a building for the performance

Church at Ramanthang

performance of Divine worship, at Ramanchooq, were almost completed during the year with an aggregate outlay of Rs. 11,516 -

The alterations and additions to the criminal side of the Grand Jail at Kachas, to adapt it as a Commissariat Store, were almost finished, and good progress was made in carrying out the same kind alterations to the Commissariat (Muck and Porter) Depot. The outlay on these works amounted to Rs. 16,150 and 15,506 respectively. Quarters were under provision for the Gunpowder Manufacture. Rs. 12,500 were expended during the year, and it is expected that the building will be completed by the end of August next.

A sum of Rs. 15,000 was appropriated to the completion of twelve additional solitary cells, with recreation room, for the European Regiment in Fort Saint George. The construction of six blocks of Family Quarters for the Warrant Officers of the Ordnance Department was in hand, and Rs. 5,000 were spent in raising the walls

Military (Continued)

Commissariat Stores at Kachas.

Arack and Porter Depot at Do.

Quarters for the Gunpowder Manufacture at Do.

Solitary Cells in Fort St. George.

Family Quarters for the Warrant Officers of the Ordnance Dept. serving in the Fort.

Military (Continued)

to a height of 10 feet and in fixing the door and window frames. The build- ings for a Lodge, Hill and Bakery at Kachas, upon which Rs. 15,000 were laid out in 1865/66, were successfully completed during the year with a further outlay of Rs. 17,806, and Rs. 8,745 were spent in providing a bullock

shed, and quarters for the Staff Sergeant in charge of the Bakery. With the exception of the expense of Magazine which is in progress, the whole of the additions and alterations to the

Horse Milling Sines at Saint Thomas Mount were finished with an outlay during the year of Rs. 4,002, and Rs. 21,255

were spent on the construction of a Reserve Magazine at Do. Magazine which is approaching completion.

Race Course Barrack at Bangalore.

Considerable progress was made with the construction of the new barracks on the Race Course at Bangalore for the accommodation of a Regiment of Cavalry and of two batteries of Artillery. An orderly room, two magazines, a double Skittle Alley and two Bowling Alleys were erected, and Quarters were provided for a School Master and his wife and for nine non Commissioned Officers. The walls of the male and female

female hospitals were raised to nearly
the full height of the lower stories, and the
apartments and administrative ~~rooms~~ ^{rooms}
were about one third finished. The Cavalry
stable will probably be completed about
the end of July. The masonry of one block
of Quarters for the married men of the
Artillery and the basements of three others
were nearly finished, and the Artillery
gun sheds, sick stables and other
minor buildings were in a forward state.
The total expenditure during the year
was Rupees 1,67,939.

A sum of Rupees 48,299 was appropriated to the addition of three
blocks to the old Cavalry barracks at
Bangalore for the accommodation of
a Regiment of Infantry. One of
these blocks was completed, and the
other two will be ready for occupation
by the end of July. The walls of the
Commissionariat Bakery, upon which
Rupees 20,715 were expended, were
raised to a height of 14 feet. In
connection with the Ulloor water pro-
ject, a sum of Rs. 13,472 was
laid out in completing the Regie
house, the masonry of the filter, and
three

Military
(Continued)

Military
(Continued)

Commissionariat
Office at
Dannanore.

Lawrence
Asylum
Works.

Artillery Bar-
acks at Dan-
nanore.

Married
Quarters at
Dannanore.

Grand
Powder
Magazine at

4

three sides of the pure water basin,
and in commencing the laying
down of the filtering media.

The foundations of the new
Commissionariat Office at Dannanore
were laid at an expense of Rs. 5080,
and Rs. 133,970 were appropriated to
the Lawrence Asylum buildings at
Oblacmund. The Hospital was completed,
and a few huts were provided for
the Police engaged in guarding the
convicts employed on the works. -
The new Artillery Barracks at Dannanore,
upon which Rupees 45,133 were
laid out, progressed so well that the
required accommodation for married
men and one half of that for
single men will be ready for occupation
before the monsoon of 1857. The In-
fantry married Quarters at Dannanore,
Talicut and Mallipooram were
nearly completed, and the founda-
tions of the Grand Powder Magazine
at the former station were laid
with an aggregate outlay of Rs. 24,909.

Civil Buildings.

Jail at
Berhampore.

Certain additions, consisting of a Hospital, Civil Debtors ward, Solitary Cells, &c., were ordered to be made to the jail at Berhampore.

Jail at
Vizagapatam.

About one third of these additions was completed at an outlay of Rs: 3249. In connection with the new District Jail at Vizagapatam, Rs: 19,497 were spent in finishing six radial blocks and the jailor's Quarters, and in building the enclosure wall and the Walls of the Female ward, Hospital, Guard rooms and Solitary Cells. The

Central Jail at
Rajahmundry.

outlay on the new Central Jail at Rajahmundry amounted to Rs: 38,344. The works which are now completed are five radial blocks, four workshops, four Towers, Central Warder, Jailor's Quarters, a portion of the enclosure wall, Inner Palisade, Partition walls, a large well and temporary latrines. Two ranges of solitary and women's cells and other works are in course of erection.

Guntur Jail.

Rupies 6,200 were spent in improving and enlarging the Guntur Jail, and Rs: 1,058 in the construction of a Taluq futcherry at Ongole, which is now very nearly completed.

Ongole Taluq
Cutcherry.

Taluq Cutcherries
at Hospett.

The re-roofing of the Taluq futcherry at Hospett and the construction of a similar building at Pullampett were completed.

completed with an outlay during the year of Rs 3,691. A sum of Rs: 5046 was appropriated to the improvement of the District Jail at Bellary, and Rs: 1,931 were laid out in the collection of materials for the proposed Tahsildar's Jail at Kailkoontta.

Civil
Buildings
(continued)

Jail at Cutcherry
Jail at Pullampett and
Kailkoontta and
District Jail at
Bellary

In connection with the General Hospital at Madras, Rupees 24,359 were applied to the construction of four new latrines and lavatories, a cook room and dead house, draining and railing in the compound, laying out flower gardens, and providing pipes for the supply of water from the "Seven Wells".

General Hospital
at Madras

Operations on the new Lunatic Asylum, upon which Rs: 29,028 were expended, were confined to the collection of materials, the formation of roads, and the alteration of the bungalow intended for the residence of the Superintendent. A sum of Rs: 24,341 was appropriated to the extension of the enclosure wall of the Penitentiary at Madras, the enlargement of the Jailor's Quarters, the drainage of the Compound, and the provision of good water from the "Seven Wells" by means of branch pipes.

Lunatic Asylum
at Madras

An Iron and Brass Foundry was built in connection with the Public Works Workshop at Madras at a cost of Rs: 28,530, of which Rs: 22,530 were spent in 1866/67.

Foundry at
Chepauk

A sum of Rs: 19,987 was spent in connection with the new Central Jail

Central Jail
at Vellore

Civil
Buildings
(continued)

in Jail at Vellore - the excavation of the foundations of the exterior walls, the provision of huts for the convicts proposed to be employed on the works, and the purchase and manufacture of materials.

A lock up was constructed near the Soorammungalum Railway Station at an expense of Rs: 2394, and Rs: 15,284 were appropriated to the improvement of the jails at Salem, Juddalore and Trichinopoly. In connection with the new Central Jail at the latter Station, Rs: 15,048 were spent in erecting the enclosure wall and providing temporary accommodation for one hundred convicts.

Jails at Salem,
Juddalore and
Trichinopoly.
New Central Jail
at Trichinopoly

The improvements to the new Salt pans at Tranquebar which were in progress in 1865/66 were completed with a further outlay of Rs: 2,152, and Rupees 1,452 were appropriated to the formation of an approach to the platform.

Salt pans
at Tranquebar

The new Central Jail at Coimbatore, upon which Rs: 75,213 were expended, was fitted for the reception of about 800 prisoners, and its entire completion may be looked for by the 30th June next. A temporary jail for 300 prisoners on the site of the new Central Jail at Cannanore was completed in February last, when the construction of the surrounding walls of the permanent jail was taken in hand. The outlay on these works amounted

New Central
Jail at Coimbatore.
New Central Jail
at Cannanore.

to Rs: 20,236. The enclosure walls of the new District Jail at Calicut, to which Rs: 19,638 were appropriated, were completed, and the foundations of two of the ranges at Calicut. of wards were laid. The ^{building} ~~construction~~ of the new Church at Ootacamund was ^{completed} ~~in progress~~, and Rs: 15,000 were spent in ^{laying} the foundations and ⁱⁿ preparing materials. Civil Buildings (Continued)

A District Jail at Madras was under construction, and the outlay during the year amounted to Rs: 34,999. One half of the length of the enclosure wall was raised to the full height of 16 feet, and the remainder to a height of 9 1/2 feet. The foundations of the radial blocks, hospital, Office, Store room and Jailor's Quarters were built up to the basement level, and the walls of the latrines to a height of 4 feet. Jail at Madras.

An expenditure of Rupees 9,799 was incurred in the construction of a Small Cause and Principal Sudder Ameen's Court House at Madras. The walls of the lower story were built to their full height. Small Cause & Courts at Madras.

Agricultural

Godavery
Ancient

~~Godavery~~

Listrahs

Commamoor
Channel

Western Bank
Channel

Pollairu Channel

Sectanagarum
Channel

At the Godavery, ancient Rupees 50,000 were spent in raising ^{and re-covering} the creek ^{with cut stone} and in laying down an additional rough stone apron.

The entire length of the Commamoor Channel, on which the year's expenditure amounted to Rupees 24,117, was excavated & the outlets completed. The drainage of the Rampairu swamp was carried out, to full width, for 7 1/2 miles, the escape Calingulals at Moolapollu was commenced, and, with a large portion of the drain which leads from it to the Nijampatam Creek, well, it is believed, be completed before the rains. Work upon the channel from Wallabapooram to listwater progressed satisfactorily, four Calingulals having been completed, and the widening of the channel between its head and Polloor carried on to a considerable extent with an outlay of Rupees 13,793. The widening of the lower portion of the Pollairu, upon which an expenditure of Rupees 12,492 was incurred, is approaching completion, all that ^{now} remains to be done being the excavation of the Coloz Codu to full width for about 1000 yards, and the construction of two Calingulals in the Buntumilly Channel. In connection with the project for enlarging the head of the main channel from Sectanagarum to Dogaralla, Rupees 18,555 were expended.

Agricultural Contd

expended during the year. The increase in the discharge of the channel is greatly augmented, but much remains to be done before the full benefits expected from the work can be obtained.

The materials for the construction of a first class lock at Doggerallah were prepared, and the excavation of the foundations was nearly completed at a cost of Rupees 13,734.

The improvement of the Nellore Tank was continued upon an estimate of Rupees 17,100, of which Rupees 5,790 were spent in 1866/67 in finishing the rough stone revetment. The river embankment east of Nellore was completed, and that to the West was vigorously carried on with an aggregate expenditure of Rupees 8,770. The banks are now reported to be safe in case of floods.

In connection with the Madras Water supply project, Rupees 6,683 were expended in excavating the channel in various parts. The masonry works are under execution by Contract.

The aprons of the Dasavaram Annicut were strengthened and the body wall was raised with a new granite stone coping at an outlay of Rupees 4,560.

The widening of the Cheryann Channel

Nellore

Nellore Tank

River embankments east and west of Nellore

Madras

Madras Water supply project

Dasavaram Annicut

North Arcot

Cheryann Channel

Agricultural Contd

South Arcot

Annicut across the Manimoota Staddy

Permal Tank Calinguloh.

Trichinopoly

Sluices on the banks of the Coleroon and for the Tycondan Channel in the

Trichinopoly District

channel in the District of North Arcot was completed at an expense of Rupees 35,361, of which Rupees 19,775 represent the expenditure in 1866/67.

A sum of Rupees 1,600 was appropriated to the construction of an annicut across the Manimoota Staddy river in the South Arcot District. The dam was built 4 feet above the foundations, and materials were being collected for the completion of the work. One of the Calingulohs of the Permal Tank, the bund of which is ten miles long, was extended at a cost of Rupees 3,500.

Seven surplus sluices were constructed on the north, and five on the South of the Coleroon, and materials were under collection for the proposed under sluices of the Tycondan Channel, the foundations of which were completed. The aggregate outlay on these works was

was Rupees 13,773.

The improvement of the head of the Tadavannur in the Tanjore District was completed at a total outlay of Rupees 5184, of which Rupees 3284 was the actual expenditure in 1866/67. A sum of Rupees 51125 was applied to the reconstruction of the lower Coleroon Anicut, the body of which, as well as the piers of the bridge over the Anicut and three arches, was completed. The centering of a fourth arch was set up, and the retaining wall and apron of the Anicut were finished for a distance of 158 feet.

Agriculture
contd

Tanjore
Improving
head of the
Tadavannur

Lower Coleroon
Anicut

Communications.

Roads in
Tanjore.

Several masonry works and 16½ miles of earth work of the road from Naka to Pippulunka were completed, and 9 miles were metalled and gravelled at an outlay of Rupees 9999. A sum of Rs. 13016 was spent on the construction of the road from Naka to Russelundah and, from Bulleputra to Tirucholi. With the exception of two large bridges which one in progress, the road from Naka to Ganjam was completed at an expenditure of Rs. 51622, of which Rupees 1032 was the outlay in 1866/67. Rs. 15,209 were laid out in the excavation of a Canal from the Chilka Lake to Ganjam. The earthwork of 27 miles and the metalling of other portions of the road from Vizagapatnam to Cassipore, as also a large number of masonry works, were finished at an expenditure of Rs. 14642. In connection with the road from Vizianagram to Bonadua, an outlay of Rs. 4309 was incurred in finishing the earthwork of 18 miles, gravelling and metalling 16 others, and constructing numerous bridges and minor masonry works. Favorable progress was made with the project for the cross drainage of the Illore High Level Canal in the Godavari District, Rs. 26,927 having been spent in completing the sub passage of five vents in the Illore Aqueduct with locks and tidal ^{cut} gate, as well as a large inlet and outlet for the east branch of the Poornima, and two

Illore High
Level Canal
and Iron
Bridge at
Godavari
in the
Godavari
District.

outlets at the 27th and 31st miles - (Rs. 25687) -
were laid out on the Iron Under Bridge
at Deccan in screwing down 15 Piles
and fixing the girders for one bay -

Communications

Continued

The Hyderabad road from

Berwanch to Champatun was metalled
at an outlay of Rs. 4500 - The earthwork
of the road embankment across the Union
near Valley was nearly finished, the

Road in
the District

Roads in the
District

Musamir and Pullavagu bridges were com-
pleted, and the construction of another bridge
and of a viaduct was on hand with an ex-
penditure of Rs. 18,742. The bridge across
the Pydaru on Trunk road No. 6, on to
which Rs. 8600 were appropriated, was
raised to the springing line, two arches
were turned and the third was ^{well} ~~in~~ ^{on}
advanced ~~state~~ - The single and Kotei
patam road was completed throughout
during the year with an outlay of Rs.
5624 -

Rupers 1931 were expended in
completing the road from Nundalare to
the Nundalare Railway Station - On
the road from Bellary to Ramenchoy
a sum of Rs. 1978 was appropriated
to the construction of a bridge over the
Bunbappa Nullah, the arch of which
was turned, and the wing walls raised to
the level of the crown of the Arch.

Road in
Cuddapah

Do in
Bellary

Communications
Continued

Roads in

(Bellary & the road from Bellary to Cuddapah in
Cuddapah. the construction of 8 road dams, 3 tunnels
and 3 culverts, and in the execution of a
large quantity of earthwork, gravellings and
metalling - The line to the east bank of
the Chitravathy river is in good order.

Roads in
Cuddapah
and
Kurnool.

Good progress was made with the
road from Cuddapah to Nundial on
which the outlay during the year amounted
to Rs. 18843 - Twelve road dams and
some minor masonry works were finished,
the foundations of six other road dams were
laid, 3411 running yards of road were
metalled and gravelled, and 7833 Cubic
yards of earthwork completed -

Roads in
South Coast.

A great improvement was made
on Trunk road No. 8 at the crossing of
the Mullatur by the expenditure of a
sum of Rs. 3750 in the construction of
a long gravelled embankment across
the sandy bed of the river with an
opening sufficient to carry off the water
that now passes down it - Two bridges
were commenced on the Salem and Cudda-
lore road; the piers and abutments of
another on the road from Nundalare to
Tudachellum were built; and a ^{fourth} ~~third~~ was
completed, with an aggregate expenditure of
Rs.

Rs. 7,435. A large portion of Trunk
road No. 9 South of the Vellar Ancient,
was gravelled at a cost of Rs. 4,186 —

Communications
(Continued)

The roads from Coonoor to
the Malabar Railway Station and from
Taramungallum to the Taramungallum
Railway Station were finished during the
year with an outlay of Rs. 3,959. The
line from Devatipally to the Ahtor Railway
Station was marked out, seven tunnels
were built and the raised portions of the
road were almost completed at an ex-
pense of Rupees 2,336.

Roads in
Salem.

The road from the Town of
Keralore to the Keralore Railway Station
was completed, and material was under collec-
tion for the unfinished half mile of the
Railway feeder from Vagge to Negipattinam.
The outlay on these two lines was Rs. 1,509.

Roads in
the Tanjore
Dist.

The Junction Canal from the
Jagapattinam to Eroosipondy was completed with
an outlay during the year of Rs. 3,599, and
Rs. 11,922 were spent on the Canal from Jagapattinam
to Vedarneim in excavations
between Cadooryam and Vellyam and in the
construction of the necessary masonry works.

Canals in

The most important roads which
were under construction in the Tanjore
District were those from the town of
Tuchinopoly to Aulre and Vedarneim
and the Salem boundary, upon which the
aggregate expenditure amounted to Rs. 16,392.

Roads in
Tuchinopoly

Communications
(Continued)

These lines are respectively 50 and 42
miles in length, of which 16 of the for-
mer and nearly 32 of the latter were completed
during the year.

Roads in
Coimbatore.

The upper 6½ (out of 16) miles of the
new Coonoor Shant ~~was~~ opened to Cart
traffic, and good progress was made with the
lower four miles. No portion of the Goodaloor
Shant has yet been opened, but the year's
allotment was well spent in completing the
traces and in removing large quantities of earth
and rock, and constructing several masonry
works. Of the road from the head of the
Goodaloor Shant to Sotacammund, 10 out of 20
miles were fully completed. On the new
Bunghoor Shant, work was carried on for a
distance of 8 miles from the foot of the
Southern Shant to Thamara Karay, but
on account of the rocky nature of the line,
the road is not quite open for Cart traffic.
Two out of the twelve miles of the new road
connecting Kodaigherry ~~and~~ Wellington, Coonoor,
and the Bonoor Shant, were completed,
and the whole of the remaining portion re-
traced and partially cut to widths varying
from 3 to 12 feet. The aggregate outlay
on these works amounted to Rs. 93,924.

Roads in
Malabar.

The road and bridge work below
the Karkhor Shant progressed but slowly
owing to the unusual prevalence of fever
which dispersed the workmen. The por-
tion between the foot of the Shant and
Mombat

Umbat was however metalled and several bridges were either completed or in progress at an outlay of Rs. 17,973. The whole of the Tambacherry Ghaut, upon which Rs. 20,000 were spent, was opened to bridle path, and it is expected that, before the next monsoon, the road will be available for Cart traffic as far as the junction between the old and new ghauts. On the completion of the Roomuth and Calputty bridges and some minor masonry works which are now in rapid progress, the line between Suckady and Kulputty, to which Rs. 17,896 were appropriated, will be an excellent Cart road. Operations on the road between Kulputty and Sultan's Battery were much retarded owing to want of labor, the only work executed during the year being the completion of $1\frac{1}{2}$ miles of road connecting the Kulputty bridge with the Chalapoya Bazar at a cost of Rs. 782. In connection with the line from Sultan's Battery to the Mysore frontier, Rs. 6,726 were spent in clearing jungle, raising embankments and preparing materials for minor masonry work. Several bridges were built in the Terriole road, and others were in course of erection.

During the year, the outlay on which Rs. 26,156. Five miles of the Caroor Ghaut, upon which Rs. 15,928 were laid out, were widened to a width of six yards, and three were being widened to a width of seven yards. Catch drains were excavated for a distance of $9\frac{1}{2}$ miles, and 47 road dams were completed. A sum of Rs. 19,720 was spent in completing the road from the Parkoor Ghaut to Appaicundoo, which is now open for traffic throughout its entire length. On the new Periah Ghaut, an outlay of Rs. 27,460 was incurred in blasting rock, constructing revetments and completing the earthwork along its entire length, and it is believed that the road will be open to a width of 12 feet before the monsoon. The road between Panimangalore and Kossichoozy having been made available for dry weather Cart traffic during 1865/66, the construction of the larger bridge on the line was undertaken, and Rs. 15,128 were spent during the year under review.

The

Communications
(Continued)

Roads in
Madura.

The bridge across the Shun-
mooganade River, on which Rs.
10,960 were spent, was finished throughout
with the exception of a portion of the
plastering. On connection with the
line from Tirumungalam to the
Combatore boundary, Rupees 13,338
were appropriated to the completion
of 9 miles of road and to the con-
struction of two small bridges and
other masonry works. Rs. 18,457
were laid out on the line from
Palamecottah to Tuticorin in form:
-ing the roadway from the 19th to the
end of the 23rd mile, and in build-
-ing one of the abutments and five of
the piers of a bridge on the 24th mile.
-ing Four progress was made with the road
from Madura to the Travancore coun-
try, Rs. 8,345 having been spent
in metalling 8 1/2 miles and construct-
-ing 15 road dams.

Roads in
Tinnevely.

Miscellaneous.

Public
Improvement

The good water channel
from Sultanpattinam bridge to Robinson's
Pettah was completed, and (Rs. 10,557)
Channels and Conduits in were expended on that work and on
the Tirumalai Dist. the extension of good water conduits
in the town of Kanchipuram.

Paimbain
Channel in over angle
the channel Paimbain
Dist.

The ~~project~~ ^{operation} for cutting the in-
-ing of the reef channel at
the channel Paimbain ~~was~~ ^{continued} in progress, and an
outlay of Rupees 2,332 was incurred
in blasting 9,195 Cubic feet of stone
and removing 29,267 Cubic feet of
silt, gravel &c.

Repairs

Outlay on
Repairs.

Under this head, a total
expenditure of Rupees 2,108,438
was incurred in keeping in repair
1,027 Military Buildings, 479 Civil
Buildings, 674 Channels, 1,467 Tanks,
55 Dakshinapada, 52 sluices, 527 dykes,
58 Anicuts, 7 Locks, 64 Drainages,
4 Irrigation dams, 8,132 Miles of road
or Canal and 179 Bridges, Tunnels and
Road dams. The following were the

Principal repairs executed during the year.

Godavary { Godavary Anicut — 12682
Dredging Canadian River Bar — 5354
Godavary River Banks — 30370

Tristrah { Kasulipatam Canal and minor branches — 16191
Shore Canal do. do — 9261
Pollair do. do — 7939
Nizampatam do. do — 6627
Commamoor do. do — 7489

Bellary { Boragal Anicut — 3772
Boonabudra Channel — 14841

Tinnevely - Canolien Channel — 3895.

S. W. No. 18 July 1867 L. 438.

Appendix
Statement showing the expenditure on Public Works in 1866/67 from Imperial Funds as compared with the allotment for that year and with the outlay in 1865-66

Districts	Allotment for 1866-67 including private contributions	Expenditure in 1866-67	Expenditure in 1865-66
Banyam	158,873	~~153,190~~ 107,448	131,557
Bagalkot	135,175	~~127,958~~ 133,664	107,016
Jodwery	357,676	~~366,598~~ 256,525	301,549
Risraha	265,854	~~256,190~~	272,979
Tellur	154,350	147,396	131,165
Cuddalore	114,485	114,166	145,465
Turnool	72,202	70,786	77,213
Bellary	279,482	251,804	216,615
Presidency	357,405	351,113	313,713
Madras	331,090	~~348,300~~ 1,10,122	332,568
North Arcot	194,540	~~185,627~~ 181,106	177,550
South Arcot	160,566	~~166,618~~ 158,686	172,736
Salem	94,729	92,975	102,132
Bangalore	341,964	315,375	286,737
Panjabi	246,218	~~237,712~~ 236,063	239,818
Pichinopoly	205,731	~~204,353~~ 203,525	181,356
Coimbatore	479,438	~~570,940~~ 511,106	575,813
Malabar	399,766	~~400,878~~ 401,391	381,831
South Canara	69,255	~~65,865~~ 69,996	74,791
Madura	182,619	~~180,892~~ 182,133	119,132
Trinnevelly	145,964	~~159,862~~ 145,851	113,823
Total.	47,47,382	~~46,38,055~~ 47,52,629	44,52,222

Statement shewing the expenditure on New Works in each District from Imperial Funds under the Budget heads.

Districts	Military	Civil Build-ings	Agricul. = Rural	Com. = muni. = cations	Miscella = neous = Pub. Im = provement	Total
Ganjam		12221		56256	72883	141360
Khagapatam	649	18961	2738	65703	1668	109070
Godavery	311	58851	94689	26313	180167	375499
Kistnah		9322	102313	8247	16366	136748
Nellore		5977	24843	13017		73857
Buddapah	59	4872	452	9267		14650
Tumool	520	1098	1211	12025		17854
Bellary	105420	8161	1320	3683		118584
Presidency	132095	136673			1350	273118
Madras	35416	18847	63252	7220	60110	186600
North Coast	49	31637	26518	4019		62223
South Coast		9263	13203	13755	180	36701
Salem	3347	12838	2367	5210		23792
Bangalore	282741	8782				291523
Tanjore		6540	63778	118114		287432
Trichinopoly	6882	26643	18808	7094		59427
Coimbatore	165924	134234	18629	91976	87	490299
Malabar	87377	69205		46822		319588
South Canara	347	8181		29929		37457
Madura		56516	1855	29768	2631	90770
Tinnevely	1500	4693	5534	27460		39187
Total	822640	655550	280519	584132	66776	2529617

Statement shewing the expenditure on Repairs in each District from Imperial Funds under the Budget heads. 35

Districts	Military	Civil Build-ings	Agricul. = Rural	Com. = muni. = cations	Misc. = neous = Pub. Im = provement	Total
Ganjam	493	1147	14618	13325		59483
Khagapatam	3391	4258	6068	35569	22	45694
Godavery	1729	6093	117657	30499	1222	159497
Kistnah	1204	3331	90804	23897	341	119637
Nellore		1775	27408	44376		73559
Buddapah	1836	389	30234	67057		99516
Tumool	427	1271	17175	33759		52932
Bellary	19437	1331	16468	68985		136220
Presidency	44026	18868	596	14587	248	78325
Madras	23553	11156	90612	98115		223766
North Coast	3781	2650	62102	53632		122184
South Coast		1832	58646	61439		121917
Salem	625	3220	19170	46168		69183
Bangalore	22132	1720	90981	60556		23852
Tanjore		3245	61091	59020	768	155520
Trichinopoly	6736	857	84991	52342		114926
Coimbatore	6263	3977	24550	65357	491	100855
Malabar	10919	6242	820	63215	64	81290
South Canara	667	1488	36825	51731		90122
Madura		6625	55235	56186	180	120675
Tinnevely	2149	6357	56262	56186		120675
Total	149404	76080	875346	939838	7770	2108438

Statement shewing the Estimate, allotment and expenditure in 1866-67 on Important Public Works in the Madras Presidency.

District	Work.	Expenditure			
		Estimate.	up to 30 th April 1866.	Allotment for 1866-67	Expenditure during 1866-67.
		Rs.	Rs.	Rs.	Rs.
<i>Military</i>					
	Major. Constructing 10 New Wash houses for the Regiment	34,800	"	15,000 increased to 21,297	21,295
D.	Collar makers and carpenters Workshop	8,490	"	7,276	4,525
D.	Black Smith's Forge	3,770	"	3,770	2,305
D.	School room and Place of Worship for Protestants	18,950	10,679	8,271 reduced to 6,271	3,679
D.	Roman Catholic Place of Worship	19,454	10,196	8,976 reduced to 7,188	8,416
D.	Set of Rifle Ranges	4,500	375	4,027 reduced to 3,496	3,463
D.	Hospital Serjeant's Quarters	4,137	"	4,137	4,137
D.	9 Non-Commissioned Officers Quarters of S. Battery	28,724	22,975	5,467 increased to 5,749	6,240
D.	Alterations to Non-Commissioned Officers Quarters of Artillery	7,240	6,646	594 reduced to 569	569
D.	16 married men's Quarters of S. Battery	29,340	22,519	7,724 reduced to 6,476	6,475

District	Work	Estimate	Expenditure up to 30 th April 1866.	Allo ^t ment for 1866-67.	Expenditure during 1866-67.	District	Work	Estimate	Expenditure up to 30 th April 1866.	Allo ^t ment for 1866-67.	Expenditure during 1866-67.
Bellary	Military (cont.) Alterations and improvements to Artillery Barracks and buildings	21,980.	9,170	12,810	13,308	Presidency	Military (cont.) Constructing 18 Blocks of Family Quarters for the Warrant Officers of the Ordnance Department	76,500		{ 15,000 reduced to 5,000 }	5,000
Do.	One Armourer's shop for European Infantry	5,560	.	{ 6,500 reduced to 5,560 }	4,327	Do.	Constructing a Sorage Mill and Bakery	30,400	15,000	{ 17,150 increased to 17,415 }	17,806
Do.	Shed for Sick Carts attached to the Arsenal	4,455	"	4,455	4,334	Do.	Do. Staff Sergeants Quarters with Out houses at — do —	3,555	"	3,555	3,465
Do.	A Building for the performance of Divine Worship. Ramchandrag.	9,715	6,628	3,087	2,955	Do.	Do. a bullock shed and well in the Compound of — do —	4,280	"	4,280	4,280
Presidency	Making certain alterations and additions in the Criminal side of the Grand Jail, to adapt it for the use of the Commissariat Department.	19,840	.	{ 9,500 increased to 16,150 }	1,650	Madras	Additions and alterations to the Horse Artillery Lines at the Mount	87,530	77,030	{ 8,070 reduced to 3,070 }	4,002
Do.	Alterations in the Commissariat Arrack and Porter Depot	35,400	"	{ 10,800 increased to 15,000 }	15,506	Do.	Constructing a Reserve Powder Magazine at — do —	37,800	19,863	{ 7,800 increased to 20,010 }	21,235
Do.	Quarters for the Overseers attached to the Gun Powder Manufactory	28,200	"	{ 10,000 increased to 13,837 }	12,500	Bengalore	New Barracks on the Race Course	12,00,000	6,16,461	{ 1,75,000 reduced to 1,55,625 }	1,67,939
Do.	Constructing 12 additional solitary cells, with an association room, for the European Regiment in the Fort.	17,800	14,998	15,000	15,000	do	Adding three additional blocks to the Cavalry Barracks for the accommodation of a Regiment of Infantry	1,05,200	47,027	{ 30,000 increased to 58,173 }	48,299
						Do.	Government Battery	84,100	18,822	{ 15,000 increased to 25,000 }	20,715

District	Work	Estimate	Expenditure up to 30 April 1866.	Allotment for 1866-67	Expenditure during 1866-67
Bangalore	Military (Excluded) Ullor Water Supply Project	72,000	50,214	{ 20,000 reduced to 14,985 }	13,472
Malabar	Commissariat Godown at Lazmanore	28,780	"	{ 10,000 reduced to 4,703 }	5,080
Guntur	Lawrence Asylum at Cota- canur	9,61,067	2,43,353	{ 1,47,740 reduced to 1,33,936 }	1,12,240
	Police Constables' Huts at the Lawrence Asylum Site	21,614	"	{ 1,33,936 }	21,730
Malabar	Artillery Barracks at Cannanore	91,740	563	{ 50,000 reduced to 40,352 }	46,133
Do	Married Quarters at — do —	1,27,723	1,08,193	{ 26,485 reduced to 10,532 }	13,625
	Out Houses to — do —	11,810	"	{ 5,000 reduced to 4,367 }	
Do	Grand Powder Magazines at — do —	20,700	"	{ 15,000 reduced to 13,600 }	11,284

Civil Buildings.

Ganjam	Improvements to the Bellah Jail at Berhampore	14,318	1725	{ 12,593 reduced to 2,580 }	3,249
Vizagapatam	Constructing Bellah Jail at Vi- zagapatam	60,324	23,681	{ 20,000 reduced to 19,500 }	19,497
Godavari	Constructing Central Jail at Rajahmundry	2,08,030	1,60,543	{ 43,677 reduced to 27,000 }	38,344

District	Work	Estimate	Expenditure up to 30 April 1866.	Allotment for 1866-67	Expenditure during 1866-67
Kistack	Civil Buildings (contd) Quarter Jail	12,820	"	{ 5,000 increased to 7,150 }	6,288
Nellore	Taluk Butcherry at Ongole	11,334	8,494	{ 2,190 increased to 2,840 }	1,858
Bellary	Re-roofing the Hospett Taluk Jail butcherry	2,150	1205	{ 945 reduced to 895 }	894
Buddapah	Pullampett Taluk Butcherry	7,300	4,792	2,508	2,797
Bellary	Improvements to the Jail at Bellary	{ Approximate 24,000 }	"	6,997	5,046
Kurnool	Taluk Butcherry at Kothamreddy	7,700	"	{ 3,500 reduced to 2,000 }	1,931
Presidency	Latrines and Lavatories in connection with the General Hospital	8,600	"	{ 8,600 reduced to 7,623 }	7,623
Do	New Book House at — do —	"	"	3,800	2,837
Do	New Dead House at — do —	{ Approximate 2,750 }	"	{ 2,750 reduced to 2,250 }	2,249
Do	Drainage of — do —	"	"	{ 600 increased to 3,170 }	4,447
Do	Fixing iron Railings in the Hospital Compound and laying out flower gardens	10,350	6,332	4,018	4,018
Do	Putting up iron Railings from the Cen- tral wing of the General Hospital to the Godavari river	5,730	1712	{ 3,718 reduced to 1,618 }	1,629

District	Work.	Estimate	Expenditure up to 30 April 1866.	Allo'tment for 1866-67.	Expenditure during 1866-67.
Civil Buildings (Contd)					
Presidency	Laying down pipes for supplying water from the seven wells to the General Hospital	4,540	645	{ increased to 1,500 }	1,556
do.	Constructing a Lunatic Asylum at Madras	"	"	20,000	20,028
do.	Extending the enclosure wall of the Penitentiary	16,860	"	{ reduced to 15,950 }	15,950
do.	Alterations and additions to the Jailers Quarters at do.	5,330	"	4,160	5,147
do.	Drainage of the Penitentiary	2,700	"	2,700	2,700
do.	Bringing seven Wells water from General Hospital to the Penitentiary	3,200	554	{ reduced to 544 }	544
do.	Erecting an iron and brass Foundry at Chepauk	28,530	6,000	{ increased to 22,530 }	22,530
North Arcot	Central Jail at Vellore	2,08,000	"	{ reduced to 20,000 }	19,987
Salem	Constructing a Lock-up at Sornamungalam	2,900	200	{ reduced to 2,430 }	2,394
do.	Alterations and improvements to the Salem Jail	"	"	5,000	5,037

District	Work	Estimate	Expenditure up to 30 April 1866.	Allo'tment for 1866-67.	Expenditure during 1866-67.
Civil Buildings (Contd)					
Alterations & improv.					
South Arcot	Alterations to the Juddalore Jail	"	"	3,000	3,000
Trichinopoly	Improvements to the Jail at Trichinopoly	4,750	"	4,750	4,650
do.	Extension of the Outer Drain of the District Jail at Trichinopoly	2,700	"	2,700	2,597
do.	Constructing a new Central Jail at Trichinopoly	{ approximate 3,70,000 }	"	15,000	15,048
Tanjore	Improvements to the new Salt Pans at Tranquebar	5,720	1926	{ reduced to 3,020 }	2,152
do.	Forming approach to the new Salt Platform at Tranquebar	2,590	"	{ Imperial 2590 reduced to 1500 Income Tax 1090 }	{ Imperial 1452 }
Coimbatore	Central Jail at Coimbatore	3,50,000	2,53,471	{ increased to 70,000 }	75,213
Malabar	do. at Cannanore	"	"	{ reduced to 20,000 }	20,236
do.	Jail at Calicut	80,000	"	{ increased to 22,304 }	19,638
Coimbatore	Church at Ootacamund	53,830	"	{ increased to 14,943 }	15,000
Madurai	New Jail at Madurai	85,800	"	{ increased to 35,000 }	34,999

District	Work	Estimate	Expenditure up to 30 April 1866	Allocation for 1866-67	Expenditure during 1866-67
<u>Civil Buildings (Contd.)</u>					
Madurai	Small house and Principal Sudder Ameen's Court houses at Madurai	27,500		$\left\{ \begin{array}{l} 40,000 \\ \text{reduced to} \\ 9,799 \end{array} \right\}$	9,799
<u>Agricultural</u>					
Godavery	Raising the Godavery Anicut	3,00,000	2,28,023	$\left\{ \begin{array}{l} 73,494 \\ \text{reduced to} \\ 50,000 \end{array} \right\}$	50,000
Kistna	Commamoor channel project	1,85,460	51,172	$\left\{ \begin{array}{l} 50,000 \\ \text{reduced to} \\ 24,800 \end{array} \right\}$	24,117
do	Western Bank channel	1,46,479	95,750	$\left\{ \begin{array}{l} 25,000 \\ \text{reduced to} \\ 16,200 \end{array} \right\}$	13,793
do	Widening lower portion of the Pullairu	1,04,050	82,983	$\left\{ \begin{array}{l} 13,998 \\ \text{reduced to} \\ 12,498 \end{array} \right\}$	12,493
do	Sloping down the banks of the Settanagaram main Canal	2,76,404	1,53,819	$\left\{ \begin{array}{l} 16,000 \\ \text{increased to} \\ 16,420 \end{array} \right\}$	18,550
do	Constructing a 1' Class Lock at Dugeralu	27,800	5,279	$\left\{ \begin{array}{l} 10,000 \\ \text{increased to} \\ 12,796 \end{array} \right\}$	13,734
Nellore	Improvements to the Nellore Tank	17,100	8,182	$\left\{ \begin{array}{l} 5,000 \\ \text{increased to} \\ 5,800 \end{array} \right\}$	5,790
do	River embankment west of Nellore	16,400	5,822	$\left\{ \begin{array}{l} 6,000 \\ \text{reduced to} \\ 5,200 \end{array} \right\}$	5,210
do	River embankment east of Nellore	13,410	10,223	$\left\{ \begin{array}{l} 3,187 \\ \text{increased to} \\ 3,487 \end{array} \right\}$	3,560

District	Work	Estimate	Expenditure up to 30 April 1866	Allocation for 1866-67	Expenditure during 1866-67	
	Agricultural (Contd.)			$\left\{ \begin{array}{l} 1,10,800 \\ \text{reduced to} \\ 61,683 \end{array} \right\}$	61,683	
Madras	Madras Water Supply project	6,11,759				
do	Raising the Casavaram Anicut	6,060		6,060	4,560	
North Arcot	Widening the Cheyarr channel	35,000	15,586	$\left\{ \begin{array}{l} 14,110 \\ \text{increased to} \\ 19,410 \end{array} \right\}$	19,775	
South Arcot	Constructing an anicut across the Mannirothia Kaddy River	4,000		$\left\{ \begin{array}{l} 3,500 \\ \text{reduced to} \\ 1,600 \end{array} \right\}$	1,600	
do	Extension of one of the Calingulaks of the Permant tank	3,500		3,500	3,500	
Trichinopoly	Constructing 10 surplus sluices on the north bank of the Coleroon		12,380	2,420	$\left\{ \begin{array}{l} 5,000 \\ \text{increased to} \\ 6,490 \end{array} \right\}$	6,483
do	do - do - do on the south bank of - do -		7,920	4,675	$\left\{ \begin{array}{l} 3,245 \\ \text{reduced to} \\ 2,245 \end{array} \right\}$	2,245
do	Constructing sluices for the Wyacondan channel	16,500		5,000	5,045	
Tanjore	Improving the irrigation of the Vadavaru Head.	5,184	1,900	3,284	3,284	
do	Constructing a sluice and 7 arches, and completing an additional laterite and rough stone apron at the northern extremity of the South branch of the Siver Coleroon Anicut	74,000				
	do - an additional laterite and rough stone apron with retaining walls at the advanced portion of 35 sluices in the Southern branch of the Lower Coleroon Anicut	16,000				
					$\left\{ \begin{array}{l} 30,000 \\ \text{increased to} \\ 50,617 \end{array} \right\}$	50,617

District	Work	Estimate	Expenditure up to 30 April 1866	Allotment for 1866-67	Expenditure during 1866-67
<i>Civil Buildings (Contd.)</i>					
Madras	Small lease and Principal Sudder Ameen's Court houses at Madras	27,500		$\left\{ \begin{array}{l} 40,000 \\ \text{reduced to} \\ 9,799 \end{array} \right\}$	9,799

Agricultural

Godavery	Raising the Godavery Anicut	3,00,000	2,28,023	$\left\{ \begin{array}{l} 73,474 \\ \text{reduced to} \\ 50,000 \end{array} \right\}$	50,000
Kistnagh	Commamoor channel project	1,85,460	51,172	$\left\{ \begin{array}{l} 30,000 \\ \text{reduced to} \\ 24,800 \end{array} \right\}$	24,117
do	Western Bank channel	1,46,479	95,750	$\left\{ \begin{array}{l} 25,000 \\ \text{reduced to} \\ 16,200 \end{array} \right\}$	13,793
do	Widening lower portion of the Pullairu	1,04,050	82,983	$\left\{ \begin{array}{l} 13,998 \\ \text{reduced to} \\ 12,498 \end{array} \right\}$	12,493
do	Sloping down the banks of the Sekanagran Main Canal	2,76,404	1,58,819	$\left\{ \begin{array}{l} 16,000 \\ \text{increased to} \\ 16,420 \end{array} \right\}$	18,550
do	Constructing a 1' Class Lock at Dugeralla	27,800	5,279	$\left\{ \begin{array}{l} 10,000 \\ \text{increased to} \\ 12,796 \end{array} \right\}$	13,734
Mellore	Improvements to the Mellore Tank	17,100	8,182	$\left\{ \begin{array}{l} 5,000 \\ \text{increased to} \\ 5,800 \end{array} \right\}$	5,790
do	River embankment west of Mellore	16,400	5,822	$\left\{ \begin{array}{l} 6,000 \\ \text{reduced to} \\ 5,200 \end{array} \right\}$	5,210
do	River embankment east of Mellore	13,410	10,223	$\left\{ \begin{array}{l} 3,187 \\ \text{increased to} \\ 3,487 \end{array} \right\}$	3,560

District	Work	Estimate	Expenditure up to 30 April 1866	Allotment for 1866-67	Expenditure during 1866-67
<i>Agricultural (Contd.)</i>					
Madras	Madras Water Supply project	6,11,759		$\left\{ \begin{array}{l} 1,10,800 \\ \text{reduced to} \\ 61,683 \end{array} \right\}$	61,683
do	Raising the Casavaram Anicut	6,060		6,060	4,560
North Arcot	Widening the Cherpur channel	35,000	15,586	$\left\{ \begin{array}{l} 44,110 \\ \text{increased to} \\ 19,410 \end{array} \right\}$	19,775
South Arcot	Constructing an anicut across the Mannimotha Naddy River	4,000		$\left\{ \begin{array}{l} 3,500 \\ \text{reduced to} \\ 1,600 \end{array} \right\}$	1,600
do	Extension of one of the Calingulaks of the Permain tank	3,500		3,500	3,500
Trichinopoly	Constructing 10 surplus sluices on the north bank of the Coleroon	12,380	2,420	$\left\{ \begin{array}{l} 5,000 \\ \text{increased to} \\ 6,490 \end{array} \right\}$	6,483
do	do - do - do on the south bank of - do -	7,920	4,675	$\left\{ \begin{array}{l} 3,245 \\ \text{reduced to} \\ 2,245 \end{array} \right\}$	2,245
do	Constructing sluices for the Wyacondam channel	16,500		5,000	5,045
Tanjore	Improving the irrigation of the Vadavair Head.	5,184	1,900	3,284	3,284
do	Constructing a sluice and 7 arches, and completing an additional lake and rough stone apron at the northern extremity of the South branch of the Lower Coleroon Anicut	74,000		$\left\{ \begin{array}{l} 30,000 \\ \text{increased to} \\ 50,617 \end{array} \right\}$	50,025
do	do - an additional lake and rough stone apron with retaining walls at the advanced portion of 3 sluices in the southern branch of the Lower Coleroon Anicut	16,000			

Estimated Amount for Execution during April 1866 1867 1868.

District Work

Communications

Panjim	Road from Aske to Pijullkondur	47,690	14,276	10,000	9,999	
Do	Do from Aske to Pijullkondur	44,610		10,000		
	Branch road from Pijullkondur to Murcholly	27,950		29,212	13,017	13,016
Do	Road from Aske to the Panjim Fort and salt pans	62,700	50,590	17,000	1216	1032
Do	Excavating a Canal from the Chilka Lake to the Panjim river	118,200		60,000	14,000	15,209
Vijayapatnam	Road from Vijayapatnam to Cuddapoor	115,000	51,755	15,395	14,642	14,642
Do	Road from Vizianagram to Bowdard	53,080	47,455	6,751		4,309
Podavery	Works for the crop Drainage of the Ellore High Level Canal	105,486	29,684	30,000	25,000	26,927
Do	Low Arch bridge at Kancanda	81,683	54,976	19,981	25,664	25,687
Pistnah	Metalling Hyderabad Road from Begowah to Shamshakur	10,000	5,000	Imperial 5,000	Imperial 1,000	Imperial 3,500
Ellore	Constructing an embankled road & masonry works along the Musurur Valley on Tank Road	68,630	22,714	Imperial 15,000	Imperial 3,744	Imperial 15,000

District	Work	Expenditure up to 30 April 1866	Allocated for 1866/67	Expenditure during 1866/67
Communications/contd				
Mellore	Bridge across the Idaru on Trunk Road No 6	2,000	11,428	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{reduced to} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 1000 \\ 9500 \\ 2100 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 6500 \\ 2100 \end{array}$
Do	Angole and Kottapattam road	50,200	45,529	4,670 5,124
Cuddalore	Road from the Mandalore Railway Station to Mandalore	7,312	5,082	2,230 1,931
Bellary	Bridge over the Pimkuffa Mullah on the road from Bellary to Kurnool	3,080	"	$\left\{ \begin{array}{l} 3080 \\ \text{reduced to} \\ 1979 \end{array} \right\} 1978$
Do	Road from Bellary to Cuddalore	10,200	10,150	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 696 \\ 4128 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 696 \\ 1252 \end{array}$
Cuddalore	Do from Cuddalore to Bellary	10,431	90,689	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{reduced to} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 5628 \\ 6065 \\ 122 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 5107 \\ 1193 \end{array}$
Do	Do from Cuddalore to Kurnool	6,518	14,490	$\left\{ \begin{array}{l} 6518 \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 7000 \\ 7000 \end{array}$
Kurnool	Do from Kurnool to Cuddalore	60,000	48,183	11,843 11,843
South Arcot	Forming roadway and em- bankment on the bed of the Mullataur and constructing a bridge	5,030	"	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 1750 \\ 2950 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 2950 \\ 1000 \end{array}$
Do	Bridge over the Mottial Coley	1,780	"	$\left\{ \begin{array}{l} 1780 \\ \text{reduced to} \\ 1130 \end{array} \right\} 1130$
Do	Do over the Kinnia Salem Surplus Channel	1,820	"	$\left\{ \begin{array}{l} 1820 \\ \text{reduced to} \\ 850 \end{array} \right\} 850$

District	Work	Expenditure up to 30 April 1866	Allocated for 1866/67	Expenditure during 1866/67
Communications/contd				
South Arcot	Bridge of 3 Arches of 30 feet span across the Thunbapettat Coley	5,900	"	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{reduced to} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 5900 \\ 1900 \\ 983 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 1900 \\ 983 \end{array}$
Do	Do of 1 Arch of 30 feet do across the Pookottly Coley on the road from Cudda- lore to the Salem frontier	3650	1078	$\left\{ \begin{array}{l} 2830 \\ \text{reduced to} \\ 2572 \end{array} \right\} 2572$
Do	Metalling and graveling 16 miles of Trunk Road No IX	24,900	9,999	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{reduced to} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 8700 \\ 2275 \\ 1025 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 2275 \\ 1711 \end{array}$
Salem	Completing the road from Ofoor to Maloor	8,320	4,478	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 1120 \\ 2239 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 1120 \\ 2239 \end{array}$
Do	Road from Taramu- galam to the Sora- mangalam Railway Station	14,300	10,642	600 600
Do	Improving the road from Devattipatty on Trunk Road No X	5500	1206	$\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 2000 \\ 2109 \\ 285 \end{array}$ $\left\{ \begin{array}{l} \text{Imperial} \\ \text{Income Tax} \end{array} \right\} \begin{array}{l} 2051 \\ 285 \end{array}$
Tanjore	Constructing road from the Railway Station at Keraloor to the Town of Keraloor	3,690	3,028	662 597

District	Work.	Estimate up to 30. April/66	Expenditure for 1866/67	Allocation for 1866/67	Expenditure during 1866/67
Communications (contd)					
Sanyore	Metalling road from the Negapatam Railway Station to Nagore.	25730	23290	Imperial 2449 reduced to 750 Income Tax 1890	Imperial 750 Income Tax 102
Do	Junction Canal from Negapatam to Seropondy.	24165	20745	Imperial 3420 reduced to 1500 Income Tax 1920	Imperial 1490 Income Tax 2103
Do	Completing the Navigable Canal between Negapatam and Vadavarcin.	70410	3797	Imperial 2000 reduced to 700 Income Tax 8390	Imperial 700 Income Tax 4922
Tichingoly	Road from Tichingoly to Aradloor and Noddiarpallam to its junction with Shank Road. 809.	43600	25095	Imperial 8000 reduced to 2000 Income Tax 6355	Imperial 2000 Income Tax 4752
Do	Constructing a road from Tichingoly to the lakem boundary via Perior	50000	33271	Imperial 8000 reduced to 3000 Income Tax 2340 D. Road 4000	Imperial 3000 Income Tax 2840 D. Road 4000
Coimbatore	Coonoor Chant new trace	240000	100822	30000	55961
Do	New Godaloor Chant	81400	18759	15000 reduced to 12355	12355
Do	New line of road from Colacurumund to the head of the Godaloor Chant at Nallivuthann.	66762	7007	Income Tax 7462	Income Tax 7462

District	Work.	Estimate up to 30. April/66	Expenditure for 1866/67	Allocation for 1866/67	Expenditure during 1866/67
Communications (contd)					
Coimbatore	Burghoor Chant new trace	72100	21116	Imperial 15000 reduced to 8500 Income Tax 5000	Imperial 8504 Income Tax 5000
Do	New road connecting St. Mary's Cherrry and Wellington with the new Coonoor Chant	33427	4780	2497 increased to 4642	4642
Malabar	Karkhor Chant; road and bridges below.	32550	18356	8212 reduced to 2882 Income Tax 54600 reduced to 5435 to 12000	2525 3474 11974
Do	Chambacherry Chant	146413	76562	56413 reduced to 20000	20000
Do	Curthoor 10 bridges from Luckherry to Vythery	25150	9805	8000	7790
Do	Road between Vythery & Kulpatty	41400	13776	10000 reduced to 1700	1736
Do	Bridge over the Moonoath river	16000	5352	7000 reduced to 3500	4800
Do	Do over the Kulpatty river	14500	"	5400 reduced to 4600	3970
Do	Road from Kulpatty to Sultan's Battery.	"	1278	7000 reduced to 800	782
Do	Do from Sultan's Battery to the Mysore frontier.	30000	4810	7000 increased to 7500	6926
Do	Service road	60660	41453	Imperial 15742 reduced to 4465 Income Tax 4465	Imperial 21891 Income Tax 4465

P.W. No. 18 July 1877 L. 2134

18 July 1877

No. 2155

18 July 1877

Arch. No. 1877

To No. 2156

The Secretary to the
Government of India
(P.W.)

Sir,

In forwarding the
Progress Report of Public
Works in the Madras
Presidency for the year
1866/67, I am directed
to offer the following
remarks.

1877

2. The year's allotment
was Rs. 64,70,723, and
the expenditure under
the Budget heads,
as far as yet ascertained,
amounted in the ag-
gregate to Rs. 62,04,006,
as shown below:-

1877

	<u>New Work</u>	<u>Repairs</u>	<u>Total</u>
Military	8,22,640	1,49,404	9,72,044
Civil Buildings	6,55,550	76,080	7,31,630
Agricultural	3,80,519	875,346	12,55,865
Communications	5,84,132	9,99,838	15,83,970
His: Pub: Improvement	86,776	7,770	94,546
	<u>25,29,617</u>	<u>2,108,438</u>	<u>46,38,055</u>
Tools and Plant			88,414
Establishments			<u>14,77,537</u>
			<u>62,04,006</u>

The largest outlay on New works under "Military" was incurred in the District of Coimbatore and in the executive charge of Bangalore. Of the aggregate expenditure in Coimbatore Rs. 1,33,970 represent the outlay on the Lawrence Asylum Buildings in completing the Hospital, forming

approaches, and providing huts for the Police. The principal buildings which were under execution in Bangalore were the Cavalry and Artillery Barracks on the Race Course, and the addition of three blocks to the Barracks intended for the accommodation of a Regiment of Infantry. At the Presidency, large sums were spent on the construction of a Bakery and the provision of accommodation for the stores of the Commissariat Department. In Malabar, the outlay on Military works was Rs. 87,377, which was appropriated

Only one half
of the total expenditure
under "Civil Buildings"
was incurred in the

1. Araduna

The aggregate outlay
on Irrigation New Works

was Rs. ^{440,929}~~380,819~~ ~~and~~ nearly
~~the~~ one half of which
was spent in the execution
of works for the extension
of irrigation in the Deltas
of the Godavari and
Kistnah. A sum of Rs.
61,683 was laid out in
excavating the channels
connected with the Madras
Water supply project and
Rs. 50,025 were expended
on the reconstruction of a
part of the Lower Coleroon
Anicut in the Dist of

Tanjore - The allotments for
two works under "Com-
munications" having been
very small, the operations
of the Departments under that
head

head were necessarily ^{much} restricted. The largest outlay
was in the Coimbatore
and Malabar Districts in
which a sum of Rs.
246,000 was spent in
opening up the Coonoor,
Godaloor, Suezloor, Karkoor,
Tambacherry and Punal
ghauts, and the pools
on the Nilgheries and
on the Plateau of the
Nymrad - The Canals
from the Chilka Lake
to Ganjam and from
Negapatnam to Vedaraniam
were on hand, and Rs.
30,730 were spent upon
them during the year -
The progress of the former
was much retarded on-
ing to the great difficulty
experienced in procuring
labor

labor, and the latter ~~is~~
is advancing to completion,
but it is feared that
it will be maintained
with much difficulty and
at a heavy cost, owing
to the probability of a rapid
deposition of silt, unless
preventive measures ~~are~~
devised and carried out.
The attention of the Supy
Engineer is now engaged
on this subject.

The introduction of
the Road Cess Act into
the Districts of this Presidency
has been recently sanctioned,
and as the collections
from that source are
likely to amount to a
considerable sum, the
Govt hope to be able
at

not into all I
think W.D.
you would
all

at no distant date, to
relieve the Imperial re-
venues of the maintenance
of all minor roads, and
thus to set free a larger
grants for those new works
under "Communications"
which have hitherto made
but little progress with the
small assignments
which it has been possible
to set apart for them
in the Annual Im-
perial Budgets.

I am to add that
the Deputy has, on
the whole, been efficient-
ly administered during
the past year - With
but few exceptions, this
Govt have had every
reason to be satisfied
with the members of the

Engineer Establishment,
who have indeed much
skill and energy in the
performance of their
executive duties. Most
of the members of the
Super Subordinate Es-
tablishment in charge
of Ranges have proved
themselves fully equal
to their responsibilities,
and the Govt. have
recently advanced some
of the most deserving of
them to the Engineer grades,
and further promotions
will be necessary to fill
vacancies in the Departt.
as they occur, no Military
Officers for employment in
it being now obtainable in this
Presidency, and the

supply of Engineer Officers
from England having
for some time past been
suspended. From this
latter cause, the proportion
between the Military and
Civil element in the Deptt.
is rapidly undergoing
a change, and the latter
will, in long, greatly pre-
dominate. This is a state
of things which, in the
opinion of the Govt., is
far from desirable, and,
meanwhile, they have
great difficulty, not only
in maintaining the
Departt. in an efficient
state, but also in selecting
from it a sufficient
number of qualified
Officers for employ-
ment in the investigation
of

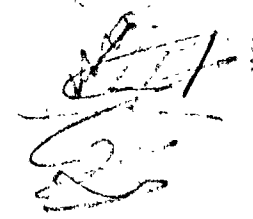
of irrigation project,
and in the executive
charge of the execution
of those of higher im-
portance already sanc-
tioned, and which it is
so desirable to have
pushed on with the
utmost rapidity —

Recd 19/7/67 with three copies
of the Progress Report.



Gust Stiburger
18th July 1867

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Pro. of Govt. for July.

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Pro. of the Madras Govt.

Of 18th July 1867

According to the
Govt. of India the Progress
Report of P.W. in the
Madras Presidency for
1866/67.

No. 438