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GOVERNMENT OF INDIA,

DEPARTMENT OF

REVENUE, AGRICULTURE & COMMERCE.

No. XVI.

COLLECTION OF PAPERS

RELATING TO THE LATE

SCARCITY IN BENGAL.

FEBRUARY 1875.



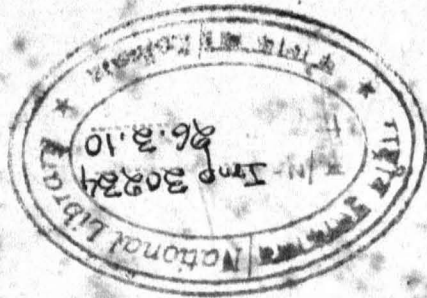
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DEPARTMENT OF REVENUE, AGRICULTURE AND COMMERCE.

COLLECTION OF PAPERS RELATING TO THE LATE SCARCITY IN BENGAL.

No. XVI.

FEBRUARY, 1875.

No. 1.

Letter from MAJOR J. GRAHAM, on special duty, to the Secretary to the Government of India, Department of Revenue, Agriculture and Commerce,—No. 2037, dated 2nd January 1875.

Not knowing the terms on which he was entertained, I beg to submit for the orders of Government a copy of a bill received from Mr. J. C. Schmidt, late Rice Storage Inspector.

Mr. Schmidt left Calcutta on the 21st November on the expiration of the six months for which he was engaged.

No. 2.

Letter from J. A. BOURDILLON, Esq., Officiating Under-Secretary to the Government of India, Financial Department, to the Comptroller General,—No. 778, dated 30th January 1875.

I am directed to authorize you to pay to Mr. Schmidt, the late Government Rice Storer in Calcutta, Rs. 75, being the cost of his passage by steamer from Calcutta to Akyab.

2. The bill received from Major Graham is herewith forwarded.

ORDERED, that a copy of this letter be sent to the Department of Revenue, Agriculture and Commerce for information.

Original papers returned.

Endorsement by the Department of Revenue, Agriculture and Commerce,—No. 56, dated 12th February 1875.

Copy forwarded to Major J. Graham, on special duty, with reference to his letter No. 2037, dated the 2nd ultimo.

No. 3.

Letter from H. J. SPARKS, Esq., Officiating Secretary to the Chief Commissioner, Oudh, to the Secretary to the Government of India, Department of Revenue, Agriculture and Commerce,—No. 5652, dated 16th October 1874.

In my letter No. 1158, dated the 3rd March, the Chief Commissioner reported the measures which he found it necessary to take in the northern parts of the province in order to avert famine, and I am now to submit a copy of Mr. Capper's letter No. 4586, dated the 5th instant, and its enclosures, showing what has actually been done. These papers speak for themselves, but it may be as well to give a brief summary of what has occurred.

2. *Test works*.—Towards the end of 1873, it was feared that there might be considerable distress in the Fyzabad division, and early in the current year it was apparent that these fears were not groundless. Test works were then started by Mr. Capper, the Commissioner. Not content with the appearance of the country and the people, and the reports that he received of the distress, he took the precaution of directing small works to be experimentally set on foot, rightly judging that if many persons were attracted to the works by the very small wages offered, there could no longer be any doubt that the people were suffering from want and privation.

3. *Fyzabad*.—In the Fyzabad district, though the autumn crops had failed, there was no great distress. Here the people found labor without much difficulty. Some few test works were started, but they proved that no relief works were really wanted, and they were all closed before the end of March; the total expenditure being less than Rs. 3,000.

4. *Distress in Bharaich and Gonda*.—But the number of persons who flocked to the test works in some parts of Bharaich and Gonda proved beyond all question that, owing to previous bad seasons, and the failure of the winter rains in the trans-Gogra districts, help was absolutely required. The distress

was confined to tolerably compact tracts. The total distressed area comprised about 2,900 square miles, and contained some 750,000 souls.

5. *Nature of relief works.*—The first step was to determine the nature of the relief works to be undertaken. Road-work was eventually decided on, and the reasons which led to its selection may be given in the words of the Commissioner: "As to the nature of the works to be started as relief works, Sir George Couper from the first had urged on us the utility of works of irrigation. But by this time we had gained by experience some knowledge of the numbers which flocked to every test work that was opened. Wells, as chiefly employing skilled labor, were out of the question, even in those parts where there was a probability of successfully sinking them; tanks, although serviceable in the prevention of future scarcity, required much local knowledge and matured consideration in the selection of their site. Their concurrent construction in numerous places demanded a large skilled supervising establishment of a class which was not available, and the few which could have been immediately commenced would have entailed the assemblage at each of a mass of poor, underfed wretches who would have been to a considerable extent unmanageable in so confined a space, and whose very assembling in the immediate vicinity of a village would tend to the outbreak at any time of an epidemic, which might have the most disastrous effects. It was decided that road-work was the most expedient. By simultaneous opening of several sections of each, work would be offered within reach of the homes of the mass of those employed; the gangs would be distributed, and their supervision rendered comparatively easy; whilst the roads themselves in the then roadless Terai would facilitate the immediate importation of food-grains and stimulate the trade in future. Roads then, with poor-houses along the several lines and at such other places as might be thought necessary, were to form the staple of the relief works. Field dispensaries, with central hospitals and adequate medical superintendence of the gangs, were to be provided; whilst, owing to the deadly climate of the Terai during the rainy season, when work by the acclimatized was liable to be stopped by floods, and superintendence by Europeans and unacclimatized officials was said to be precluded by the endemic fevers, depôts of grain were provided for the support of the people when no work could be done. In Gonda itself provision for 50,000 maunds of grain was made, partly as a measure of precaution, should unforeseen accident occur, or another bad season be in store, but chiefly because the new demand, at any price, of grain for Lower Bengal threatened to exhaust the relics of our maize crop and to carry off the spring harvest so soon as it was reaped. So great was this demand, that the agents of Government or of grain speculators hovered round even our most distressed tracts, tempting the holders of even a few maunds by tenders of cash at previously unheard-of rates to part with their small reserves, and there was no law which authorized direct interference with their action. Fortunately, so far as the rabi crop was concerned, the people realized the danger, and as a rule refused to sell; whilst the thekadars, who generally receive their rents in kind, and who for a consideration had bound themselves to procure and store such stock in excess of their usual stores as was prescribed for each, laid an embargo on the crops of the poorer tenantry, and allowed no sales except to themselves.

"Subsidiary precautions were taken, and amongst others the famine tracts, and those others in Gonda district where intolerable distress was apprehended, were divided into circles, each under the supervision of some local respectability, to whom all village chowkeedars and servants of the circle were bound to report all cases of urgent distress, and who was authorized (being provided with means for the purpose) to give discretionary immediate relief, reporting his action to the local delegate of the Relief Committees. Fortunately, although enough cases were thus brought to notice from time to time to show that the machinery was in working order, it never was severely strained and may (tested by results) be pronounced to have been unnecessary."

6. *Roads.*—In the Terai there were but few roads, and it was not difficult to select lines which, while convenient at present because passing through the heart of the country where the distress was greatest, would be of great ultimate utility. An old military path, roughly made during the campaigns of 1858 for patrolling purposes, ran along the Nepal frontier. This could still be traced in places, and it has now been made a useful road. A series of roads, opening out the northern parts of the districts and bringing



the forest roads into connection with the district communications, were designed and lined out, and these were the first works opened. But in

addition to these roads, some supplementary works were sanctioned, to be taken in hand if found necessary. Of these may be noticed several tanks, of which two were ultimately undertaken: A "bund" embankment on the Rapti, some 1,200 feet in length, designed to stop a flood which every year submerged some five miles of country. A canal, three miles long, to drain the water from three square miles of swamp. This, it was thought, would not only reclaim some valuable rice land, but would also render that part of the country less unhealthy. Rest bungalows for the inspecting officers wherever they might be found necessary, were also under consideration, but only one was constructed, as the Maharaja of Bulrampur placed at the disposal of the authorities houses in various places, which provided sufficient accommodation for such officers as were not at the time under canvas.

7. *Works undertaken.*—The following tables taken from the Commissioner's report show the nature of the works undertaken in the two districts, the number of persons to whom they afforded labor, and the expenditure:—

DISTRICT.	NAME OF WORK.	Length in miles.	Estimate.	Number of persons employed from commencement.	Amount to laborers.	Establishment and contingencies.	TOTAL.
			Rs.		Rs.	Rs.	Rs.
GONDA	Road from Atrowla to Belrampur ... ..	17½	37,691	610,414	30,100	6,592	36,662
	" Atrowla to Tulsiapur ... ..	14½	46,371	561,460	28,259	2,515	30,774
	" Military (Gonda Section) ... ..	36	84,312	780,916	41,705	4,147	45,853
	" Chowdri Dee to Khurgapur ... ..	31½	59,039	1,222,110	55,639	5,869	64,505
	" Bulrampur to Ekona ... ..	14½	40,315	181,940	10,314	1,462	11,776
	" Karasur to Mankapur ... ..	11½	7,533	73,396	4,082	537	4,619
	TOTAL ROADS IN GONDA ... ..	125½	2,75,261	3,436,236	1,73,160	21,029	1,94,189
	Tank at Chowdri Dee ... ..	.....	1,858	24,951	1,204	189	1,343
	" Lallia ... ..	.....	2,839	44,165	2,020	197	2,217
	Bund on Rapti at Ghuser Ghāt... ..	1,200 feet.	1,060	21,694	1,218	136	1,354
	Canal at Mehnawan ... ..	3 miles.	8,730	66,824	3,159	357	3,516
	Total irrigation work in ditto ... ..	.....	6,487	157,444	7,601	829	8,430
	Inspection bungalow at Atrowla ... ..	.....	1,841	No rolls kept.	1,751	.....	1,751
	TOTAL IN GONDA ... ..	.....	2,83,599	3,593,680	1,82,612	21,858	2,04,370

DISTRICT.	NAME OF WORK.	Length in miles.	Estimate.	Number of laborers employed.	Expenditure.
			Rs.		Rs.
BHARAICH	Road Bharaich to Nanpara (Jingraghat) ... ..	1	5,755	52,860	3,759
	" Military (Bharaich Section) ... ..	15½	24,932	2,80,570	18,435
	" Gobhapur to Bhinga with Sahelwa Branch ... ..	9	9,016	91,117	5,571
	" Bhinga to Lachmanpur ... ..	8½	4,102	48,470	4,100
	" Lachmanpur to Mathura ... ..	5	2,262	22,421	2,262
	" Pipraghat to Ekona ... ..	13½	5,582	51,106	4,553
	" Bhinga to Nanpara ... ..	26	33,965	1,68,409	13,910
	" Pipraghat to Charda ... ..	32½	24,359	53,634	8,410
	TOTAL BHARAICH ... ..	106½	1,09,873	7,59,046	62,300
FYZABAD	Repairs ... ..	5½	3,000	57,239	2,997

Altogether in the whole division 4,409,965 persons were employed for one day at a cost of Rs. 2,69,667, being about one anna two-half pie per head, including cost of gang supervision.

8. *System adopted.*—In carrying out these works it was arranged that the works generally should remain under the supervision of the Commissioner, and be constructed by gangs working under and paid by the Deputy Commissioners; the surveys, marking out and measuring up, and purely professional supervision of works in progress, as well as the preparation of the regular plans and estimates, being entrusted to the officers of the Department Public Works. Other proposals had been made. It had, for instance, been suggested that Government should utilize the skilled and able-bodied labor which in times of distress can be obtained at lower rates than usual by employing them on remunerative works, while all other distressed persons should be fed by charitable relief. But the great object in view was not to get the works done cheaply, but to avert distress;

Reasons for its adoption.

and it was held to be far better to take on at the works every one who was willing to give a day's labor for a day's food, than to employ the able-bodied only, and feed the rest in idleness.

9. Doubtless it would have been easier to organize and supervise gangs of skilled and able-bodied laborers. But it would have been disheartening to them to find that advantage was taken of the hard times to get their labor at a cheap rate while their neighbours ate the bread of idleness, and for a naturally lazy people it was considered that it would not be good to give away much in charity. Many would doubtless long continue to come for a day's food given gratis, who would not linger on the works a day after they found they could find more remunerative works elsewhere. Moreover, they would in future take less trouble with their crops if they knew that at the worst they would be fed by Government. The system adopted after due consideration had this advantage—that it taught the people that the authorities would help those who helped themselves.

10. *Work carried out by mixed gangs.*—The works were accordingly carried out by mixed gangs, every one who was willing to work being allowed to do so. The gratuitous distribution of alms to persons able to work was avoided, and the following three points were kept steadily in view:—

- (1) That so far as might be possible, men were not to be attracted from their agricultural avocations.
- (2) That to ensure this, the wages of labor were to be kept so low as to provide food, but not tempt those who could by any other means obtain it.
- (3) That these wages were to be paid daily, either in money or kind.

11. *Mode of payment, &c.*—As to the mode in which the laborers were employed and paid, the Chief Commissioner cannot do better than let Mr. Capper speak for himself: "All comers willing to work at our rates were to be received, and work was to be allotted to each class according to their capacity. They were to be formed into gangs some miles apart to avoid overcrowded encampments, and to bring the work as far as possible within daily reach of the laborers' homes."

Sanitary arrangements were duly seen to, and a field hospital and a few movable huts were attached to each gang. All moonshees and mohurrirs were provided with lithographed copies of vernacular instructions as to laying out and constructing the road, soils to be selected or avoided, digging side-drains, dressing the roadway and slopes, mode of payments, their own duties towards their superior officers and subordinates, and their relations to the supervising establishments of the Department Public Works. Those incapable of even light work were to be received and fed on the works, pending the orders of the proper officer. With him it rested to determine whether such should be maintained at their homes, removed to a poor-house, or sent to a central hospital.

As to the actual working, Mr. Maconochie, Deputy Commissioner of Gonda, states that "over each gang there was a mohurrir to keep accounts and to take care that the necessary funds were available for daily payments; a supervisor of works who apportioned and overlooked the works of each sub-gang, and appointed assistant mohurrirs and mates according to the numbers who flocked to the works. As a rule, each assistant mohurrir had 220 persons under him told off into four sub-gangs of fifty-five persons each, five being skilled diggers, the fifty unskilled hands. There were two mates to each sub-gang, one of whom was required to be able to read and write either Hindi or Persian, and keep the roll of workmen. This man between 7 and 8 in the morning, after marking down all in attendance, made up his account and delivered to the assistant mohurrir a total showing the number of persons present in each class and the amount of money required to pay them. After the assistant mohurrir had checked up the returns of his mates, he made up a similar total for the head mohurrir, who, after receiving the accounts of all his assistants, made up the accounts of the whole gang. He was expected to have made over by 3 P. M. to each assistant mohurrir the money required to pay each sub-gang, and the mohurrir distributed this to the head mates, who, when the order to leave off work was given, seated their sub-gangs according to



their order in the nominal roll, and after the number had been tested, the order to pay was given, and each person received his wages for the day."

Under the system of simultaneous payment of sub-gangs, it was as easy to pay Rs. 5,000 as Rs. 500, and the people were off to their homes before dark. But the preliminary difficulties in procuring a regular supply of pice or of grain on the different sections were very great. They severely taxed the energies and strained the authority of the Deputy Commissioners and their staff, and had the works been entrusted to the Department Public Works, any arrangements that could have been made by them must have broken down, and they would have called upon us to find the cash, the change, and the accountants. It is known from practical experience how tedious is the operation of paying in grain, and it is not surprising that Mr. Maconochie stopped it as soon as he could. But both he and Mr. Chapman found at first that it was much easier to procure maize at 15 or 16 seers per rupee, than to get an adequate supply of copper coin, although it was not easy to get the grain.

The Government coinage was unknown in the Terai, the circulating medium being the lump of copper known as Goruckpuri pice, valued generally at 20 gundas of 4 to the rupee, and there was but a scant supply of these. The stock of copper coin in the district treasuries was, in the face of such a demand as this sudden and unexpected one, ludicrously inadequate, and emergent indents on Lucknow and Fyzabad produced but little. Meanwhile, speculators became alive to the demand, and the price of Goruckpuri pice rose so rapidly, that when the Government pice arrived, the two coinages became current at the same rate, 4 to the anna, or 16 gundas to the rupee. This had, however, its advantageous side. At each work, as far as possible, a banian was induced to settle, and although some came with great reluctance and very small stocks, the more enterprising soon discovered that it was a very good business. Government, the work-people, or the neighbouring villages took at once every ounce of grain that they could produce, and the daily re-sale of the coppers which they received from the people to the works gave them a very handsome profit. In consequence, their numbers and their food-supplies rapidly increased, till at last in April small baiparis, travelling grain-dealers, who were taking grain to Nawabganj for boat exportation to Bengal, found it worth their while to bring their three or four carts to our distressed Terai, and every work had its banians no longer pressed but voluntarily attending.

The system and the measures for organizing and maintaining the people worked well, though at the cost of great labor and anxiety to the European officers, and incessant labor and worry to their supervising subordinates.

12. *Wages*.—No man, woman, or child ready to labor was turned away. Every person willing to work was employed, and many came, not only men, but women and children also; "and yet," to quote Mr. Capper again, "the pay given was very small, and the actual measurements by the Department Public Works show that there was a very fair tale of labor exacted." The wages at first starting were—

	A.	P.	
For skilled diggers...	2	0	daily.
„ unskilled ...	1	6	„
„ adult carriers ...	1	0	„
„ children ...	0	9	in Gonda.
„ children according to age ...	from 1	to 3	in Bharaich.

About the third week of February Mr. Maconochie found "that these rates were above the ordinary rates paid in villages to unskilled diggers and common coolies, and feared that they would attract the whole population to our work." He proposed to give in future—

	A.	P.	
Skilled diggers ...	2	0	a day.
Unskilled „ ...	1	0	„
Adult carriers ...	0	9	„
Children between 12 and 17 years ...	0	6	„
„ under 7 years ...	0	3	„

The Commissioner had written to Mr. Chapman, who was in charge of the Bharaich sections of the military road, that if he had any reason to believe

that the people preferred our work and pay to working in the fields, he was to reduce—

	A.	P.
Diggers to ... ..	1	0
Adult carriers to ... ..	0	9
Children to ... ..	0	6

And on the 25th February he had announced the reductions. At the conference of the 2nd March, Mr. Maconochie's rates were unanimously adopted. The first rates were a little too high, for, when reduced, some persons left the works, thus proving that they were not in absolute want. That the wages afterwards given were not too attractive, is shewn by the fact that no sooner did rain fall in June, than the people began to leave the works in large numbers.

13. *Alms.*—The amount spent in affording relief to those who did not work was comparatively small. On this head the Commissioner writes: "As might be expected under our system, the number of persons who received gratuitous relief was but small." In Fyzabad the aggregate up to 24th April was only 1,114. At Bulrampur a large poor-house, supported by the Maharaja, fed from 250 to 300 daily, and as that public-spirited gentleman took upon himself the charge of the poor of his estate, including our special poor-house at Tulsipur, only 29,871 persons at the Atrowla poor-house were charged to Government.

14. *Medical arrangements.*—It was feared that disease might break out among some of the gangs employed on the relief works, and that the privations they had undergone might render the people especially liable to any epidemic disease. Rules were therefore drawn up laying down the procedure to be followed in the event of an outbreak of cholera or other epidemic; and some extra medical subordinates were sent to each district. Fortunately, the health of the people was on the whole good, and there was no occasion to test the efficacy of the arrangements that had been made.

15. *Works completed.*—Of the works that were undertaken, some remained unfinished when the time arrived that relief was no longer needed. Of the work that has been done, Mr. Capper writes as follows:—

The work completed was, in Bhabraich—

New roads constructed—

	Miles.
Bhinga to Gobbapur ... ..	5½
" to Lachmanpur ... ..	8½
Lachmanpur to Muthura ... ..	5
Pipraghât to Ekona (part) ... ..	6¼
" to Charda ... ..	14

TOTAL ... 39

Old roads widened and raised—

Military Road... ..	15½
Pipraghât to Ekona (part) ... ..	7½
Bhinga to Nanpara ... ..	13

TOTAL ... 36

TOTAL ROADS CONSTRUCTED ... 75

Leaving incomplete—

Pipraghât to Charda ... ..	18½
Bhinga to Nanpara ... ..	12
Pipraghât to Ekona ... ..	½

TOTAL ... 31

In Gonda the work done was—

New roads constructed—

Chowdri Dee to Khargupur ... ..	29
Atrowla to Tulsipur ... ..	14½
Mankapur to Karasur ... ..	7

TOTAL ... 50

Old roads widened and raised—

Military Road... ..	36
Bulrampur to Ekona ... ..	9
Atrowla to Bulrampur ... ..	17½

TOTAL ... 62

TOTAL ROADS CONSTRUCTED ... 112



## Leaving incomplete—

Chowdri Dee to Khargupur	...	...	...	2½
Bulrampur to Ekona	...	...	...	5½
Mankapur to Karasur	...	...	...	4½

TOTAL ... 12½

## Showing a summary of works completed in the division—

New roads constructed	...	...	...	89
Old roads straightened, widened and raised	...	...	...	98

GRAND TOTAL ROADS CONSTRUCTED ... 187

Besides two irrigation tanks, one drainage canal (part), and one river embankment, at a total expenditure (not including compensation for land taken up, pay of Public Works establishment, and a few miscellaneous items) of not more than Rs. 2,75,000.

16. *Cost.*—The accounts not having been finally closed, the exact cost cannot be given, and the Commissioner's figures, which have been checked by the Controller of the Department Public Works, seem to be rather under the mark. Approximately, the cost on relief works has been—

			Rs.
Works	...	...	2,98,363
Establishment	...	...	17,866
Tools and plant	...	...	868
TOTAL	...	...	3,17,097

To these figures must be added the sum of Rs. 90,000 spent on the storage of grain, and a sum of Rs. 1,25,000 advanced for a similar purpose. The lakh and a quarter last mentioned will be recovered, as will also the greater portion of the Rs. 90,000. Taking these sums as expended, the total cost of the relief works has been Rs. 5,32,067. But all accounts have not been received, and there will be some charge on account of pay of hospital assistants, cost of medicine, &c. The total cost may be reckoned as 5½ lakhs. But this sum has not all been given away. The greater part, if not all, of the money expended on storage of grain will be recovered. Allowing for loss, 1¼ lakhs should at any rate be recovered. The works that were undertaken were useful works. At ordinary rates they would have cost about Rs. 1,36,604; so that all that can be fairly said to have been expended on this account on pure relief is Rs. 1,80,493. As far, then, as can be judged from accounts not finally closed, the expenditure stands thus—

			Rs.	Rs.
Cost of relief works	...	...	3,17,097	
Cost of grain	...	...	90,000	
Advanced for storage of ditto	...	...	1,25,000	
Contingencies and charges not yet brought to account	...	...	17,903	
		TOTAL	...	5,50,000
DEDUCT—				
Value of work done	...	...	1,36,604	
To be recovered on account of grain	...	...	1,75,000	
				3,11,604
		BALANCE	...	2,38,396

The exact figures will be submitted hereafter. Those given above cannot be far wrong, and the Chief Commissioner does not think it necessary to delay this report in order to be absolutely precise.

17. *Quality of work.*—The rates at which the work was done were necessarily high. Many of the laborers were women and children. Many of the men were infirm. The work was carried on at a time of year when the clayey soil had become as hard as stone; and much was done which, under ordinary circumstances, would not have been commenced before the rains. All this has added to the cost; but though the rates were high, the work done was good, and the Engineer's report shows that though a considerable portion of the country has been flooded during the late rains, little or no damage has been done to the new works.

18. *Summary.*—Briefly, owing to previous bad seasons, want of rain and a severe frost, the population of some 2,900 square miles were early in the year on the verge of very great distress, which, but for Government aid, would have culminated in famine. Relief works were undertaken, on which four million and a half people worked for one day: this must represent at least 50,000 persons who were paid for their work; and besides these there are others who have received charity and who have been assisted with advances.

The wages offered were so low that it may be safely held that none came to the works who were not in want, and the ultimate cost to the State of the relief that has been given will be something under two lakhs and a half.

19. In conclusion, the Chief Commissioner trusts that these operations, taken as a whole, will not be regarded as unsatisfactory. They have not been accomplished without much personal sacrifice; one valuable life has been lost, and others have broken down under the effects of exposure in that pestilential climate at the most trying time of the year; and Sir George Couper would submit that the services of Mr. Capper, and of the officers whom he has mentioned in his report, especially Messrs. Maconochie, Chapman and Hodges, as well as of the Maharaja of Bulrampur, are deserving of the acknowledgments of His Excellency the Viceroy in Council.

*P. S.*—The return of the original maps is requested when no longer required.

Copy of a letter from W. CAPPER, Esq., Commissioner, Fyzabad Division, to the Secretary to the Chief Commissioner of Oudh,—No. 4586, dated Fyzabad, the 5th October 1874.

I have the honor to submit for the information of the Chief Commissioner, my report on the operations found necessary for the prevention of famine and the relief of distress in this division during the first nine months of 1874.

2. In the administration report of 1872-73 and other correspondence, I had drawn a gloomy picture of the prospects of this year. I had pointed to agriculturists ruined by a succession of bad harvests, plough cattle dead of murrain, food-stocks exhausted, rents uncollected, and lands resigned; and I anticipated that, should this prove another year of bad harvests, the breakdown would be general. It happened that the rainfall was much below the average and quite insufficient, so that when the rains ceased prematurely on the 6th September, and the usual downpour in the first fortnight of October entirely failed us, great anxiety was felt as to the condition of the kharif autumn crops and the prospects of the cereals which form the bulk of the great spring rabi harvest. To ascertain the real state of things, I, in the third week of October, went on tour in the Fyzabad district, Mr. Maconochie having already started in the Gonda district, and the Bharaich district officers soon afterwards were also under canvas.

3. It was soon ascertained that in the greater part of the Fyzabad and Gonda districts there were but small stocks of food-grains in the hands of the agriculturists or village traders; that, owing to the impossibility of collecting rents, revenue defaulters would be numerous; and that where payments had been enforced, the demand had too often been met from loans borrowed at ruinous interest; that a smaller area than usual had been prepared for the rabi crops, whilst, where the principal kharif crop was rice, its failure had already caused distress.

4. In Fyzabad, the poorest classes had found work, on the wages of which they lived, for there had been a great demand for labor for irrigation, as many fields had to be flooded before the rabi could be sown, and neither cane nor young crop could exist without water; but in large tracts of the Gonda district, where irrigation is not generally resorted to, their sufferings had commenced. It was even then clear that, under any circumstances, there must be considerable remissions and suspensions of the land revenue demand, and that should the Christmas rains fail, the position would be very critical.

5. Before proceeding it may be as well to note here, that the Fyzabad division is made up of the districts of Bharaich and Gonda lying to the east and north of the Ghagra, and Fyzabad to the south, with a population of three millions. Roughly speaking, its northern boundary marches with the Nepal territory, whilst on the east it adjoins Busti and Goruckpur, its extreme south-east corner resting on Azimgurh and Jounpur districts of the North-Western Provinces.

DISTRICT.	Area in square miles.	Population.	Revenue demand.
Fyzabad ...	1,681	10,22,770	8,78,154
Gonda ...	2,745	11,66,615	11,18,117
Bharaich ...	2,710	7,74,640	8,48,718
TOTAL ...	7,136	29,64,025	28,44,989

The conditions of the two northern districts differ materially from those of Fyzabad, whilst the physical features of the former are largely determined by the course of the Ghagra and the Rapti, modified in Gonda by that of the Tehri nulla.

6. The belt of the table-land, which in Bharaich forms the water-shed of these two rivers, and is raised at places some forty feet above the level of the country on each side, is in Gonda bounded on the north by the Kuana river, and on the south by the Tehri, and is known generally as the Uperhar.

To its north the country lying between the Rapti river or Kuana river and the lower range of hills is known as the Terai; whilst the Ghagratie valley to the south consists naturally of Terwaha or low-lying lands.



7. The features of the Terai resemble those of the northern parts of Busti, Champaran and Tirhoot, whilst those of the Ghagratia valley are not dissimilar from those obtaining in the half of the valley lying on the right bank of that river, the Uperhar tract presenting features peculiar to itself. In all these divisions the spring crops, where sown, are much the same, but the autumn crops are different.

In the Terwaha, maize and millets are chiefly grown. In the Uperhar, maize and early rice are the principal staples (I quote from Mr. Maconochie), whilst the late rice is grown only when a depression in the ground retains the rain water to a comparatively late period. In the Terai, more especially in the large tract lying north of the Rapti river, the late rice is the main product and that on which the people chiefly depend. Both kinds of rice are sown when the rains of June set in—the early or inferior kinds broadcast in the fields, the finer kinds in beds especially prepared. The former should be harvested in September or October; the latter, the plants of which are transplanted when some 10 inches high, in December. This transplanting is described as laborious in the extreme. The fields have been previously well ploughed, and are at least ankle-deep in water before work is commenced; so that men, women, and children have to work under a blazing sun up to their knees in water and slush.

If the rains are favorable, the return is great; if the season is adverse and rains prematurely cease, no crop yields so poor a return. In addition to the precarious nature of this crop the climate of the Terai is notoriously unhealthy, and the nature of the employment renders the cultivators peculiarly subject to attacks of fever, which not only carry off considerable numbers, but greatly debilitate the survivors.

8. As to soils, that on the right bank of the Rapti is chiefly a rich loam, friable and easily worked. North of that river is a stiff, untractable clay, resting on a sub-soil of fine sand; whilst the whole of the Ghagratia plain consists of alluvial soils of various dates, in many parts, more especially in the north and in the valley of the Sarju, fertilized by deposits of soil left by the retiring floods.

As a broad rule, the Terwaha lands are most remunerative when the rainfall is rather below average. Their staples,—maize, millets, kodo and pulse,—do not thrive if the fields are flooded after they are sown, and the lands lying low retain moisture for some time. The Uperhar lands do best with moderate rain; but in the Terai, “so long as floods are staved off, any amount of rain can be taken without injury, and the later it falls the better for the fine rice,”—whilst drought not only means the failure of this crop, but renders all ploughing for the spring crops impossible.

9. Early in December, so far as I could gather from personal observation and the reports of the district officers, the state of the crops was this: The maize and millets in the Terwaha parganas from the north-west corner of Bharaich towards the south-east of Gonda (as far as they were sown) had done well, but owing to the scanty rain only 80 per cent. of the usual area had been prepared for the spring crop.

The maize of the Uperhar was fair, but the early rice, save in localities where the ground surface was exceptionally depressed, had failed; there was no winter rice, and one-third of the land usually under spring crop lay fallow. In the Terai the failure of the rice crops was general and complete, whilst including “arhar” not half the usual rabi crop was sown.

Mr. Maconochie, the Deputy Commissioner of Gonda, wrote that “unless we had good and early winter rains, the distress in the district would be very great indeed; the tanks were all empty, and although the people were digging kacha wells to the best of their ability through the greater part of the Tulsipur and Bulrampur Terai parganas, which had suffered most, kacha wells could not be dug at all, by reason of the depth at which water is procured, and the extremely sandy nature of the sub-soil.”

From Bharaich the officers who had been chiefly in the centre and southern parts of the district reported no immediate cause for alarm, but a very pressing need for early rain and a diminution by one-sixth of the usual rabi area; whilst in Fyzabad I had seen for myself that complete or partial failure of the rice crop was general, perhaps most complete in the Birhar pargana; that much rabi land was lying fallow, and the water in tanks and ponds was exhausted; that the long-continued drought had apparently seriously injured the sugarcane, and though “arhar” looked remarkably strong and well, the young wheat, barley, peas and gram on the unirrigated lands were very weakly.

10. It was at this time that His Excellency the Viceroy visited Oudh, and probably impressed by the reports he had recently received from Bengal, enquired carefully as to our prospects. So far as this division was concerned on the occasion of his visiting Fyzabad, I felt justified in stating that, though there was distress, there was no immediate prospect of famine, and that if the Christmas rain were copious and early, the difficulties would not be greater than could be dealt with by the Collectors, under the orders of the local administration.

11. Measures to relieve the more pressing difficulties of revenue payers and their tenants were adopted with the approval of His Excellency; others were provisionally sanctioned. It was understood that in case of emergency, a very full discretion was left to the Chief Commissioner; and divisional and district officers were given to understand that, should the prospects become more gloomy, and exceptional measures be deemed necessary, they were authorized to act on their own responsibility, subject to immediate report to their superior officer; and that though they were expected to act with discretion, no life was to be lost which reasonable energy or forethought could save. The Deputy Commissioner of Gonda had, with my full approval, instructed Mr. Hodges, his district engineer, to prepare plans and estimates for a good road from Ekona to Atroula *via* Bulrampur, and other projects were discussed and settled; so that if the December rain failed, and relief works had to be started, we might be ready to start work and feel the pulse of the distress.

12. The December rain did fail, and having directed the Deputy Commissioner of Fyzabad to start a test relief work at Baskari, in the Birhar pargana, I hurried to the Terai, where I had during my December tour appointed to meet the Deputy Commissioner, should this contingency occur. Passing over the "Terwaha" low-lying villages of Gonda *en route*, I was beset alike by landlords and tenants; the former pleading utter inability to pay the revenue instalment then due, the latter pointing to the fields and calling on the Government to save their children from starvation. But the arhar looked wonderfully good; the cane, said to be dried up, seemed as if a deal of vitality was left, and the cereals, though stumpy, lifted their blanching spear points to the sun as if determined yet to make a good fight for life, and to be well able to do it. Admitting that the crops on poor, high, unirrigated lands were lost, I took comfort from the thought that much of the unsown area consisted of such lands as these, and that after all, with the morning dews then falling, with rain perhaps still to fall, the crops I saw might suffice to feed the people, if not to pay the rent. In the nearer Uperhar tract I found the arhar still better, and sturdy plants of gram thriving, though small, which without rain would be seedless, but with water might yet do well.

I did not realize then what the entry in my diary of the 7th January really meant.

7th January: Very cold and sharp frost; bad for arhar.

I dwelt on such entries as in the morning on 10th—"Clouds promised rain, but none came. It is again clouding over, and the cold has gone;" and on the 11th—"Signs of rain are good."

I was then near Atrawla, with distress around us no doubt, but hardly prepared for a Brahmin co-sharer of a village through which we were passing in the evening complaining that he and his family were *starving*. A very cursory inspection was sufficient to prove this to be the case, and they were duly cared for.

13. On the 8th, orders had been issued to start the work on the Atrawla and Bulrampur road, and on the 12th the plans, &c., prepared by Mr. Hodges had been sent to the Chief Commissioner for sanction.

A second road in the Terai, from Atrawla to Tulsipur, was projected, and by the 15th the line was roughly laid down; and leaving the Deputy Commissioner, I proceeded on a tour through the Tulsipur Terai pargana, during which I saw nearly every village. To the east, in the Bhauma sub-division, adjoining the Busti district, they had had rain sufficient to save a low average rice crop, and that part of the district was safe. The north and west, as in the adjoining parts of the Bulrampur pargana, were waste. Mr. Benett, Superintendent of Encumbered Estates, has elsewhere recorded of a similar portion of the district: "It is not easy to give any idea of the disheartening spectacle which met our eyes; the whole of the winter rice was dried up, and where I had two years before seen miles of luxuriant verdure, there were now a few withered stalks, given over to the half-starved cattle. Jheels, where I had shot snipe last March, were as dry as a road in June, and the iron soil had resisted all attempts at ploughing for the spring wheat and pulses. The few wells were occupied day and night in the irrigation of the land round the village site, but the prospect was gloomy beyond my powers of description."

14. The population here is sparse, less than 330 to the square mile, and the villages are small. Malaria is endemic, and there are few inhabitants above the class of ordinary cultivators living from hand to mouth without the smallest accumulated capital, and, like all men living on rice cultivation, idle in the extreme. Several villages seemed deserted; in many others, only old women and mothers with their children were to be seen. The men were said to have gone to Nepal, or elsewhere, in hopes of food or work. Those who remained behind were living on cakes made of the tendh tree fruit, about the size of a small peach, and of yellow color. They had no grain. As we neared the forests, a good portion of the absent population was accounted for—men, women, and children eagerly searching for fruits and edible roots. Everywhere the people seemed encouraged by our visit, for I was generally accompanied by Lala Ram Shunkar, an able and energetic agent of their landlord, the Maharaja of Bulrampur, and received with undisguised joy the news that relief works would at once be opened in the neighbourhood of their homes. On the 25th I met the Chief Commissioner, Sir George Couper, who was hurrying up to Bulrampur in the distressed districts. But on the 23rd we had had a small but steady fall of rain, and on the 30th we had more, and I was anxious to see further for myself the condition of the people. So on the 31st, having taken the Chief Commissioner's orders on the various measures to be hereinafter detailed, I left for the northernmost part of the Gonda and Bharaich Terai, whilst the Chief Commissioner moved through it by a line further south. On the 1st February there fell heavy, steady rain, which was evidently general, and which eventually saved a considerable portion of the cereals, grain and the more valuable crops, but the fine "arhar" crops throughout the Gonda and Bharaich districts, and in some parts of Fyzabad, had, except in a few exceptional places, been destroyed by the frosts of January 7th to 10th, and in a few days afterwards large tracts of country were further wasted by partial, but exceptionally heavy, hail-storms.

15. I found the remaining part of the Gonda Terai in much the same condition as that which I had visited. The rabi area was perhaps less, and as more time had passed without relief being afforded, the physical signs of suffering were intensified; and although I saw none dead from actual starvation, there were ugly stories told, and I was shown a hut in a solitary hamlet whence, it was said, the corpses of a mother and three children had been removed: a haggard old cow-keeper, the sole inhabitant, confirmed the story, saying that the husband had left with the other men in search of work, the mother took fever and became insensible, and so she and her children died.



16. Crossing into the Bharaich district, I met the Assistant Commissioner, Mr. Chapman, who had been sent hurriedly to the north when it was found that distress was serious in Northern Gonda, and who was enabled to report that though there was scarcity in the North-West, there was no present fear of actual famine, owing to the success of the maize crop. At Bhinga it was found that the kharif crop had failed throughout the Durgapur tract, and that in those portions of it where two crops were raised, the area sown with rabi spring crops was very exceptionally small. Colonel Shaw, the Deputy Commissioner, was accordingly left there on the 7th February, with powers at his own request to start emergent relief works wherever and in whatever form he thought it necessary. Mr. Chapman proceeded with me through the forest northwards. About Gobbapur (to use his words) "there were visible on every side alarming signs of serious distress bordering close on actual famine," and he was completely taken by surprise.

17. Pushing on to the Nepal frontier at Baghora Tal, we ascertained beyond doubt that the stock of grain was almost *nil*, and that the failure of rice crop (except in the vicinity of Hempur, close to the Baghora Tal) was so complete, that there had been no attempt to cut it; the cattle had been allowed to graze it down. And the "arhar" crop stood frost-bitten and dry. Contrary to custom, attempts had here and there been made on patches of land in the immediate proximity of the houses to grow barley, single or mixed, with wheat and gram. But these crops were thin and stunted. Although saved by the recent rain, the area they occupied was insignificant, and it was ultimately only vigilant watching all night and every night by a totally disproportionate number of men against the ravages of wild animals from the neighbouring forests that secured a very small return from a very poor crop.

18. Mr. Chapman reports that "the people, patient and long suffering to a degree, endeavoured in every way to economize their small stock of food. They could be seen in the early morning trooping from their villages towards the forest (some of them going 10 or 12 miles), where they spent the day in digging up roots. In the evening they returned, steeped these roots in water, beat them well, and separating the fibre, mixed the smaller particles with ordinary grains to eke out the stock." I observed that the most valued root was that of the peen kajur, a sago palm, and of course those who obtained the granular sago had a nutritious article of diet; but the quantity of this in the roots of each tree being small, this sago was in but a fractional proportion to the pounded wood and bruised fibre with which men, women, and young children satisfied the cravings of hunger at the cost too often of very serious diarrhoea. The forest at that season supplied little else but roots, for the tendh and other winter fruits and berries were over, and the sâl seed was not ready.

19. In this roadless country much being swamp, almost impassable from the recent rain, we had completely outmarched our baggage; so, having during our compulsory halt thoroughly examined all the surrounding country, and having roughly initiated Mr. Chapman into the first principle of road-making, I left him to start, as he could, relief works on the line of the old military road from Baghora Tal to the Gonda boundary, and myself moved north-west through the forests on the Bakla river.

20. Mr. Chapman writes in his official report: "It is painful to record that distress and scarcity had got the start of us. Although the people were not actually dying of starvation, still there was every probability, were aid much longer withheld, that numbers would die; that others would be enfeebled in strength and stamina to such an extent as to render subsequent aid of little avail, and render them an easy prey to any epidemic that might ensue, even if the population of the Terai, as it is inadequate for the proper working of the culturable area, did not emigrate *en masse* to Nepal, the frontier of which is most invitingly close at hand." There was no time to make elaborate preparations to meet the enemy, which threatened the depopulation of valuable estates, and consequent loss of revenue, general demoralization, disease, and death. There were no works of public utility on hand sufficiently near to render it possible to transfer to them those most urgently in need of aid, and thus relieve local pressure; nor could I waste valuable time and stand by and see if the great and urgent demand for food would not tempt speculators and merchants to import. Not a day was to be lost if the people were to be kept together, and the simplest measure one could adopt was to supply them with work in their own neighbourhood, and pay them as might be found convenient in grain or cash wages, which might enable them to procure grain.

21. My camp reached Kakadari; and in that group of malarious villages fringing the forest, I learnt how gaunt and emaciated human beings can be and yet live. Distinctions of classes seemed broken down. Thekadars, men farming villages, from the lord of the manor, to whom the cottagers look for food-supplies and loans when in distress, presented the same fleshless limbs, staring eye-balls, and wolfish faces as the poorer class. Women of all castes seemed weirdly and piteously old, and spoke with strange indifference of children dead and dying. Shaking with fever, with voices strangely hollow, the spokesmen of the ghastly groups told one and all the same sad story: "No grain in store; no rice harvest; no rabi sown; no meal for the day, and no money to procure one;" and then, with that calmness of resignation which so often marks their lymphatic race, they add "that failing help from Government or God, their time had come, they would lie down and die." I knew now what Mr. Benett meant when he wrote of others in the Gonda district, that "their gaunt looks made him miserable and were likely to haunt him as long as he lived."

Convinced that death was very near these few hundreds of people, for their few cattle did not give them food, and there was not a shop-keeper or grain-store in the place, I was comparatively helpless. Every man and every coin of public or private money which I could

spare I had left with Mr. Chapman, or on other important work ; I was almost alone in the most inaccessible parts of the district, where European officials were unknown. Fortunately, at a comparatively short distance a new bazaar had been founded on the farther side of some difficult country by a grantee, and I was enabled to make sure of the people being thence supplied with sufficient to keep body and soul together till help should come from Mr. Ponsonby, of the Forest Department, or the Maharaja of Bulrampur, to both of whom I wrote. How nobly and promptly Mr. Ponsonby and his superior officer, Captain Wood, responded to the call will be seen hereafter ; and having done this, I hurried on to finish my inspection, and report to the Chief Commissioner its results.

22. Fortunately, I had seen the worst. Getting clear of the forest and swamps, I emerged on the Charda plains ; and here, though there was scarcity and much distress, owing to the general failure of the rice crop, the extreme distress was localized, and between such localities lay groups of other villages, in which, owing to the difference of soil, greater energy of the people, or capabilities for irrigation, some kharif had been garnered, and the rabi crop, although not often exceeding half the usual average, had been wonderfully invigorated by the late unexpected rain ; and so proceeding, when on 13th February I reached Nanpara, and received my reports from all quarters of the division, I found with thankfulness that the area in which we had to combat *famine actually* imminent was compact and limited, and that, speaking generally, although hard work and ceaseless anxiety for officials, and great distress and suffering for the people of other parts, must exist during eight weary months that had to pass before the next kharif was gathered in, yet if the rains were early and sufficient, we might reasonably hope that our troubles would not culminate in general famine.

23. On the 13th February I joined the camp of Sir George Couper, the Chief Commissioner. That officer, ever sensitive to rumours that concern the prosperity of the province and the well-being of the people, had, on the 11th January, written from Saltnapur that in that district the rumours of impending distress were unfounded ; that if he found (as I had reported), owing to the few local showers that fell in Fyzabad district in the first week of January, there was no sufficient cause for anticipating actual famine in Fyzabad, he should hurry on to Gonda, and thence meet me at any part of the distressed tract. He directed me by no means to leave the Terai to meet him as a formality, and assured me, with a few words of hearty approval, of the part of that assistance and support which I gratefully acknowledge he has ever since cordially and earnestly afforded. He had since then written almost daily, giving judicious instructions as to our proposed measures, and according preliminary sanction where necessary to plans and the necessary establishments. He had now passed through South Gonda and a large portion of the Uperhar and Terai lands of Northern Gonda and Bharaich, and had seen for himself both the crops and the people.

He had consulted with district officials of all grades and the principal and more intelligent talukdars ; he had learned the views of his professional advisers as to the general principles on which relief works should be conducted, and had weighed our views as to the nature of the relief to be afforded, the principles on which it should be granted, the localities in which it was required, the nature of the works to be opened, their management and control ; and it only remained now for him to determine points on which there had been difference of opinion, and to give his final orders, so far as circumstances might admit of finality.

24. During the visit of His Excellency the Viceroy, the general question of the distress of revenue payers and of the agricultural rent payers had been fully considered by him after such consultation with officers of the administration as he deemed desirable. The proposals ultimately sanctioned were based mainly on other considerations than the actual distress of this year, but the statesman-like and far-seeing measures of His Excellency incidentally relieved the distress now imminent : scope of the immediate relief afforded by them in the Bharaich district was to some extent measured by the agricultural prospects of 1873-74, the main question in that district, *viz.*, the advisability of taxing waste and jungle, being reserved for future consideration, the remissions or suspensions of the Government demand being in all cases contingent on the revenue payer allowing an equivalent relief to the rent payers subordinate to him. By these means many thousands of peasants were relieved from a demand which they could not meet, and from a pressure which would have destroyed their remaining energies, and, by confirming their apathy as to the future, have rendered nugatory all exhortations to keep in good courage, and by energetic preparations for the next harvest, put things in train to recoup them from the failures of the past.

25. The relief thus granted was as below ; and actual remission of one-fourth of the Government revenue demand for 1281 Fusli (1873-74), amounting to Rs. 4,18,894, in Fyzabad.

In Gonda district relief had recently been afforded in parganas Bamhanipur and Mankapur, and nothing further was found necessary. In five parganas, Tulsipur, Bulrampur, Atrowla, Sadulanagar, and Burapahar, one-fourth of the revenue demand for 1281 F., amounting to Rs. 1,38,822, was remitted ; whilst in parganas Gonda, Gwarich, Dixar, Nawabgunj, and Mahadeva, the summary settlement was re-introduced, entailing a reduction of the proposed demand by Rs. 2,56,170, until the new assessment should have been revised. In Bharaich, in those parts of six parganas lying north of a road running from Ekona to Nanpara, Rs. 73,316 of the revenue demand for 1281 F. were remitted, and a further sum of Rs. 18,763 was suspended.

26. As to the nature of the works to be started as relief works, Sir George Couper from the first had urged on us the utility of works of irrigation. But by this time we had gained by experience some knowledge of the numbers which flocked to every test work that was opened.



Wells, as chiefly employing skilled labor, were out of the question, even in those parts where there was a probability of successfully sinking them; tanks, although serviceable in the prevention of future scarcity, required much local knowledge and matured consideration in the selection of their site. Their concurrent construction in numerous places demanded a large skilled supervising establishment of a class which was not available, and the few which could have been immediately commenced would have entailed the assemblage at each of a mass of poor, under-fed wretches, who would have been to a considerable extent unmanageable in so confined a space, and whose very assembling in the immediate vicinity of a village would tend to the outbreak at any time of an epidemic which might have the most disastrous effects. It was decided that road-work was the most expedient. By simultaneous opening of several sections of each, work would be offered within reach of the homes of the mass of those employed; the gangs would be distributed, and their supervision comparatively rendered easy, whilst the roads themselves in the then roadless Terai would facilitate the immediate importation of food-grains and stimulate the trade in future.

27. Roads, then, with poor-houses along the several lines and at such other places as might be thought necessary, were to form the staple of the relief works. Field dispensaries, with central hospitals and adequate medical superintendence of the gangs, were to be provided; whilst, owing to the deadly climate of the Terai during the rainy season, when work by the acclimatized was liable to be stopped by floods, and superintendence by Europeans and unacclimatized officials was said to be precluded by the endemic fevers, depôts of grain were provided for the support of the people when no work could be done. In Gonda itself provision for 50,000 maunds of grain was made, partly as a measure of precaution, should unforeseen accident occur, or another bad season be in store, but chiefly because the new demand at any price of grain for Lower Bengal threatened to exhaust the relics of our maize crop and to carry off the spring harvest so soon as it was reaped. So great was this demand, that the agents of Government or of grain speculators hovered round even our most distressed tracts, tempting the holders of even a few maunds by tenders of cash at previously unheard-of rates to part with their small reserves, and there was no law which authorized direct interference with their action. Fortunately, so far as the rabi crop was concerned, the people realized the danger, and as a rule refused to sell; whilst the thekadars, who generally receive their rents in kind, and who for a consideration had bound themselves to procure and store such stock in excess of their usual stores as was prescribed for each, laid an embargo on the crops of the poorer tenantry, and allowed no sales except to themselves.

28. Subsidiary precautions were taken, and amongst others the famine tracts, and those others in Gonda district where intolerable distress was apprehended, were divided into circles, each under the supervision of some local respectability, to whom all village chowkedars and servants of the circle were bound to report all cases of urgent distress, and who was authorized (being provided with means for the purpose) to give discretionary immediate relief, reporting his action to the local delegate of the relief committees. Fortunately, although enough cases were thus brought to notice from time to time to show that the machinery was in working order, it never was severely strained and may (tested by results) be pronounced to have been unnecessary.

29. The facts then stood thus: In South Bharaich and Fyzabad there was no cause for immediate alarm. In the former no works had been found necessary; in the latter the test earth-work on the Baskari and Jalalpur road had been opened in the first half of January. But the numbers did not exceed 150 until the 27th; on the 31st there were 469, and this number was never exceeded. The Deputy Commissioner reported that the people who came were the ordinary laborers, the majority being women and children. And although he thought that no extraordinary relief works would be required in the district, still as old men and women, and half-starved women and children sought work, he obtained leave to raise certain low places in the 45th to 54th miles of the road from Fyzabad to Azimgurh; to continue the work on the embankments of the Baskari and Jalalpur road; to carry on some desirable earth-work at certain points of the road from Haswan to Maharajgunj; and to repair and dress the slopes of a useful tank at Haibutnow. As, however, all these works were closed before the end of March, when the rabi harvest was secured, it will be unnecessary to notice them further.

The total expenditure was Rs. 2,997, of which Rs. 1,948 was spent on the Fyzabad and Azimgurh road, Rs. 574 on Haswan to Maharajgunj, Rs. 374 at Bashari, and Rs. 101 on the others.

30. In Gonda "the portion of the district in which great distress was originally anticipated comprised an area of 1,439 square miles, but the January-February rains saved "parganas Sadulanagar, Burapahar and Gonda, comprising an area of 280 square miles;" so that, with the addition of a few outlying places in Mankapur and Mahadeva, there was a population of 350,000, residing in an area of 1,300 square miles, with "a famine staring them in the face,"—the main tract lying in parganas Tulsipur, Bulrampur, and Atrawla. In Bharaich the distress was in the Tulsipur, Charda, North Bhinga, North Nanpara parganas, and in part of Ekona pargana. The population affected was reported by the Deputy Commissioner at 400,000, spread over 1,600 square miles; but it was subsequently found that great distress was to be apprehended in a somewhat more circumscribed area. Here also the Deputy Commissioner urged that "famine" was to be apprehended.

As to the use of this word, Mr. Maconochie writes: "I use it advisedly, and without any wish to exaggerate the situation. It may be true that the loss of a crop does not ordinarily "produce such a dire result, and that in 1864 A. D., when a similar misfortune befel the

"northern parganas, no such evil consequences followed. But the circumstances of the people were then very different. The failure of 1864 succeeded several years of plenty; there were ample stores in the neighbouring districts of Nepal and of the North-Western Provinces; and most of the large farmers of Tulsipur and Bulrampur had considerable stocks of grain to fall back upon. But now for several years past there had been more or less failure of one or other of the harvests: in 1870-71 the spring harvest was below average for want of winter rains; in 1871-72 we had the great September flood which damaged the autumn, and the winter frosts which injured the spring harvests; in 1872-73 again winter rains failed and the spring harvest was poor; so that for three years there have not been two good harvests in succession. Stocks had been thus greatly diminished, and had further been drained to supply the scarcity in the Central and North-Western Provinces in 1869 A. D., whilst some Nepal districts, which are our usual stand-by, were in rather worse plight than ourselves." And after noticing the great demand from Bengal draining the southern parganas of their stores and keeping prices high; the great increase of crime; the feeding of the poor as early as in January on roots, wild fruits, and berries; and the desertion of their homes by the men in Tulsipur;—the Deputy Commissioner records that "unless prompt measures" had been adopted, the "results would have been calamitous."

31. The works finally sanctioned were selected with reference to their ultimate utility and the convenience of their situation to the homes of those whose wants they were to alleviate. As will be seen by the accompanying map, no roads existed in the large area north of the Rapti, or in the north-eastern part of the Bharaich district. Their construction was of the greatest importance to the opening out of the Terai, and would probably lead to a more intimate knowledge of the proceedings of the Nepal authorities on the frontier, which, in spite of the decision of the Government of India, did not appear to be definitely settled. But, except occasionally for sporting purposes, the Terai seems to have been unvisited by European officers; its fevers were notorious, and a general impression was abroad that, owing to the numerous mountain streams and the annual floods, no roads could be made.

32. An old military path, roughly made during the mutiny campaign for patrolling purposes, parallel to the Nepal frontier, some 56 miles from Baghora Tal in the north-west to Ramnagar in the east, ran through the heart of the country where the failure of the rice crop had been most complete, and where there was little or no spring crop sown. This could still be traced in places. A parallel line south of the Rapti, from the tehsil at Atrawla to Bulrampur, the head-quarters of the Maharaja, and thence to Ekona, effected a junction with the road from this latter place to Bharaich, and would afford work at various points to the inhabitants of a tract in which Mr. Maconochie had reported that very great distress prevailed, and of which the Superintendent, Encumbered Estates, recorded that "so great was the want, that the high-caste Sais and Pathans of Atrawla were quite unable to afford the usual hired labor, and I saw them with their wives and daughters,—women whom no less a need would have drawn from their usual jealous privacy,—out in the field attending to their crops."

Its continuation north-westwards in the Bharaich district to the tehsil at Nanpara and the pargana capital at Charda tapped a fertile grain country, in which this year the crops had failed, and brought these places in communication with the head-quarters of the Raj at Bhinga; whilst of the lines running north and south, with more or less deflection east or west, the line from Bhinga to Gubbapur ran through a country almost depopulated, and produced to Sohelwa, brought the entire system of forest roads trans-Rapti into connection with the district roads. A line from Chowdri Dee, a station of the military road running through Muthura, an important local grain mart, and thence southward to Khargupur, saved the people of many villages, whose only alternative escape from death was flight. This is a road of the greatest importance, and must have been soon undertaken as a district work. A branch line from Bhinga to join this last road about two miles, north of Muthura was commenced by Colonel Shaw to relieve the Durgapur distress alluded to in paragraph 16, and in the east a line from Tulsipur to Atrawla completed this system.

33. A series of roads through the north of pargana Gonda, and parganas Sadulanagar, Burapur, and Mankapur, was also projected; but as the rain saved the rabi crop, they were not found necessary, and need not be further alluded to.

One short and very useful piece, 11½ miles, from Karasur to Mankapur, was put in hand in April as a test work, but it did not then attract many laborers. Serious reports as to the local distress arriving afterwards, after an inspection by a district officer, work was reopened on the 1st May; and this carried a daily average of 673 persons, till it was closed on the 10th August, 546 being employed on that last day.

34. In addition to these, in Gonda there were sanctioned as supplementary work (to be put in hand if found necessary)—

1st.—Several tanks, of which those at Chowdri Dee, and Lallia, where the want of a regular supply of water was greatly felt, were ultimately undertaken.

2nd.—A "bund" embankment at Ghasyar Ghât on the Rapti river, some 1,200 feet in length, to stop a flood which each year submerged some 5 miles or more of country, destroying the crops of some 30 villages and ruining the soil by a deposit of fine sand.



3rd.—A canal, some 3 miles long, to drain the water of 3 square miles of swamp into the Kuana. The neighbourhood had greatly suffered from the malarious effluvia of this stagnant pest; and the talukdar had made a feeble attempt to abate the evil, but his operations were not sufficiently scientific, and relief works being necessary in the neighbourhood, it was thought well to remove the source of disease and at the same time reclaim this large tract of excellent rice lands.

4th.—Rest bungalows for the inspecting officers wherever they might be found necessary. One only at Atrawla was constructed, the houses placed at our disposal by the Maharaja of Bulrampur in other places having provided sufficient accommodation for such officers as were not at the time marching with tents.

In Bharaich only road-making was proposed.

35. The report of Mr. Hodges, the Executive Engineer, attached to this, shows in detail how far these works were completed. The work done, the number of laborers employed, and the cost was in round numbers for Gonda :—

District.	NAME OF WORK.	Length in miles.	Estimate.	Number of persons employed from commencement.	Amount to laborers.	Establishment and contingencies.	TOTAL.
			Rs.		Rs.	Rs.	
GONDA.	Road from Atrawla to Bulrampur...	17½	37,691	6,10,414	30,160	6,502	36,662
	" " " to Tulsipur ...	14½	46,371	5,61,460	28,259	2,515	30,774
	" Military (Gonda Section) ...	36	84,312	7,86,916	41,706	4,147	45,853
	" from Chowdri Dee to Khargupur ...	31½	59,039	12,22,110	58,639	5,866	64,505
	" " Bulrampur to Ekona ...	14½	40,315	1,81,940	10,314	1,462	11,776
	" " Kārasur to Mankapur ...	11½	7,533	73,396	4,082	537	4,619
	Total Roads in Gonda ...	125½	2,75,261	34,36,236	1,73,160	21,029	1,94,189
	Tank at Chowdri Dee ...	...	1,858	24,951	1,204	139	1,343
	" " Lallia ...	...	2,839	44,165	2,020	197	2,217
	Bund on Rapti at Ghasyar Ghāt ...	1,200 feet	1,060	21,504	1,218	136	1,354
	Canal at Mehnawan ...	3 miles	8,730	66,824	3,159	357	3,516
	Total Irrigation Work in do. ...	...	6,487	1,57,444	7,601	829	8,430
	Inspection Bungalow at Atrawla ...	...	1,841	No rolls kept.	1,751	...	1,751
	TOTAL IN GONDA ...	...	2,83,589	35,93,680	1,82,512	21,858	2,04,370

In Bharaich it was about the middle of May that the establishment account was separated from that of the laborers, and it has not been found possible to re-adjust this account with accuracy. And, indeed, the money figures must be accepted as liable to subsequent correction. The payments in compensation for land taken up are not included.

District.	NAME OF WORK.	Length in miles.	Estimate.	Number of laborers employed.	Expenditure.
			Rs.		Rs.
BHARAICH.	Road Bharaich to Nanpara (Jingraghat) ...	1	5,755	52,860	3,759
	" Military (Bharaich Section) ...	15½	24,932	2,80,570	18,435
	" Gabbapur to Bhinga with Sohela, Bharaich ...	9	9,016	91,117	6,571
	" Bhinga to Lachmanpur ...	8½	4,102	48,470	4,100
	" Lachmanpur to Muthura ...	5	2,262	22,421	2,262
	" Pipraghat to Ekona ...	13½	5,582	51,106	4,853
	" Bhinga to Nanpara ...	26	33,865	1,58,409	13,910
	" Pipraghat to Charda ...	32½	24,359	53,634	8,410
	TOTAL BHARAICH ...	106½	1,09,873	7,59,046	62,300
FYZABAD.	Repairs ...	5½	3,000	57,239	2,997

Making in the entire division the number of laborers employed for one day 44,09,965, at a cost of Rs. 2,69,667, or 1 anna 2½ pie per head, including gang supervision.

In my original projects submitted to the Chief Commissioner, I had asked for relief works for Fyzabad Rs. 1,650, Bharaich Rs. 65,000, and Gonda Rs. 2,00,000, giving a total Rs. 2,66,650.

36. After some discussion it was decided that the works generally should remain under my supervision as Commissioner of Division, and be constructed by gangs working under and

paid by the Deputy Commissioner. The surveys, making out and measuring up, and purely professional supervision of works in progress, as well as the preparation of the regular plans and estimates, being undertaken by officers of the Department Public Works.

Mr. Maconochie, the Deputy Commissioner of Gonda, had with praiseworthy forethought directed Mr. Hodges, the Sub-divisional Engineer, to put in hand the projects for the Atrawla and Bulrampur, and Bulrampur and Ekona roads; and so heartily did Mr. Hodges carry out these instructions, that on the 8th January I was able to direct that the laying out of the road be proceeded with, and on the 15th the rough plans were provisionally sanctioned by the Chief Commissioner. But it was clear by the middle of February that many more works must be opened with the greatest dispatch, and the few professional officers and subordinates who were available with their utmost exertions could not lay down the different lines fast enough to meet the demands of the people who crowded to each. It was impossible that they should also be responsible for construction and for daily payments.

How severe was their work is proved by the simple fact, that of four officers of the Department, by the 19th of February Captain James, my Divisional Executive Engineer, was down with dysentery, which soon afterwards forced him to take sick leave to England, and Overseer Phillips, who was employed on the line from Nanpara to Bhinga, was soon afterwards attacked with fever of a dangerous type, from which he had not last month fully recovered.

Moreover, the petty contract system, and the employment of selected adults at ordinary rates, were by no means calculated to meet our requirements.

Three essential points were from the first kept steadily in view, and inculcated by the Chief Commissioner,—

1st.—That so far as might be possible, men were not to be attracted from their agricultural avocations.

2nd.—That to ensure this, the wages of labor were to be kept so low as to provide food, but not tempt those who could by any other means obtain it.

3rd.—That these wages were to be paid daily, whether in money or kind.

And both Mr. Maconochie and myself were greatly averse to the distribution of gratuitous charitable relief to any able-bodied persons who were capable of work.

37. The then Chief Engineer, following the practice that has obtained elsewhere, suggested that Government should utilize the skilled and able-bodied labor which is available in times of distress at a lower wage than usual by employing them on remunerative works under the Department, and would have referred all other laborers or distressed classes of the population to the district authorities to be fed by charitable relief. He would allow the professional supervisors of works to administer this charitable relief at poor-houses situate near the works—not as officers of the Department, but as agents of the Deputy Commissioner. But it was clear that, under such a system, there would be at least as much scope for corruption and peculation as may exist under a system which employs on works all those who can work. We had not to deal with widespread famine actually existing—all our efforts were directed to avert it. What concerned us first were the people: the return which we sought was not a good bargain wrung out of the laborers, but the preservation of the population in such a state of health, morally and physically, as to enable them at the proper time to resume their ordinary occupations as if the recent calamitous seasons had not occurred.

38. Admitting that so much work cannot be got out of mixed gangs as out of gangs of selected labor, yet able-bodied laborers will not do as much as they can if they see a large number of their neighbours fed gratis whilst a hard day's work was demanded from them. Require work from *all* comers at a rate of pay which leaves no margin for luxuries, and those will come who are compelled by necessity, and at the first fitting opportunity they will transfer their work to their fields. But if you give gratuitous food to all who are not able-bodied, and to all able-bodied a full day's wage for a full day's work, comparatively few will attend to agriculture at the proper season. The present advantage would outweigh the prospective, and the outturn of the next harvest be diminished by the measures adopted to meet the deficiency of the last.

39. Moreover, the agricultural population and the laborers in the rice districts are exceptionally lazy; an idle, slovenly kind of cultivation is all that is required, and for the greater part of the year all the rice cultivator has to do is to watch his crop grow and to eat it. To such the gratuitous distribution of food would do moral mischief. It would destroy the inducement to work, for they would naturally argue, "why should we take extra pains with our crops, or endeavour to produce more, as we pay rents in kind—no crop, no rent; and when we have no crop, the Government will feed us; we shall have no work to do."

On the other hand, in mixed gangs one cannot help being struck with the energy with which children work, and their joyful pride in its result, as well as with the self-satisfaction of the aged and infirm. It seemed no slight advantage that the children and young persons,—the hope of the future,—should learn or be confirmed in a previous lesson, that work means bread. Looking back on the past, I think that if we had adopted the system of selected laborers and gratuitous relief, we should have had the whole country on our hands.



40. The details of the system adopted were settled at a conference held by me at

Colonel Shaw, Deputy Commissioner of Bharaich.  
G. B. Maconochie, Esq., Officiating Deputy Commissioner of Gonda.  
Captain E. Wood, Conservator of Forests.  
C. Chapman, Esq., Assistant Commissioner, Bharaich.  
C. Ponsonby, Esq., Assistant Conservator.  
E. Hodges, Esq., Sub-divisional Engineer.  
G. Campbell, Esq., Sub-divisional Engineer.

Gobbapur on the 2nd March.

Eight of us were present, as per margin. They were assented to by all after mature consideration, and were duly carried out in Gonda and by the Bharaich officers, except Colonel Shaw,

who preferred working without plans, through agents of talukdars, and who consequently broke down.

All comers willing to work at our rates were to be received, and work was to be allotted to each class according to their capacity. They were to be formed into gangs some miles apart to avoid overcrowded encampments, and to bring the work as far as possible within daily reach of the laborers' homes.

Sanitary arrangements were duly seen to, and a field hospital and a few movable huts were attached to each gang. All moonshees and mohurrirs were provided with lithographed copies of vernacular instructions as to laying out and constructing the road, soils to be selected or avoided, digging side drains, dressing the roadway and slopes, mode of payments, their own duties towards their superior officers and subordinates, and their relations to the supervising establishments of the Department Public Works. Those incapable of even light work were to be received and fed on the works, pending the orders of the proper officer. With him it rested to determine whether such should be maintained at their homes, removed to a poor-house, or sent to a central hospital.

41. As to the actual working, I quote Mr. Maconochie: "Over each gang there was a mohurrir to keep accounts, and to take care that the necessary funds were available for daily payments; a supervisor of work, who apportioned and overlooked the works of each sub-gang, and appointed assistant mohurrirs and mates, according to the numbers who flocked to the works. As a rule, each assistant mohurrir had two hundred and twenty persons under him told off into four sub-gangs of fifty-five persons each,—five being skilled diggers, the fifty unskilled hands. There were two mates to each sub-gang, one of whom was required to be able to read and write either Hindee or Persian, and keep the roll of workmen. This man between 7 and 8 in the morning, after marking down all in attendance, made up his account and delivered to the assistant mohurrir a total, showing number of persons present in each class, and the amount of money required to pay them. After the assistant mohurrir had checked up the returns of his mates, he made up a similar total for the head mohurrir, who after receiving the accounts of all his assistants made up the accounts of the whole gang. He was expected to have made over by 3 P. M. to each assistant mohurrir the money required to pay each sub-gang, and the mohurrir distributed this to the head mates, who, when the order to leave off work was given, seated their sub-gangs according to their order in the nominal roll, and after the number had been tested, the order to pay was given, and each person received his wage for the day."

42. At first some of the higher officers, and notably Mr. Chapman on the military road, took upon themselves the great physical labor of paying all the gangs themselves, but it was found in practice that even head mohurrirs could not personally pay their gangs; some of whom were kept till 9 and 10 at night, whilst occasionally some unfortunate sub-gangs were kept two or three days without pay. "Under the system of simultaneous payment of sub-gangs, it was as easy to pay 5,000 as 500, and the people were off to their homes before dark." But the preliminary difficulties in procuring a regular supply of pice or of grain on the different sections were very great. They severely taxed the energies and strained the authority of the Deputy Commissioners and their staff; and had the work been entrusted to the Department Public Works, any arrangements that could have been made by them must have broken down, and they would have called upon us to find the cash, the change, and the accountants. From much practical experience I know how tedious is the operation of paying in grain, and am not surprised that Mr. Maconochie stopped it as soon as he could. But both he and Mr. Chapman found at first that it was much easier to procure maize at 15 or 16 seers per rupee than to get an adequate supply of copper coin, although it was not easy to get the grain. The Government coinage was unknown in the Terai, the circulating medium being the lump of copper, known as "Goruckpuri pice," valued generally at 20 gundahs of 4 to the rupee, and there was but a scant supply of these. The stock of copper coin in the district treasuries was, in the face of such a demand as this sudden and unexpected one, ludicrously inadequate, and emergent indents on Lucknow and Fyzabad produced but little. Meanwhile speculators became alive to the demand, and the price of Goruckpuri pice rose so rapidly that when the Government pice arrived, the two coinages became current at the same rate—4 to the anna, or 16 gundahs to the rupee.

This had, however, its advantageous side: at each work as far as possible a banian was induced to settle, and although some came with great reluctance and very small stocks, the more enterprising soon discovered that it was a very good business. Government, the work people, or the neighbouring villages, took at once every ounce of grain that they could produce, and the daily resale of the coppers which they received from the people to the works gave them a very handsome profit. In consequence, their numbers and their food-supplies rapidly increased, till at last in April small baiparis, travelling grain-dealers, who were taking grain to

Nawabgunj for boat exportation to Bengal, found it worth their while to bring their three or four carts to our distressed Terai, and every work had its banians no longer pressed but voluntarily attending.

43. The system and the measures for organizing and maintaining the people worked well, though at the cost of great labor and anxiety to the European officers, and incessant labor and worry to their supervising subordinates.

By the end of February, where works had been started, the more conspicuous signs of famine or of gaunt distress had disappeared. Mr. Thomson, the local Inspector of Schools, has recorded what proves how successful our measures had been, that on the 22nd of that month (that is about a month or five weeks after the works had commenced) he passed some gangs on the Atrawla and Bulrampur road, who were laughing and merry, and had no complaints to make to the sahib. For some time these people had been accustomed to the sight of sahibs, and out of the 2,378 persons who were that day employed on that road (except some of the gang at the 10th mile, who were new arrivals), the people probably did not look famine-stricken. Had Mr. Thomson been on the line a month earlier, he could have borne stronger testimony to the adequacy of the measures adopted.

44. And yet the pay given was very small, and the actual measurements by the Department Public Works show that there was a very fair tale of labor exacted. The wages at first starting were—

			Annas.	Pies.
For skilled diggers	...	...	2	0 daily,
„ unskilled „	...	...	1	6 „
„ adult carriers	...	...	1	0 „
„ children	...	...	0	9 in Gonda.
„ „ according to age	...	from	1	to 3 in Bharaich.

About the third week of February, Mr. Maconochie found “that these rates were above the ordinary rates paid in villages to unskilled diggers and common coolies, and feared that they would attract the whole population to our works.” He proposed to give in future—

			Annas.	Pies.
Skilled diggers	...	...	2	0 a day.
Unskilled „	...	...	1	0 „
Adult carriers	...	...	0	9 „
Children between 12 and 7 years	...	...	...	6 „
„ under 7 years	...	...	...	3 „

I had written to Mr. Chapman, who was in charge of the Bharaich sections of the military road, that if he had any reason to believe that the people preferred our work and pay to working in the fields, he was to reduce—

Diggers to 1 anna,  
Adult carriers to 9 pies,  
Children to 6 pies,

and on the 25th February he had announced the reduction.

At the conference of the 2nd March, Mr. Maconochie's rates were unanimously adopted, and these remained in force (save on the works under Colonel Shaw's direct management) until the works as relief-works were closed—in Bharaich on the last day of July, in Gonda on the 20th August. Only in the third week of May, when the organization of the gangs was suffering from the large number of women and children as compared with men, the bulk of whom were most properly at work in their fields; when women and children of the better classes unused to the great heat of the time could not, and did not, do a proper day's work, and I was enabled to report to the Chief Commissioner that there was no longer room for anxiety as to the food-stock of the division falling so low as to risk famine before the time when a favorable season (such as then seemed assured) would bring into the market the new crops of autumn;—it was only then that I felt justified in directing that children under 10 years should be struck off in Bharaich and all the Gonda works radiating from Atrawla. Even then the fullest discretion was allowed to the Deputy Commissioner to modify this order in practice for special reasons to be reported, and it was impressed through them on gang subordinates that those in real distress were to be employed or fed, whether under 10 or not.

45. As might be expected under our system, the number of persons who received gratuitous relief was but small. In Fyzabad the aggregate up to 24th April was only 1,114; at Bulrampur, a large poor-house, supported by the Maharaja, fed from 250 to 300 daily, and as that public-spirited gentleman took upon himself the charge of the poor of his estate, including our special poor-house at Tulsipur, only 29,871 persons at the Atrawla poor-house were charged to Government. The charges at the special poor-house at Gubbapur in the Bharaich district have been amalgamated with the weekly road returns, and cannot now be distinguished. The large expenditure at the Sudder poor-houses at Gonda and Bharaich, and the increased charges at the regular dispensaries, were only indirectly attributable to the anticipated famine, and are therefore excluded from this report.



46. At a conference held at Tulsipur on the 24th March, at which the officers marginally

W. C. Capper, Esq., Commissioner,  
Fyzabad Division.

Colonel Anderson, Superintendent,  
Revenue Survey.

G. B. Maconochie, Esq., Officiating  
Deputy Commissioner, Gonda.

C. Chapman, Esq., Assistant Com-  
missioner, Bharaich.

Dr. Heffernan, Civil Surgeon, Gonda.

G. J. Low, Esq., Officiating District  
Superintendent of Police.

noted met,—after it was decided that if the infirm and small children were excluded from our mixed gangs, the pay of the remainder must be increased, and that we must be prepared for an increase of numbers on the works,—Mr. Low pointed out the increase of crime as unusually large, even for the 2nd quarter of the year, and Dr. Heffernan, who was on a tour of medical inspection, considered professionally that the people generally were much pinched; that the infirm and beggars were suffering from the withdrawal of the help and charity to which they were accustomed; and that in his opinion,

a considerable proportion of the gangs in the Terai roads were emaciated and in a condition of health rendering them liable to fall an easy prey to any epidemic disease that might be engendered when the mango and mhowa season came on. With the sanction of the Chief Commissioner, rules were drawn up for the treatment of gangs in case of an outbreak of cholera, small-pox, or other epidemic diseases. The Civil Surgeons of Bharaich and Gonda were authorized to indent on the Allahabad depôt for a reasonable supply of medicines and necessaries for the field hospitals, and the necessary men were speedily supplied by the strenuous exertions of Dr. Cannon, the Deputy Surgeon-General at Lucknow.

47. I am glad to record that these and other precautions have been proved unnecessary, but they at the time added to our anxieties, and will probably be held to have been neither uncalled for nor unwise. There was no epidemic; the number of people admitted into the hospitals were insignificant, and the diseases, with the exception of a few cases of small-pox for which they were treated, were of ordinary descriptions, and the admissions, all told, were less than 1,000. But none the less I am bound to acknowledge that the subordinate medical officers deputed had a rough time. They were unacclimatized, and at the hottest time of the year were exposed to all the climatic dangers of the Terai. The hospital assistants were expected to visit the gangs in their charge every day, whilst the senior men acted as inspectors, and were in charge of the standing hospitals prepared at Bulrampur, Atrawla, Tulsipur, and Chowdri Dee in Gonda; at Gubbapur in Bharaich, in which district a reinforcement of the medical staff of the branch dispensaries at Bhinga and Ekona supplied the other necessary medical head-quarters.

The officers thus employed were as below :—

DISTRICT.	Name.	Grade.	How employed.
Gonda	Futteh Khan ...	1st	Inspection duty.
"	Abdool Mahomed Khan ...	3rd	Inspection duty.
"	Lal Mahomed ...	"	Chowdri Dec.
"	Abdul Ghassir Khan ...	"	Tulsipur.
"	Ram Tahal ...	"	Karasur.
"	Dindial ...	"	Mehuwan.
"	Gaffur Khan ...	"	Ramnagar.
"	Sheik Amir ...	"	Atrawla and Bulrampur Road.
Bharaich	Alabundi ...	"	Military Road.
"	Abdul Majid ...	"	Pipraghat to Charda.
"	Mahomed Jarkhan ...	"	Bhinga to Nanpara.
"	Imamuddin ...	"	Compounder, Pipraghat to Ekona.

All gave the greatest satisfaction save one, "who was apt to be quarrelsome, and attempted to arrogate to himself the functions of the moonshee in charge of his road." I rejoice to record that in spite of the hardships which they cheerfully endured, none suffered in health save Alabundi, who "after for some weeks battling against a severe attack of fever and dysentery, was finally compelled to apply for leave of absence from his post and remained for many days at the Bharaich dispensary before he was well enough to return to his regiment."

48. The Hospital Assistant was sent to Mehuwan, partly because a detached gang were at once in that neighbourhood draining an unhealthy swamp, which might at any time breed an epidemic, but chiefly on account of a somewhat alarming report by Mr. Bennett, the Superintendent of the estate in which this swamp lies, who in the latter part of March after a tour of inspection reported acute and widespread distress among the numerous Bramin yeomen families, who abound in that pargana, and who, it appeared, were too proud to go on the relief works.

In consequence, Mr. Butts, Assistant Commissioner, was deputed, and on his report, made after careful personal inspection of each village, out-door relief was granted in small monthly pittances and advances: 973 persons, on the whole, received such relief aggregating Rs. 892, and 392 received advances in grain from the sudder depôt.

49. This depôt, as before remarked, had been decided on as a purely precautionary measure, and was a reserve in case the depôts provided in the trans-Rapti districts should, owing to another failure of harvest, prove insufficient in the rainy season when all traffic as a rule ceases. "It was at first arranged" (I quote Mr. Maconochie) "that the Maharaja of Bulrampur should collect and store with his head lessees or agents 75,000 maunds of grain

"in five depôts, and that the Deputy Commissioner should have in reserve another 50,000 maunds at Gonda. But after the result of the spring harvest had been ascertained, it was decided on the 16th April, at a conference held at Gonda, at which the Chief Commissioner presided, that this amount should be cut down to 55,000 maunds for Bulrampur, and 40,000 maunds for Gonda." During his May tour in the distressed districts, Mr. Maconochie had satisfied himself that the prescribed amount had been stored by the Maharaja's servants, and his own stores were collected and warehoused, partly in an old Government office building and partly in a temporary shed run up for the purpose by Mr. Gilbert, the Sub-divisional Officer to whom Mr. Maconochie tenders his best thanks for the energetic assistance then afforded. The figures given in Mr. Maconochie's report do not quite agree with his contingent bills, and I therefore adopt the latter.

Description of grain.						Quantity.	Amount.
						Mds. Srs. Chs.	Rs. A. P.
Wheat	...	...	...	...	...	12,017 23 3	29,967 6 3
Gujai (barley and wheat mixed)	...	...	...	...	...	2,881 12 9	6,391 9 3
Barley	...	...	...	...	...	1,675 15 11	3,464 4 1
Gram	...	...	...	...	...	7,835 12 10	17,505 13 8
Arhar	...	...	...	...	...	799 16 3	1,664 12 8
Barley and peas mixed	...	...	...	...	...	2,820 3 0½	6,059 0 9
Peas	...	...	...	...	...	2,649 0 3	3,692 10 2
Mussur (pulse)	...	...	...	...	...	191 38 0	455 4 7
Aksa (do.)	...	...	...	...	...	18 17 12	39 5 6
Barley and kirao	...	...	...	...	...	2,810 27 12	5,927 0 0
Kirao (peas)	...	...	...	...	...	2,787 14 7	6,225 5 10
Bajra (mixed grain)	...	...	...	...	...	280 16 11	581 11 10
Paddy	...	...	...	...	...	4 38 8	10 4 11
Indian-corn	...	...	...	...	...	413 24 0	1,004 5 6
Barley and gram mixed	...	...	...	...	...	137 14 7	252 4 1
Other charges	{	Cost of shed	...	...	...	.....	2,046 0 0
		Carriage	...	...	...	.....	2,385 1 1
		Packing	...	...	...	.....	1,034 3 9
		Establishment	...	...	...	.....	196 13 11
		Miscellaneous	...	...	...	.....	432 12 8
TOTAL						35,322 35 0½	89,336 2 6

The amount actually charged for was, it appears, 35,333 maunds, the total cost of which amounted to Rs. 89,336. I can speak from personal knowledge to the difficulties attending the collection at that time of this quantity of food-grains without disturbing the local markets, and to the tact and patience with which they were overcome by Mr. Maconochie. The time has not yet arrived at which we can say how this grain account will ultimately stand. The direct cost has been to Government less than Rs. 90,000, as above, and the Maharaja has received recoverable advances aggregating Rs. 1,25,000. Mr. Maconochie writes on the 11th September that he "would have preferred, had it been possible, to have made arrangements with grain dealers to have kept this quantity of grain at my disposal in case of need, but any assistance in this way on any terms was refused," and his reports of the "28th January show how hopeless it was to obtain this assistance on anything like reasonable terms." He continues—"I expect, when the time for spring sowings commences, to dispose of much of the wheat and gram which is of extra fine quality, as seed. But of this I am quite sure" (to this I must record a most emphatic assent) "that under the circumstances of the district, the storage of this grain was an imperative necessity, and if in consequence of the present bountiful harvest half the sum is lost Government will be well repaid by the present hopeful state of the district. The actual good it has done in helping the poorer classes of yeomanry" (not only by advances but by enabling them to threaten to resort to the Government stores if their mahajans refused them advances on the usual terms), "and the effect it has had in keeping down prices and forcing the grain-dealers to open their stores, has been most beneficial; and although Government may have lost by this action of the dealers, the people as a mass have gained to a very large extent." Personally I do not anticipate any considerable loss. The Calcutta Central Famine Relief Committee have supplied this division with the liberal contribution of Rs. 27,000, and although the greater part of this arrived too late for the advances which we had hoped to make therefrom, the applications for seed advances promise to be numerous, and we cannot make better advances than from the picked seed of our Government stores, which will of course be made at the present market rates.

50. It only remains to record briefly the service of those by whom what was done, was done. None of the superior Civil Officers were relieved of their ordinary duties. I, as Commissioner of the Division, remained in responsible charge of the works, but was permitted by the Chief Commissioner to transfer my head-quarters from Fyzabad to Bharaich, from April till the end of June, when all immediate danger was over, and my presence was urgently required elsewhere. Mr. Maconochie was throughout officiating as Deputy Commissioner of Gonda. Mr. C. Chapman, who had been from the 1st in charge of the more important relief

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works in Bharaich, assumed charge of the others on the 8th May, when Colonel Shaw was transferred to Rai Bareli, and Mr. Chapman was posted to the Bharaich district as Officiating Deputy Commissioner.

Mr. Chapman modestly records that when, on the 9th February, he opened a relief work at Tandia on the military road, he did so under somewhat adverse circumstances, being for some days without professional aid of any kind. He really, without practical experience beyond his native ability, having only the instructions which I had hurriedly given, fixed his line of road, marked it out, and pegged out work which in three days afforded work for 1,200 people, and opened another section at Bamahi, which carried an equal number, in so workmanlike a way that when the District Engineer, Mr. Campbell, arrived, it was found that he had hit the true line and that none of his work was lost. He remained in charge for a time without any help but that of his court moonshee, Tiloknath, and a naib canungo who chanced to be with his camp, till this and other works in that direction were in full working order, and he was (in May) summoned to head-quarters to assume charge of the district. His subsequent exertions did much towards reducing into order the almost hopeless chaos of the other works of this district, and by tours at intervals during the subsequent months he kept the working machinery in order, aided and encouraged his subordinates, and strengthened the hands of the inspecting engineers.

Mr. Maconochie may speak for himself in the report herewith submitted. I have no words to add to those who read between the lines. From November to the middle of April he was busily engaged in the distressed districts, and, as I have recorded in my general administration report, his powers of organization, his unwearied industry, and unfailing resource, have been of the highest value. He says, and says truly, on a subsequent occasion, that as he went out and visited all the main works remaining out till the end of May, no great inconvenience was experienced.

51. In reply to my letter from Kakardari, referred to in para. 21, Mr. Ponsonby wrote from Chulua, on the Girwa, on the 13th February 1874, saying that he was expecting Captain Wood, the Conservator of Forests, but that as "the avoiding of loss of life was all important," he had no doubt but that they would both soon be on the spot. In a very few days these noble-minded men were there, without baggage or even ordinary comforts, intent on one thing only—to start work which would enable the almost famine-stricken people to live. They succeeded. By opening out five paths, digging a reserved forest boundary ditch, collecting firewood, digging out stumps and projecting new roads to join the district system, they found work for all classes and averted the imminent danger which the arrival of the Maharaja and his consequent arrangements soon afterwards effectually removed.

The good that has been done by the works subsequently executed by these officers, in consultation with the district authorities, can hardly be exaggerated. It may be said that the roadless forest, and Terai trans-Rapti will practically be as accessible this cold season as any other portion of the districts.

52. The ordinary establishment available in the division consisted, in addition to the Civil Officers and their staffs, of Lieutenant James, R. E., Executive Divisional Engineer; Mr. Hodges, Sub-divisional Engineer at Gonda; Mr. Campbell (who had but recently joined the department), Sub-divisional Engineer at Bharaich, and subordinate Overseers in each district—a staff whose time was fully occupied by their current duties. As early as November Mr. Hodges had, however, energetically commenced the preparation of schemes which might ultimately become necessary for the relief of distress. In December Lieutenant James visited the Gonda and Bharaich districts with a similar object, and in January, recognizing the emergency, he placed the larger portion of his staff on special duty, and himself undertook surveys and other works which are not generally executed by an officer in his position. I have noticed above how soon he fell a victim to this work, but am bound to record my deep obligation to him for the work so done. In April a special relief works division was formed under Mr. Willmore, but he had been lent a few days in charge when, on the 22nd, he was transferred to the charge of Mr. James' division, and Mr. Hodges was promoted in his place. His subordinates gradually obtained from all parts of the province were posted—

To Gonda—

Mr. Nicholson	...	Officiating Sub-divisional Engineer (in charge).
Hetram	...	Sub-overseer, 1st grade.
Dabipershad	...	" "
Karim Ahmed	...	" "
Gowri Shunker	...	" 3rd grade.
Amir Mirza	...	" "

Of whom Gowri Shunker soon resigned and was replaced by Motiram, a clerk in a Department Public Works office.

To Bharaich—

Mr. G. A. Campbell	...	Sub-divisional Engineer (in charge).
Goluknath	...	Overseer, 2nd grade.
Chobeylal	...	" "
Bukhtawar Lal	...	Sub-overseer, 1st grade.
Sakhawat Hossein	...	" 2nd "
Ishiqal	...	" 3rd "

Of these, Chobeylal was discovered deliberately copying the measurements which it was his duty to test, and his immediate suspension ultimately resulted in dismissal from Government employ.

On this small professional staff fell the heavy duty of surveying and working out the various lines of road, preparing plans and estimates, instructing the necessarily unskilled employes of the Civil Officers, supervising and weekly measuring up work done. Some little time was necessary to fully organize the works, but with the spirit of hearty co-operation animating all grades, and the zeal and energy of Mr. Hodges permeating his staff, the system worked admirably. For all works undertaken regular surveys and estimates have been submitted and duly passed.

From May measurements of work done were regularly made, and the bills submitted in due course to the Controller, Department Public Works, and these bills have now for the most part been passed.

53. For civil supervision, the Talukdar and Peshkar of Atrowla in the Gonda district and the Peshkar and one Canungo, Bharaich, were relieved of their ordinary duties, and a fluctuating temporary staff were employed and charged day by day to the works.

54. Till the middle of April, for purposes of supervision, Mr. Maconochie and Mr. Butts, Assistant Commissioner, divided the Gonda district between them, the former taking the country north of the Rapti, the latter that to the south. Thus there was constant supervision, and no gangs remained long unvisited by a responsible European. For one month later Mr. Maconochie was relieved by Mr. Saiad Mahomed Ahmad, Extra Assistant Commissioner, but on and after the 15th the Deputy Commissioner visited all the main works by tours: the regular supervision being entrusted to the Tehsildar and Peshkar.

55. In Bharaich the inspection was done by Mr. Chapman till the first week in May, when Shivdial Peshkar of Bharaich was deputed. On the 25th May, however, Mr. Chapman began a series of tours which were continued during the rains, which commenced on the 30th May, and fairly set in early in June. Messrs. Hodges and Campbell throughout the cold, hot, and rainy seasons were constantly on the move, and may be said to have almost lived in camp.

56. The work completed was in Bharaich—

<i>New roads constructed</i> —Bhinga to Gubbapur	...	...	...	...	5 $\frac{1}{2}$ miles.
Bhinga to Lachmanpur	...	...	...	...	8 $\frac{1}{2}$ "
Lachmanpur to Muthura	...	...	...	...	5 "
(part) Pipraghat to Ekona	...	...	...	...	6 $\frac{1}{2}$ "
Pipraghat to Charda	...	...	...	...	14 "

TOTAL ... 39 "

<i>Old roads widened and raised</i> —Military road	...	...	...	...	15 $\frac{1}{2}$ "
(part) Pipraghat to Ekona	...	...	...	...	7 $\frac{1}{2}$ "
Bhinga to Nanpara	...	...	...	...	13 "

TOTAL ... 36 "

GRAND TOTAL ROADS CONSTRUCTED ... 75 "

<i>Leaving incomplete</i> —Pipraghat to Charda	...	...	...	...	18 $\frac{1}{2}$ "
Bhinga to Nanpara	...	...	...	...	12 "
Pipraghat to Ekona	...	...	...	...	$\frac{1}{2}$ "

TOTAL ... 31 "

In Gonda the work done was—

<i>New roads constructed</i> —Chowdri Dee to Khargupur	...	...	...	...	29 "
Atrowla to Tulsipur	...	...	...	...	14 $\frac{1}{2}$ "
Mankapur to Karasur	...	...	...	...	7 "

TOTAL ... 50 "

<i>Old roads widened and raised</i> —Military road	...	...	...	...	36 "
Bulrampur to Ekona	...	...	...	...	9 "
Atrowla to Bulrampur	...	...	...	...	17 $\frac{1}{2}$ "

TOTAL ... 62 "

TOTAL ROADS CONSTRUCTED ... 112 "

<i>Leaving incomplete</i> —Chowdri Dee to Khargupur	...	...	...	...	2 $\frac{1}{2}$ "
Bulrampur to Ekona	...	...	...	...	5 $\frac{1}{2}$ "
Mankapur to Karasur	...	...	...	...	4 $\frac{1}{2}$ "

TOTAL ... 12 $\frac{1}{2}$  "

Showing a summary of works completed in the division—

New roads constructed	...	...	...	...	89 miles.
Old roads straightened, widened and raised	...	...	...	...	98 "
TOTAL	...	...	...	...	187 "



Besides two irrigation tanks, one drainage canal (part), and one river embankment, at a total expenditure (not including compensation for land taken up, pay of Public Works establishment and a few miscellaneous items) of not more than Rs. 2,75,000. The accounts not having been finally adjusted and closed, the exact figures cannot yet be given.

57. Nor do I know, if the expenditure by the Forest Department will ultimately be charged to this head. No accounts have been submitted to me, nor have I the details of the many useful works completed by them.

58. As to the general utility of the roads, I agree with Mr. Hodges that "most of the roads constructed were much required and would probably have been constructed from local funds as these became available, and the new lines open out districts hitherto inaccessible for wheeled traffic." The portions remaining incomplete at the close of the relief works were at once taken in hand by the district officers and are now for the most part completed.

The Mehnawan canal when still incomplete proved a success; and (Mr. Hodges' report) from the evidence of "its present (11th September) working will, besides vastly improving the healthiness of this tract, convert an almost useless swamp of about 2,000 acres into good rice land worth Rs. 4 per acre annually."

If the Rapti bund answers the purpose for which it is designed, and as the heavy floods this year were calculated to test it severely, it probably will, some 40 fine revenue-paying villages will be saved from annually increasing deterioration, and their prosperity will be ensured. The bungalow at Atrowla (which contains two large centre-rooms besides side-rooms and out-offices) is strongly built, and being 32 miles from Gonda, will be of great convenience to all inspecting officers.

59. The cost of the works has been much less than I had at first anticipated. In order to find work for the number of women and children employed in excess of the men, the clod breaking and surface dressing was finer than would ordinarily be done on a district road at this season of the year; the digging too was most laborious and consequently expensive. The stiff clays of the rice districts in which most of the works lay after the drought of 1873-74 were hard as a stone, and in many places during the greater part of the time the works were in progress, ordinary phourahs were of no use, and koodra and kodali picks had to be substituted.

Moreover, the turfing which was absolutely necessary to protect the roadways from flood would under ordinary circumstances not have been commenced before the rains. The appendix shows the difference between the actual cost and the estimated cost at ordinary Public Works Department rates.

60. The Engineers' reports submitted since the floods subsided show that all the works are in good order. Mr. Hodges observes as to the effects of the floods, that though the whole country bordering the Rapti has been one sheet of water during June and July, there has been no serious damage and there is scarcely any evidence of the high floods beyond the heaps of rubbish left behind when the waters receded, except on the Atrowla and Tulsipur road which runs at right-angles to the Rapti river, and a few long wide slopes left as channels for the flowing waters. He reported that even there only ordinary repairs after the rains will be required, and these are now in hand from district funds.

61. "I would submit," to quote from my general administration report, "that the work arranged and started under circumstances most trying to the mind has been conducted under great physical trials, and though successfully conducted, has been the cause of much anxiety and not a little suffering to all concerned. The field work has been carried on through the hottest part of the year in the Terai, which is notoriously unhealthy, and in great measure the general superintendence has been conducted by officers unrelieved of their ordinary duties and not inured to such exposure."

Mr. E. Hodges, whose services as Sub-divisional Engineer at Gonda in the early part of the year had been invaluable, worked with equal energy in his more responsible position as Executive Engineer of the relief works division. To his professional knowledge, this officer adds an insatiable capacity for work and singular physical energy; his advice in matters of organization and his singularly hearty co-operation in the work of supervision have largely contributed to the success of the operations, and I trust that he may receive substantial proof of the Government's appreciation of these services and confirmation in the grade in which he is now officiating.

He records of Mr. George Campbell, District Engineer, that he has given the greatest assistance in the Bharaich works and proved himself an able and energetic officer, working heartily in camp, laying out and supervising work, and taking measurements for his estimates, all of which were submitted by the end of June. I can from repeated personal observation bear testimony to the cheerful energy which this officer exhibited in getting through his arduous duties at a trying season of the year, and I regret to add that, although he has since been transferred to Fyzabad, he has not been able to shake off the fever which he contracted in the field.

62. Of the subordinates in the Public Works Department, Mr. Hodges writes that they have, on the whole, worked well and have done their best. I am sure that Sir George Couper will be pleased to read that they were encouraged and stimulated by the promise made by the Chief Commissioner to remember those who distinguished themselves, and that neither Mr. Hodges nor those whose services he specially commends will have erred in trusting that their services will be recognized as opportunity occurs.

Those who distinguished themselves are ranked by Mr. Hodges in order of merit as—

- 1.—Sakhawat Hossein, Sub-overseer, 3rd grade.
- 2.—Babu Motiram, Sub-divisional Clerk, Bharaich, and Officiating Sub-Overseer.
- 3.—Goluknath Sen, Overseer.
- 4.—Bukhtawar Lal, Sub-Overseer, 1st grade.
- 5.—Dabipershad, ditto ditto.

But this list includes the living only, and not the dead. Mr. Hodges has accorded in other correspondence the very first place to Babu Hetram, Sub-overseer of the 1st grade, who died after the works were closed of fever after several attacks had been more or less overcome. I fully concur in Mr. Maconochie's regrets and hopes in respect to this officer and his family. He "cannot refrain from reporting with great sorrow the death of one of our best men "from fever brought on by his exertions during the most inclement season of the year, and "would fain hope that Government may be pleased to grant to his widow and children some "small pension in recognition of the services of their husband and father who died doing "his duty as bravely as any soldier in battle."

Mr. Chapman expresses himself as "extremely satisfied" with the way in which Sub-overseer Sakhawat Hossein performed his duties, and praises Bukhtawar Lal.

63. Of the Civil Officers, to Mr. Maconochie, Officiating Deputy Commissioner of Gonda, is due the lion's share of praise. His report speaks for itself, and his powers of organization, unwearied industry, and unfailing resource have been of the highest value. He does not report altogether favorably of the Tehsildar of Atrawla, but he acknowledges the services of the Peshkar Wali Mahomed, the Officiating Tehsildar Dhunput Rai, and the Officiating Peshkar Ehsanul Hak. Of the European Officers, he writes: "Captain Forbes, Officiating Settlement Officer, "gave me invaluable aid in arranging for the purchase and storage of grain at a time of urgent "need, when I could not, without neglecting important work, have left the north of the district "to do what he did for me. Mr. Butts, Assistant Commissioner, shared with me the labor of "organization and of supervision of the relief works gangs, and when alarming reports were "received about the Mehnawan portion of the district, he at once proceeded to the spot, and by "his carefully conducted inquiry enabled me to relieve the wants of those really requiring "assistance. Mr. Bennett, Superintendent of Encumbered Estates, merits my acknowledgments "for the manner in which he assisted me in procuring grain at a time when I should have "been hardpressed to collect the amount required."

Concurring in this, I am glad to record that Mr. Maconochie has since been promoted to the grade of Deputy Commissioner, that Moonshee Dhunput Rai has been appointed Tehsildar, and that the Chief Commissioner has intimated that the services of the European Officers and of the two Peshkars will be recognized by promotion as occasion may offer.

64. Of the Bharaich officials, I would very heartily commend Mr. Chapman, Assistant Commissioner. I confirm what I have elsewhere recorded that this officer, after having furnished me with the first reliable reports as to the state of North Bharaich, and organized under the greatest possible disadvantages the first relief works, where the delay of a few days meant the sacrifice of life and the depopulation of an estate, called suddenly to the charge of a district and all its works, has successfully conducted them to a satisfactory conclusion. He does not in his report mention Mr. Macmahon, Assistant Commissioner, because he was not in a position to know how great were that officer's exertions to procure and send forward the necessary supplies of copper coin to pay the gangs. I (who observed them) am glad to acknowledge their extreme value at the time, and the earnest cheerfulness with which they were rendered at a time when Mr. Macmahon was unavoidably overwhelmed with a mass of ordinary and extraordinary duties, with which it was difficult for one man to deal.

Of the district subordinates whose work commended them to my notice, he records of Shindial Peshkar, that "he did good service as superintendent of works, being constantly on "the move and keeping those in charge of each work up to the mark; unfortunately he fell "ill (of Terai fever) in July and is still unfit for his duties."

Of Gyapershaud, he says: "I cannot speak too highly of the way in which he performed "his duties. He is a good, trustworthy man, worked cheerfully, and not a single complaint "was preferred against him."

Of Darogha Imamuddin: "He had sole charge of the road from Pipraghat to Ekona, "and I have it on Mr. Hodges' authority that this job is of the best and cheapest in the whole "division."

I regret to record that Mr. Chapman has during his exertions contracted fever, which it is hoped that a change to Fyzabad may enable him to cast off; but I am glad to state that Shindial has been rewarded by promotion to the rank of Tehsildar, and that the Chief Commissioner will see that Gyapershaud and Imamuddin are not lost sight of.

65. Of the native gentlemen, Mr. Maconochie records that to the Maharaja of Bulrampur the best thanks of the Government of India are due. Maharaja Sir Drigbejoy Singh, K. C. S. I., is officially well known to the Government as a nobleman of severely tried and approved loyalty. As a *quondam* extraordinary member of Council, he is personally known to the Viceroy.

On occasion of former scarcity in his estate, he received the commendation of the Chief Commissioner, Sir Charles Wingfield, for the liberal succour he afforded to his tenants, and he has fully maintained his high reputation on this important occasion.



On receipt of my letter, reporting the great distress at Kakardari, he made arrangements by which he was personally soon on the spot. When Colonel Anderson, Revenue Surveyor, reported from personal observation great distress amongst the Tharu villages in a remote corner of the Nepal frontier, he proceeded to the spot, and in both instances his arrangements were thorough and satisfactory. He has declined to receive any compensation for his interest in the lands taken up for public purposes in his extensive estate. He effectually took upon himself the charge of the poor and even of our poor-houses in his estates; his elephants and horses were placed at the disposal of our inspecting and superintending officers; and he has responded to every call, although for various reasons his circumstances were more embarrassed than had been thought. Indeed, his extreme liberality and his construction and endowment of the Bulrampur Hospital at Lucknow has temporarily crippled even his large resources. I shall be glad to hear that these services have been acknowledged by the Government, which we all alike serve.

66. To his Naib, Bhya Ram Shunker Lal, very considerable praise is due. Without detracting from the merits of his master, I may say that the good intentions and even the orders of the Maharaja might have missed their mark had it not been for the very cordial and earnest co-operation of this able and intelligent gentleman, whose services are fully recognized by the Deputy Commissioner of Gonda and the Engineers of both districts.

67. Mr. Chapman has placed on record his sense of obligation to Bhugwan Sarup, Peshkar of the Raja of Bhinga, for his effective assistance in procuring copper coin and grain for the payment of the gangs, when neither were easily procurable.

68. To Nawab Nisar Ali Khan, Kazilbash, and the local agents of the Raja Rajgan of Kuppurthulla, my acknowledgments are due.

\* \* \* \* \*

69. Mr. Hodges' report, and the map and comparative estimates of the work done at ordinary Department Public Works rates, and those taken as for relief works under the system pursued, are appendices to this report.

Deputy Commissioner, Gonda, No. 1596, dated 11th September 1874.

Deputy Commissioner, Bharaich, dated 12th September 1874.

70. The reports of the Deputy Commissioners of Gonda and Bharaich are herewith submitted.

## APPENDIX.

### LIST OF ESTIMATES.

District.	Roads.	No. of miles.	Estimate at relief rates.	Estimate at Department Public Works rates.	Completed.	Expenditure.
					Miles.	Rs.
GONDA	Military road ...	36	84,312 @ 8	32,474 @ 3	36	45,853
	Chowdri Dee } 1st section	16	36,184 @ 7-8	15,319 @ 3	16	64,505
	to					
	Kargapur } 2nd "	15½	22,855 @ 8-8	7,614 @ 3	13	36,662
	Bulrampur to Utrowla ...	17½	52,277 @ 9	12,934 @ 3	17½	
	Bulrampur to Ekowna ...	14½	40,315 @ 8	15,394 @ 3	9	
	Utrowla to Tulshipur ...	14½	46,371 @ 8	18,484 @ 3	14½	
	Korasar to Munkapur ...	11½	7,533 @ 6-8	3,509 @ 2-8	7	4,619
	TOTAL	125½	2,75,261	1,05,728	112½	1,94,189
BHARAICH	Military road, section ...	15½	24,906 @ 7	10,983 @ 3	15½	18,435
	Nanpara to Bharaich (Jingraghat) ...	1	5,754 @ 9	2,445 @ 3-4	1	3,759
	Lachmanpur to Muthara ...	5	2,262 @ 4	1,477 @ 3	5	2,262
	Gobbapur to Bhinga, with Sohelwa branch ...	9	9,016 @ 9	3,700 @ 3	9	6,571
	Bhinga to Lachmanpur ...	8½	4,102 @ 5	2,284 @ 2-8	8½	4,100
	Pipraghat to Ekowna ...	13½	5,582 @ 6-8	2,399 @ 2-8	13½	4,853
	Pipraghat (Bhinga) to Churdah ...	32½	24,359 @ 7-8	9,173 @ 2-8	14	8,410
	Bhinga to Nanpara ...	26	33,865 @ 8	12,184 @ 2-8	13	13,910
	TOTAL	110¾	1,09,846	44,645	79½	62,300
FYZABAD		5¼	3,000	.....	5¼	2,997
	Gonda ...	125½	2,75,261	1,05,728	112½	1,94,189
	Bharaich ...	110¾	1,09,846	44,645	79½	62,300
	Fyzabad ...	5¼	3,000	...	5¼	2,997
	TOTAL	241½	3,88,107	1,50,373	197½	2,59,486
GONDA	Mehuwan canal ...	...	8,730 @ 6	3,658 @ 2-8	...	3,516
	Chowdri Dee tank ...	...	1,858 @ 6	851 @ 2-12	...	1,343
	Lalia tank ...	...	2,839 @ 6-8	1,310 @ 3	...	2,217
	Rapti bund ...	...	1,060 @ 4-4	529 @ 2-8	...	1,354
	Inspection bungalow at Utrowla, Gonda ...	...	1,841	1,666	...	1,751
	TOTAL	...	16,268	8,014	...	10,181
	GRAND TOTAL	241½	4,04,375	1,58,387	197½	2,69,667

WILLIAM CAPPER,  
Commissioner.

From G. B. MACONOCHE, Esq., Deputy Commissioner of Gonda, to the Commissioner of the Fyzabad Division,—No. 1596, dated Gonda, the 11th September 1874.

I HAVE the honour to submit a final report on the famine relief operations carried out in this district under your orders, and now brought happily to a close by the advent of a bountiful harvest.

2. Before detailing the measures taken to relieve distress, a short description of the district may not be out of place.

3. The district of Gonda lies on the left bank of the Gogra, and stretches in the form of a parallelogram, somewhat contracted in the centre from that river to the Nepal Hills. It is for the most part a flat plain, intersected by numerous small rivers and streams, which take their rise in either the hills to the north, or some of the large hills in the Bharaich district to the west. The soil south of the Rapti is chiefly a rich loam, friable, easily worked, and extremely productive, growing in the autumn maize, rice and millets, and in the spring wheat, barley, pulse of all kinds, oil-seeds, sugar and poppy; while north of that river, we find principally a stiff clay, producing chiefly rice in the autumn and similar spring crops to those mentioned above.

4. The district is divided into three broad divisions, *first*, the Terwaha or low-lying lands, which extends from the Gogra to the river Terhi; *second*, Uperhar or elevated plateau extending from the Terhi to the river Kuana; and *third*, the Terai from the Kuana to the foot of the first range of hills.

5. In all these divisions, the spring crops are much the same, but the autumn crops are very different. In the Terwaha the maize, requiring little water, is chiefly grown; in the Uperhar maize and early rice are the principal staples, while the late rice is grown only where a depression in the ground retains the rain-water to a comparatively late period; while in the Terai, more especially in the immense tract lying north of the Burha Rapti river, the late rice is the main product, and that on which the people chiefly depend for providing themselves with all their little necessities. Both kinds of rice are sown as soon after the beginning of the rains in June as possible, but with this difference. The early rice, which is in every way inferior, is sown broadcast in the fields in which it will finally come to maturity in September, while the late rice is first sown in beds prepared for the purpose, and when the plants are about 9 inches to a foot high, they are transplanted to the rice fields, where they come to maturity about December. This work of transplanting is laborious in the extreme; the field requires to be at least ankle deep in water before work is commenced, and as the soil has been previously well ploughed, men, women and children have to work, under a blazing sun, up to their knees in water and slush. No doubt their reward is great should the rains prove favourable, while on the contrary, if the season be at all adverse, and rains cease too soon, *i. e.*, before the end of September or beginning of October, no crop yields so poor a return. In addition to the precarious nature of the crop, the climate is unhealthy, and the nature of the employment renders the people peculiarly subject to attacks of fever, which yearly not only carries off considerable numbers, but debilitates those who survive its attacks. I here append a statement showing the percentage of each main class of autumn and winter crops grown in each parganah, classified according to the three main divisions noted in paragraph 4. I add also the area in square miles and population according to last census.

MAIN DIVISIONS.	Name of Parganah.	Percentage of known total area.	PERCENTAGE OF CHIEF GRAINS TO TOTAL KHARIF.				Area in square miles.	Population.
			Maize, Millet.	Kodo, pulse.	Early rice.	Late rice.		
CHIEFLY TERWAHA ...	Paharapur ...	55	44	9	26	7	113	74,139
	Gwarich ...	66	56	12	15	4	273	154,745
	Digsir ...	70	56	11	20	6	154	90,582
	Nawabgunj ...	72	48	14	25	7	141	61,417
	Mahadewa ...	67	35	13	17	10	89	48,820
CHIEFLY UPERHARS ...	Gonda ...	50	15	16	36	20	504	272,378
	Munkapur ...	56	1	17	66	5	125	41,858
	Bumnipaer ...	72	1	6	66	17	66	31,029
	Burapar ...	62	1	11	70	10	77	20,541
	Sadulanagar ...	60	6	13	70	7	101	35,152
CHIEFLY TERAI ...	Atraola ...	63	2	7	55	30	195	72,464
	Bulrampur ...	47	5	3	26	57	424	160,237
	Tulsipur ...	60	4	4	16	65	440	104,454

6. As a broad rule the Terwaha parganahs flourish when rains are somewhat scanty, because the Indian-corn, millets and pulses do not like much water. Those in the Uperhars like moderate rains, while in the Terai, so long as floods can be staved off, any amount of rain can be taken without injury, while the later it falls the better for the fine rice. Last



year not only were the rains scanty beyond memory, but they left off unusually early. I give here a comparative statement showing rain-fall for four years between June and February :—

MONTH.	1870-71.	1871-72.	1872-73.	1873-74.	REMARKS.
June	2.5	5.4	5.5	3.8	
July	25.2	18.5	16.1	8.4	
August	16.3	12.2	10.4	5.1	
September	9.8	29.3	11	3.5	In 1871-72 rains left off on 26th September.
October	8				In 1872-73, 26th September.
November					In 1873-74, 6th September.
December					
January	6	2.2		.2	
February		.7		1	

7. It will thus be seen that the Terwaha parganahs did well. The Uperhars suffered in rice from the early cessation of the rains, none worth recording having fallen after 6th September, while in the Terai the failure was general and for the most part complete. All over the district the area under spring crops was circumscribed, notwithstanding the efforts made by the people to sow the lands by first irrigating them. I calculate that at least  $\frac{1}{11}$ ths of the land usually under spring crop lay fallow :—

In Terwaha  $\frac{1}{8}$  less,

„ Uperhar  $\frac{1}{3}$  „

„ Terai  $\frac{1}{2}$  „

so that by the middle of November it was sufficiently clear that unless we had good and early winter rains the distress in the district would be very great indeed. The tanks were all empty, and although the people were digging kutchha wells to the best of their ability through the greater part of the parganahs which had suffered most, *viz.*, Tulsipur and Bulrampur, kutchha wells cannot be dug at all by reason of the depth at which water is procured, and the extremely sandy nature of the subsoil.

8. Much depended upon the Christmas rains ; if these fell early and freely it was possible for the district to have got through the season, not without pressure it is true, but without famine. These, however, failed equally, and to add to our misfortunes a severe frost early in January practically destroyed the arhur pulse which had been largely sown, and in the early part of the season promised extremely well. It comprised about  $\frac{1}{7}$  of the entire spring crop, and not more than  $\frac{1}{4}$  of this produced anything ; damage was done also to the gram and peas, so that by the middle of January our prospects were extremely gloomy. Fortunately, in the last few days of January and early in February, we were blessed with a good fall of rain, which doubled the spring crops then in the ground, and saved certainly the northern centre of the district from the same fate as awaited the Terai. But to counterbalance this, in April hail fell upon a cluster of villages lying eastward in parganahs Gonda, Munkapur, and Mahadewa, and destroyed the hopes of the people in about 40 square miles of country, rendering relief imperative.

9. The portion of the district in which great distress was originally anticipated comprised an area of 1,439 square miles ; but the January and February rains saved Sadulanagar, Burapar, and the north of Gonda, comprising an area of 280 square miles ; deducting this area, and adding the 40 square miles destroyed by hail alluded to in preceding paragraph, there remained an area of 1,300 square miles, with a population of 350,000, with a famine staring them in the face.

10. In using the word “famine” I do so advisedly, and without any wish to exaggerate the situation. It may be true that the loss of a single crop does not ordinarily produce such a dire result, and that in 1864, when a similar misfortune befell the northern parganahs, no evil consequences followed ; but the circumstances of the people were very different. The failure of 1864 succeeded several years of plenty ; there were ample stores in the neighbouring districts of Nepal, and most of the large farmers of Bulrampur and Tulsipur had considerable stocks of grain to fall back upon. Now this was all altered ; for several years past there has been more or less a failure of one or other of the harvests : in 1870-71 the spring harvest was below average for want of winter rains ; in 1871-72 we had the great September flood, which damaged the autumn, and the January fogs which injured the spring, harvests. In 1872-73, again, winter rains failed, and the spring harvest was poor, so that for three years there have not been two good harvests in succession. Stocks had been thus greatly diminished, and also by the drain caused by the scarcity in Central Provinces and in North-West Provinces in 1869 A. D., and finally the Nepal districts, which are our usual stand-by, were in rather worse plight than ourselves. All this, added to the great demand in Bengal, which drained the southern parganahs of their surplus stores and thereby kept prices high, precluded any hope of the people carrying on unassisted. The best proof of the very great distress prevailing even in January is the fact that the poorer people had even then began to feed on roots, wild fruits and berries, that crime was greatly on the increase and the people in Tulsipur were deserting their homes. I have no hesitation in recording that unless in January prompt measures had been adopted, the results would have been most calamitous.

11. Finding that the rains had ceased so early, and hearing gloomy accounts from the north on September 27th, I went into camp, going first to Bulrampur, then visited the country between the Kuana and Rapti, and the worst part of Gonda. It was lamentable to see the fine rice withering away for want of water, and the despair of the people at the sight of their main staple gone. I then went south satisfying myself as to the state of that portion of the district, and soon saw that under no circumstances was there any danger in the Terwaha. As regards the north, early in November I requested Mr. Hodges, the Sub-divisional Engineer, to get two projects prepared, so that if the winter rain failed and work had to be started, we might have something to commence upon. The Atraola and Bulrampur, and Bulrampur to Ekona roads, were the works selected, and so heartily did Mr. Hodges enter into the proposals that by the time you visited the north of the district early in January, these were prepared in the rough and ready for submission to the Chief Commissioner. Early in January it was clear that these two projects would not be nearly sufficient to afford employment to all who would require to have work found for them, and after consultation with the leading members of the native community when you had visited the afflicted portion of the district, the following works were fixed upon as being best adapted to bring employment near the homes of those requiring assistance :—

1. Raising and widening road from Atraola to Bulrampur, 17½ miles.
2. Raising and widening road from Bulrampur to Ekona, 14½ miles.
3. Raising and widening military road from Pachparwa to Nipalgunj, Gonda Section 36 miles.
4. Construction of road from Atraola to Tulsipur, 14½ miles.
5. Construction of road from Chowdridi to Kurgupur, 31½ miles.
6. Construction of road from Khorasur to Munkapur, 11½ miles.
7. Drainage canal at Mehnaon (3 miles) later on as the above-noted works began to draw towards completion, and it was still necessary to provide employment.

Three other works were undertaken, *viz* :—

1. A tank at Chowdridi in parganah Tulsipur, where water is greatly needed.
2. A tank at Laha, parganah Tulsipur.
3. Constructing band at Ghasyar Ghât on Rapti.

I may mention that a series of roads were also projected through north of parganah Gonda, parganahs Sadulanagar, Burapar and Munkapur, but the rain in January and February having saved the rabi, beyond roughly settling the route, nothing was done on them.

12. I do not here attempt a description of each work undertaken; this appertains to the Engineering Department, but the accompanying sketch map will show the situation and direction of each.

13. Having settled the works to be undertaken, the question arose by what agency was the work to be carried out? No doubt it belonged chiefly to the Department Public Works, but as higher authority had determined (and most wisely I think) that all who could do anything should be employed, and only the absolutely helpless supported at the poor-houses, it was thought best that the work should be carried on by the district authorities, supervised and directed by the engineering staff. The plan has worked well, and although judged by contract rates, no doubt the cost of our work is high, yet considering the disadvantages under which we laboured in having to deal with not only unskilled workmen but many weak and feeble, and working during the most unfavourable season of the year, I do not think we can be reproached with wasting Government funds uselessly. I am aware that many officers hold strongly to the opinion that only the able-bodied should be taken on to the works, and that all the feeble and aged should be sent to the poor-house to be supported gratis, or in exchange for any little work that might be given them to do. In this view I totally disagree, holding it to be bad for the people politically and morally to receive wholesale gratuitous help. I have no hesitation in saying that if we had adopted the system of gratuitous relief we should have had the whole country on our hands. But by the system adopted we gave assistance to those who required it, while offering no attraction to persons having work in their own villages to leave their ordinary employments and crowd Government works.

14. As it was of importance to avoid having large overcrowded encampments in which disease might be engendered despite all precautions, it was considered advisable to establish a number of gangs some miles apart from each other under a mohurir to keep the accounts and pay the people, and a supervisor to lay out and check the work done.

We had in all 17 gangs at work, and although this increased the labour of supervision, yet the results were most satisfactory; the encampments were kept down to a minimum, most of the work-people getting back to their homes every evening. As a precautionary measure, a field hospital was attached to each gang directly the season approached when sickness might be apprehended, but I am thankful to say only the ordinary diseases required treatment. We had no outbreak of any epidemic, and I think I may attribute this (under Divine Providence) in a great measure to our having kept the people apart and prevented crowded camps.

15. The system of management adopted was as follows: over each main gang there was a mohurir to keep accounts and take care the necessary funds were available for daily



payments; a supervisor of works who apportioned out and overlooked the works of each sub-gang and assistant mohurirs and mates according to the numbers who flocked to the works. As a rule, each assistant mohurir had 220 persons under him told off into four sub-gangs of 55 persons each, 5 being skilled diggers, the remainder unskilled; there were two mates to each sub-gang: I tried first to work with but one, but found the work was more than one could manage, so allowed a second. One of these mates was required to be able to read and write either Hindi or Persian; he kept the roll of workmen, and after a certain hour in the morning, usually 7 or 8 o'clock, marked down all in attendance; he then made up his accounts, delivering to the assistant mohurir a total shewing number of persons present in each class and amount of money required to pay them. After the assistant mohurir had checked up the returns of his mates, he made up a similar total for the head mohurir, who, after receiving the accounts of all his assistants, made up the accounts of the whole gang. He was expected to have made over by 3 o'clock to each assistant mohurir the money required to pay each sub-gang, and the mohurir distributed again this to the head mates, who, when the order to leave off work was given, seated their sub-gangs according to their order in the nominal roll, and after the number had been tested, order to pay was given and each person received his daily wage. I tried making the head mohurir pay the men himself, but as the gangs grew in number, this system utterly broke down. As the majority of the work-people returned to their homes every evening it was of great importance to get them off the ground as soon as possible, but as many were sometimes detained until 9 or 10 o'clock at night, or perhaps kept two or three days without their wages, the reformed system was introduced; payments at each gang being made simultaneously, it was as easy to pay 5,000 as 500, no delay occurred, and the work-people were off to their homes before dark.

16. To supervise the gangs, the tehsildar and peshkar of tehsil Atraola were relieved of their ordinary duties in order to give them time to superintend the works, and in addition Mr. Butts and myself divided the district between us, he taking south of the Rapti and I north. Thus there was constant supervision, and no gang remained many days together unvisited. When the heat drove us from camp in the middle of April, our place was taken up by Mr. Said Mahomed Ahmet, Extra Assistant Commissioner, who remained until 15th May, when he could no longer be spared from the sadr. I had to withdraw him, but as I went out myself, visiting all the main works, remaining out until the end of May, no great inconvenience was experienced. I regret I was unable to remain out the whole time, having to return to the sadr, thus leaving the supervision to the tehsildar, an experienced officer, and one who could have done most excellent service had his zeal equalled his ability.

17. The salaries paid to the mohurirs and other supervisors were as follow:—

Head mohurir from 8 to 10 annas per diem.

„ supervisors 8 annas per diem.

• Assistant mohurirs from 4 to 5 annas per diem.

Head mate 3 annas.

Assistant mate 2 annas.

The wages were fair as regards assistant mohurirs and mates, but rather low as regards head mohurirs and supervisors. Another Rs. 5 or Rs. 10 per month would not have added much to the percentage of establishment, while it would have attracted a better class of men for employment; and had I the work to do over again I would advocate paying this class of men more highly.

18. The wages to be paid to labourers as first determined were as follow:—

Skilled diggers	2 annas	0 pies	per diem,
Unskilled „	1 anna	6 „	„
Adult carriers	1 „	0 „	„
Juvenile	0 „	9 „	„

but after a fortnight's trial I found these rates were so much above the ordinary rates paid in villages to unskilled diggers and common coolies that I was attracting the whole population to our works, I therefore with your permission reduced the rate to as follows:—

Skilled diggers	2 annas	0 pies	per diem.
Unskilled „	1 anna	0 „	„
Adult carriers	0 „	9 „	„
Juvenile between 12 and 7 years	6 „	„	„
Do. below 7 years	3 „	„	„

Grain was usually selling at 32lb per rupee. No doubt the rate was low, but as it represented 2lb of grain for 1 anna, and was as much as an ordinary labourer received in his village, I did not think Government should give more. Where a whole family resorted to the work, the wages were ample: they not only lived well but were able to save something.

19. The work-people were paid in money every day as a rule, and it was not the least of my difficulties arranging so as to ensure a full supply of copper coin at each gang. The Government coinage was hardly known north of the Rapti, the principal circulating medium being the lumps of copper known as Goruckporee pice; these could be purchased at one time for 20 gundahs of 4 to the rupee; but before I could receive the supply of coin I had indented for.

directly it became evident that relief works would have to be extensively undertaken, the price ran up, and before March I could get only 16 gundahs for the rupee.

20. At every gang I had several banias selling grain, parched corn, &c., so that the people after getting to their homes should not have to go about searching for food. The system answered so well that at several of the larger gangs small wholesale dealers found it worth their while to bring their grain and retail it at wholesale prices. When copper coin failed, I tried paying the people in grain; but the operation was so tedious that I stopped it as soon as I could, providing grain through the local dealers to such as required it.

21. Having detailed the measures adopted for the management of the work-people, I append a table showing the dates on which work commenced, the number employed, and the cost.

NAME OF WORK.	Date on which commenced.	Total number of persons employed from date of commencement of work.*	AMOUNT PAID TO						Contingencies.	Grand Total.			
			Labourers.	Establishment and contingencies.		Total.							
				Rs.	As.		P.	Rs.			As.	P.	Rs.
Atrala and Bulrampur road	29th January 1874	610,414	30,160	3	0	6,501	6	2	36,661	9	2	Included under head "Establishment."	
Tulsipur and Atraola road	21st February 1874	561,460	28,259	4	6	2,514	4	3	30,773	8	9		
Chowdridi Khoagupur road	.....	1,222,110	58,639	3	6	5,866	0	8	64,505	4	0		
Military road, Gonda section	.....	786,918	41,706	4	9	4,146	8	3	45,852	2	13		
Ekona and Bulrampur road	25th February 1874	181,940	10,314	5	3	1,461	12	0	11,775	13	3		
Chowdridi tank	16th May 1874	24,951	1,203	13	9	138	15	0	1,342	13	6		
Lalya tank	7th May 1874	44,165	2,019	7	6	197	6	6	2,216	14	0		
Band, Ghasyar ghat	19th June 1874	21,504	1,217	9	0	136	2	6	1,353	11	6		
Khurasa and Mankapur road	9th April 1874	73,396	4,082	1	9	536	9	3	4,618	11	0		
Mehnaon canal	27th February 1874	60,824	3,159	8	9	366	11	8	3,525	4	5		

22. It will be seen that between February, when the work really commenced, and August, when it closed, we supplied work to 3,593,681 persons. The average daily attendance amounted to 21,139, at a cost of Rs. 1,208. The greatest number flocked to the works in May, in which month we had 1,105,644 on our hands. This was to be expected: work is usually everywhere slack in that month. The spring crops have been garnered, while the ploughing for the autumn harvest has not yet regularly commenced.

23. In June the rains fortunately set in early, and as our rates were not attractive, all who had work to do left us, and the numbers gradually fell away. The works north of the Rapti were all closed early in July, as the country was soon flooded, and it was found impossible to carry on any longer. This, however, had been foreseen, and the measures taken to insure assistance to all requiring it will be detailed further on. South of that river work was carried on until the third week in August, by which time the new harvest was gradually approaching maturity, prices were falling, and work available as in other years. As Mr. Hodges, Executive Engineer, is furnishing a report on the professional portion of the work, I have not considered it necessary to trench upon his department by detailing amount of work done, average cost, &c.

24. The land required for these works was regularly taken up under provisions of Act XXVI of 1871; 604 acres have been occupied; the compensation amounts to Rs. 3,082-8-6, with yearly remission of revenue amounting to Rs. 329-6-6; of the amount of compensation, only Rs. 2,446 will have to be disbursed, the Maharaja of Bulrampur, in the most liberal manner, declining to receive any payment for his land, giving it as a contribution to the relief of his tenantry.

25. As the work-people generally returned to their homes every evening, no special sanitary measures were adopted; those who came from far were few in number and easily found shelter in the different villages and groves near their work, so that nowhere were there any considerable number congregated together.

26. As the hot weather set in and numbers increased, it was considered advisable to provide against the contingencies of an epidemic breaking out. With this view field hospitals were established at each gang, supervised by Hospital Assistants, and standing hospitals prepared at Bulrampur, Atraola, Tulsipur, and Chowdridi. The Hospital Assistants were expected to visit the gangs in their charge every day, while the two senior men, Futteh Khan at Atraola and Abdul Mahomed Khan at Chowdridi, acted as inspectors. I add a list of the men employed and their stations.

NAME.	Grade.	How employed.
Futteh Khan ...	1st Grade ...	Inspection duty.
Lall Mahomed ...	3rd " ...	Chowdridi.
Abdool Guffoor Khan ...	" " ...	Tulsipur.
Ram Tahal ...	" " ...	Khurasa.
Deen Dayal ...	" " ...	Mehnaon.
Guffoor Khan ...	" " ...	Ramnagar.
Abdool Mahomed Khan ...	" " ...	Inspection duty.
Sheikh Aimirs ...	" " ...	Atraola and Bulrampur road.



Providentially, their services were not required in the emergency contemplated; the work people were remarkably healthy all through, only ordinary diseases coming under treatment. I show the number treated after establishment of these hospitals:—

NAMES OF PLACES.		Febris Intermittent.	Diarrhoea.	Dysentery.	Ophthalmia.	Small-pox.	Parotitis.	Rheumatism.	Herpes.	Gonorrhoea.	Abscess.	Ascites.	Bronchitis.	Dyspepsia.	Spermatorrhoea.	Wounds.	Debility.	Ulcer.	Bubo.	Splenitis.	Scalera.	Syphilis, Primary.	Colic.	Otitis.	Snake-bite.	Odontalgia.	Sprain.	Constipation.	Other diseases.	Died.	TOTAL.
Chowdrdih	...	18	11	6	4	4	...	9	3	2	2	1	4	13	...	1	...	3	...	3	...	...	...	...	1	...	...	...	7	...	94
Ramnagar	...	26	6	7	4	2	1	43	5	4	12	...	6	34	4	5	4	21	...	8	...	2	1	...	...	...	1	2	...	198	
Tulsipur	...	12	7	...	3	6	...	3	3	...	3	...	...	...	...	1	2	5	...	2	...	...	...	...	...	...	...	...	...	47	
Mehnaon	...	29	9	1	7	...	...	23	2	4	13	2	3	16	...	2	6	4	...	3	...	...	...	...	1	1	...	14	...	142	
Khorasa	...	17	4	...	1	4	1	...	...	1	4	1	...	...	...	2	4	...	2	1	...	1	6	...	...	...	1	17	...	67	
Atraola to Bulrampur	...	12	6	9	2	...	2	2	2	...	...	...	...	18	...	1	...	3	1	...	2	1	1	...	...	...	1	...	63		
TOTAL	...	114	43	25	21	16	4	80	15	11	34	4	13	81	4	10	16	40	1	15	6	3	3	6	1	1	1	2	41	...	611

There were no deaths in hospital, although before they were established we had three deaths, but all from natural causes. There was also one birth; the woman was a stranger, so I caused her to be housed and maintained until again able to return to work. I should mention that to make the hospital assistants thoroughly moveable, I allowed each man a kahar to attend upon him—he carried the medicines when the hospital assistant was on tour, and when at the hospital made himself generally useful.

27. At first it was not considered necessary to establish poor-houses where cooked food should be distributed, but each head mohurir was authorized to relieve every distressed person who came to him—all who could do any thing were set to work, those who were too feeble were relieved without work being exacted,—but somewhat later on it was deemed advisable to make more systematic provision of poor-houses and circle-visitation in the more distressed parts. The Maharaja had a large poor-house at Bulrampur, where from 250 to 300 persons were fed daily,—it was unnecessary to open a second here; but at Atraola and Tulsipur, where there were no institutions of the kind, I caused them to be established, and they are still being maintained; further, at Mehnaon, where some really distressing objects of compassion were found, small sums were given monthly to help to eke out with the charity of their neighbours. I am extremely averse to allowing it to get abroad that Government was to do every thing, and that nothing was to be done by the people themselves. As a rule, the people behaved extremely well, and only occasionally did I find any disposition displayed among them to shirk their admitted responsibilities on the plea that “sirkar” was doing every thing. Further, the Maharaja of Bulrampur organised all through his extensive estates convenient circles, in which he appointed some one of the more influential lessees who made himself responsible that no case of real distress should remain unrelieved, while I ordered all Government officials to watch carefully for the same. The Maharaja himself having provided the funds for relieving the poor of his estate, excepting for the support of the Atraola poor-house, I have not been called upon to provide funds for the indigent in this northern part of the district.

28. In addition to the direct aid of money and food, I have in many instances advanced grain from the Government stores to the poorer class of zemindars to support themselves and dependents on their undertaking to repay when the new crop came in. This action on my part did a vast amount of good; it kept prices down, and forced those having stores to open them, while it relieved the immediate necessities of those who were unable to get credit excepting on exorbitant interest.

29. Thus in every way I have endeavoured, whilst making the people exert themselves, to assist every class who required help; and so satisfactorily has this been effected, that I have heard of not a single death having occurred from any preventible cause, and the people, who, before the opening of the relief works, had been leaving the north of the district in considerable numbers, have all returned to their homes but three. The following are the numbers who have been relieved excluding those aided by the Maharaja of Bulrampur, of whom I have no record:—

	Rs.	As.	P.
29,871 relieved at the poor-houses ...	...	1,641	8 4
973 receiving out-door relief ...	...	891	12 0
392 receiving advances of grain.			

Included in this I have not added the numbers relieved in the town and environs of Gonda, which hardly come within scope of this report.

30. Before the rains fell in January and February, the aspect of affairs seemed so gloomy, not only on account of deficient crops and empty barns, but also of the large exports towards Bengal which were draining the whole of the southern parganah of grain, that it was deemed

necessary to lay in a reserved stock in case of scarcity during the rainy season when all traffic as a rule ceases. It was at first arranged that the Maharaja of Bulrampur should collect and store with his head lessees or sub-agents 75,000 maunds of grain, whilst I should have in reserve another 50,000 maunds at Gonda; but after the result of the spring harvest had been ascertained, it was decided at a conference held at Gonda, at which the Chief Commissioner presided, that this amount should be cut down to 55,000 maunds for Bulrampur, and 40,000 maunds for Gonda.

31. When on tour in May through the distressed districts, I satisfied myself that the grain had been collected by the Maharaja's servants and was then being stored in places judiciously selected by his head agent, Lallaram Shunker; my own stores were collected and stored at Gonda, partly in the old Atraola Settlement Cutcherry building, and partly in temporary sheds run up for the purpose by Mr. Gilbert, the sub-divisional officer, to whom my best thanks are due for the assistance he afforded me on this occasion. The following is the grain I collected:—

DESCRIPTION OF GRAIN.					Amount		
					Mds.	S.	Ch.
Wheat	...	...	...	...	11,924	37	12
Gujaye (wheat and barley)	...	...	...	...	3,279	24	3
Barley	...	...	...	...	1,801	14	11
Gram	...	...	...	...	7,488	25	2
Bajra (peas and barley)	...	...	...	...	6,333	31	14
Peas	...	...	...	...	4,484	7	3
Masur	...	...	...	...	3	22	4
Juar	...	...	...	...	594	18	4
Aksa	...	...	...	...	18	17	12
Rice	...	...	...	...	13	7	8
Dhan	...	...	...	...	758	8	0
Janchinia	...	...	...	...	159	6	12
Arhar	...	...	...	...	8	8	29
TOTAL					37,708	11	3

I would have preferred, had it been possible, to have made arrangements with grain-dealers to have kept this quantity of grain at my disposal in case of need; but as my assistance in this way on any terms was refused by every one to whom I applied, I had nothing for it then but to trust to my own resources, and these fortunately did not fail me.

Of the grain collected by myself I have distributed 103 maunds in loans as detailed in paragraph 28, leaving 37,603 maunds still in store. I expect when the time for spring sowings commences to dispose of much of the wheat and grain, which is of extra quality, as seed, the remainder I must dispose of as I best can. The cost of this grain amounted to Rs. 97,964-15-3; what the loss will be I cannot at this moment say; but of this I am quite sure, that under the circumstances of the district the storage of this grain was imperative necessity, and if, in consequence of the present bountiful harvest, half the sum is lost, Government will be well repaid by the present hopeful state of the district, the actual good it has done in helping the poorer classes of yeomanry, and the effect it has had in keeping down prices and forcing the grain-dealers to open their stores. Although Government may have lost by this action of the dealers the people as a mass have gained to a very large extent, and I trust that this will be borne in mind when the cost, though apparently heavy, comes to be considered. The grain stores in the Bulrampur estates has been paid for partly by the Maharaja and partly by Government. The Maharaja has received an advance of Rs. 75,000, which will be repaid by easy instalments, the balance he paid himself.

32. In conclusion I have now only to record my thanks to those who, during this most anxious year, have given me their cordial assistance.

33. Captain Forbes gave me invaluable aid in arranging for the purchase and storage of grain. I use the word invaluable, because he came to my assistance at a time of urgent need when arrangements had to be made, and I could not, without neglecting important work, have left the north of the district to do what he did for me.

34. Mr. Butts, Assistant Commissioner, shared with me the labour of organisation and supervision of the relief work gangs; and when alarming reports were received about one portion of the district, at once proceeded to the spot, and by his carefully conducted enquiry enabled me to relieve the wants of those really requiring assistance.

35. Mr. Benett, Superintendent of Encumbered Estates, merits my acknowledgments for the manner in which he assisted me in procuring grain at a time when without his aid I should have been hardpressed to collect the amount required.

36. To the Maharaja of Bulrampur the best thanks of the Government are due for the assistance he afforded us and the liberality he has displayed from first to last as I have



already detailed in this report. My thanks are equally due to his head agent, Lalla Ram Shunker, on whom the work of organising relief circles and storage of grain fell. I am personally much indebted to him for the necessary copper coin for the payment of the work-people, and in the aid he gave me on all necessary occasions.

37. The tehsildar of Atraola kept his accounts well, but in the more active duties of supervision I regret to say he failed me. He is a man of undoubted ability, but on this occasion his zeal by no means equalled it.

38. The peshkar, Mr. Wully Mahomed, did his best, and my thanks are due to him.

39. The officiating tehsildar, Mr. Dhunput Rai, and officiating peshkar, Mr. Absamul Rak, also did their best, and as already reported I was perfectly satisfied with them.

40. Last, but by no means least, my warmest thanks are due to Mr. Hodges, Officiating Executive Engineer, and his staff, for their exertions. Mr. Hodges' merits as an officer are well known to you; but I feel bound to place on record my own sense of the great assistance he gave me in every department by his unwearied exertions to keep the gangs fully employed, and of the cordial relations which existed between us from first to last. To him I leave the pleasing task of bringing to your notice his own subordinates; but I cannot refrain from reporting with great sorrow the death of one of his best men, Mr. Hetram, sub-overseer, from fever brought on from his exertions during the most inclement season of the year. I have placed his widow and children for the present on the relief fund, but would fain hope that Government may be pleased to grant them some small pension in recognition of the services of their husband and father, who died doing his duty as bravely as any soldier in battle.

41. I have only one word to add to this I fear too long report, and that is, to convey to yourself my very best thanks for the aid and support you gave me through this anxious year. Without your cordial countenance and valuable advice I should never have been able to carry the work through in the satisfactory manner it has been accomplished.

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Letter from E. HODGES, Esq., Officiating Executive Engineer, Relief Works Division, to the Commissioner, Fyzabad,—No. 365A, dated 11th September 1874.

I have the honor to forward a report on the famine relief works carried out in districts Gonda and Baraitch from January to September 1874. These works were included under the Fyzabad Provincial Division up to the end of March, when a separate executive charge (the Fyzabad Relief Division) was formed by Chief Commissioner.

As the Deputy Commissioner's reports will probably give details of numbers employed and points of general interest, I shall merely detail briefly what has been done from an engineering point of view.

It is impossible for me to speak *exactly* as to the cost of all the works, as final accounts have not been submitted, especially the compensation for land; but the amounts to the nearest even numbers of rupees will, I trust, suffice for a narrative report.

### *Report on Famine Relief Works carried out in 1874, Gonda District.*

#### COMMUNICATIONS.

Road Utrowla to Bulrampore; estimate 169 of 1874-75, Rs. 52,277.

Length  $17\frac{1}{4}$  miles; width 80 feet.

The estimate provided for widening, straightening, and raising old road and constructing a new junction road to the Soawun bridge near Bulrampore.

The road has been completed to the full width for the whole distance. Besides this, the sides of embankments have been turfed throughout, and they have stood the exceptionally heavy rains and floods of this year without any material damage.

This is, I think, wrong; the abstract of estimate in my office gives Rs. 37,691 as final estimate, and not Rs. 52,277. It can be checked in Chief Engineer's Office.

W. C. CAPPER,  
Commissioner.

About Rs. 15,000 will be saved on the estimate, as the embankments were not carried out to the full height originally

proposed, should more relief work be required.

Road Utrowla to Tulseepore; estimate No. 112 of 1874-75, Rs. 46,371.

Length  $14\frac{1}{2}$  miles; width 80 feet.

An entirely new road has been opened out and the work completed, except that the embankment has not been raised to the full height. This will scarcely

affect the usefulness of the road which opens out an entirely new district hitherto almost inaccessible. Thus the road will always be very important, whether it be regarded as an outlet for surplus produce or an inlet for importation, should necessity arise. The sides of embankments having been well turfed have suffered but little, and the usual annual repairs will do all that is required.

About Rs. 12,000 will be saved on the estimate, chiefly through not raising all the banks to the full height proposed.

Military Road, Gonda Section; estimate No. 113 of 1874-75, Rs. 84,312.

Length 36 miles; width 60 feet.

As a famine relief measure, this has been the most important of the works carried out, since this road runs through the worst districts, extending along the Nepal frontier, at a distance of 10 to 20 miles from the hills.

A patrol track, 30 feet wide, was cleared here after the mutiny for moving troops to watch the rebels who had escaped to the Nepal hills; hence the name. But the original track was in places overgrown, and from not having been kept up, was almost useless as a road.

This line has now been made into a road 60 feet wide, the whole length with 20 feet embankment, varying from 6 inches to 2 feet high, though the general formation level is 1 foot.

The great drawback on this road was the number of *hill streams* crossed (some 15 large streams and over 20 small ones). As it was impossible to bridge all these, *slopes* have been cut down of 1 in 20 by which the crossings are rendered easy. These were all cut before the rains and the road rendered passable throughout, though the embankments are not all to full height of estimate.

Banks have been turfed and have stood the rains, so that ordinary repairs at the end of the season, including a little extra earth-work at the nallas, is all that will be necessary.

About Rs. 24,000 has been saved on the estimate.

Road Chowdree Dee to Kurgoopore; Length  $31\frac{1}{2}$  miles, 60 feet width.

1st Section to Muthora Ghât.—Estimate No. 115 of 1874-75, Rs. 36,184.

The earthwork and turfing of this section has been completed for the full length of 16 miles, and the road opened out; materials have been collected for the only *bridge* (Khyrnala) on the line, and are being prepared, but until the water goes down, the bridge cannot be constructed: this will be done in October or November from district funds.

2nd Section south of Muthora Ghât.—Estimate No. 197 of 1874-75, Rs. 22,855.

This part has been completed down to Kurgoopore, including clearing jungle and construction of road.

At the closing of relief-works,  $2\frac{1}{2}$  miles south of Kurgoopore remained to be completed; this is being constructed from district funds.

The *whole road* from Chowdree Dee to Kurgoopore will probably soon become one of the most important in the district, as it connects the rice-growing country to the north with two systems of roads, and thus with the bazaars, southwards, including Byram Ghât. Thus it will be eminently useful, whether as a line for exporting or importing produce. Considered as a relief-work, it drew immense numbers for about two months, when the pressure was great, since it ran through a part where there was considerable scarcity.

Road Khorasa to Munkapore; estimate No. 180 of 1874-75, Rs. 7,533. Length  $11\frac{1}{2}$  miles, completed 7 miles width 60 feet.

This is also a new line in place of an old winding track 20 feet wide, which ran from village to village through the same district.

As there was not the same demand for relief in this part as in the north, the work has not been completed, though 7 miles of road have been constructed



out of  $11\frac{1}{4}$ , the total length. The portion completed is in good order, and the remainder is being finished from district funds.

The amount of unexpended balance is about Rs. 2,500.

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Road Bulrampore to Ekona; estimate No. 116 of 1874-75, Rs. 40,315. Length  $14\frac{3}{4}$  miles, 9 miles completed; 80 feet width.

Estimate provides for raising and widening old road as a continuation of the road from Utrowla to Bulrampore.

As relief was not required along this part to a very great extent, the work was not pushed on, but rather kept in reserve for the rainy season, if required then. Hence, when relief-works were closed, only 9 miles (out of the whole  $14\frac{3}{4}$ ) had been completed. The remainder is now being finished from district funds. The new embankments, properly sloped and turfed, have suffered no damage from the floods.

Amount of estimate unexpended is about Rs. 18,000. This saving is due to the fact that—

- I.—Only 5 miles have been completed to *full* width 30 feet, as estimated.
- II.—Remaining 4 miles completed to width of 20 feet, as suggested by Chief Engineer, should relief not be required to full extent proposed.
- III.—Slight reduction in cost of work below estimated rate.

Relief Works, Agricultural Tank, Chowdree Dee; estimate No. 177 of 1874-75, Rs. 1,858.

Estimate was for a new tank at Chowdree Dee on the military road in the northern division of the Gonda District—a place where good water is always very scarce.

As this supplemented the relief-works on the military road, it was not commenced till May, just before the beginning of the rains.

It was intended to dig the tank 8 feet deep as being the utmost likely to be done.

A depth of 6 to 7 feet was reached when the rains thoroughly set in; thus the work was very *nearly completed*, though not quite in accordance with estimate. This, however, will not materially affect the usefulness of the project.

Tank Lulia; estimate No. 178 of 1874-75, Rs. 2,839.

This tank also was commenced as a relief-work on the completion of the adjacent road (Chowdree Dee to Kurgoopore) in this part.

Depth proposed was 8 feet of excavation: this has been done, and with the exception of a little dressing which remained when the tank filled with water, the work has been *completed*.

Mehaon Canal; estimate No. 195 of 1874-75, Rs. 8,730.

This canal, which is nearly three miles in length, has been cut to drain off about three square miles of swamp, round the village of Mehaon, into the Kuana Nuddee. A cut has been made the entire length, which is half of the required width, and even in its incomplete state this has been found to work well, and has this year done an immense amount of good in draining off the surplus water from this marshy and fever-stricken part. The work will be finished from district funds, and when complete there is no doubt (from the evidence of its present working) that, besides vastly improving the healthiness of this tract, it will convert an unhealthy and almost useless swamp of about 2,000 acres into good rice land, worth Rs. 4 per acre annually. Rs. 5,000 remain unexpended.

## Bund on Rapti.

This work consists of a bund 1,200 feet in length, from two feet to eight feet high, on the south bank of the river Rapti, and lying about half-way between Bulrampore and Utrowla.

There is a dip here in the land through which every year the Rapti waters flowed, and flooded at least four or five miles of country lying rather in a hollow, from which the water could not escape; thus agricultural operations were much interfered with, and besides the land was covered with a sandy deposit.

The bund now completed has been constructed with a view to saving this country formerly flooded.

A substantial bank, with slopes of four to one, well turfed, has been constructed. This year when still incomplete (not being to the full height) it stopped the waters till they flowed over the top during the very highest floods. But now that the bank is at its full height, the overflow will almost certainly be prevented, and the land of a number of adjacent villages will be thereby improved.

Inspection Bungalow at Utrowla, estimate No. 198 of 1874-75, Rs. 1,841.

A serviceable thatched bungalow was constructed at Utrowla for the use of public works and civil officers, as there was no other accommodation here; at all other centres various buildings belonging to talookdars were placed at the disposal of officers.

This bungalow (which contains two large centre-rooms, besides side-rooms and out-offices) is strongly built, and will remain as a chowki, as it is situated 32 miles from Gonda, and will be a convenient centre from which to start on inspection to other out-stations.

The work was completed, partly by skilled labor, and partly by the ordinary relief gangs, at about Rs. 100 below estimated cost.

*Summary* of the work done in the Gonda District is as follows:—

		Miles.
New Roads constructed	...	{ Chowdree Dee and Kurgoopore 29
		{ Utrowla and Toolseepore 14 $\frac{1}{8}$
		{ Khorasa and Munkapore 7
		TOTAL 50
Old Roads improved (widened and raised)	{	Military Roads 36
		Bulrampore and Ekona (portion completed) 9
		Bulrampore and Utrowla 17 $\frac{1}{4}$
		TOTAL 62
GRAND TOTAL ROADS CONSTRUCTED		112
AGRICULTURAL.		
Irrigation Tanks	...	...
	...	Chowdree Dee } 2 tanks.
		Lulea }
Drainage Canal (working, but not complete)		Mehaon 1 canal.
River Embankment	...	...
	...	Rapti Bund 1 bund.
Leaving to be completed—		
		Miles.
Roads—	Chowdree Dee and Kurgoopore	2 $\frac{1}{2}$
		Bulrampore and Ekona 5 $\frac{1}{2}$
		Khorasa and Munkapore 4 $\frac{1}{2}$
		TOTAL 12 $\frac{1}{2}$

besides widening the Mehaon Canal, which (though it acts well) does not carry off the flood water *fast* enough, being only half the estimated width.

Thus, taken as a whole, it will be seen that only a very small portion of the work set in hand remains uncompleted. It must also be stated that the carrying on and closing of various works depended rather on the necessity for relief than on the question of completion of works.

### *Report on Famine Relief Works carried out in Baraich District.*

#### COMMUNICATIONS.

Jingha Ghât Approaches; estimate No. 18 of 1874-75, Rs. 5,755.

Estimate was for widening and raising the approaches to the Sotu Nala bridge near Baraich on the roads from Nanpara and Kutta Ghât.



Work has been completed, and both earth-work and turfing have stood the rains without any loss. Besides affording relief to the poor of Baraitch, this work has made a great improvement in the road (Baraitch to Nanpara) above-mentioned.

Work has been *completed* as estimated at a saving of Rs. 2,000 by working at less than estimated rates.

Military Road, Baraitch Section,  $15\frac{1}{2}$  miles; Estimate No. 114 of 1874-75, Rs. 24,932.

This is a continuation of the military road in the Gonda district, and runs from Huthu Khoond (the Gonda boundary) to Bugoura Jál on the Nepal frontier. This has been the most important single work carried out in Baraitch, running directly through the most distressed districts.

As in the Gonda Section, this road has been constructed generally on the old patrol track (which was 30 feet wide where entire), with a total width of 60 feet, and embankments 20 feet wide and from 6 inches to 3 feet high. All the nalas have been sloped down, and the whole road rendered passable. These nala crossings will doubtless require ordinary repairs after the rains, but otherwise up to the end of July the road was in good order, and not materially damaged.

A *saving* of about Rs. 6,500 has been effected on estimated amount, partly by a reduction in the cost of work, and partly by not raising the embankments to the full estimated heights.

Road Gubbapore to Bhinga; Estimate No. 190 of 1874-75, Rs. 8,722; length  $7\frac{1}{2}$  miles, width 60 feet.

This is an entirely new road, which will form a very useful line connecting the Terai with the system of forest roads north of Bhinga, and opening communication between the Terai and Bhinga, and thus with Baraitch.

*Sohilwa branch.*—A short line,  $1\frac{1}{2}$  miles long, taken in continuation of above line across the military road up to Sohilwa, where it meets the forest road from the Terai jungle. The whole work has been very satisfactorily carried out at a saving of about Rs. 2,500 on the estimated amount, due chiefly to reduction of rate when the rains commenced.

Road Bhinga to Luchmunpore; Estimate No. 191 of 1874-75, Rs. 4,102; length  $8\frac{1}{2}$  miles.

This is a short line connecting the above places, and opening out a part almost unapproachable before. A good deal of rough land had to be crossed, including one large nala, the Khyan; also two miles of jungle were cleared by rooting out to the full width of road, and altogether a good serviceable road has been made, and the work well carried out to completion.

Road Luchmunpore to Muthora; Estimate No. 168 of 1874-75, Rs. 2,262; length 5 miles.

A short branch connecting Luchmunpore, and thus Bhinga, with the important bazaar of Muthora on the Chowdree Dee and Kurgoopore road. It has generally a formation width of 20 feet 6 inches high; and as good high land was chosen, there are no difficult parts on the road.

It has been satisfactorily completed, and supplied relief to this part when the main road from Chowdree Dee was completed.

The last two lines will be especially useful in opening out a district hitherto entirely beyond existing roads.

Road Pipraghât to Ekona; Estimate No. 167 of 1874-75, Rs. 5,582; length  $13\frac{1}{2}$  miles.

This work consisted of two portions—

- (1) Widening and defining a portion of old road from Ekona *via* Chuckpehain towards Bhinga  $7\frac{3}{4}$  miles.
- (2) Constructing a new junction road  $6\frac{1}{4}$  miles from Chuckpehain to Pipraghât, to take advantage of the ferry here, which is open at all seasons. The whole work has been completed, except about  $\frac{1}{2}$  mile, which remained unfinished when relief works were closed. The road was in first-rate order generally at the end of July when inspected by Executive Engineer, and work had been very satisfactorily carried out.

A saving of about Rs. 750 will be effected, chiefly by working under estimated rate.

Road Bhinga to Nanpara; Estimate No. 179 of 1874-75, Rs. 33,865; completed 13 miles (including portions), width 80 feet.

The whole length of this road is 26 miles, so that only one-half has been completed. Fortunately a much smaller amount of relief had to be given in this part than was at first contemplated when the road was commenced with banks up to the full formation height.

Since May nine miles have been constructed with a lower formation, and the road is being completed from district funds on this plan, so as to be open for traffic from end to end, as also was contemplated in estimate which was prepared in June.

This work was not at first carried through so satisfactorily as the others, from the gangs not having been properly organized. When this was done, the cost was much reduced, and the average rate will now bear comparison with that of other works; also work done is still in good order. Less than half of the estimated amount has been spent, leaving an unexpended balance of about Rs. 20,000.

Road Pipraghât to Churda; Estimate No. 192 of 1874-75, Rs. 24,359; length completed 14 miles.

This road, as laid out and partly completed, runs across the north centre of Baraich, from near Bhinga, to meet the road from Baraich to Nepalgunge, a portion of the district never before opened out.

There are two branch lines, both important, *viz.*, (1) connecting the system of forest roads north of Churda with the main road, and thus bringing these roads into communication with the main line leading to Baraich; (2) a branch from Chumeerpurwa to the Nawabgunge bazar, which will act as a feeder to the main line.

As a relief work, it was commenced in March, and work was started at various places where distress was apparent. Besides this road was intended as a reserve for the rainy season should work be necessary, which was not the case; consequently, out of a total length projected of  $32\frac{1}{2}$  miles, only 14 miles, as above, have been completed; the remainder is being finished from district funds, as this will be an important road.

The parts completed are in good order. About Rs. 16,000 will remain unexpended on this estimate, as only 40 per cent. of the work has been done.

The cost of work executed in the rains was below the estimated rate.

*Summary of Relief Works in Baraich.*

*New Roads constructed—*

			Miles.
Bhinga to Gubbapoor	...	...	5 $\frac{3}{4}$
Bhinga to Luchmunpoor	...	...	8 $\frac{1}{2}$
Luchmunpoor to Muthora	...	...	5
Pipraghât to Ekona (part)	...	...	6 $\frac{1}{4}$
Pipraghât to Churda	...	...	14
TOTAL	...	...	39

*Old Roads widened and raised—*

Military Road	...	...	15 $\frac{1}{2}$
Pipraghât to Ekona (part)	...	...	7 $\frac{1}{4}$
Bhinga to Nanpara	...	...	13
TOTAL	...	...	36

GRAND TOTAL ROADS CONSTRUCTED ... 75

*Leaving incomplete—*

			Miles.
Pipraghât to Churda	...	...	18 $\frac{1}{2}$
Bhinga to Nanpara	...	...	12
Pipraghât to Ekona (part)	...	...	$\frac{1}{2}$
TOTAL	...	...	31

Only 60 per cent. of the work projected in case of need was required as relief. But as the portions remaining are useful lines and much required, they are being completed from district funds, and will be finished by about November 1874.



## GENERAL REMARKS.

*Summary of works in the Division.*

	Miles.
New roads constructed ...	89
Old roads straightened, widened, and raised ...	98
<b>TOTAL ROADS CONSTRUCTED</b> ...	<b>187</b>
Irrigation Tanks ...	2 tanks.
Drainage Canal ...	1 canal.
River Embankment ...	1 bund.

showing a total of 340 lakhs of earth-work ;

20 $\frac{3}{4}$  „ of turfing ;

47 acres 8 miles of jungle cutting, and a total of expenditure on works of Rs. 2,72,000, viz.,—Gonda, 2,17,000 ; Baraitech, 55,000 ; not including compensation for land taken up, or public works establishment.

As the final accounts have not been submitted for all works, the exact amount cannot be stated, but this is correct to thousands.

*General Utility of Works carried out.*

*Roads.*—Most of the roads constructed were much required, and would probably have been constructed from local funds as these became available within the next few years. It is scarcely likely that funds would have been found for the military road, as this was a work of considerable magnitude.

The new lines all open out districts hitherto inaccessible : thus there will be now greater facilities for traffic in those parts.

*Tanks, embankments of river bank, and drainage canal,*—of their utility there can be no doubt, as stated above in detail.

The improvements caused by one work alone (the Mehaon Canal) will in a few years produce from 2 to 3 per cent. on the whole amount expended on relief works, both in Gonda and Baraitech.

*Height of embankments.*—Allusion has several times been made in the detail reports to the fact that the embankments of roads have not been carried up to the full heights estimated.

It should be mentioned that in preparing the estimates the greatest possible amount of *useful* work was proposed, with the reservation that the formation level would only be completed to *full* height in case there was a necessity for this amount of work. And though these full heights have not been reached in all cases, yet no gaps nor unsightly useless banks have been left ; the road surface is uniform, and for all purposes of general traffic, the roads, as above detailed, may be considered complete.

*Effects of the late floods on the works.*—During the present rainy season, the whole country bordering the Rapti has been one sheet of water, and communication was kept up by boat for miles between Utrowla, Bulram-pore, Tulseepore, &c. The roads and adjacent country were thus under water more or less during June and July. Notwithstanding this, there has been no serious damage ; in fact, with the exception of one road at right angles to the Rapti, Utrowla to Tulseepore, there is now scarcely any evidence of the high floods beyond the heaps of rubbish left behind when the waters receded. All the roads have their embankments with slopes of three to one, and these were all turfed early in the rains. Also long wide slopes were left as channels for the flowing water ; these have not been at all injured except north of the Rapti, and even there, only ordinary annual repairs after the rains will be required.

The floods of present season fully set forth the necessity of keeping low embankments for these Terai roads, and of not interfering with the general flow of water *across country* : this was decided upon when works commenced. The *cost of work* has varied from Rs. 3-12 to over Rs. 8 per 100 cubic feet. The high price is due to several causes over which this department had no control :—

1st.—The numbers of *women and children* out of all proportion to the number of able-bodied men or diggers employed. Owing to the low wages (one anna) purposely fixed for able-bodied men, they were not tempted to leave their fields where any cultivation at all could be done ; the excess women and children had to be set to work beating clods, &c., to keep them employed.

2nd.—The number of *weak* and *infirm* persons employed, as the poor-houses only supported those who were not fit to work at all. This no doubt prevented demoralization from gratuitous relief; at the same time it threw the *expense* on the works.

3rd.—The distances travelled by work-people daily from and to their homes, in many cases five to eight miles, precluded the possibility of their doing a full day's work, and the works could not possibly be carried on conveniently near to *all* the villages.

4th.—The exceptionally *hard soil* during the greater part of the time the works were in progress; so much of the work lay in the rice districts, where the soil is mostly clay, which after such a drought as that of 1873-74 became hard as stone. In many places the ordinary *phaorahs* were of no use, and *koodras* and *koodalees* had to be substituted.

Where the work has been carried on after the rain fall, nearly double the quantity was executed on those days when the rain did not cause interruption.

The *system* carried out of making all payments through the civil officers was no doubt a good one, as it divided the work and responsibility, and left the Public Works officers free to lay out and supervise works without being too much burdened with accounts and muster rolls.

No hitch has occurred that I am aware of between the two departments, and as a rule there has been no shifting of responsibility or break-down, notwithstanding the immense numbers employed under a very small staff of officers.

The *nature of the work* required the Public Works officers to be out in camp all the hot weather and the early part of the rains. This was found very *trying*, and nearly all have suffered more or less from fever, heat, and exposure, more especially the subordinates, who had to stay out during the rains, turfing and protecting embankments. One good man has unfortunately succumbed, *viz.*, Hit Ram, Sub-Overseer, 1st grade, who has given me by far the most assistance of the subordinates, having been connected with the work since December last, and in the most trying and difficult times was always ready. I had hoped to recommend him for his distinguished services, but unfortunately he *died* on the 1st September of fever brought on by fatigue and exposure at the end of July. As he leaves a widow and two children unprovided for, I trust some recognition will be made of his services.

*Establishment.*—I need not detail the services of Mr. Campbell, Assistant Engineer, 2nd grade, as you, having been at Bharaich, are aware he has worked heartily in the most trying season, having been in camp till June, laying out and supervising work and taking measurements for his estimates, all of which were submitted by the end of that month. He has given me the greatest assistance in the Bharaich works, and proved himself on the present occasion an able and energetic officer.

With regard to the subordinates, I am glad to be able to remark that, with one exception (Chokay Lall,) since dismissed from the Public Works Department, they have on the whole worked well and done their best; but I beg specially to bring to your notice the undermentioned in order of merit who have in my opinion done exceptionally good service under trying circumstances. They were no doubt encouraged and stimulated by the promise graciously made by the Chief Commissioner to remember those who distinguished themselves, and I trust their services will be recognized as opportunity occurs.

*Sukhawat Hossein*—Sub-Overseer, 3rd grade, was on the military road and Gubbapore to Bhinga. He is a very sharp and intelligent man, lately from Roorkee, and has done very good service, and even though suffering from Terai fever, worked on to the last; he is now engaged in completing the Churda road.

*Baboo Motee Ram*—Sub-divisional Clerk, Bharaich. This man was taken from the office and put on works as a temporary sub-overseer, and has been engaged on the Chowdree Dee and Kurgupore road. Great credit is due to him for his exertions in moving up and down this long line, keeping very large gangs well employed, and making a good job of the road as he has done.

*Goluck Nath Sen*—Was on the Bharaich works almost from the first, and with his good knowledge of surveying and levelling, proved eminently useful in laying out the new lines. He has done very good service.

*Bukhtawar Lall*—Sub-Overseer, 1st grade, has been connected with the Bharaich works from the commencement—first on the military road, and after



wards on "Bhinga to Nanpara." This last was the most unsatisfactory work in the whole division during April and part of May; but on his taking charge of the work, the instructions given by Deputy Commissioner and myself were so well carried out, that the rate was reduced from about Rs. 20 to less than Rs. 4 per 1,000 cubic feet. He is now completing the same road from district funds.

*Dabee Pershad*—Sub-Overseer, 1st grade, was in charge of 24 miles of the military road, and worked hard till July, when he got fever badly, from which he was still suffering when he left the division in the end of August. As he has done good work and suffered in consequence, I trust his services will be remembered.

I should not close this report without acknowledging the valuable assistance rendered by the Maharaja of Bulrampur in the matter of supplies, &c.; also in placing various buildings at the disposal of Public Works officers. It was on this account that only one inspection bungalow was found necessary in Gonda district.

Letter from C. CHAPMAN, Esq., Assistant Commissioner, Bhabaich, to the Commissioner, Fyzabad Division,—dated the 12th September 1874.

I have the honor to submit my report on the measures adopted for the alleviation of distress in this district during the current year.

In making this report I labor under considerable disadvantages, for I am entirely in the dark as to what correspondence passed between my predecessor and the higher authorities on the state of the country, anticipated failure of crops, and consequent distress prior to 8th May, the date on which I received charge of the district, as unhappily all communications were made apparently demi-officially, there being no record left to aid me.

So much has been written about famines generally, their causes and effects, that I deem it expedient to confine myself solely to the facts that led to the adoption of measures of relief, how those measures were carried out, and the result.

During the early part of last cold season I was occupied in the south portion of the district, and heard and knew little of what was going on in the north, the Korasur or southern tehsil being in my charge.

Towards the end of December, however, I marched north, beyond Nanpara, to the river Girwee, and thence eastward through Churdah, Mulhipore, Bhunga, to Bhinga.

During this tour I naturally saw a great portion of the north of the district, and at Mr. Capper's request gave the result of my observations in a letter dated 27th January.

These observations were briefly that about Nanpara and to the north the maize crop had been good. The urhur promised well, until nine-tenths were killed by the heavy frosts during the end of December and beginning of January. There was but little promise of a rabi harvest, and total failure of rice crop.

Eastwards the rabi crops looked a shade better, but the destruction of the urhur was general, and rice here again an almost total failure. At and about Bhinga prospects appeared even worse.

On the 1st February I marched to Ekowna to meet Mr. Capper: thence we marched together through Bhinga to Gobbapur, north-east and along the Terai, to Bhugora Tal on the Nepal frontier. Almost every village in the tract of country between Bhinga and Gobbapur was personally visited, and here were visible on every side alarming signs of serious distress bordering close on actual famine. Almost the whole area north of the Bhinga forest, as far as Kakadari, and thence to Churdah and Nanpara, is devoted to the cultivation of rice. Only in the proximity of the villages, on patches of higher grounds, is any attempt made to raise maize or any spring crops. The scanty rainfall of last year, and more especially the total failure of rain from the beginning of September, were the causes of the almost total destruction of the rice crop, the chief (one might almost say the sole) crop raised in these parts, and on which the people are mainly dependent for food. Last year, it is true, the people, seeing the rice being burnt up before their eyes, made an attempt to grow here and there barley, wheat, and gram; but only constant watching all night and every night to keep off wild animals from the neighboring forest secured a very small outturn from a very poor crop.

So thorough had been the failure of the rice crop, except in the vicinity of Hempore close to Bughora Tal, that there had been no attempt to cut it; the cattle were allowed to graze it down.

The season before (1872) had been an unfavorable one, and the people were in a sad strait.

From a strict overhauling of the majority of the villages in this portion of the Terai, I had ascertained without doubt that the stock of grain was almost *nil*, and at least seven weary months had to pass before another crop could be expected.

Still the people, patient and long suffering to a degree, themselves endeavoured in every way to economize their small stock of food. They could be seen trooping off early in the morning from their several villages towards the forest, where they spent the day in digging up the roots of a stunted palm tree—the sago palm I believe. In the evening they returned to

their homes (some had to go as much as 10 or 12 miles) ; they then steeped these roots in water, beat them well, and separating the fibre obtained a granular substance somewhat resembling sago. This they mixed with their ordinary food to eke out the stock.

This root, used in the proportion of one-third to two-thirds of ordinary grain food, apparently did them no harm, but mixed in larger quantities produced diarrhœa ; and yet many perforce had to subsist upon half grain and half root, and when remonstrated with exclaimed—“ What can we do.” Jail birds were in clover as compared to these poor wretches.

This state of things was far from pleasant. I must confess it took me completely by surprise, and Mr. Capper, though his suspicions were evidently roused by what he had seen during a tour through the Gonda Terai, could not have been aware of the true state of the people in these parts until he came amongst them.

The position of affairs was this: an almost total failure of the rice crop in parganas Tulshipur, Bhinga, Churdah, Nanpara, and Ekowna. In these same parganas, with a population in round numbers of 4,00,000 (rather more than half the population of the entire district), giving an average of some 250 souls to a square mile—the arbur destroyed, the rabi crops weak and stunted, giving hopes of a very short outturn, and only partially revived by an unexpected fall of rain in the beginning of February, when it is remembered that the largest area in these parganas is devoted to rice cultivation, on which the people mainly depend for food—the position was one which gave rise to by no means unfounded grounds for much uneasiness, if not alarm. An official report was submitted by me at once to the Commissioner. There was no time to be lost, for although the people were not actually dying of starvation, still there was every probability were aid much longer withheld that they would be enfeebled in strength and stamina to such an extent as to render subsequent aid of little avail ; that numbers would die of starvation, become an easy prey to any epidemic that might spring up, or migrate *en masse*.

In either case the result would be ruinous to the Terai portion of the district ; depopulation of valuable estates, loss of revenue, general demoralization, must too surely ensue.

Even now the population of the Terai is inadequate for the proper working of the cultivable area. The Nepal frontier is most invitingly close at hand, where land, rent-free, can be obtained for a term of five years for the asking.

It is painful to record that distress and scarcity had got the start of us. There was no period available for making elaborate preparation to meet the enemy. Works of public utility or other projects were not being carried out in any other portion of the district to which we could transfer those most urgently in need of aid, and thus relieve local pressure.

It would have been pure waste of valuable time to stand by and give opportunities to merchants and traders for the importation of grain: the people had not the money to purchase food.

Rather than bring them food, rather than allow them to desert the district and go elsewhere in search of food, it appeared to be an imperative duty to give them the means of obtaining it. The landlords could not feed the mass for the long months before another crop would be ready, and to leave the people to live on credit with the mahajun was simply to involve them hopelessly and irretrievably in debt.

It became an urgent necessity to find work for the people as a means of relief.

The most suitable sort of employment appeared to be making roads.

The Commissioner, seeing that prompt action was required, unhesitatingly decided on the course to be pursued. He directed me to stay in the Terai and commence operations at once on the old military road which runs from the Gonda district to Bughora Tal, and issued orders to the Deputy Commissioner, Colonel Shaw, to open relief works on other roads running through the distressed portions of the districts.

Captain Wood and Mr. Ponsonby, of the Forest Department, came at once to the front and commenced a series of roads through the Government reserved forest, thus giving employment to numbers ; and in a day or two, after it had been unmistakably proved that distress of a serious nature was present in the land, several relief works were opened.

At the commencement several difficulties had to be surmounted, the chief of which was the want of establishment. In time, however, additional overseers were made over to the district officers ; others to the Department Public Works. Mr. Hodges, Executive Engineer, Relief Works, Gonda, was placed in charge of Bharaich also, and Mr. Campbell was transferred from the district to relief works.

Further, three native doctors and a compounder were placed at our disposal for employment on the different works. Thus in a short time everything assumed a more ship-shape form.

The system followed in giving relief was a labor test ; the essential was that all who came for relief should in return give labor. All who came, at least on the military road, were taken on. It was scarcely possible to draw the line between those who could give an adequate return for their wages and those who could not. Consequently many were allowed on the works who did not and could not do anything approaching to a day's work ; still the pittance they earned was small, and for it a regular day's work could not be expected. Some few there were, I dare say, more fit for sedentary work, and whose proper place would have been in a poor-house ; but we had no time to organize poor-houses, nor did it appear necessary to do so. The feeble and infirm were so few in number that their being mixed up with the able-bodied did not hamper the latter in any way. They were allowed to squat and beat as best they could the earth thrown up on the road, pick out grass and weeds, and give such light labor. They did what



they could, and imagined that they were actually earning the pittance they received ; and consequently did not look upon themselves as merely recipients of purely charitable aid.

Except for the Terai, that is to say for the country lying north of Bhinga forests, from Gobbapur to Bughora Tal, it was not deemed necessary to purchase and store grain. This line of country in the middle of the rains is almost inaccessible, and it would not have been safe to leave the supply of food in case of an emergency to the ordinary operation of traders : hence, as a thoughtful and necessary precaution, Mr. Capper determined on having a large stock of grain stored at Gobbapur, where there is a tehsil of the Maharaja of Bulrampur, so that in the event of a breakdown in the arrangements or stoppage of works from excessive rain or from any other unforeseen cause, there was a supply at hand sufficient to keep the people alive for some months.

For the other portion of the district where there were greater facilities of ready transport, arrangements had been made with holders of grain, and it was well known where food could have been obtained if wanted.

The following works were opened :—

- 1.—A road from Hathia Khurd on the borders of the Gonda district to Bughora Tal on the Nepal frontier (military road).
- 2.—A road from the military road opposite Gobbapur to the Bhinga forest to meet the Government forest road, and an extension to the north as far as Sohelwa to meet another Government forest road coming from Gujatio.
- 3.—A road from Bhinga to Luchmanpur.
- 4.—A road from Luchmanpur to Muthara bazaar in the Gonda district.
- 5.—Nanpara to Pipraghât (Bhinga).
- 6.—Pipraghât to Churdah.
- 7.—Babagunge to Churdah extension to Lukahi to meet a Government forest road from Khyramori.
- 8.—Chumerpurwa to Nawabgunge.
- 9.—Pipraghât to Ekowna.
- 10.—Jhingaghât approaches.

These roads running through the rice-growing portion of the district will be noticed separately further on, and a return will be annexed showing the date on which each road was commenced, the date on which the work was completed or closed, the number of laborers employed, and the cost.

At first the military road with its extension to the Bhinga forest to the south and to Sohelwa on the north was placed under my special superintendence ; the rest of the works were under Colonel Shaw, Deputy Commissioner.

The rates were fixed well below ordinary rates, so as to hold out no inducements to any but those in actual want to come. On the military road the rates first given were—

	Anna.
For diggers ... ..	1½
Adults carrying earth ... ..	1
Children ... ..	½

On the other works in the district the rates were somewhat higher—

Diggers...	1½
Adult carriers ... ..	1¼
Children ... ..	¾ to 1

At these rates numbers flocked readily to the works, and it was feared that the relief works were drawing away men from their more legitimate work in the fields. On the military road alone during the first week, that is, from 9th to 15th February, 6,104 people came to the work. In the next week the number had increased to 26,846, and this was the highest figure attained in any one week on any work. On the 25th February I received a letter from Mr. Capper, directing me to reduce my rate at once, if I had any reason to believe that the people preferred our work and pay to working in the fields. I had noticed some on the works whom I thought had little business there, so I determined on a reduction at once as follows :—

	Anna.
The diggers ... ..	1
Adult carriers ... ..	¾
Children ... ..	½

The effect was wonderful. On the 26th February the numbers were 4,050, the highest ever attained in one day. On the 27th the attendance fell to 2,357 ; still as the "Mohurram" has just commenced, it was no criterion that falling off in attendance was solely the result of reduction of rates. After "the Holi" was over, the attendance rose on the 7th March to 3,337, falling again on the 8th to 2,472, and 3,000 was never reached again. On the 26th February I was encamped at Bunnhee, a village about a mile from Gobbapur. Colonel Shaw, Captain Wood, and Mr. Ponsonby, of the Forest Department, arrived, and were followed on the 28th by Mr. Capper. On the 2nd March Mr. Maconochie, Deputy Commissioner of Gonda, and Mr. Hodges, Executive Engineer, Relief Works, arrived. A conference was held in the Commissioner's tent, and the question of rate of wages, and to what extent children should be

employed, was fully discussed. It was determined that the following rates should be paid throughout all the relief works :—

	Anna.
Diggers ... ..	1
Adult carriers ... ..	$\frac{3}{4}$
Children from 12 to 7 ... ..	$\frac{1}{2}$
Ditto below 7 ... ..	$\frac{1}{4}$

It was also resolved in consequence of the low rate to be given that little children who could carry even a handful of earth should be entertained. I am of opinion that this concession was absolutely necessary, for a man and his wife could but earn between them  $1\frac{1}{2}$  anna; this sum at the price maize was selling, 15 seers for a rupee, would purchase scarcely enough for two grown up people at work all day. In many instances the family consisted of the parents, a lad or girl above 7, and two children below that age. Others had three children below 7, and it was only by *all* coming and earning a little that they could live in tolerable health and keep up their strength to enable them to work for their bread. With rates fixed so low as they were, it was thought, and with reason, that all who could possibly do so would endeavour to support themselves by independent labor rather than resort to the work. The numbers came down to well below 3,000 on the military road, and remained fluctuating between 2,000 and 2,800 until the rabbi was ready for the sickle. They fell then to under 2,000, but rose soon after to a daily average of 2,196 during all April. On the 1st May the road to Bhinga forest was commenced, and this drew off a large number from the military road. With the exception of the road from Nanpara to Pipraghât, the other works had scarcely opened, so that the change of rates had no appreciable effect.

On the Nanpara and Pipraghât road the people crowded on in large numbers from the beginning of March. To provide work for the masses it was arranged that all roads, whether then existing or newly projected, should be raised so as to render them, if possible, passable at all times of the year. On the military road, for the better handling of the people, I carried out the following plan :—

Gangs were organized of 10 diggers and 30 carriers, and over each gang was appointed a headman who could write; he was paid 2 annas per diem, and numbers of such could be obtained for so low a remuneration. It was his duty to write down the names of his gang as they came on to the work. Over every 10 gangs a mohurrir was appointed, and he went round about 10 A. M. and tested the entries of the mates or headmen and kept the register. Over all was appointed a Munshi, a respectable trustworthy man, and he was responsible for the money and proper rendition of accounts. The mohurrirs were paid from Rs. 8 to Rs. 10 a month.

The *modus operandi* on the other works was, I believe, similar.

In March we received printed instructions drawn up by Messrs. Maconochie and Hodges for the guidance of the supervising establishment. These were distributed to all concerned, and according to them the works were carried on everywhere except on the military road, for which I had already drawn up instructions to all intents and purposes so much like the Gonda ones that I did not think it worth while to risk confusion by their introduction.

As soon as their services could be obtained, three sub-overseers from the Department Public Works were made over to the district officers—

Bakhtawar Lal,  
Ishak Lal,  
Malik Ali,

and two others were added to the Executive Engineer's staff—

Sakhawat Husen,  
Goluk Nath.

The duty of the first named was to see that a fair and reasonable amount of work was obtained from the gangs, and that the roads were finished off in the orthodox manner; they assisted also in measuring up the work and laying out the roads after the Department Public Works overseers had given the centre and outer pegs. To the latter was entrusted the task of laying out the lines of road under the immediate superintendence of Mr. Campbell. The native doctors appointed to the relief works were—

Alabanda,  
Abdul Majid,

from the 7th Bengal Cavalry stationed at Sitapur, and Mahomed Yar Khan from one of the local dispensaries.

Alabanda was told off to the military road and its branches, Abdul Majid to the Churdah, and Mahomed Yar Khan to the Nanpara roads.

In addition to these the services of a compounder, Emamuldin, were given, and he attended to the gangs at work on the Pipraghât and Ekowna roads.

All gave the greatest satisfaction, with the exception of one.

I regret to say that Alabanda, after battling for some time against a severe attack of fever and dysentery, was finally compelled to apply for leave of absence from his post, and remained



for many days at the sudder dispensary before he was well enough to return to his regiment. Abdul Majid was sent to replace him, and Mahomed Yar Khan took over charge of the Churdah in addition to the Nanpara roads.

I am thankful to be able to report that the health of the work-people was wonderfully good. In March some cases of small-pox occurred in villages off the military road. The percentage of sick to the average strength employed on the work was remarkably low. In some weeks 1 per cent., and never rising above 6. The principal ailments for which they resorted to the native doctors were skin diseases—sores, ophthalmia, and fever. Only a few isolated cases of diarrhoea and dysentery occurred. There was no cholera. Considering that the people were working all day during the hottest months of the year and during the rains up to the end of July, it is hard to account for the singular immunity from sickness enjoyed by them, unless it be that the season has been a peculiarly healthy one everywhere.

Mahomed Yar Khan's services were dispensed with on the 1st July, Alabanda left (sick) on the 14th, and Abdul Majid and Emamuldin, compounder, on the closing of the work—the 31st July.

With regard to the payments, our greatest difficulty was the want of copper coins. On the principle of "*bis dat qui cito dat*" Mr. Capper impressed on us constantly that daily payments must be made. To carry out his wishes was utterly impossible until the treasury was supplied with a large amount of copper, and it was not till long after the work had commenced that the system of daily payments was carried out. On the military road I paid the laborers myself in copper as far as possible, and when that ran short in grain, which I obtained from the south of Bhinga. In obtaining grain and copper the peshkar of the Rajah of Bhinga rendered me valuable assistance. I found the people had no objection to taking payments in grain. I obtained jhundri in large quantities, 200 and 300 maunds at a time, for 16 seers for a rupee, and paid out a seer for one anna. At length a bunniah found it worth while to bring up large quantities of grain, and established himself close to the work, and he must have done a good business: from him I used to recover the pice paid away a day or two before, and thus succeeded in paying the people regularly. I fear the payments were not so regular elsewhere, and it was only by issuing the most stringent orders on taking over charge of the district that I believe I succeeded in securing daily payments.

The money required for the different works was kept as near to them as was compatible with safety. For the military road the bulk was kept at the Maharaja of Bulrampur's tehsil at Gobbapur, sufficient for two or three days' payment being kept under a guard in my camp. The Bhinga Rajah undertook the custody of cash for the works started at Pipraghat, Nawab Nisar Ali Khan Kizalbash did similar service for the works passing through his estate, and the tehsildars of His Highness the Rajah of Kupurthulla took charge of money sent for the Luchmanpur Muthara bazaar and the Ekowna roads. When, however, the gangs on the Pipraghat, Nanpara, and Churdah roads had made considerable progress eastwards from the starting point, it was found necessary to send out a treasure tumbril under a suitable police guard. They remained in the nearest village to the works, and moved as the gangs did: only in this wise could daily payments have been made on these lines.

Every precaution was taken, from a sanitary point of view, to secure cleanliness; and wherever gangs were stationary for any time, trenches were dug for their convenience.

Representatives of every caste were to be found amongst the people who flocked to the relief works—Thakurs and Pasis, Brahmins and Kyasths, Chamars and Musulmans, all worked together, and their wives and children also; poverty and distress levelled all distinctions, and I think this eagerness by all castes to work for the very small wages given is a strong and telling proof of the general scarcity, and shows that timely relief was given only when urgently called for.

Early in April it was intimated that the Chief Commissioner intended holding a conference at Gonda on the 15th of the month. Mr. Campbell and myself were directed to attend. The measures already adopted for alleviating distress were discussed. It was the concurrent opinion of all present that, under ordinary circumstances, we had obtained the upper hand of the distress, and that there was no fear of famine. Still there were many months before us and the next crop, and relief to be effectual must be continued well into the rains until there was a demand for labor in the fields. Sir George Couper took the same view, and thanking us warmly for the efforts we had made to carry out the wishes of Government, directed that the works should continue open until further orders.

On the 28th July Mr. Capper, deeming that further Government aid was not required, directed all relief works to be closed in this district on the 31st July.

In addition to the establishment engaged on the several relief works, Sheo Dyal Singh, peshkar, was appointed superintendent on the 27th April. He did good service, being constantly on the move and keeping all those in charge of the work up to the mark. Unfortunately he fell ill in July, and is still unfit for his duties. At the Sadr two clerks were entertained, and the total cost of the Sadr establishment, including Sheo Dyal Singh's pay, amounted to Rs. 388-0-5.

It remains for me now to notice to what extent the different works were carried out.

The accompanying map, which Mr. Hodges kindly planned for me, shows the system of roads projected, those fully and those partially finished. The military road from Hathia Khurd, the boundary of the Gonda district, to Bughora Tal on the Nepal frontier, marked A, is 15½ miles long, and is intersected by ten large koolars or hill streams. The road has

been formed throughout, with an embankment from 6 inches to 3 feet, 20 feet wide, and ghâts made at each ko olar. I commenced this road on the 9th February at Tandia, half-way between Gobbapur and Bughora Tal, as being the most central point and within easy reach of the majority of the villages, under somewhat adverse circumstances, being for some days without professional aid of any kind. It was with difficulty I could provide occupation for the numbers that came for work. On the 12th February there were over 1,200 people working; and as there was every prospect of the numbers being shortly doubled, I thought it advisable to start another section, and proceeded to Bumbhee within a mile of Gobbapur, and there marked out a mile or so of road which prevented a crush at Tandia and drew the people from the neighbouring villages. On the 13th February Mr. Campbell, who was working up with his levels on the road from Tulshipur to Gobbapur, rode from his camp to give me the line; fortunately I had hit it off, and it was not necessary to make any alterations; he returned to camp after giving me some help, and worked up to me by the 19th. Bakhtawar Lal was sent to me later on, and right well he worked day and night. I must not omit here to mention the great assistance I received from my court munshi, Tilok Nath, who in addition to his judicial duties assisted me in paying the people, sitting up half the night watching the preparation of the register and keeping the accounts. The mohurrirs were a raw set, and it is entirely due to the trouble he took in teaching them that the registers were kept right.

Gobbapur and Bhinga road.—This road, marked B B on the map, was projected to give relief to a number of villages between Gobbapur and the Bhinga forest, and to meet the Government forest roads. Its length is  $5\frac{3}{4}$  miles. A good road has been made throughout. Its extension to Sohelwa of  $1\frac{3}{4}$  mile has also been finished, thus connecting the Bhinga Government forest and those at the foot of the hills. The land taken up for the road amounts to 73 beegahs. I was on this and the military road from the 9th February to 6th May, when I was called to the Sadr to take charge of the district. Sakhawat Husen was the Department Public Works overseer. I was extremely satisfied with the way he performed his duties. Mr. Hodges will be better able than I am to testify to his merits.

Bhinga and Lachmanpur road, marked H H,  $8\frac{1}{2}$  miles, is completed, and 25 acres of land have been taken up. Lachmanpur to Muthara bazaar, marked L L, is  $5\frac{1}{4}$  miles long; this has also been finished, and 16 acres of land taken up. These two works afforded relief to the inhabitants of the Durgapur illaka, pargana Ekowna. Gya Pershad was in charge of these roads, and I cannot speak too highly of the way he performed his duties. He worked cheaply and well, and not a single complaint was preferred against him. He is a good, trustworthy man, and I wish the Executive Engineer will not lose sight of him. Pipraghât to Ekowna, marked D D, is 14 miles long. Only 13 miles were completed by the 31st July, and as there appeared no necessity for further expenditure from famine relief funds the work was closed. Darogah Emamuldin had sole charge of this work, and I have it on Mr. Hodges' authority that the job is one of the best and cheapest in the whole division.

Nanpara and Pipraghât road, marked M M, is 26 miles in length. Ten miles have been completed, and  $3\frac{1}{2}$  miles from the Nanpara end partly done. This road commenced badly under the charge of one Sheotahal Lal. He was found to be working at a very high rate, and generally mismanaged the whole thing. He was promptly removed, and Bakhtawar Lal was transferred from the military road, who soon set things on a proper footing, and exacted a fair amount of work from the people. About 187 acres of land have been taken up. Pipraghât to Churdah, with extension to Babagunge, marked F F, is 24 miles in length. Commenced at Khyra:  $4\frac{1}{2}$  miles have been completed as far as Surra, with the exception of one or two gaps which had to be left when the ground from the heavy rains we have had was under water.

From Babagunge to Churdah and beyond in the direction of Pipraghât some 4 miles have been completed; here too the rain interfered with the work. From Churdah a short road was also made to Lukehi to meet the Government forest road at Churdah. Mukka Lal was in charge, and the cash was kept at the tehsil there belonging to the Maharaja of Bulrampur. At the Pipraghât end of this road Malik Ali was the district overseer and Ahmed Husen munshi, Ishak Lal being the Department Public Works officer. All gave satisfaction. Chamir Purwah to Nawabgunge, marked S, is a branch from the Pipraghât and Churdah road. It was projected to give relief to the people about Nawabgunge. Rice is the chief crop raised here, but the outturn last year did not repay even the seed put in the ground. This road was managed entirely by Nawab Kazilbash, who kept our funds in his tehsil.

*Jhinghaghât approaches.*—A work started to relieve distress consequent on high prices in the town of Bharaich. It consists of a high embankment with slopes all turfed. Fursut Lal, abkari mohurrir, was in charge, and he did the work very well. By the formation of this high embankment the bridge over the Soti at the entrance to the town from the north has been secured: 51,984 people were fed at a cost of Rs. 3,467-15-5.

I regret to say that the statements of compensation for land appropriated for roads are not as yet completed. The ameens are hard at work, but the time of the year is against them, and they have been delayed by the country in many places being under water.

For the military road 168 $\frac{1}{2}$  beegahs have been taken up, for which compensation to the amount of Rs. 765 will have to be paid, and a remission of revenue of Rs. 64-14-5 allowed. For the Gubbapur and Bhinga road 72 $\frac{3}{4}$  beegahs have been taken up, for which as compensation Rs. 363-6-0 will have to be paid and revenue remitted to the amount of Rs. 42-15-0.

The returns for the other roads will be submitted as soon as prepared.



Remissions and suspensions of Government demand have been granted as below, on the distinct understanding that the landlords shall make equivalent remissions of rent:—

Pargana.						Remissions.	Suspensions.
Tulshipur	...	...	...	...	...	4,605	...
Ekowna (Durgapur) estate	...	...	...	...	...	14,044	...
Dhurmapur	...	...	...	...	...	8,260	...
Churdah (Mulhipur) estate	...	...	...	...	...	3,423	3,423
Churdah (the rest)	...	...	...	...	...	13,142	...
Nanpara	...	...	...	...	...	15,340	15,340
Bhinga	...	...	...	...	...	14,500	...
TOTAL						73,316	18,763

Although we commenced without even rough estimates, yet by the end of June regular estimates were prepared, submitted, and passed. I have not entered into details of estimates, amount of earth-work done, and rates at which work was performed on the different roads. It will be sufficient for me to note that in not one single instance was the estimate exceeded; as a rule, we worked well below the amount.

On the 25th May Mr. Hodges and I started to visit all the works. Everywhere he expressed himself well satisfied with the progress made. The people were contented, and no complaints were made against any of the establishment.

At Churdah we met Mr. Campbell. Here Mr. Hodges left us, and Mr. Campbell and I went to inspect the Chamarpur branch road. A very heavy storm passed over the country on the 30th, and the next morning water was lying in many places from a foot to two feet deep. The work under the direct superintendence of Kifayatoola, Peshkar of Nawab Nisar Ali Khan, was pronounced good, and the people said they were paid regularly. I then proceeded to the works near Nanpara, and Mr. Campbell marched to Pipraghât. More rain fell on the first three days of June, and every one commenced to plough. The only road I have not seen is the Ekowna and Pipraghât one, but Messrs. Hodges and Campbell drove through its whole length on the 28th July, and were well satisfied with Imamuldin's work.

The greatest credit is due to these officers for the manner in which they have devoted themselves to their arduous duties. Unmindful of heat and rain, they were ever on the move, and the good quality of the work done is owing to their strict and constant supervision.

The result of our operations has been that over a considerable portion of the district where severe distress prevailed the people have been fed and thus saved from starvation and disease.

The estates in Terai proper, instead of being deserted and ruined, are prosperous and well-to-do. Most assuredly numbers would have gone to Nepal had relief not been given before the beginning of February. Many people were on the move, and a few from the villages round about Gobbapur had left their homes. These benefits have been obtained at a cost of Rs. 51,893 spent on the relief works, and Rs. 73,316 revenue remitted, making a total of Rs. 1,25,209; and 8,19,559 men, women and children have been supported for a period of six months.

Nevertheless, this large sum of money has not been lavishly expended or thrown away: the roads opened were works of public utility. We have in exchange, where traffic is especially heavy, a complete system of roads throughout the northern portion of the district, some unfinished it is true, but these are to be finished from district funds I believe. In addition to local efforts for mitigation of distress, we received a sum of Rs. 2,500 with a promise of more if needed from the Central Relief Committee at Calcutta. This sum has been expended, through the agency of the talukdars, by a system of village or home relief, and afforded assistance to those who from position, caste-prejudice, infirmity or any other cause could not resort to the works; we included also those who had suffered from the floods in June and July.

The rains commenced early this year, and the people taking advantage of the blessing, have cultivated every available patch of land. The outturn of rice will be enormous, but continuous rain, such as we have lately had, will I fear damage the maize. Still the prospects of the kharif and rabi harvests are cheering, and I trust the present promise of bumper harvests may be fulfilled.

The main cause of our success, if I may be permitted to use the word, in relief operation is in a large measure due to the practical way in which the Commissioner organized the system to be followed out, to the generous manner in which the Chief Commissioner having once entrusted Mr. Capper with a responsible and anxious duty supported him throughout, and, I may add, to the hearty and unselfish devotion to the work of all subordinates, European and Native.

The people will remember for many a day how the "Sirkar" came forward with no niggardly hand to help them in their need, and we, forgetting the risks we have run from climate and sun, have the satisfaction of knowing that all have tried to do their duty.

In conclusion, I beg to express my thanks to Mr. Capper for the kind assistance he was ever ready to afford me during a time of not only hard work, but great anxiety.

# APPENDIX.

NAMES OF ROADS.	When commenced.	When completed or closed.	No. of coolies employed.	Cost.		
				Labor.	Establishment.	TOTAL.
				Rs. A. P.	Rs. A. P.	Rs. A. P.
1.—Military road, Bharaich section ... ..	9th February 1874 ...	31st July 1874 ...	2,96,088	15,950 3 2	1,004 8 6	16,954 11 8
2.—Gobbapur to Bhinga, including branch to Sohelwa ... ..	1st May „ ...	1st „ „ ...	91,957	4,829 11 6	284 8 6	5,114 4 0
3.—Bhinga to Lachmanpur ... ..	15th February „ ...	15th „ „ ...	49,776	3,061 11 0	166 9 10	3,228 4 10
4.—Lachmanpur to Muthara Bazaar ... ..	5th „ „ ...	12th „ „ ...	24,545	1,450 2 11	81 1 2	1,531 4 1
5.—Nanpara to Bhinga (Pipraghât) ... ..	6th „ „ ...	31st „ „ ...	1,93,073	12,146 3 6	794 13 9	12,941 1 3
6.—Pipraghât to Churdah ... ..	27th „ „ ...	31st „ „ ...	28,588	1,714 11 9	398 15 9	2,113 11 6
7.—Babagunge to Churdah ... ..	23rd May „ ...	31st „ „ ...	8,759	494 0 0	77 9 0	571 9 0
8.—Chamarpurwa to Nawabgunge ... ..	22nd February „ ...	31st „ „ ...	21,674	1,674 11 10	48 0 10	1,722 12 8
9.—Pipraghât to Ekowna ... ..	24th March „ ...	31st „ „ ...	53,115	3,931 4 0	316 2 8	4,247 6 8
10.—Jingraghât approaches ... ..	5th „ „ ...	2nd „ „ ...	51,984	3,401 15 9	65 13 8	3,467 13 5
TOTAL ... ..	...	...	8,19,559	48,654 11 5	3,238 3 8	51,892 15 1

C. CHAPMAN,

Asst. Commr. in charge Relief Works, Bharaich.