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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No.	102	Press
B.P. No.		Mis.

Dated 25-1-1876 196 .

Not to be folded or roughly handled

Proceedings of the Madras Government, Revenue Department,
25th January 1876.

Read the following papers :—

No. 204. From H. J. REYNOLDS, Esq., Officiating Secretary to the Government of Bengal, Financial Department, (Statistics,) to the Secretary to the Government of Madras, dated Calcutta, 5th November 1875, No. 3,709.

I AM directed to forward, for the information of His Excellency the Governor of Madras, a copy of the first number of the *Statistical Reporter*, a monthly journal published by the Government of Bengal with the sanction and approval of the Government of India, and devoted to Economic, Agricultural, and Statistical inquiries. The journal will necessarily deal, for the most part, with affairs connected with the Bengal province, but by no means exclusively, and it will very much add to its value if statistical and other information could be supplied from other provinces for publication in its pages. The Lieutenant-Governor of Bengal would be glad to see the paper assume as wide and cosmopolitan a character as would be compatible with its dealing with statistical and economic matters of Indian interest.

2. The paper will, for the present, remain under the editorship of Mr. H. J. S. Cotton, the Junior Secretary to this Government, and I am to request that if the Governor of Madras should consider it desirable to subscribe for copies of the paper, or to furnish information for publication in its pages, you will be so good as to communicate the orders of Government direct to that officer.

3. The subscription to the *Statistical Reporter* has been fixed at Rs. 12 per annum payable in advance, or Rs. 2 per each number if purchased singly.

REFERRED to the Board of Revenue for opinion.

FORT ST. GEORGE, *30th November* 1875. (Signed) D. F. CARMICHAEL, *Secretary to Government.*

No. 205. Proceedings of the Board of Revenue, dated 21st December 1875, Miscellaneous No. 11,192.

Read Endorsement of the Secretary to Government, Revenue Department, dated 30th November 1875.

ABSTRACT.—Referring, for Board's opinion, letter from Government of Bengal, Financial Department, forwarding two copies of the first number of the *Statistical Reporter*, and requesting that if the Madras Government should desire to subscribe for copies of this paper, or to furnish information for publication therein, they should communicate their orders to Mr. H. J. S. Cotton, the Editor.

THE *Statistical Reporter* appears to contain valuable information, and the Board are of opinion that each Collector and the Board's Office should be furnished with a copy.

2. Copies of Trade Returns and other statistical papers can be furnished to the Editor if Government desire.

(True Extract.)

(Signed) C. A. SALTON,
Acting Sub-Secretary.

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ke strides towards the acquisition of statistics and accurate information ... | peering to ... | ...ceus from the ... ...
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Proceedings of the Madras Government, Revenue Department,
25th January 1876.

No. 206. Ootacamund, 25th January 1876, No. 102.

Miscellaneous.

The Government will subscribe for ten copies at present. The Board can supply statistics as proposed. Copies of Government Orders on agricultural subjects will be transmitted from the Government Office to the Editor.

(True Extract.)

(Signed) D. F. CARMICHAEL,
Secretary to Government.

To the Board of Revenue.

2nd C. R. Lushington.

Registered No. 169.]

THE

STATISTICAL

Published by the Governm

No. 1.] NOVEMBER 1

The Statistical Reporter.

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INTRODUCTION.

"The Lieutenant-Governor believes that statistics are not an end, but a means to an end; and he thinks that a better knowledge of the country and the people of a province, where our knowledge has fallen so far behind that which we possess in other provinces of India, will probably tend to improvement in the administration. But mention, on the present stage, he is in truth doing little more than trying to ascertain facts. If he succeeds, even in a moderate degree, in that attempt, then he and those who may come after him, in the Government, will be in a much better position to proceed with confidence in any measures for the amelioration of the condition of the people which may be suggested by the facts brought to light."

These remarks were recorded by Sir George Campbell in 1871, shortly after his appointment as Lieutenant-Governor of Bengal, and the aim of the Bengal Government has since been to carry the policy thus stated into effect. It is the work of Sir Richard Temple, as it was of his predecessor, to acquire and register such general and detailed knowledge of the condition of the agricultural population, and of the trade of the country, as all the facts which affect them, ought to be in the possession of every civilized Government, and especially of a Government which stands very much in the relation of a landlord as well as of a Government to large portions of the people.

It is hoped that an efficient commencement has been made of measures towards the acquisition of statistics and accurate information

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THE

STATISTICAL REPORTER.

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No. 1.] NOVEMBER 1875. Subscription { Rs. 4 per annum, postage Re. 1 / Single copies, As. 4 each

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INTRODUCTION.

"The Lieutenant-Governor believes that statistics are not an end, but a means to an end; and he thinks that a better knowledge of the country and the people of a province, where our knowledge has fallen as far behind that which we possess in other provinces of India, will probably tend to improvement in the administration. But pushing, in the present state, he is in truth doing little more than trying to ascertain facts. If he succeeds, even in a moderate degree, in that attempt, then he, and those who may come after him in the Government, will be in a much better position to proceed with confidence in any measures for the amelioration of the condition of the people which may be suggested by the facts brought to light."

These remarks were recorded by Sir George Campbell in 1871, shortly after his appointment as Lieutenant-Governor of Bengal, and the aim of the Bengal Government has since been to carry the policy thus stated into effect. It is the desire of [illegible] Temple, as it was of his predecessor, to acquire and register such general and detailed knowledge of the condition of the agricultural population, and of the trade of the country in all its main branches, as will enable them, as regards the possession of every civilized Government, and especially of a Government which stands very much in the relation of a landlord as well as of a Government to large portions of the people.

It is hoped that an efficient commencement has been made of [illegible] and accurate information about the country and the people. The census was a great statistical work, of which the advantages were profoundly felt in the organization of measures of relief during the past year. It has been followed up by an attempt to collect accurate vital statistics over selected areas in the country. On the whole, the results of this attempt are fairly successful, and of good promise. As regards agricultural statistics, four special Deputy Collectors were sanctioned for statistical duty, and made laborious and careful inquiries into the tracts of country to which they were appointed. District statistical accounts have been specially supplied by the district and sub-divisional officers of several parts of the country. The famine necessarily interfered with the prosecution of statistical inquiries regarding agriculture, but considerable information has nevertheless been obtained concerning some of the staple products. In addition to the report of the Jute Commission, statistics of the cultivation of tea, cotton, tobacco, flax, potatoes, and of the food-grains of the country, have been obtained from nearly every district of Bengal. The new and developed establishments have afforded an agency for the collection of correct statistics, which had long been a crying want. An educational census was taken over a part of the 24-Pergunnahs and of Nuddea in 1872; and in the same year a similar census was effected in Mymensingh and the Commissioner of Patna has since compiled an [illegible] census in certain tracts in his division. The returns so being [illegible] under the Road Cess Act are supplying a deficiency in the [illegible] and landed property. The census and the [illegible] about which the collection of statistics as gathered [illegible]. It is hoped that with the special Deputy Collectors, the subdivisional establishments, the reorganized patwarees and [illegible] large part of the province, and especially in [illegible] Government estates, we shall be able to add to [illegible] sanctions from the road cess proceedings [illegible] as our special areas for vital statistics are [illegible] knowledge acquired by the census.

But if the collection of statistics is to be [illegible] the results arrived at ought to be punctual. [illegible] important that there should be no delay in [illegible] vital statistics of the country, month by month, [illegible] which should be widely circulated. The [illegible] does operations connected with the census will afford [illegible] facts regarding the tenures and rents of land [illegible] published in a comprehensive and reliable form. [illegible] of statistics makes arrangement of the Courts of W[illegible] Bengal, and the statistics relating to the [illegible] of the great trust soon to be published, and [illegible] The numerous estates returned under the [illegible] Government (the number of which is [illegible] quantity of agricultural statistics available, [illegible] The annual reports of the registration of assurances [illegible] bearing upon social science. The encouragement [illegible] talk or rural post throughout this province, [illegible]

the Department, will also cause the production every year of the progress of popular education. Such results ought to be published.

The traffic in Central and Western Bengal is to be dealt by Sir George Campbell, and has Sir Richard Temple has recently ordered a the provinces for in Bengal generally. The [illegible] regarding the boat traffic of Bengal—by [illegible] in any other country—will prove [illegible] Among means for collecting the statistics of the [illegible] Police, and Opium with adjacent provinces [illegible] Provinces, Oudh, the Central Provinces, and [illegible] Assam, must have sanctioned and [illegible] this source there will be a large influx of [illegible] The statistics of the coast-borne trade of Bengal have, as is well known, been regularly [illegible] 1868, those with have to be embodied with [illegible] and those returns of they be formed among [illegible] with wherever be of such value as it is [illegible] there.

[illegible] mentioned, which in some sense [illegible] statistics, there are generally the several [illegible] reports, such as the administration of [illegible] Police, Jails, Education, Provincial Finance, [illegible] and others, all which present valuable [illegible] information periodically by statistical [illegible] which may be drawn and used from time [illegible] processes of the country.

[illegible] does there should be a separate [illegible] are used for the purposes under the [illegible] Bengal, Behar, and Orissa, and the [illegible] Bengal, Behar, and Orissa, and the [illegible] Bengal, Behar, and Orissa, and

...most important article of down-traffic. The ...during the three years under review are as ...

... of Sugar despatched down the Ganges past Sahebgunge.

	1873.	1874.	1875.
	Mds.	Mds.	Mds.
...	3,30,627	3,08,015	3,93,077
...	3,042	3,714	4,409
...	24,019	26,362	11,229
...	22,185	22,185	6,550
...	67,263	61,064	20,560
...	2,452	4,157	533
...	4,182	3,950	2,826
...	2,605	1,915	4,486

...cross-stream above four-fifths comes from the ...district, mostly in the Chuprah and Jessore ...Muttra a large proportion of the rest comes ...is consigned to the Mallah and Moorshedabad ...consigned to Nuddea and fifty thousand maunds ...Sub-Inspectors' Division for the most ...Eastern Bengal receives but a very small ...Mallah to the local consumption or ...imported into Shahzadpore eventually finds its ...the capital from such parts as Jungypore and ...Western Bengal.

...by sugar received into Calcutta by the East ...ended, and seventy-six thousand maunds in the ...shows a decrease from the Patna division ...Western Provinces.

...of Sugar despatched down the Ganges past Sahebgunge.

	1873.	1874.	1875.
	Mds.	Mds.	Mds.
North-Western Provinces	24,915	27,251	42,827
Bhaugulpore	31,260	6,258	26,378
Sarun	8,334	12,207	18,666
Tirhoot	9,441	7,200	17,198
Patna	1,91,708	2,15,300	2,50,459
Monghyr	1,49,217	2,16,367	1,07,671
Bhaugulpore	1,40,071	46,056	26,197
Purneah	18,455	10,083	11,470

...During the year 1873 the greater proportion of the export of ...rice and gram was despatched from the districts of the Bhaugulpore ...exports from the Bhaugulpore district, the returns of which are less ...exports is entirely due to the new railway between Patna ...Patna. Purneah district contributes but a small proportion ...

...Of the rice imported into Calcutta, 1,50,000 maunds, ...Bengal, ...Chittagong, ...the remainder ...

...The following table shows the localities from which wheat is exported:—

Places of shipment of Wheat despatched down the Ganges past Sahebgunge.

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces ...	2,929	7,008	15,118
Shahabad	538	331	4,121
Sarun	3,031	340	20,929
Tirhoot	1,112	2,114	1,596
Patna	25,684	24,941	18,661
Monghyr	1,01,303	1,50,291	1,04,057
Bhaugulpore	1,81,101	2,72,846	2,16,154
Purneah	36,172	33,423	27,754

...It will be seen that nearly all the wheat that comes down the ...exports emanate at marts in the Monghyr and Bhaugulpore districts. ...very little comes from the Patna Division and from the North-Western ...Provinces. The principal exporting marts are Monghyr, Khagurriah, ...Surajgurrah, Dhuraiporo, Colgong, Sooltigunge, and Teeschee. Almost ...all the exports of wheat are destined for Calcutta; some 40,000 or ...50,000 maunds are consigned to Hauldhessun, to be subsequently ...re-exported to the metropolis.

The exports of pulses and grain are as follows:—

Places of shipment of Pulses and Grain despatched down the Ganges past Sahebgunge.

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces ...	24,915	27,251	42,827
Shahabad	31,260	6,258	26,378
Sarun	8,334	12,207	18,666
Tirhoot	9,441	7,200	17,198
Patna	1,91,708	2,15,300	2,50,459
Monghyr	1,49,217	2,16,367	1,07,671
Bhaugulpore	1,40,071	46,056	26,197
Purneah	18,455	10,083	11,470

The following table shows the exports of saltpetre:—

Places of shipment of Saltpetre despatched down-stream past Sahebgunge.

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces ...	16,766	7,322	21,517
Shahabad	50	800	.....
Sarun	77,962	68,243	46,476
Tirhoot	1,45,628	1,92,627	2,07,170
Patna	52,045	52,317	29,951
Monghyr	5,220	1,548	909
Bhagulpore	3,650	1,025	.....
Purneah	6,060	.....	.....

River-borne saltpetre comes mostly from the Tirhoot and Sarun districts, but the exports have apparently decreased from Sarun, as they have increased from Tirhoot. Grandiok, Sahebgunge, Mozufferpore, Durbhunga, and Soleenpore, all in Tirhoot, are now the chief places for exports. From Patna the exports by river are small, but by rail they are very considerable. The railway receipts are annually increasing, and apparently at the expense of the river traffic. The following comparative statement shows the imports of saltpetre by river and by railway into Calcutta during the past three years:—

	1873.	1874.	1875.
	Mds.	Mds.	Mds.
By railway	2,90,316	3,59,276	3,63,501
By river	3,28,000	3,23,800	3,06,000
Total ...	6,19,316	6,83,076	6,69,501

The Custom House returns show that the export of saltpetre from the port of Calcutta was 6,82,130 maunds in 1872-73; 6,05,714 maunds in 1873-74; and 7,30,024 maunds in 1874-75. The Custom House returns thus produce a belief that the present Sahebgunge returns of Ganges-borne saltpetre are approximately correct, and afford a test of the approximate accuracy of the figures. It must be remembered that at Sahebgunge the amount of traffic carried by steamers is not registered.

The Ganges-borne trade in hides is extremely small, the total number of hides and skins (by tale) passing Sahebgunge varying from 2,50,000 to 3,50,000 annually. The greater part of these are shipped at Durbhunga and consigned to Sahebgunge, whence they are despatched to Calcutta by rail. It is supposed that hides cannot bear a long river journey in the rains without spoiling. The trade in hides sets towards Patna from all the surrounding districts and from the North-Western Provinces, being based on advances given in Patna; and from that city hides are exported by rail to Calcutta in large quantities.

The articles of miscellaneous vegetable produce, which amounted to 3,50,000 maunds in 1873, and so forced the large total of 3,90,000 maunds in 1873, are principally supplied from the North-Western Provinces and from the marts of Hivelgunge, Peliar, and Patna. Patna alone supplied more than 80,000 maunds in 1874. The pepper is largely grown in the Purnea district, and is becoming more and more appreciated as an additional article of food. The consignments are mostly for Calcutta. The quantity of timber shown in the returns—which is over 1,00,000 maunds—is less than might have been expected. It is derived principally from the sal forests in the Nepal terai, and is thence floated down the rivers to one of the Behar marts for shipment. Ivenbungo appears to enjoy the largest timber trade, and sends about 70,000 maunds to Calcutta. There is a slight falling off in the amount of cotton marked in 1874, attributable to a short crop last season in Western India. Indigenous cotton is not expected to be grown even in Behar, where the cultivation is comparatively more extensive than elsewhere in Bengal, is not sufficient for the requirements of the people, and has to be supplemented by supplies imported from the West. Almost all the cotton passing Sahebgunge comes from Mirzapore, and is consigned for sale in the Moorshedabad and Bensbaryee districts and to East Bengal. The exceptionally large amount of rice carried down-stream in 1874 is owing to shipments of 1,60,000 maunds of Government rice from Sahebgunge to Riverpore on Mohuli, at that time a distressed district.

Up-stream Tr... registered at the st...

Rice	
Salt	
Pulses	

Considerably ... The chief de... ment:—

Places of shipment

Sonthal Pergunnah	
Purneah	
Maldah	
Dinagepore	
Rajshahye	
Moorshedabad	
Burdwan	
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Pubna	
Dacca	
Tipperah	
Sylhet	
Backergunge	
Unspecified Eastern ...	
Assam ...	

By far the lar... million maunds of ... from the districts ... requirements of Ba... of the rice sent u... districts. A quant... and there is an a... rents that actually ... Maldah district, ... Inga rice into B... down the Attrai an... the Sunderbans to ... Kooleen, Perrumbo ... the Mahanunda ri... subsequently be sa... Mahanunda river ... In 1873 the total ... West amounted ... 14,28,704 maunds; ... Purnia, 3,07,928 m... on the Kowlagola ... many, 71,240 more ... pore, Nowhaney, ... There is the ... In the Sahebgunj ... Mr. Robinson, ex... maunds. The ... opinion that the ... 2,50,000 maunds ... But Mr. Robinson ... understate the ... which he estimate... It is to be hoped ... sanctioned with ... From 8,00,0... from the Rajsha... In these figures ...

finds its way to ... nre Koomarpore ... western bank of ... latter must expo... produces some ... produce was so ... away unsold, beca... it. The town of ... to be an obligat... Dupchanchia, wh... road, which has ... said to export abo... stated, the export... make up the diffe... Mampore Bemilia... and Sardah, 1,05... The contrib... 1,50,000 maunds ... Moorshedabad, in ... district. Jungyra ... year 1872-73 th... home-grown, but ... Dinagepore, and ... during the same ... into the market ... In 1873 the Sahe... to 2,15,000 maun... mungeah, Patlabo... Dubrochur, and ... on the Rampore B... to the exhaustion ... chiefly to Calcutta ... and was 3,85,0... Howrah and Sa... was despatched ... principal merchants ... Tenai (2,32... from the marts ... 6,88,000 maunds ... returns as having ... the produce of ... so. Dacca for the ... may be said to ... districts of the ... in 1870. ... The figures ... the seventy-nine ... into the Goalpa... and the greater p... Bengal, where the ... 6,20,000 maunds ... the districts of the ... 3,40,000 maunds ... was a Government ... Sahebgunge to ... whole of the Gov... Behar by water. ... The prices ...

Declension of ...

The rice from ... largest in the ...

Sugar is the next most important article of down-traffic. The shipments of sugar during the three years under review are as follows:—

Places of shipment of Sugar *despatched down the Ganges past Sahebgunge.*

	1873.	1874.	1875.
	Mds.	Mds.	Mds.
North-Western Provinces ...	3,93,027	3,08,915	3,95,977
Shahabad	3,042	3,714	4,403
Sarun	46,019	26,863	14,229
Tirhoot	[illegible]	22,485	4,530
Patna	57,263	61,664	26,566
Monghyr	2,452	4,457	532
Bhagulpore	3,182	2,990	2,526
Purneah	2,065	1,917	4,486

Of this amount as down-stream, about four-fifths comes from the North-Western Provinces, mostly from the Cawnpore and Lucknow districts. In the Behar districts a large proportion of the cane comes from Patna, the Gungetic-borne cane. Orissa takes little more than one-third of the sugar consigned to the Maldah and Moorshedabad districts. Kumaon imports a hundred and fifty thousand maunds annually, and Assam about one thousand maunds. Of the sugar exported to Nepal and Thibet, a large proportion is refined sugar. The exports of sugar to Nepal and Thibet are steadily increasing, and the trade is capable of further development. The sugar exported to Assam is principally refined sugar. The exports of sugar to Assam are about 1,00,000 maunds annually.

Treasure and Specie.

Treasure imported and exported down the Ganges past Sahebgunge.

	1873.	1874.	1875.
	Rs.	Rs.	Rs.
Imports	1,01,000	1,00,000	1,00,000
Exports	1,00,000	1,00,000	1,00,000

The following table shows the localities from which wheat is exported:—

Places of shipment of Wheat *despatched down the Ganges past Sahebgunge.*

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces	2,929	7,008	15,118
Shahabad	538	931	4,121
Sarun	3,031	340	20,929
Tirhoot	1,112	2,114	1,596
Patna	25,084	24,841	18,661
Monghyr	1,01,363	1,60,251	1,04,057
Bhagulpore	1,31,101	2,72,846	2,16,154
Purneah	30,172	33,423	27,754

It will be seen that nearly all the wheat that comes down the river is shipped at marts in the Monghyr and Bhagulpore districts. Very little comes from the Patna Division and from the North-Western Provinces. The principal exporting marts are Monghyr, Khagurriah, Sungurrah, Bhagulpore, Colgong, Sealpungee, and Besonee. Almost all the exports of wheat are destined for Calcutta; some 10,000 or 20,000 maunds are consigned to Chandernagur, to be subsequently re-exported to the metropolis.

The exports of pulses and gram are as follows:—

Places of shipment of Pulses and Gram *despatched down the Ganges past Sahebgunge.*

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces ...	24,946	37,264	47,337
Shahabad	21,236	6,288	25,278
Sarun	8,824	12,207	14,956
Tirhoot	6,441	7,400	17,158
Patna	1,15,978	2,10,901	2,60,499
Monghyr	1,07,217	1,40,857	1,27,674
Bhagulpore	1,20,954	60,250	26,197
Purneah	18,256	60,983	11,470

During the year 1872 the greater proportion of the export of pulses and gram was shipped from the districts of the Bhagulpore division. There was a large falling off in the two past years of the export from these districts, and during the present year the exports from the North-Western Provinces and Patna districts have largely increased. Of the exports from Patna, Dullapore almost entirely is consigned to Calcutta.

One of the most important markets for cereals in Bengal is Dumdumah, a station in the Jessore subdivision on the Eastern Bengal Railway. During the year 1872 it was ascertained by careful enquiries that upwards of 3,00,000 maunds of cereals were brought into that market, chiefly from rural villages in the central and eastern districts of Bengal, and subsequently sold to dealers from Calcutta, Howrah, and Bankipore, where the consumption of cereals is large, and local supplies are insufficient. The stores are then sent to Calcutta for local consumption or for export. About 2,00,000 maunds were despatched from Behar and Bhagulpore and re-exported to Calcutta. During the same year, the imports of wheat were 2,00,000 maunds, chiefly grown in the Monghyr district, but the greater part came from Muzaffurpore, Durbhunga, and Mozufferpore. Purneah, Bhagulpore, and Sahebgunge also contributed considerable quantities. A great deal of wheat is consigned to Calcutta from Sahebgunge and Colgong, but it is chiefly grown in the Rajmahal hills, and is not, therefore, included in the exports from the Behar districts.

The following table shows the exports of saltpetre:—

Places of shipment of Saltpetre *despatched down-stream past Sahebgunge.*

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces ...	16,766	7,229	21,517
Shahabad	50	800	.....
Sarun	77,962	68,243	46,476
Tirhoot	1,45,628	1,92,627	2,07,170
Patna	52,045	52,317	29,951
Monghyr	5,220	1,543	909
Bhagulpore	3,650	1,025	.....
Purneah	6,060	.....	.....

River-borne saltpetre comes mostly from the Tirhoot and Sarun districts, but the exports have apparently decreased from Sarun, as they have increased from Tirhoot. Gundnock, Sahebgunge, Mozufferpore, Durbhunga, and Soleempore, all in Tirhoot, are now the chief places for exports. From Patna the exports by river are small, but by rail they are very considerable. The railway receipts are annually increasing, and apparently at the expense of the river traffic. The following comparative statement shows the imports of saltpetre by river and by railway into Calcutta during the past three years:—

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
By railway	2,96,316	3,59,276	3,63,501
By river	3,23,000	3,23,800	3,06,000
Total ...	6,19,316	6,83,076	6,69,501

The Custom House returns show that the export of saltpetre from the port of Calcutta was 6,82,420 maunds in 1872-73, 6,06,714 maunds in 1873-74, and 7,30,924 maunds in 1874-75. The Custom House returns thus induce a belief that the present Sahebgunge returns of Gungeo-borne saltpetre are approximately correct, and afford a test of the approximate accuracy of the figures. It must be remembered that at Sahebgunge the amount of traffic carried by steamers is not registered.

The Gangeo-borne trade in indes is extremely small; the total number of indes and chins (by tale) passing Sahebgunge varying from 1,50,000 to 3,00,000 annually. The greater part of these are shipped at Durbhunga and consigned to Sahebgunge, whence they are despatched to Calcutta by rail. It is suggested that indes cannot bear a long river journey in the rainy weather unpiling. The trade in indes sets towards Patna from all the surrounding districts and from the North-Western Provinces, being based on advances given in Patna; and from that city indes are exported by rail to Calcutta in large quantities.

The articles of miscellaneous vegetable produce, which amounted to 2,50,000 maunds in 1873, and exceeded the large total of 3,00,000 maunds in 1874, are principally supplied from the North-Western Provinces and from the marts of Revelgunge, Behar, and Patna. Patna alone supplied more than 50,000 maunds in 1874. The potato is largely grown in the Patna district, and is becoming more and more appreciated as an additional article of food. The consignments are mostly for Calcutta. The country of origin shown in the returns—cotton over 1,00,000 maunds—is less than might have been expected. It is derived principally from the ear-forests in the Nepal terai, and is thence floated down the rivers to one of the Behar marts for shipment. Dealbungah appears to enjoy the largest transit trade and sends about 70,000 maunds to Calcutta. There was a slight falling off in the shipments of cotton caused in 1874 attributable to a short crop last season in Western India. Indigenous cotton is not exported as the crop grown, even in Behar, where the cultivation is comparatively more extensive than elsewhere in Bengal, is not sufficient for the requirements of the people, and has to be supplemented by supplies imported from the West. Almost all the cotton passing Sahebgunge comes from Muzaffurpore, and is consigned to marts in the Moorshedabad and Bagbahye districts and to East Bengal. The exceptionally large amounts now carried down-stream in 1874 is owing to a shipment of 1,66,000 maunds of Government rice from Sahebgunge to Hooghly in Maldah, at that time a distressed district.

Up-stream Traffic.—The principal staples of the up-stream traffic registered at the station at Sahebgunge are—

	1872	1873	1874
	Mds.	Mds.	Mds.
Rice	27,63,000	33,14,745	9,86,625
Salt	11,85,000	9,19,695	8,36,640
Pulses	1,91,000	4,60,747	2,24,182

Considerably more than half the rice goes up during the dry season.

The chief despatches of rice are shown in the subjoined statement:—

Places of shipment of Rice *despatched up the Ganges past Sahebgunge.*

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
Sonthal Pergunnahs	8,902	32,26	3,30,331
Purneah	4,407	2,36	8,251
Maldah	13,81,328	2,60,479	3,5,034
Dinagepore	2,70,969	2,35,428	8,191
Rajshahye	3,03,402	2,33,650	23,407
Moorshedabad	3,06,018	3,32,349	28,567
Burdwan	3,185	2,128	750
Calcutta	40,472	25,86	4,409
Presidency Division	5,225	1,852	1,607
Pubna	13,909	6,443	1,878
Dacca	4,96,252	6,59,117	63,299
Tipperah	.....	18,985	83,930
Sylhet	761	.....	6,601
Backergunge	13,97	.....	10,895
Unspecified Eastern Districts	3,853	1,80,400	12,005
Assam	779	4,120	22,043

By far the largest item of up-stream traffic is rice. An immense million maunds of rice are carried in an ordinary season up the Ganges from the districts of Northern and Eastern Behar, to supply the requirements of Behar and the North-Western Provinces. The bulk of the rice sent up-country comes from the Dinagepore and Maldah districts. A quantity of the Dinagepore rice is shipped from Maldah, and there is an element of confusion in the returns, as rice exported reports that actually belong to Dinagepore being shipped on to the Maldah district. The two districts may be enumerated together as the huge rice field,—half of the surplus produce of which is conveyed down the Attrai and finds its way along the Mahanunda, through the Sunderbunds to Calcutta, and the remaining half along the Lesser Karatoya, Poornubhba, and other smaller streams which all run down to the Mahanunda into the Ganges, and so to the North-West. It will subsequently be seen that a small proportion of rice goes down the Mahanunda river finds its way along the Bolinga Canal into Calcutta. In 1873 the total registered exports from these districts to the North-West amounted to 16,82,889 maunds; in 1873 it increased to 19,28,714 maunds. The principal marts are Nowlagunge, Dhumdumah, Bulliapore, 8,37,928 maunds; Bulliapore, 4,07,490 maunds; Rajmahal on the Kosheo, 80,162 maunds; Asanoe, 9,41,[illegible] maunds, 7,1,224 maunds, both on the Tangon; and Chumpatolah, Dhuktore, Nowlazar, and Nyabunnee, all on the Tangon. In addition to these there is the large mart of Gondgunge, which does not appear in the Sahebgunge returns, but from which, as Mr. Magistrate Mr. Robinson, estimates that the exports were for the year [illegible] maunds. The late Mr. Alexander, Magistrate of Maldah, was of opinion that the whole exports of Maldah rice consisted of 5,00,000 maunds, and that the greater part of the rice sent up-country. But Mr. Robinson believes that the Sahebgunge returns very much underrate the quantity of the exports from Gungeopore, which he estimates cannot be less than 17,00,000 to 18,00,000 maunds. It is to be hoped that the more accurate system of registration now established will clear up all doubts on the subject.

From 3,00,000 to 4,00,000 maunds of rice are exported annually from the Rajshahye districts. The exports from Dinagepore are included in these figures, but the greater portion of the rice [illegible]

[illegible] The principal marts of the Bogra district are on the Jumoona, and Dupchanchia on the Nagar, a branch of the Kurateen river. The two main roads of the Adamdighee tract, which had first risen in Bengal, and where in 1872 the cultivation was suffered to ripen and whether sufficient labour could not be found to harvest the crops is a matter of history, had always been held to pertain to the Northern Bengal Railway; and in connection with the railway by a good road to be now taken in hand. Each of these marts is credited with 1,00,000 maunds of rice annually; but, as above suggested, Calcutta. The principal marts which [illegible] on to the North-Western Provinces are Tanda,000 maunds; Gudjaroon, 1,28,000 maunds; Gaurdah,

[illegible] from that Moorshedabad district is about The last trade of Dhulian, the principal mart of [illegible] as that of some other places in the [illegible] surpasses it, and probably Meerzeeadan. In the [illegible] south it about 1,00,000 maunds of rice, partly [illegible] greater part importations from Rungpore in [illegible] Dacca. Like the Jungypore mart, [illegible] about 1,50,000 maunds of rice were brought [illegible] the western part of the Moorshedabad district [illegible] registered exports from Jungypore amounted [illegible] Other important marts in the district are Kling[illegible] Meerzeeadan, Jeeaguni, Berhampore, [illegible] Mooreah. From the west part of Moorshedabad, [illegible] cultivation, where now is grown almost [illegible] other crops, there are large exports by rail. During 1871 a total exports from Beerbhoom [illegible] amounts, of which 1,27,000 were consigned to [illegible] Chandernagore or Bandytear. The remainder [illegible] Dhal Golwah, a mart on Loop line on the [illegible] Eastern Railway. [illegible] nearly 1,00,000 maunds of rice, derived [illegible] Sangaipur, Supore, and Furreedpore. [illegible] The rice of the Hooghly district is of [illegible] quality, and is much esteemed in the [illegible] consumption of Bandytear. The remainder [illegible] Dhal Golwah, a mart on Loop line on the [illegible] Eastern Railway. [illegible] nearly 1,00,000 maunds of rice, derived [illegible] Sangaipur, Supore, and Furreedpore. [illegible] The rice of the Hooghly district is of [illegible] quality, and is much esteemed in the [illegible] consumption of Bandytear. The remainder [illegible] Eastern Bengal is consigned [illegible] Western Provinces about 15,00,000 maunds, to Patna nearly 10,00,000 maunds, and to Sasra about 4,00,000 maunds. The North-Western Provinces receives rather less than one-half of the total consignments. The large receipts shown against Furreedpore in 1874 represent the Government rice referred to in the preceding paragraph.

After rice, the next most important item of up-stream traffic is salt, which is entirely despatched from Calcutta and from Bhuddressur in the Hooghly district, where it is stored by dealers who have imported it from Cuttack. No less than 1,18,205 maunds, which were registered at Sahebgunge in 1874, were consigned from Bhuddressur. The following statement shows the destination of the up-country salt consignments during the past three years:—

Destination of SALT *despatched up the Ganges past Sahebgunge.*

	1872.	1873.	1874.
	Mds.	Mds.	Mds.
North-Western Provinces	79,657	60,840	86,930
Shahabad ...	...	26,912	...
Sasra ...	2,58,197	1,04,730	1,48,924
Tirhoot ...	4,05,898	2,93,339	2,45,174
Patna ...	1,59,860	73,884	63,035
Monghyr ...	1,02,017	1,10,940	95,005
Bhagulpore ...	1,96,302	1,56,273	1,02,055
Purneah ...	29,206	60,920	60,860
Southal Pergunnahs ...	120	875	2,119

Besides the sale described by eleven chief seerdars, lakhs of maunds were despatched up-country by the East Indian Railway in 1874; but the returns of the Company do not show the distribution of this supply. In 1871 the despatch of salt by rail was 14,70,000 maunds; in 1872 it was 19,40,000 maunds. This steady increase in the quantity of salt consigned by rail is very satisfactory, more especially as it will be seen that it corresponds with the decrease in the boat sale traffic. The principal [illegible] for salt are Sasra, in Tirhoot, 1,10,000 maunds; and Hoshungabad, in Nerbudda, 1,00,000 maunds. Bhuddressur, Kidderpore, Patna, Bally Ghaut, and Monghyr, each import between 40,000 and 80,000 maunds of salt in the year. It is observable that for both Ganges-borne salt is supplied to Patna on to places in the Patna Division south of the Ganges. These districts are therefore supplied by the railway. In 1871 it is known that 3,00,000 maunds of salt were consigned to the Patna station alone.

The pulses next in strength are shipped chiefly from the large marts at Dinapore in the Moorshedabad district, and are consigned to Patna and other places in the Patna District.

The following statement shows the total quantities of such consignments from the principal marts in Bengal that were sent up the Ganges and registered at Sahebgunge during the years 1872, 1873, and 1874:—

Down-Stream Traffic.

	1872.	1873.	1874.
Places of Shipment.	Mds.	Mds.	Mds.
Sahebgunge	68,760	76,041	8,54,493
Mirzapore	2,80,595	1,82,500	70,875
Meerzeeadan	2,02,300	81,000	...
Moochan	3,07,554	1,34,021	55,029
Maldah ... in Dinagepore ...	3,06,403	4,09,181	...
Nowpore ... and Maldah ...	5,56,405	4,10,401	...
Rajmehal	1,07,077	35,951	...
Jeaunagar	8,60,670	1,21,072	84,834
Rampore Boaleah in Rajshahye ...	81,005	1,08,000	...
Godagaree ditto ...	1,71,962	1,08,000	...
Sandha ditto ...	2,60,215	1,03,215	1,03,215
Dhuliun in Moorshedabad ...	1,52,000	22,735	22,735
Jungypore ditto ...	8,72,540	1,47,000	1,10,000
Bhuddressur in Hooghly ...	1,70,000	2,13,000	3,27,000
Calcutta	15,05,470	6,75,000	2,18,000
Dacca	4,50,240	1,05,000	1,18,875
Meerzeeganee	.....	.....	.....
Places of Destination.			
Mirzapore	5,97,210	1,60,700	45,000
Benares	3,10,467	1,60,000	60,700
Ghazeepore	1,60,715	1,18,500	50,102
Buxar	1,21,850	1,18,000	79,257
Bulia Ghazeepore	1,80,951	1,17,000	1,17,758
Monee in Ghazeepore	1,61,005	1,02,610	2,36,695
Revelgunge in Sarun	1,15,502	1,28,770	1,02,642
Dighwarra	2,05,510	1,05,163	1,06,515
Hoshungabad	2,84,000	2,58,818	3,47,000
Patna	1,04,925	1,20,594	76,000
Dinapore	76,787	62,283	2,50,583
Cawnpore	3,12,991	60,000	52,000

Up-stream Traffic.

	1873.	1874.	1874.
Places of Shipment.	Mds.	Mds.	Mds.
Sahebgunge	76,041	8,54,493	
Mirzapore	1,82,500	70,875	
Meerzeeadan	81,000	...	
Moochan	1,34,021	55,029	
Maldah ... in Dinagepore ...	4,09,181	...	
Nowpore ... and Maldah ...	4,10,401	...	
Rajmehal	35,951	...	
Jeaunagar	1,21,072	84,834	
Rampore Boaleah in Rajshahye ...	1,08,000	...	
Godagaree ditto ...	1,08,000	...	
Sandha ditto ...	1,03,215	1,03,215	
Dhuliun in Moorshedabad ...	22,735	22,735	
Jungypore ditto ...	1,47,000	1,10,000	
Bhuddressur in Hooghly ...	2,13,000	3,27,000	
Calcutta	6,75,000	2,18,000	
Dacca	1,05,000	1,18,875	
Meerzeeganee	.....	.....	
Places of Destination.			
Mirzapore	1,60,700	45,000	
Benares	1,60,000	60,700	
Ghazeepore	1,18,500	50,102	
Buxar	1,18,000	79,257	
Bulia Ghazeepore	1,17,000	1,17,758	
Monee in Ghazeepore	1,02,610	2,36,695	
Revelgunge in Sarun	1,28,770	1,02,642	
Dighwarra	1,05,163	1,06,515	
Hoshungabad	2,58,818	3,47,000	
Patna	1,20,594	76,000	
Dinapore	62,283	2,50,583	
Cawnpore	60,000	52,000	

Rising Calcutta on one side, it will be seen that the largest river marts with a Ganges-borne trade are Patna, where the registered transactions altogether exceed 15,00,000 maunds a year; Revelgunge, where they exceed 10,00,000; Dacca, where they exceed 8,00,000; and where they exceed 10,00,000; Dacca, where they exceed 8,00,000; and Hoshungabad, in Nerbudda, 1,00,000 maunds. The largest importing marts are Patna, Furreedpore, Dacca, Bally Ghaut, and Monghyr, each import between 40,000 and 80,000 maunds of salt in the year. It is observable that for both Ganges-borne salt is supplied to Patna on to places in the Patna Division south of the Ganges. These districts are therefore supplied by the railway. In 1871 it is known that 3,00,000 maunds of salt were consigned to the Patna station alone.

The following statement shows the total quantities of such consignments from the principal marts in Bengal that were sent up the Ganges and registered at Sahebgunge during the years 1872, 1873, and 1874:—

TRADE BETWEEN NORTHERN BENGAL AND CALCUTTA REGISTERED ON THE NUDDEA RIVERS.

The traffic along the upper delta of the Ganges, known as the Nuddea rivers, that is along the Bhagirathee, the Jellinghee, and the Matabhanga, is also registered.

(1) There is a toll-station at Jungypore, near the head of the Bhagirathee, where that river leaves the Ganges. The traffic from Behar and the districts of the Bhaulpore division is registered at Jungypore. The returns of this station do not show the traffic of places between Nuddea toll-station.

(2) There is another toll-station at Nadeea, about 50 miles above Calcutta, and about 80 miles below Jungypore, at the point where the Jellinghee river drives into the Bhagirathee. The Nuddea returns show the traffic along the Jellinghee river, and of places on the Bhagirathee between Jungypore and Calcutta. The traffic from Northern and Central Bengal is intercepted at Nuddea.

(3) The Matabhanga river returns are taken at the station of Kaligunge, which is situated about midway on the Matabhanga river, by which route the traffic of North East and part of Eastern Bengal comes to Calcutta.

During the years 1873 and 1874 the number of boats (excluding passenger boats and empty boats) that were registered at the toll-stations on the Nuddea rivers was:—

	1873.			1874.		
Toll-stations.	Down-stream.	Up-stream.	Total.	Down-stream.	Up-stream.	Total.
At Jungypore on the Bhagirathee ...	9,040	1,557	10,597	8,443	920	9,363
At Nuddea on the Bhagirathee ...	6,081	6,732	9,760	2,072	6,981	9,053
At Nuddea on the Jellinghee ...	3,377	1,091	4,491	1,520	1,520	3,013
At Kaligunge on the Matabhanga ...	4,605	1,955	2,560	3,500	3,000	6,392
Total ...	23,103	12,334	35,437	15,535	12,421	27,956

It should be ex[illegible] on the Nuddea riv[illegible] registered at the to[illegible] however, was until [illegible] all traffic that pas[illegible] had already been re[illegible] traffic that had be[illegible] when it passed a to[illegible] Government, the whol[illegible] principle, and boats [illegible] on the same journe[illegible] of the year 1874.

The following [illegible] upwards traffic reg[illegible] and 1874:—

Toll-stations

At Jungypore on the [illegible]
At Nuddea on the Bha[illegible]
At Nuddea on the Jell[illegible]
At Kaligunge on the [illegible]

It will be see[illegible] downward traffic [illegible] tion of the tra[illegible] Calcutta and [illegible] few ranges of hi[illegible] a second time [illegible] when the chan[illegible] by boats of mo[illegible] up traffic in the [illegible] alone of the up[illegible] by the Bhagirat[illegible]

The Bhagir[illegible] returns to a gr[illegible] Sahebgun[illegible] figures of the [illegible] as follows:—

Outwards
Rates and gra[illegible]
Wheat
Total of the ye[illegible]
Total towards [illegible] for Calcutta

The traffic [illegible] registered at [illegible] at Sahebgunge [illegible] twenty-four hou[illegible] Kadhe, simply [illegible] ately below the [illegible] the Mahlah di[illegible] composed [illegible] Jungypore, th[illegible] respectively [illegible] Sahebgunge [illegible] about 60,00[illegible] 5 compared [illegible] 500 maun[illegible]

the Jungypore and Sahebgunge returns. After the excess of the Sahebgunge traffic will not be ten lakhs of maunds. Five lakhs of this is [illegible] and the remainder, or twenty-two lakhs, ought to [illegible] the amount of traffic borne by the Ganges [illegible] West into Eastern and Northern Bengal. [illegible] that at Jungypore the boatmen pay toll [illegible] maundage, and may therefore be expected to under- [illegible] at Sahebgunge they pay no toll and have no [illegible] the truth. The amount of allowance that [illegible] cannot be estimated, but it must be [illegible] the exports registered at Sahebgunge from [illegible] West into the districts of Maldah, Rajshahye, [illegible] of Eastern Bengal are [illegible] less than [illegible] may be said to amount to from twelve to [illegible] than in transition before Government, if Sahebgunge registration is the more accurate, and [illegible] indicate the further but at present an [illegible] exists which can only be removed by the [illegible] system of registration now established.

[illegible] for Calcutta only the excess registered at [illegible] above the figures of exports. This difference [illegible] the total amounts of Behar and North-West river- [illegible] follow the direct course down the Bhagirathee, [illegible] [illegible] a small share going down the [illegible] and very much the greater part following [illegible] as far as the Ooria, and thence through [illegible] to Calcutta and the coasts. It will be [illegible] traffic arrived into Calcutta by the [illegible] maunds in 1873, and to 3,82,7[illegible] maunds [illegible] Behar produce were exported down the [illegible] 50,795 maunds were exported down the [illegible] of these exports were of seeds and wheat. [illegible] registered at Jungypore, shown only the [illegible] of considerable being about three [illegible] [illegible] amounted to 2,01,000 maunds in 1870, [illegible] 1873, the Nuddea district [illegible] [illegible] 1874 [illegible] amounted to 2,91,000 maunds. [illegible] [illegible] Jungypore, [illegible] [illegible] [illegible]

TRAFFIC BETWEEN EASTERN BENGAL AND CALCUTTA REGISTERED ON THE CALCUTTA CANALS.

THE most important traffic of Bengal is that which is registered on the Calcutta canals. The returns are taken at toll-stations a little outside Calcutta on the canals which connect the Sunderbunds, Backergunge, parts of Jessore, and Eastern Bengal generally with Calcutta. There are two main canals. The first is called the Circular or Baliaghatta Canal, and runs from the Hooghly at Chitpore in a south-easterly direction about twelve miles to a place called Bamunghatta. The present toll-stations are at Chitpore, Bamunghatta, and Rajah's Hall. The other canal is known as Tolly's Nullah, being for the most part excavated by Major Tolly one hundred years ago, and proceeds from the Hooghly at Kidderpore to a place called Sumookpotta, about sixteen miles inland. There are three toll-stations on Tolly's Nullah—at Kidderpore, at Sumookpotta, and at Ranaghat. Tolly's nullah is very shallow during the dry season of the year, and the traffic on it is therefore less than that on the Circular Canal.

The Calcutta canals route for boats proceeds eastwards as far as Kanchrapara, a distance of 49 miles, and up to this point is under the supervision of an engineer officer of the Public Works Department. There is a tide-path as far as Khoolna, so that boats can proceed by tracking at any stage of the tide. For about the first half of the way from Calcutta, as far as Kallyganga on the Circular Khall, boats can follow an alternative route, but from that point it is usual to follow one channel to Khoolna. At Khoolna the boats branch off to their several destinations north and east. Khoolna, which has been called the capital of the Sunderbunds, is situated at the point of the junction of the Atharabanka and Bhyrab rivers. The Atharabanka is an offshoot from the Mudhoomutee, down which comes all the produce from the north. The Bhyrab is the river which conveys the Backergunge produce to Calcutta. The steamer route to Khoolna and Backergunge is very much more frequented. It is necessary to proceed down the Hooghly as far as Channel Creek, and take a course among the net-work of wider and deeper streams to the south of the Sunderbunds.

The total number of loaded boats, the cargoes of which were registered on the Calcutta Canals, was 101,737 in 1874, and 77,040 in 1873. The total weight of all the cargoes imported into Calcutta by the canals along the Sunderbund route was 1,76,21,104 maunds in 1873, and 1,46,98,324 maunds in 1874; and the total weight of the cargoes exported by the same route was 45,49,072 maunds in 1873, and 36,01,420 maunds in 1874.

The following tabular statement will show the imports into Calcutta by the Sunderbun canal route from the several districts of Bengal during the years 1873 and 1874:—

Places of shipment of Merchandise imported into Calcutta viâ the Canals, 1873.

Districts.	Rice.	Wheat.	Other cereals.	Pulse and gram.	Oil-seeds.	Jute.	Sugar.	Tobacco.	Miscellaneous.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	
North-Western Provinces	.....	8,660	.....	200	11,300	.....	.....	.....	.....
Harun	.....	8,590	.....	1,575	26,200	.....	8,500	.....	.....
Shahabad	.....	9,050	.....	.....	27,000	.....	.....	.....	.....
Tirhoot	.....	.....	.....	.....	3,500	.....	.....	.....	.....
Patna	.....	6,250	13,000	4,925	52,284	.....	.....	500	.....
Monghyr	.....	1,000	.....	5,500	41,520	.....	.....	.....	.....
Bhagulpore	.....	950	.....	1,450	10,303	.....	.....	.....	.....
Scottish Pergunnahs	.....	1,050	.....	.....	.....	.....	.....	.....	.....
Purneah	3,000	.....	.....	.....	.....	48,110	.....	10,000	.....
Rungpore	.....	.....	.....	.....	2,000	.....	.....	4,000	.....
Assam	.....	.....	.....	15,000	23,500	1,16,003	.....	.....	.....
Sylhet	70,000	.....	.....	200	24,700	.....	.....	.....	.....
Tipperah	.....	.....	.....	.....	4,000	.....	.....	.....	.....
Chittagong	.....	.....	.....	.....	.....	.....	.....	.....	.....
Noakhally	90,000	.....	.....	.....	.....	.....	.....	.....	.....
Dacca	3,42,500	.....	.....	35,000	68,225	12,93,119	.....	1,200	.....
Furreedpore	15,500	.....	.....	2,500	2,000	3,500	.....	.....	.....
Backergunge	21,55,702	.....	1,000	1,530	3,000	.....	.....	.....	.....
Mymensingh	.....	.....	.....	700	13,000	500	.....	.....	.....
Pubna	39,100	.....	.....	24,192	1,21,301	7,05,273	.....	1,000	.....
Nuddea	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jessore	96,010	.....	11,415	26,010	34,974	18,150	49,221	.....	.....
24-Pergunnahs	56,500	.....	5,77,000	40,500	3,000	3,000	60,500	100	.....
Total	35,51,312	24,500	5,10,054	2,05,292	7,35,208	21,87,855	1,07,214	15,800	.....

It will be observed that though the greater part of the cargoes arrived from Eastern Bengal, a certain proportion comes from the districts of the North-Western Provinces. The

Statement showing the Rohar and Bengal consignments into Calcutta

1873.

Canals through	Rice.	Wheat.	Other cereals.	Pulse and gram.	Oil-seeds.	Jute.	Sugar.	Tobacco.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Total of North-Western Provinces consignments	35,51,312	24,500	5,10,054	2,05,292	7,35,208	21,87,855	1,07,214	15,800
Total of Bengal consignments	1,40,70,792	1,76,000	4,66,938	1,79,000	4,38,740	20,00,577	1,20,000	4,00,000
Grand Total	1,76,22,104	2,00,500	9,76,992	3,84,292	11,73,948	41,88,432	2,27,214	4,15,800

1874.

Canals through	Rice.	Wheat.	Other cereals.	Pulse and gram.	Oil-seeds.	Jute.	Sugar.	Tobacco.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Total of North-Western Provinces consignments	36,58,000	25,000	10,000	1,75,000	3,65,000	3,000	60,000	500
Total of Bengal consignments	1,10,40,324	1,00,000	4,00,000	1,80,000	2,00,000	10,00,000	1,00,000	4,00,000
Grand Total	1,46,98,324	1,25,000	4,10,000	3,55,000	5,65,000	10,03,000	1,60,000	4,00,500

The total of the Bohar trade thus comes into Calcutta by canal by circuitous route appears to amount to about 2,50,00,000 maunds in the year. Nearly half consists of oil-seeds, the great staple of Behar export produce. The ordinary channel for Behar produce is along the Bhagirathee river, but during the latter part of the dry season that river is not navigable, and the up-country merchants, if they export at all at that time, are compelled to send their boats the long route down the Ganges as far as Khoolna, along the Ooma, the Mudhoomutee and Atharabanka, and so on Khoolna, into the canal route. It is a matter of inconvenience to upcountry traders that it should be necessary under these circumstances to send their produce to Calcutta during the rainy season, when the weather is so long and under the circumstances. Apart from its [illegible] from Calcutta [illegible]

at central stations known that [illegible] and khalls, stations are [illegible] registered twice. The Lieutenant registration [illegible] offices on the [illegible] cation of registered posts have been effective and [illegible] been established which are, so [illegible] of a large area.

Special [illegible] the river-borne [illegible] understood that [illegible] registration of [illegible] India General [illegible] way Company [illegible]

This registration Western Provinces Allahabad in the Western Provinces traffic of the [illegible] of Sarun. [illegible] has therefore [illegible]

The Inspector Provinces (Mr. [illegible] along the [illegible] selected. The registering [illegible] Provinces [illegible] Junction was inter-provincial the subsequent [illegible]

It was said registration of purpose the [illegible] a branch office Hajeepore on [illegible] station at Dinapore another station [illegible] the Gaudhuk [illegible] and station of [illegible] registered at [illegible] Hajeepore [illegible] at respects [illegible] questionable [illegible] put station for [illegible]

Patna on the Ganges. Considerable great advantage [illegible] Ganges, [illegible] eastern boats, [illegible] joint during [illegible] to register [illegible] trade. The [illegible] rainy season [illegible]

At present existing establishment [illegible] Chowkeedar of [illegible]

The Native Collectorate during the pendency of [illegible] Hooghly, and [illegible] excellent [illegible] greater portion of [illegible] stations. Head [illegible] planning an [illegible] serve as a check [illegible] produce [illegible]

The most important of the imports via the canals is rice, and the bulk of this comes from Bengal. Backergunge has the reputation of being the finest rice district in Bengal, and a very large proportion of its exports goes to Calcutta. The rice is of superior quality, and is grown as a rule instead of being sold in the local markets. The principal districts in Backergunge from which rice is exported are Bauleah, 15,000 maunds; Nesmuttey, 2,95,300 maunds; Jhalakatty, 2,00,000 maunds; Burisal, the head-quarters of the district, 1,00,000 maunds; Indrapoora 1,71,000 maunds; Allygunge, 1,23,300 maunds; Kazeepoor, 2,50,900 maunds; Amgoria, 1,42,700 maunds; Lahooreah, 1,00,000 maunds; Ramgurdha, 1,13,200 maunds; Rajeha, 1,00,000 maunds; Patna Hat, 1,29,400 maunds; Alipore, 1,00,000 maunds; Bhooa, 1,23,400 maunds; and Mooreliguage, 1,33,300 maunds. The registered export from the district into Calcutta in 1874-75 was 20,00,000 maunds. Backergunge rice is also extensively exported to neighbouring districts, so much so that many cultivators in Backergunge find a profit in disposing of their superior rice by exportation, and in supplying their own wants with rice received from Sylhet, Dacca, Mymensingh, and Tipperah. Rice is imported during the rainy season, and the imports into Backergunge are said to vary greatly on this imported crop being good or bad, on the latter part of the autumn and for a portion of the succeeding season as well. Next after Backergunge, as a rice district—but often a wide interval—comes Dacca, the registered exports were 5,66,000 maunds in 1873 and 5,00,000 in 1874. The principal rice-supplying mauls in Dacca are Lohajung, Kasaregunge, Goureesur, Kallygange, and Bhowanigunge, but from none of these places do the exports exceed a lakh of maunds. It is believed that Dacca is a rice-growing district. It is calculated that the district of Mirzaheegunge, where the inhabitants average 5 cwts. each, imports at least a million and a half maunds rice. Rice supply comes from Backergunge, Tipperah, and Sylhet. The rest of the district is much of it exports, but not to any considerable extent. The Dacca district is on the great channels of export from Eastern Bengal, passes through this district, and supplies a large consumption in country and in Calcutta. Mymensingh also exports rice, and in 1873-74 exported about 2,00,000 maunds to Calcutta and 1,00,000 maunds to Assam. The trade by river is mostly in the hands of Mussulmans and Kayasthas. Dacca, Mymensingh, Backergunge, and Furreedpore are productive districts, but the greater part of the rice exported is consigned to Chittagong. Tipperah supplied 31,000 maunds in 1873, and 1,00,000 maunds in 1874. Furreedpore shows 40,000 maunds and 35,000 maunds. Jessore 50,000 maunds and 40,000 maunds, and the 24-Pergunnahs 1,00,000 maunds and 1,50,000 maunds. In the Silver Coast districts, Jessore and in the north eastern part of the 24-Pergunnahs, rice is not grown in quantity sufficient for the export trade, but large imports from the Backergunge district and from the Sunderbunds. Jessore and the 24-Pergunnahs are the districts in which the exports of rice from the 24-Pergunnahs are required for the Canal consumers. In the year 1874-75 the export of rice from the Diamond Harbour Canal amounted to 1,44,000 maunds. This export trade is very much localized, there a beginning has now been made in the trade along the Hooghly river, and in the Howrah district. Rice, which runs into Tolly's Nullah, is carried to Calcutta. Comparatively large quantities of rice are imported by steamer from Backergunge, Furreedpore, Kedgeree, Kedgeree, Coutheree, Kidderpore, and Calcutta. The rice is of superior quality, but in some of these places do the im

EEN THE DISTRICT OF MIDNAPORE AND CALCUTTA.

nd Midnapore canals have for some years been open
ve recently, especially the Midnapore canals, formed a
ute of rice from the fertile country which stretches
ast coast of the Bay of Bengal from the mouth of the
oad weight of goods conveyed through these canals was
s in 1871-72, 22,03,530 maunds in 1872-73, and
in 1873-74. The traffic registered at toll-stations
the returns hitherto collected by the Irrigation Depart-
ter of a very serviceable nature for statistical purposes,
from the 1st September of the present year, been
Cassimon system of registration sanctioned by the
noe.

andary of the south-west districts of Bengal drain two
great Calcutta. A great part of the produce of the fertile
Midnapore is carried from the Hooghly and Kassaboree
canals steam of the Hooghly. The fourmen, when
ds are most exciting themselves of the tidal currents
ge and safer navigation of the canal. In this way
rice of the great market of Balleghye on the head
Esplanade row, which is largely supplied from the
districts way to Calcutta, without passing through
of the export trade also of the south of Midnapore
a great deal of that of the busy and rising mart of
ssumption of the rivers Rooparain and Hooghly,
ch chiefly further down the river, is conducted to
ugh water highways. This is a dangerous route,
ase of all traffic from Balleghye and southward
ipience of waiting often for several days in the
ecessary. Intricate Tents are swooped, the one
mmer of 1875, that Collector of Midnapore reported
at a fleet of 10 boats in front of the Clowrolly
ass, a great part of the rice exports adopts as
follows the course of the Hidgelee tidal canal,
the whole east of the Midnapore division, enters the
ugh the Tamlook river, and falls into the Hooghly
the Coopamarie. Generally speaking, almost
ats come from the south side, especially down the
ge, while from the surplus stock of Burrapore and
ge lots of maunds. During 1872, when the
ported rice, as has been mentioned, was 4 lakhs of maunds
ls in 1873, it dropped 58,175 maunds of rice, and
ports again in 1874 the canal earned no less than
of rice, and 2,83,536 maunds of paddy. It
s of the importance that such a canal as this
ssistance of the canal, that the saurce is proved by
s sent by the canal. A very fine steam vessel
as lately put on the service across the Cleopatra Bar to
ed directly the Hooghly at Chowbagah, and to
ommunication with Calcutta. In 1873-74 the amount of rice
ported during that year 2,29,720 maunds were conveyed
ers, several hundred during the same period, of which
the greater part was to be shipped from False Point.
principal traffic along these canals is salt and coal,
ed salt or from Calcutta. 4,50,000 maunds of
along these canals in 1873, and 5,05,110 maunds in
ding salt export entirely, along the Midnapore
very important consumption either for distant
Calcutta, however, about 21 millions, would at
ly more than 2,00,000 maunds of salt in the
ffice must therefore have been carried to Calcutta
2,00,000 maunds were manufactured in 1873 and 2,54,950
the number of which in both years went to the
canal was measured up the Irrigation Department
ing of traffic vessels. The traffic along the Orissa
s chiefly inland, and comprises very small in
Midnapore canals the traffic of as has been shown

TRADE OF CALCUTTA WITH THE INTERIOR OF BENGAL.

The trade of Calcutta with the interior of Bengal has already been amply illustrated, and it will have appeared that Calcutta is the main centre of commerce to which all the principal merchantable produce of the province is consigned, and from which salt is exported for the supply of the several districts. Besides salt, the main staple of export from Calcutta is cotton piece-goods; but the present returns of inland trade are not sufficiently complete to enable even an approximation to be made of the quantities of piece-goods sent up-country, or of their destination. But although it is not necessary to furnish again a detailed account of the trade of the metropolis, it will probably be found convenient to summarize the traffic in a brief abstract, and an attempt has been made to effect this, as far as possible, in the subjoined statement, which shows the principal imports into Calcutta from Bengal during the years 1873 and 1874. The imports *viâ* the Bhagirathee have been calculated on the totals registered for Calcutta at Sahebgunge, after deducting the traffic shipped west of Sahebgunge, and sent to Calcutta by routes other than the Bhagirathee. The return is incomplete in many respects. There is no law which can compel boatmen to declare the whole weight of the cargo in their boats, and there can be no question but that the weight is often understated. The returns of traffic furnished by the Railway Companies are most incomplete, and, except in rare cases, show neither the places of export nor the places of destination. The amount of traffic borne by the River Steamer Companies is only partially known to Government, and it has therefore been excluded from the statement. But in spite of these drawbacks, the statement below is one of considerable value and interest.

Imports into Calcutta and its environs, 1873.

Articles.	Quantity.	Value.	Rail.	Steam.	Country boats.	Rail.	Steam.	Country boats.
			Maunds.	Maunds.	Maunds.	Rupees.	Rupees.	Rupees.
Rice	10,00,000	2,00,00,000	2,00,000	2,00,000	6,00,000	40,00,000	40,00,000	1,20,00,000
Paddy	2,83,536	42,53,040			2,83,536			42,53,040
Pulses	1,00,000	20,00,000	50,000	50,000		10,00,000	10,00,000	
Wheat	1,00,000	20,00,000	50,000	50,000		10,00,000	10,00,000	
Oilseeds	2,00,000	40,00,000	1,00,000	1,00,000		20,00,000	20,00,000	
Ghee	20,000	8,00,000	10,000	10,000		4,00,000	4,00,000	
Sugar, refined	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Sugar, unrefined	1,00,000	30,00,000	50,000	50,000		15,00,000	15,00,000	
Molasses	50,000	5,00,000	25,000	25,000		2,50,000	2,50,000	
Cotton	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Jute	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Hides	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Tobacco	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Indigo	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Saltpetre	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Opium	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Coal	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Other articles	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Total	30,53,536	7,89,53,040	8,85,000	8,85,000	12,83,536	3,57,50,000	3,57,50,000	1,74,53,040

Imports into Calcutta and its environs, 1874.

Articles.	Quantity.	Value.	Rail.	Steam.	Country boats.	Rail.	Steam.	Country boats.
			Maunds.	Maunds.	Maunds.	Rupees.	Rupees.	Rupees.
Rice	10,00,000	2,00,00,000	2,00,000	2,00,000	6,00,000	40,00,000	40,00,000	1,20,00,000
Paddy	2,29,720	34,45,800			2,29,720			34,45,800
Pulses	1,00,000	20,00,000	50,000	50,000		10,00,000	10,00,000	
Wheat	1,00,000	20,00,000	50,000	50,000		10,00,000	10,00,000	
Oilseeds	2,00,000	40,00,000	1,00,000	1,00,000		20,00,000	20,00,000	
Ghee	20,000	8,00,000	10,000	10,000		4,00,000	4,00,000	
Sugar, refined	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Sugar, unrefined	1,00,000	30,00,000	50,000	50,000		15,00,000	15,00,000	
Molasses	50,000	5,00,000	25,000	25,000		2,50,000	2,50,000	
Cotton	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Jute	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Hides	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Tobacco	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Indigo	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Saltpetre	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Opium	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Coal	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Other articles	1,00,000	40,00,000	50,000	50,000		20,00,000	20,00,000	
Total	30,29,720	7,88,45,800	8,85,000	8,85,000	12,59,720	3,57,50,000	3,57,50,000	1,73,45,800

The annexed statement shows the export of salt into the several districts of Bengal along the water-routes of the Nuddea rivers and the Calcutta canals:—

Consignments of SALT *into the interior of Bengal, 1874, by river routes.*

Places of Destination.		By the Bhagirathee, registered at Nuddea.	By the Jellinghee, registered at Nuddea.	By the Matabhanga, registered at Kishnaghur.	By the Bhagirathee, registered at Sahebgunge.	By the Calcutta canals.	Total.
		Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
North-Western	Provinces	10,510	6,000	.....	.....	10,000	26,510
Purneah	...	1,86,200	8,280	.....	.....	.....	1,94,480
Sarun	...	1,57,140	.....	.....	.....	.....	1,57,140
Tirhoot	...	1,57,140	.....	.....	40	1,22,000	1,57,152
Patna	...	90,103	2,340	.....	100	.....	92,443
Monghyr	...	1,43,148	300	.....	2,300	.....	1,45,748
Bhaugulpore	...	2,45,853	.....	2,000	2,300	33,282	1,80,435
Beerbhoom	...	62,162	64,622	200	15,643	.....	1,82,627
Purneah	...	9,459	.....	.....	.....	.....	9,459
Santal Pergunnahs	...	.....	.....	.....	.....	.....	6,000
Rungpore	...	66,719	375	6,125	.....	.....	73,219
Maldah	...	1,45,000	44,063	14,032	1,371	.....	2,04,466
Dinagepore	...	1,45,000	25,703	27,250	1,285	.....	1,99,238
Rajshahye	...	9,076	53,323	24,000	.....	1,500	87,899
Pubna	...	.....	.....	3,125	.....	.....	3,125
Bogra	...	.....	1,000	2,00,754	.....	3,04,207	5,05,961
Pubna	...	.....	.....	.....	.....	12,500	12,500
Mymensingh	...	.....	.....	30,470	.....	6,70,899	7,01,369
Dacca	...	.....	.....	2,650	.....	.....	2,650
Mooxeegunge	...	1,05,190	13,230	2,650	2,469	.....	1,23,539
Meerzaeshmul	...	67,486	.....	.....	.....	.....	67,486
Howrah	...	.....	.....	.....	.....	1,050	1,050
Hooghly	...	.....	.....	.....	.....	69,500	69,500
24-Pergunnahs	...	.....	.....	.....	.....	12,000	1,72,323
Nuddea	...	43,665	39,658	96,999	.....	2,80,735	2,60,057
Jessore	...	.....	.....	40,000	.....	61,995	1,01,995
Kingsepore	...	.....	.....	17,000	.....	3,37,673	3,54,673
Backergunge	...	.....	.....	.....	.....	64,503	64,503
Noakholly	...	.....	.....	.....	.....	28,800	28,800
Tipperah	...	.....	.....	.....	.....	2,38,400	6,42,240
Assam	...	.....	.....	37,840	.....	.....	37,840
Unspecified Districts	Eastern	.....	.....	8,736	.....	6,702	14,938
Total		8,36,997	2,20,547	5,80,080	21,584	24,00,852	41,42,593

The whole of this supply of salt is consigned from Calcutta. By the East Indian Railway the exports of salt up-country amounted in 1874 to about seventeen lakhs of maunds; by the Eastern Bengal Railway the exports amounted to 84,767 maunds; by the Midnapore canal they amounted to 6,52,118 maunds. Altogether the registered exports of salt from Calcutta amounted in 1874 to 65,79,442 maunds.

The average annual consumption of salt in Bengal and Assam during the past three years is shown by the salt returns of the Board of Revenue to have been about 79,50,000 maunds. Seventy-nine and a half lakhs of maunds or a population of 66¼ millions gives a consumption of 4·79 seers per head or 9¾lb. In round numbers, out of this supply 7½ lakhs are imported almost entirely from England, but also to a small extent from foreign and from Indian sea-ports. The remaining five lakhs are made up of excise salt manufactured mostly in Orissa, of a certain amount of Gowjam salt consumed in the tributary estates of Orissa, of illicit salt consumed in Behar and in the saline tracts along all the coast of the Bay of Bengal, and of a small amount of foreign salt consumed along the eastern and northern frontier of the province.

It has been shown that the registered exports of salt from Calcutta into Bengal and Assam amount to about 65¼ lakhs. It is believed that very little of the salt sent by the East Indian Railway goes beyond Bengal. The consumption of the 24-Pergunnahs district and of Calcutta itself, and of the Hooghly, Howrah, and other districts that lie south of the south-eastern post of registration on the Bhagirathee river, etc. to which supplies are therefore to be added, cannot be registered, amounts to at least four millions and a half, and consumes not less than five and a half lakhs of salt. The amount of registered salt that finds its way into these districts is not more than a lakh of maunds. The importation of Liverpool salt into Chittagong amounts to two lakhs annually, and the distribution of that salt is of course not included in the statement above given of salt exports from Calcutta. We have thus a total of 73½ lakhs of salt imported into Bengal of which the destination can be traced. The total of imported salt has been stated to be 7¾ lakhs. A small difference only remains of about 13 lakhs of maunds, attributable to under-registration. The Lieutenant-Governor considers that this result may be accepted as satisfactory, and as affording verification of this part of the internal trade returns. It seems to show that the attempts to register the river and canal traffic of Bengal have already attained a very considerable measure of success.

IMPROVED SYSTEM OF REGISTRATION OF BOAT TRAFFIC.

The great importance of the question of the registration of internal traffic within the Bengal provinces has of late years been fully recognized, and considerable progress was made under the orders of the late Lieutenant-Governor, Sir George Campbell, in registering and recording this traffic. Unfortunately, owing to the tedious nature of the statements in which the statistics are recorded, and the want of an adequate agency, a long period has always unavoidably elapsed before the registration returns have been considered by the Statistical Department of the Secretariat. In the earlier part of this issue it will, however, be seen that much valuable information has lately been collated and published.

The most important traffic of Bengal is that which is registered on the Calcutta canals.

The traffic along the Nuddea rivers, that is along the Bhagirathee, the Jellinghee, and the Matabhanga, is also registered.

The Orissa and Midnapore canals have been for some years open to traffic, and have recently, especially the Midnapore canals, been the principal routes for the export of rice from the fertile country which stretches along the south-west coast of Bengal from the mouth of the Hooghly. The traffic on these canals is registered.

The above traffic is all registered at toll-collecting stations. In 1872 a commencement was made of establishing registration stations for the sole purpose of registering the traffic. A station was in that year established by Sir George Campbell at Sahebgunge, with the object of registering the traffic between Eastern and Northern Bengal, and the districts of Behar and the North-Western Provinces.

Sir Richard Temple has recently sanctioned arrangements for the further extension and systematisation of the registration of traffic, in order that, if possible, a complete system of the registration of river-borne traffic in Bengal may be established. He has given the subject his careful consideration, and the annexed statement indicates the principles on which, subject to the approval and sanction of the Government of India, the system is being completed, and the arrangements to which, after consultation with the Commissioners, His Honour has accorded his provisional sanction.

The whole system of registration is to be controlled from the Statistical Department of Government, where the returns are to be analysed and regularly published and circulated to officers [illegible] would have been possible to have organised what may be called a district system of registration, under which all the rivers-borne traffic would, from each district, would have been registered at stations within the district itself, but such a localisation of the registration is to be deprecated for many reasons. It would involve the multiplication of small stations, and small stations will generally be far removed from the supervision of a district or sub-divisional officers, and would necessarily have to be placed under low-paid clerks, who would, it is to be feared, practise oppression and interference with the trade. Moreover, goods would be registered more than once if they were registered while passing under streams, and again at the large central stations. According to the system of the district system, boats would be registered more than once if they passed through successive districts. The Lieutenant-Governor does not therefore desire that district officers should undertake a complete registration of the traffic of their own districts. Bengal must be taken as a whole for the purposes of traffic registration, and in order to register and ascertain all the traffic of the province, it is indispensable that supervision should be exercised from only one head-quarters, and that a uniform system of registration should be introduced everywhere.

Simplicity moreover is essential. In considering this matter from a general point of view, and not merely district by district, as discussed by the Commissioners, it was evident that a comparatively small number of stations, well chosen, would answer the purpose as well as a large number. It will create expense, and also confusion, if more registration stations are established than are absolutely necessary to register the trade on the main lines of communication. So long as the traffic is registered on the large streams, there is no necessity for the establishment of several small stations on the rivers and canals of the large streams. There is no doubt that the present system does not fail into the big streams will fall to be registered, but it is urged that such traffic is so small and insignificant in comparison to the whole as to be of no consequence. The question also of the expense of registration must not escape notice. Special precautions will be taken against the issue of tickets, to prevent boats being registered [illegible] precautions will be of no avail if the cargoes are [illegible] once in the small boats which come down the [illegible] river, and once

like Serajgunge, Nurainguinge, and Goalundo. It is ...ere sent to those stations from all the small rivers ... these transhipped for conveyance to Calcutta. It ...rom the feeder rivers, the goods will assuredly be ... enough no boat may be registered more than once. ...erator, therefore, did not consider that, for general ..., it would be necessary to retain any registering ...stems of feeder rivers of Bengal. The multiplying ... already been awarded, and at those places where ...onvenient it has been an object to arrange for as ...igh a registration as possible. Stations have only ... small number of principal places on the large rivers, ... the receiving and distributing depôts of the trade ...country.

...ppears ite in train for ascertaining the amount of ...orest traffic on the Bengal rivers, and it must be ... registration stations have no concern with the ... traffic. The principal steam companies are the ...an Navigation Company, the Eastern Bengal Rail... the River Steam Navigation Company.

REGISTRATION STATIONS.

... of frontier posts between Bengal and the North... has as was arranged at a conference held at ..., soon after the Government of the North... ...ions that the registration of the river-borne ...ffic at certain points on the banks of the Collector ... post on the Western Bengal Railway.

... traffic between Surma and the Naga Western ... have yields a current of five thousand ... a minute, and is carried on by a number of ... Besides the frontier ... a small number of principal places on the large rivers, ... the receiving and distributing depôts of the trade ...country.

...app

the South-Western Frontier, a post has been ... road between Cuttack and Ganjam; and as the ... for its location was found to be at a place called ... Madras should undertake the registration, ... being paid by the Government of Bengal. It is ... land traffic between Orissa and the Madras ... intercepted at this new station.

... been no organized attempt made to register ... between Bengal and Nepal; but it is known ... certain returns of the figures considerable. Great ... been found in obtaining a complete system of ... but as far as extends there the trade finds its ... channels. The best arrangements that seem ... circumstances; but it must be understood they are ... liable to modification.

... the land trade between the Chumparan district ... by three routes. One to the west, running ... taking the trade from Bettia and Segowlee; ... east, running through Kuttkeawa, where many of the ... have on the eastern boundary of the district, passing ... purpose at Ghormara. By far the greater part of ... Kuttkeawa; that by Kanoul and by Ghormara ... Lieutenant-Governor has sanctioned at Kuttkeawa ... establishment on Rs. 20 as Rakoh for establishment on ... a person for establishment on Rs. 10 per measure. ... the trade by Ghormara is almost nominal during ... and the Collector will exercise his discretion in ... allowance during the rainy months or not. No orders ... for the registration of the river traffic are arranged ... by the Government of the North-Western Pro... nature of river-borne traffic between Chumparan ... (Gandak area).

... Martin pointed out the establishment at ... in the district of ... was same from this way ... from Nepalese ground in Nepal, which ... [illegible] ... that the roads all converged at two ... [illegible] ... The amount of the trade ... [illegible] ... Rs. 20 has been sanctioned at Amouah, in the north-west of the district, which is described as an important position, and clerks on Rs. 15 a month at Sikteo and Kaleoghat, which were also places recommended by the Collector. It was not contemplated in these arrangements that the registering clerks should visit markets on the Nepalese side of the border, but no special instructions have been issued to that effect by Government. The Resident in Nepal is in communication with the Commissioner of Bhagulpore on this subject, in order that there may be no misunderstanding between the Purneah and the Nepal authorities. The Lieutenant-Governor certainly would not wish that any inquisitorial action should be encouraged in any place within the Nepal frontier without the cognizance and approval of the Durbar; but he understands that there will be no objection to accounts being made within Bengal limits to make the registration as complete as possible.

In addition to the establishments above sanctioned, an allowance for contingencies of Rs. 3 per mensem has been allowed in each of the districts of Chumparan, Muzaffurpore, Durbhunga, and Bhagulpore, and Rs. 5 in Purneah.

For the frontier trade of the district of Darjeeling with Sikkim three frontier stations have been sanctioned, at Pheydong, at Rungeet, and at Tukvah. A clerk on Rs. 20 has been sanctioned at each of the former stations, and on Rs. 12 a month at the latter station, with Rs. 5 a month for contingencies. For the registration of the frontier trade between Darjeeling and Nepal clerks have been sanctioned from the 16th September to the 15th of June of each year at the frontier stations of Kursiong (Composite Adhikaree), and Nuksuri-bareo. For the registration of traffic between Jalpaiguree and Bhooteea, an establishment on Rs. 20 a month has been established at each of the four stations of Chamoorchee, Bullia, Buxa, and Haldibary during the cold weather. The Commissioner of Cooch Behar has taken the necessary action as regards the Deb Rajah of Bhooteea to prevent any misapprehension of the intentions of Government in effecting the registration of traffic.

An effective registration of the traffic between Eastern Bengal and Assam presents also considerable difficulties owing to the great length of the frontier line. The trade is principally by water, and it will be impossible or unfair to maintain a supervision over any except the main river routes by which the great bulk of the traffic is conveyed. The stations which it has been proposed to establish for registering purposes are as follows:—

1. One on the Cooch Behar frontier, on the road between Tezpore and Darang.
2. One at or near Dodhnai, on the river Brahmaputra.
3. One at Chilmarie, on the Jamporeah route, the south-west corner of the Garo Hills.
4. One near Dewangunge, on the frontier between the district of Mymensingh and the Garo Hills.
5. One at Bhowrah Bazar on the Meghna, at the tri-junction point of the districts of Sylhet, Mymensingh, and Tipperah.

Of these stations the most important are those at Chilmarie and Dewangunge Dutsai, which have been already sanctioned in order to register the Eastern Bengal frontier traffic. It is still under consideration whether the other posts should be established or not.

With regard to Hill Tipperah, the Lieutenant-Governor proposes to continue the registration to that trade (consisting principally of cotton and forest produce) which passes down Hill Tipperah into Bengal, and to the exports which come from Bengal into Hill Tipperah. The arrangements are still under consideration. On the South-Eastern Frontier there is no land trade of sufficient importance to require registration, such traffic as exists between the district of Chittagong and the province of British Burmah is almost entirely conducted by sea.

NOTE ON RICE STATISTICS BY LIEUTENANT J. W. OTTLEY, R.E.

[This original object of the investigation which led to the compilation of these notes was to verify the correctness of the statements put forward by Mr. Arbuthnot, the Executive Engineer in charge of the Orissa portion of the Mahanuddy Canal, as to the average outturn of paddy per acre.

During the course of the investigations then undertaken, some information was obtained on other points connected with the rice plant, and I was directed to embody in a note any available on the subject which might appear likely to be useful or interesting to the Canal Engineers in Bengal.

In the preparation of this note I have availed myself of the following sources of information:—"Rice Statistics of Bengal, Behar, and Orissa," being the answers received from every district in the province to a circular issued by the Agricultural and Horticultural Society of India; The Bengal Administration Reports for 1871-72 and 1872-73, Mr. H. J. S. Cotton's articles in the *Calcutta Reviews* of January and April 1874; the Revenue Reports of the Irrigation Department, Bengal; Colonel Haig's Notes on Orissa; Dr. Hunter's Statistics of the Cuttack, Pooree, and Balasore Districts; Colonel Searle's Project for the Saheb-gunge Canal; Mr Levinge's Report of 1870, on the country traversed by the Soane Canals; Baboo Ramshunker Sen's Agricultural Statistics of Jessore; the Dacca Blue Book; and lastly the files of the *Indian Economist*, *Agricultural Gazette of India*, and *Statistical Reporter*.

Throughout this note, when speaking of the outturn of crops, I have used the term "paddy" to mean "unhusked rice," and the term "rice" to mean the grain after it has been cleaned or has undergone the husking process. Many writers appear to consider the words as synonymous; this, however, is not the case, and as the proportion which "rice" bears to "paddy" is variously estimated at from ⅓ to ½ths, the distinction is important.

Another point requiring notice is the variety of land measures adopted in the province, the usual Bengal "beegha" is 14,400 square feet, or nearly 3 to an acre; the beegha in use in South Behar is 27,225 square feet, or ⅔ths of an acre; the Cuttack beegha or "mâh" is nearly equal to an acre: but besides these I have found in the course of my investigation local beeghas varying from 3,600 square feet to 43,535 square feet. The greatest care is therefore necessary in comparing the outturns of different districts. In this note I have reduced all calculations of outturn to "maunds of paddy per acre."

A third point requiring notice is the meaning to be attached to the term "average outturn." Mr. Knight observes that, "in Bengal amongst the people the outturn is usually given in 'annas.' They use the term '16 annas' to signify an ideal crop, seldom or never actually reaped, which should therefore be held to mean a 'bumper crop.' A fair average crop is described by them as 12 annas, and a harvest a little above or below the average as 13 annas or 11 annas, as the case may be." In this sense a 4-anna or 8-anna crop should mean respectively ¼th or ½th of an average yield.

Rice is grown more or less in many countries, in America, in the south of France, in Spain, Piedmont and Lombardy, in Egypt, on the west coast of Africa, in the Islands of Bourbon, Mauritius, and Madagascar; but the rice continent of the world is Asia,—and in Asia, British India is pre-eminent as the territory where rice cultivation most prospers.

The largest crop ever known to be raised in America was in 1847, when it reached 51,839 tons; since then it has decreased, and in 1873 was only 14,294 tons, of which 10,942 tons were exported. Italy in 1867 exported 85,100 tons, and Spain in 1866 exported 8,975 tons, but these amounts are insignificant when compared with the exports of Asia generally, and especially with those of British India, as will be seen from the annexed statement taken from Mr. Cotton's "Rice Trade of the World":—

Abstract General Statement showing the Sea Exports and Imports of Rice in the World.

Exports from	1869.	Imports into	Tons.
Bengal, about	500,000	Great Kingdom, except Ports	150,000
Madras, ,,	100,000	Continental Ports, about	100,000
Burmah, ,,	700,000	Ghent, &c., about	80,000
Siam, ,,	350,000	Marseilles, ,,	100,000
Java, ,,	150,000	Genoa, ,,	60,000
Italy, ,,	70,000	Mauritius, ,,	24,000
Spain, ,,	8,000	Bourbon, ,,	20,000
Egypt, ,,	70,000	Reunion, ,,	40,000
Brazil, ,,	8,000	West Indies, ,,	8,000
Ceylon, ,,	12,000	Australian Colonies, ,,	10,000
Miscellaneous, ,,	12,000	Miscellaneous, about	12,000
Total of Rice Exports, about		Total of the Imports, about	1,200,000

Nearly all the rice from Burmah, 1,350,000 maunds, exported or sent from Bengal, about 1,000,000 maunds, from Calcutta, 300,000 from Chittagong, and 600,000 from the Orissa ports.

The following statistics are also taken from Mr. Cotton's paper:—

The declared value in pounds sterling of the rice and paddy exported from British India during 1872-73 amounted to £6,701,028; of this amount the Burmah produce was valued at £2,851,254, the Bengal at £1,959,362, the Madras at £749,518, and the Bombay at £197,913. The average declared value per ton of rice exported was £8-7-0 for Bombay, £7-13-0 for Madras, £5-2-0 for Bengal, and £4-4-0 for Burmah. The total amount of duty collected at 3 annas a maund (82 lbs) on the exports of rice and paddy in the same year was £617,497.

American rice, from the careful cultivation to which it has been subjected, has acquired a quality far finer than that of any other rice. Persistent efforts have been made by the Indian Government to introduce the Carolina varieties into India, but hitherto with only moderate success. On this point Sir George Campbell, in his Administration Report for 1872-73, writes thus:—"For Carolina rice cultivation an artificial supply of water is necessary, and instructions have now been issued that the seed should be sown on our canals. Carolina rice is much more highly priced in the market than ordinary rice, and it may be that with command of water we shall be able to realize from the cultivation of Carolina rice much that is new mark on canals."

Bengal rice may be broadly divided into three qualities: Table rice, Ballum, and Moonghy; of these Table rice is of course the best, Ballum next, whilst the Moonghy is common or inferior rice. The quality of good Burmese rice is beyond question much inferior to the quality of good Bengal rice, and in comparison is usually considered unpalatable and rejected as food by rice-eating communities. The enormous European imports from Burmah, exceeding half a million tons per annum, are, it is believed, consumed principally in the manufacture of starch and spirits, and in the numerous other manufactures in the composition of which rice forms an ingredient. Burmese rice sells in the English markets at from 3 to 11 shillings a cwt., the highest prices never exceeding 12 shillings. Good Bengal rice commands 14 to 18 shillings in the market, whilst good Carolina has sold at 30 to 40 shillings per cwt.

Mr Cotton writes:—"The districts of the whole of Bengal Proper, or the great alluvial and deltaic plain between the Himalayas and the Bay of Bengal, and of Orissa, or the diluvial territory between the hills and the sea connecting these provinces with Madras, a level area of nearly one hundred thousand square miles, uninterrupted by a single hill, rich in black mould and of boundless productive capacity, subject to recurrent inundation and enjoying natural facilities, such as no other country in the world possesses, for canal irrigation, constitute the great rice-producing tract of Bengal, which is ordinarily richer, more than self-supporting. The surplus products of this vast area, generally speaking, is taken great advantage of which the rice-producing districts of the province are capable. The imports into Calcutta have to find food for the non-producing population and for export up-country, Chittagong is the centre of a large and rapidly-growing export trade by sea. Patna is the emporium of the trade for Behar and the North-Western Provinces.

The imports of rice into Calcutta in an ordinary year may be set down at about 20 million maunds:—

Of which 10 millions are exported annually as rice from Calcutta	
,, 7 ,, ,, consumed by the resident population	
,, 3 ,, ,, pass through Calcutta in the ordinary course.	
Total 20 million maunds.	

The greater portion of this comes from the Burdwan, Bhurgunga, the Bhaugulpore Division, the Dooreah district, the Midnapore district and Orissa.

The second exporting district in Bengal proper is Chittagong. The bulk of the rice comes from Tipperah, Noakhally, and the island of Dukhin Shahbazpore to Backergunge, and is principally exported by sea.

The emporium of the up-country trade, as above stated, has been described as a centre for collection and distribution.

The following statement given by Mr. Cotton shows the principal directions and quantities of rice traffic in Bengal:—

	Maunds.
Exports from Bengal into Calcutta for consumption	1,000,000
Exports from Bengal into Calcutta for re-shipment to the metropolis and its environs	10,000,000
Exports from Central, Upper, Central, and Eastern Bengal into Behar and the North-Western Provinces for consumption in those districts and Assam	6,000,000
Western Provinces 2½ millions.	
Exports from the Sunderbunds and Chittagong	3,000,000
Exports from Orissa by sea other than into Bengal ports	3,000,000
Exports from Bengal into Assam	500,000
Total	23,500,000

...ation are mostly taken from Mr. Cotton's ...

...square miles; population 209,674; average ...—Rice gets a good deal of rice by land for ... but I know are at present no data to ... what amount it is. It also exports by sea for the ... about 1,000,000 maunds per annum, but the data ... cannot be accurately ascertained.

...square miles; population 1,444,782; average ... rice is exported, some ... and some to ... ports; the exports by sea ... about 500,000 maunds.

...square miles; population 770,222; average ... [illegible] ... about 1,000,000 maunds ... Midnapore sub-district goes to Calcutta, as ... Medinee and Jellasore ports, and the remainder ...

...square miles; population 2,540,953; ... 62·25 inches.—The Collector states that ... 1,500,000 acres, the following proportion ...

	Acres.
...	150,000
...	1,000,000
...	350,000
...	1,000,000

...considers that 600,000 acres do not require ... estimated produce from the land under rice ... 1,000,000 maunds of rice ... 25 inches, average ... exports by sea for the ...

ordinary outturn per acre of first rate rice land is 45 ...
...cond rate land, 34 to 27; and of third rate ...
...maunds.

...ordinary outturn of paddy per acre is 30 to 39 ...
...maximum 48 maunds.

...ordinary outturn of paddy from an acre of ordinary ...
...be stated to be from 13 to 18 maunds.

...erage outturn 26 to 30 maunds per acre, maximum ...
...maunds.

...om 25 to 33 maunds. The result of a very favour... ...to 50 maunds of rice, 30 to 35 of *sugni*, and 45 to ...

...Midnapur division and subdivision of Bengal the ...tturn is from 30 to 13 maunds of paddy; in the ...ivision, from 8 to 10 maunds. The maximum ...ield is about 30 maunds.

...Sealdah division from 10 to 19 maunds, Sherghatty ...maunds, and Arrangatta 10 to 16 maunds. Maxi... ...um 40 maunds.

...erage outturn from 15 to 24 maunds of paddy. ...r 21 answers from zemindars to a circular issued ...ector, gives the average outturn at 120 maunds. ...ssrs. Burgess, Thomson, and Myles of Behea, ...ort 60 to 70 maunds; Mr. Orange, of Betiea, ...13 maunds; and Mr. Macgowain, of Dubree Ghat, ...ported to be given in Ceylon Heywood states ...erage outturn of rice is from 12 maunds of paddy ...ported as follows for different localities:—...ah 15, Hooghly 12½, Kajoree 15, Dighaugan 10, ...ore 32, Sooksagurra 10; maximum known 57 ...

...erage outturn of paddy is about 19 maunds per ...

...the Uttergaon Estate, Jessor, average outturn ...ds, and Mr. Grant estimates the average ...ds. Mr. Grant states that the ...ds per acre.

...Sylhet, Cachar, and Assam the average ...ld is about 2,000 lbs. or 50 maunds ...Tripura Triumph the average yield is 40 maunds, and ...

...ge outturn ...

...difference between the value of the autumn operation ...ason and the value of the intervening account ...ould be raised.

The high lands are ploughed once or twice in February, the sandy nature of the soil rendering this operation feasible, but the lower and harder lands await the first fall of rain. Baboo Judoo Nath Mookerjee, the Deputy Revenue Superintendent of Midnapore, states that the soil is greatly benefitted if the cultivators can give the first ploughing by the middle of February, and says that the Bengalis have an old saying on this point:—"Blessed is the emperor, and pious must be his empire where rain falls by the end of the month of *Magh*?" (February). The land is again ploughed in March, or as soon after as showers sufficient for the purpose fall. Four to five ploughings are usually considered sufficient preparation for the ground. In April or May the seed is sown broadcast and the plough is passed over it; no rain is required for this operation. The earlier the seed can be sown, and the stronger the young plants are when the rains first set in, the better is the chance of a good crop. In some districts when the rice is about 5 inches high, the ground is again ploughed and harrowed. Mr. Taylden says that in Orissa about July or August the plough is driven through the young rice in order to thoroughly loosen the soil at the roots. The weeds, grass, &c., are then removed, the rice plants replanted by hand, and a sort of bhut harrow (*mathi* or *mai*) is drawn over the field to level and consolidate it. In Midnapore the custom appears to be to plough through the young rice first about the end of June, again after an interval of some 10 days, the harrowing following this second ploughing at an interval of about 10 days or so.

The above method of cultivation refers to the treatment of broadcast rice; when transplanted rice is grown, the following is the method followed. In addition to the ploughings made during the dry season, as in the case of broadcast rice, the fields are twice ploughed at intervals of at least four or five days, each ploughing being immediately followed by a harrowing, and the transplantation should begin as soon as possible after the second harrowing. A large quantity of water is required on the ground during these operations, the proper time for which is between the middle of June to the middle of September. Weeding, after the grass is the only work that remains to be done after the rice are been transplanted.

At reaping time, the usual practice is to cut the stalks midway; the ripper part being taken home with the grain, while the lower half or stubble remains in the field, and is often eaten up by cattle or sometimes fire is allowed to decompose there. Baboo Ramnarain Sen states that grain intended to keep for seed is reaped a few days before cutting, dried for three days and stacks whilst the grain inclosed in husk is dressed within four to five months, wearing as the weather is fair or foul. The chaff after winnowing is thrown away. The inner stalk of the plant, after being divested of the green is dried and stacked carefully for the cattle to subsist upon during the rains and the ensuing season.

As a general rule, manure is not used for paddy-fields on account of the labour and expense its application would entail. In several districts, however, cowdung, horse-litter, and wood-ashes are used as manure; the grass and weeds are also burnt and the ashes ploughed into the soil. A few places the cultivators dig out the mud from the sides of tanks and apply it to their fields.

Over the whole of the province, the land is a general rule is cropped every year, the high sandy soils yielding yearly two crops, viz. an early rice crop and subsequently a cold crop. In some districts the cultivators, although raising a crop of rice on the land every year, follow a regular system of rotation, and substitute one variety of rice crop for another. I have noticed complaints in many of the reports that the yield now is less than formerly.

Mr. Taylden remarks that in Orissa, "so far as irrigation is concerned, there are three stages in rice cultivation, at one or other of which water is more or less needed almost every year to ensure a full crop, viz. (1) by ploughtime and sowings in April or May, (2) in July or August for the subsequent weeding and transplanting, and (3) in October to thoroughly mature the crop, and sometimes, moreover, that it would be well if the canals could supply it in February for the early cloud crops.

I have endeavoured to arrive at some satisfactory conclusion as to the average cost of cultivation, but I am afraid that it is well nigh impossible to do so. In some cases blind approximations or proportions of three to seven are mentioned, but these in most cases do not receive much money payment; they are given their meals and a certain proportion of the produce in kind, as for instance on the Sundarbans the proportion of the produce in kind, as for instance on the Sundarbans the proportion given away amounts to one-fifth of the produce after it has been threshed and cut. In the majority of cases the labourers are probably the sons and daughters of the cultivators, the manure is the produce of the home cattle, and the cattle are fed, and grazing carries, &c. on the land, &c. such that almost the whole of the outlay is in kind. It would be almost impossible in any case to estimate the interest to the cultivator, the gain in money value of the labour, and the increase in the outturn of the land, consequent on the use of manure. Besides these considerations, in this way of ascertaining the

average cost of cultivation, there are others. It is quite apparent, from a perusal of the returns, that great differences of opinion exist as to the amount of labour required, almost the only point on which all are agreed are—first, that 6 men and 6 ploughs with 6 pairs of oxen can plough an acre of land in a morning; and secondly, that 12 men will reap an acre in a day. The cattle are rarely worked more than two or three hours in the day at the plough, for as they in most cases receive no food except what they can pick up by grazing, they are not fitted to endure much hard work.

The estimates of cost given in district returns which I have consulted vary from Rs. 6 to 15 per acre; but after very carefully comparing the various items, I think that perhaps it may be assumed that the cost of cultivation is equivalent to about one-third of the value of an average crop, or say from Rs. 6 to 8 per acre exclusive of rent; but for the reasons above given, I do not believe that this represents the cost to the cultivator, who would rarely have any money expenditure. On one point, however, all the returns seem agreed, viz. that whatever the cost of cultivation may be, the outturn of the rice crop leaves the ryots a very small margin of profit, and consequently he is generally described as being entirely in the hands of the mahajun, or money-lender; as living chronically from hand to mouth, and as being unable to successfully withstand the pressure of two or three bad years.

Doubts having been frequently expressed as to the value of or necessity for, irrigation for rice crops, a great number of experiments to ascertain the outturn of irrigated and unirrigated crops were carried out in 1873 by Mr. Appolin in the Midnapore district. The results may be here briefly stated thus:—The unirrigated lands gave an outturn of about one-fifth of a bumper crop, lands irrigated in October and November gave nearly half a bumper crop, and lands irrigated from June and July gave six-sevenths of a bumper crop. The crops irrigated from the beginning of the season exceeded in value the altogether unirrigated ones by Rs. 16 per acre, this value being obtained from the selling price of the paddy and straw on the ground. Now, inasmuch as the year (1873) in which these experiments were made was one of deficient rainfall, the comparison is decidedly favourable to the canals and unfavourable to the unirrigated crops, and this proportion of outturn, viz. as 1 is to 7, will not hold in ordinary years. This much, however, may be asserted—namely, that lands irrigated from the beginning of the season will yield seven times better than the unirrigated ones, and secondly, that in ordinary years the canal irrigated crop will compare with the unirrigated one as 6 to 8 of less. This increase may not appear great when merely the rate is considered, but the case of vast importance when the area of cultivation is reckoned in hundreds of thousands of acres. On the Midnapore canal alone it may safely be estimated that when the irrigation is fully developed the increased outturn of paddy, due to the canal, will in a season of favourable rainfall, or say in seven years out of nine, be at least 3,00,000 maunds, or in other words, the wealth of the district will be increased in seven years out of nine by three lacks of rupees. In two years out of every nine (judging by the experience of the last nine years) the increased outturn of the year due to the canal would be 1,50,000 maunds of paddy, and the increase of wealth at least 1½ lakhs of rupees.

Lastly, as to the amount of water necessary, it is now generally agreed that about 72 inches of water are required to thoroughly mature a rice crop. If the rainfall is not sufficient, the deficiency must be supplied either by underground or by artificial irrigation.

Moreover, it is to be observed that this amount of 72 inches to ensure the best crops, must be spread pretty evenly over the five months from June to October, inclusive.

INDIGO TRADE AND CULTIVATION.

The production of indigo is a principal industry in these provinces. In the districts of Midnapore and Hooghly on the Lower Provinces, over Central Bengal to Purneah, and westward to the confines of the North-Western Provinces, it is largely cultivated, and from its trade or cultivation is in many places the most important source of the wealth and prosperity of the people. Although in Bengal Proper the area of indigo land is much reduced as Behar is fast increasing, and the local annual outturn of the country is now nearly two dozen an average of [illegible] years. The average rate per acre is [illegible] 100 maunds, [illegible] three or four [illegible] average. A statement showing the total exports of indigo from Calcutta [illegible] years, furnished by the Custom House, is subjoined:—

Years.	Quantity.	Value.	Years.	Quantity.
	Mds.	Rs.		Mds.
1840-41 ...	1,30,722	3,16,19,014	1860-61	81,110
1841-42 ...	1,30,464	3,26,61,744	1861-62	1,03,200
1842-43 ...	1,04,173	1,98,55,856	1862-63	1,03,200
1843-44 ...	1,06,787	2,70,58,856	1863-64	1,03,200
1844-45 ...	80,204	2,16,24,514	1864-65	1,03,200
1845-46 ...	1,24,000	3,07,20,000	1865-66	1,03,200
1846-47 ...	1,06,000	1,71,78,000	1866-67	1,03,200
1847-48 ...	1,06,000	1,07,70,774	1867-68	1,03,200
1848-49 ...	1,06,000	1,71,78,000	1868-69	1,03,200
1849-50 ...	1,06,000	1,71,78,000	1869-70	1,03,200
1850-51 ...	1,06,000	1,71,78,000	1870-71	1,03,200
1851-52 ...	1,15,064	1,86,50,000	1871-72	1,03,200
1852-53 ...	80,000	1,03,88,444	1872-73	1,03,200
1853-54 ...	1,06,000	1,71,78,000	1873-74	1,03,200
1854-55 ...	88,341	1,37,84,000	1874-75	1,03,200
1855-56 ...	1,03,000	1,67,86,000	1875-76	1,03,200
1856-57 ...	88,351	1,34,80,125	1876-77	1,03,200
1857-58 ...	84,012	1,74,38,771	1877-78	1,03,200

The indigo crop of 1876 was an average crop; the exports [illegible] 1,10,500 maunds. The indigo crop of 1874 was very indifferent, being one of the worst on record; the total outturn was [illegible] maunds. In 1875 the indigo crop was more favourable, and the estimate [illegible] about 1,25,000 maunds. The following statement [illegible] Messrs. William Moran and Co.'s Market Reports:—

Indigo on Carts, 1873, 1874, *and* 1875.

	1873.	1874.	1875.
	Mds.	Mds.	Mds.
Lower Bengal.			
Kyeon, Fureedpore, &c. ...	427	270	1,100
Jessore ...	1,750	0	1,000
Nuddea ...	2,250	0	2,000
Mirzapore ...	1,270	0	1,000
Burdwan and Bancoora ...	761	0	1,000
Moorshedabad ...	2,520	0	2,000
Tajahtye and Boira ...	512	0	1,000
Rajeshye and Pubna ...	1,715	0	1,000
Tumlook ...	2,345	0	2,000
Bhagulpore ...	3,276	2,400	3,000
Monghyr ...	1,005	0	1,000
Rungpore and Native ...	6,750	6,000	6,000
Total ...	30,260	2,400	22,100
Behar.			
Tirhoot ...	20,365	7,000	20,000
Chumparun ...	11,250	7,100	10,000
Chuprah ...	11,995	3,000	10,000
Total ...	43,610	17,100	40,000
North-Western Provinces.			
Benares ...	6,274	0,000	6,000
Doab ...	10,124	10,000	10,000
Total ...	27,398	10,000	26,000
Grand Total of ...	1,10,023	29,500	88,100

The following statement shows in detail the [illegible] in which it is proposed exported from Calcutta during [illegible] and 1874-75:—

	quantity	Value	

	Maunds.			
	1874-75.		1875-76.	
	Quantity.	Value.	Quantity.	Value.
	Cwt.	Rs.	Cwt.	Rs.
	6,891	33,89,071	5,587	29,76,660
	2,679	14,22,201	1,405	8,05,284
	1,016	6,14,523	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]

and though it is possible that it may have been due to the scarcity in Nepal, and therefore may be of a short duration, still there is much reason to hope that this is not so, and that it will be a permanent addition to our supply.

In the district of the Darjeeling Division in which tea is grown, the cultivation has yet been carried on on a very small scale. The experimental gardens, which did not increase in size after 1863, were far greater than before, amounting to 1,000 acres.

In the Terai Division there are two tea-growing districts, viz. Morung and Titalia.

Regarding the total quantity of land taken up for tea in the Morung district, the number of established gardens being thirteen, the Collector reports an increase to 1,631 acres, against 1,268 acres of last year, and a further increase of 500 acres. The total area is stated at 131,680 bighas, but the Collector reports that, regarding the yield of the gardens for which he has received returns, he is entitled to be about two and a half times that number of acres. It is impossible to say how much of the area taken up for cultivation, but it is roughly estimated that about two-fifths of the total amount taken up will eventually be brought under tea cultivation. With good management, the lands in the Morung district yield on an average about 1000 lb of tea per acre. This is a very favourable case where a smaller outturn is shown, the average having been only 600 lb.

It is stated that the area already taken up will keep the tea-makers at work for many a year, and that there are very many lands, both in this district and the Hill Tracts, which are fit for tea-cultivation, but which, for various reasons, have been neglected. There are now twenty-two gardens in Morung, and twelve in the Hill Tracts. Local labour is insufficient, and the Collector says that the Inland Emigration Act, however it may be worked, is not likely to extend the supply of tea-labour. It may be mentioned, however, that the Act has been extended to Assam, where the cultivation of tea is increasing, and where labour is more plentiful. There are no doubt many other districts in Bengal, and notably Chittagong, where tea-cultivation would succeed, as the Collector says, in both the Hill and Plain tracts, and the following remarks will show that the Government is not unmindful of the capabilities of the country in this respect:—"Many of the waste lands in the Chittagong district are suitable for the growth of tea. The climate of the Hill Tracts is favourable, but the cultivation of tea is not encouraged, for the reason that the Government is unwilling to dispose of the waste lands in the Hill Tracts, which are required for the Lushai expedition. Even in the Plains, where the climate is not favourable, as the rainfall is excessive, the cultivation of tea has been attempted, but the gardens have been abandoned. The failure is attributed to the want of skilled labour, and to the fact that the plants were destroyed by insects. Tea cultivation has been carried on in the Sylhet district for many years, and the gardens are reported to be in a flourishing condition. The soil in which the tea plant grows best is a rich loam, and the plant requires a considerable amount of rain and shade. A suitable locality for a garden is a hill-slope. The land is cleared of jungle, and the plants are set out in rows, four feet apart, on the slope of the hill. The tea is plucked when the plant is three years old, and the leaves are dried in the sun. Tea is said to be a very profitable cultivation, but the capital required is considerable, as the cost of clearing the land, planting the shrubs, and erecting buildings, &c., amounts to Rs. 100 per acre.

...ases at this period. The wet season was unhealthy ... and the least unhealthy were the dry or hot months. ...wer months cholera in June, July, and August; ... and September; small-pox in June and July; and ...rom June to September, prevail very extensively, and

...hot months cholera and bowel complaints prevail ...x in March, April, and May; and fever in February ...ters, marriage processions, pilgrimages, lead to much ... practice of eating to excess of cooling fruits at this ...e bowels, and leads to a similar result. Yet the hot ...salthiest and most congenial on the whole for the

...of Calcutta the registered deaths amounted in the ...6 per thousand of the population, but this result ...as correct, as the census of Calcutta has never been ...and consequently no conclusions can be drawn from ...eference generally to the assessed population. In the ...mounts in Bengal, the deaths amounted to 22·49 per ...d registration in these areas is still very imperfect. ...vernment dispensaries the returns of sickness and ...that there was a death-rate of 7·53 to every 1,000 ...under treatment. The death-rate in the jails of ...or thousand. The mortality in dispensaries and jails ...ase and deaths from bowel complaints and cholera, ...egard that a large proportion of the deaths which ...ccurs in dispensaries by our registering agencies; ...ded whether that opinion is justified by the facts. ...that in bowel complaints only bad cases are treated ...ent, and that the proportion of deaths is therefore ...ameral average, and that the more correct classifi... in jails and dispensaries causes many deaths to be ...ases as due to cholera and dysentery which in Bengal ...d as cases of fever.

...nsiderable improvement in the registration of births ...e year. What the return birth-rate in the Lower ...ented cannot be ascertained, the deaths outnumber the deaths, we ...y, and there can be no reasonable doubt that ...d, since an excess of births over deaths. In 1873 ...ercentage of excess over births was 0·66 per 1,000 of ...ver the assisted rural areas there was an ...ed decrease amounting to 10 per 1,000. It has been ...that cannot be considered as a more imperfect regis... that improvement is consequently really and the ...ppears that satisfactory progress is being made ...ral registration. A great deal more will however, ...before it can be said that real success has been ...ew areas can it be said that the returns of living ...ercentage of the sexes the ratio is 117 ...whereas we know that in England 104 boys are born to every 100 girls. It is extremely probable that some part at least of this discrepancy is due to the less accurate registration of female births in Bengal as compared with those of males; but what the true proportion is, we have as yet no sufficient data to show.

Act IV (B.C.) of 1873, an Act relating to the registration of births and deaths, is now in operation in the Suburban Municipality, in the municipalities of Dacca and Comilla, Darbhangah, Hooghly, Serampore, and Cuttack, and in the townships of Naraingunge, Hazareebagh, Chittra, and Eshak.

By Section 1 of the Act, the Lieutenant-Governor is empowered at any time, by a notification in the *Calcutta Gazette*, to direct the extension of the Act within the limits of any area; and by Section 11 of the Act, the Municipal Commissioners are authorized, under certain conditions, to arrange for giving effect to the provisions of the Act within any place to which the District Municipal Improvement Act, Act III (B.C.) of 1864, shall have been extended.

Sir Richard Temple has already assented to the principle that it is generally desirable to extend the Act over several of the selected area localities, and especially over those town areas in which municipalities are established. No doubt can exist that so long as the present agency is not improved, and registration is not made compulsory by legislative enactment, entirely satisfactory results cannot be achieved. At the same time, until the machinery of registration is better organized and more familiar to the people, it believes the Government to insist upon considerable discretion and care being exercised in places where the law may be introduced, and to permit the introduction of the law cautiously, and only under reasonable safeguards. The Lieutenant-Governor is not desirous of extending the law prematurely, and he considers it advisable that for the present the operation of the measure should be restricted within the limits of municipalities or of selected town areas.

In all places to which the Act may be extended, pains should be taken to notify as widely as possible the principal provisions of the law, and to acquaint the people with the objects and proportions of registration. The Act should not be introduced hastily, or until ample notice has been given of its intended introduction. The Lieutenant-Governor has directed, moreover, that even in the case of municipalities where the introduction of the Act may be sanctioned under Section 11, the law shall not be put in force until a report has been submitted to Government stating the circumstances under which it is proposed to introduce the Act and showing that the procedure enjoined by the law has been complied with. The requirements of the law are so simple and easily understood that it does not seem that it will be necessary to frame any bye-laws under the Act.

Subject to these remarks, the Lieutenant-Governor will be glad to see the Act extended generally to places in which the District Municipal Improvement Act is in force, or to other selected urban circles where it may be considered advisable to observe a complete registration of births and deaths. But it is clearly understood that in all municipalities and districts where the entire cost of effecting registration under the Act must, if possible, be defrayed from the municipal funds.

Statement showing the statistics of Births *and* Deaths *in selected areas in Bengal during the year* 1874.

RURAL AREAS.

Division.	District.	Name of Area.	Total population.	Number of births.	Number in 1,000.	Number of deaths.	Number in 1,000.

[illegible] and Deaths during the Fortnight of Cyclone, [illegible] of Casualties, and similar other Matters in respect of [illegible] have been ascertained during the year 1874.

Name of Station.	Number of Births registered during the year.	Number of Deaths registered during the year.	Excess of Births over Deaths.	Ratio of Excess per 1,000 of Population.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Supplement to the *Calcutta Gazette*, 1871.

Modes of Artificial Respiration, Intravenous Injection and Administration of various Drugs &c., in India, Snake-poisoning, and the Physiological, Chemical, and Medical Properties of Snake-poisons. By the Commission appointed by Government. Price Rs. 6, postage 7 annas.

Report on Outbreaks of Cholera in the Opium Department. By Surgeon-Major Lethbridge, Sanitary Commissioner with the Board of Revenue, Lower Provinces. Price 4 annas.

Sailing Directory for the guidance of Shipmasters and Sailing Vessels.

Indian Ferns: Coloured, Detailed, and Illustrated, with Charts of Fronds, Varieties, and Tables. By Surgeon-Major Beddome, late Indian Navy. Price Rs. 10/.

Cyclone Tide for Bengal, corrected up to the 1st January 1875. Price 4 annas 6 pages.

For Sale at the Bengal Secretariat Press, 39, Chowringhee.

PUBLISHED BY THE GOVERNMENT OF BENGAL.

THE STATISTICAL REPORTER,

A MONTHLY JOURNAL

Devoted to Economic, Agricultural, and Statistical Enquiries.

Subscription, Rs. 12 per annum, postage Re. 1, payable in advance; or Re. 2 per each number if purchased singly.

All business matters should be arranged with, and advertisement rates may be learnt from, Mr. K. M. Lewis, Superintendent of the Bengal Secretariat Press.

Scale of Rates for Advertisements.

		Rs.			Rs.
Half page,	per annum ...	180	One column	per annum ...	180
Half page,	,, ,, ...	105	Half column	,, ,, ...	60
Quarter page,	,, ,, ...	60	Quarter column	,, ,, ...	35

Casual advertisements, 3 annas per Bourgeois line.

CLOSE OF THE PRESENT BONUS PERIOD.

On 15th November 1875.

The Standard Life Assurance Co.

ESTABLISHED 1825.

THE INVESTED FUNDS exceed £4,800,000 sterling, and are invested as follows:

Mortgages	£2,424,643	10	11
Loans on Policies within their value	241,693	11	0
Landed Estate and House Property	162,794	13	8
Government Securities	240,425	0	0
Railway Bonds and Debentures	923,760	4	1
Life Interest and Reversions	46,798	4	0
Shares of Scottish Chartered Banks	29,032	6	8
Loans on Personal Security	80,425	17	2
Agents' Balances (none accounted for)	211,763	19	5
Bills at Call and Accepted	26,919	11	5
Cash in hand, on Deposit, and in Bank	125,108	19	6
Total FUNDS (15th November 1874)	£4,521,005	17	10

NOTE.—New Annuities and other gross annual Premiums and Single Consideration have been received during the current year to the amount of £1,200 per Business day.

Progress of the Company's Business.

During the last nine years the Standard Company has placed on its Books upwards of £1,000,0 of assurances, and in the United Kingdom which during so many consecutive years—some and the ancient Life Assurance Institutions—authority established so large an amount of public support.

INCOME of the Company is upwards of SEVEN HUNDRED THOUSAND POUN

Intending Assurers

are invited to communicate with the Secretaries or Agents of the Company at an early date, as proposals dated after 15th November n the Bonus of the Company until 1885.

Calcutta, September, 1875. GEORGE LUCAS KEMP, Esq., *Calcutta Branch*.

Printed and published by GIRISH CHUNDER GHOSE at the Printing Office of the Bengal Secretariat, in the city of Calcutta.—8th November 1875.

FINANCIAL DEPARTMENT.

STATISTICS—No. 6709.

CALCUTTA, THE 8TH NOVEMBER 1875.

From H. J. REYNOLDS, Esq.,

Offg. Secretary to the Government of Bengal.

To the SECY. to the GOVT. of MADRAS.

Sir,

I am directed forward, for the information of His Excellency the Governor of Madras, a copy of the first number of a monthly journal published by the Government of Bengal with the sanction and approval of the Government of India, entitled "The Statistical Reporter," devoted to Economic, Agricultural, and Statistical enquiries.

2. The paper will be the means of bringing to notice much information which would be scattered in different and often inaccessible publications, and it will be the object of the Bengal Government to deal for the most part with facts connected with the Bengal Province, but by no means exclusively, and it will very much add to its value if information in its pages from other parts of India can be supplied from time to time. The Lieutenant-Governor of Bengal would be glad to see the paper become more widely circulated, and would be glad if the Government of Madras could see its way to [illegible] compatible with its dealing with statistical enquiries of a character as to the interest

3. The subscription to the *Statistical Reporter* has been fixed at Rs. 12 per annum payable in advance, or Re. 1 per each number if purchased singly.

I have the honour to be,

Sir,

Your most obedient servant,

[illegible]

Letter from the Govr of Bengal
Forwarding 2 copies of
the 1st Number of the "Ca-
lcutta Reporter," with in-
structions about subscrib-
ing for it.
Pres: 13th Dec. 1792
Suggesting that the
Post Office Vessels Calls may
be furnished with a copy
of the Calcutta Reporter

Ans. 5th Jan. 1793

Ans. 21st Dec. 1792

The Publishers
Representation stated to
Lieutenancy of Bengal
& the Board's Consent
for distribution to
Subscribers Departments
Cg. 10th January 1793
No. 731.

Answered by the Govt
of Bengal, that they
now have stated the

Marine Letters

Letter from the Govt of Bengal
forwarding 2 copies of
the 1st number of the Sta-
tistical Reporter, with in-
structions about subscrib-
ing for it.
Pros. 15th Nov 1875

} R.G. 5th Nov 1875 No 2328

Suggesting that the
1st 2 Office Reports may
be furnished with a copy
of the Statistical Reporter

} R.G. 24th Dec 1875 No 1192

The Tables
Department received to
be subscribed for under the
Medical Economic
for distribution to
different Departments
G.O. 1st June 1876
No 319

Annexed Tables
ordered by the Govt
of Bengal about a
year ago, which they
now have started at
the

Rec'd 5th Nov. 1875
Read 17th —
No 3709

Rec'd 24th December 1875
Read 27th —
No 4038

From
The Govt of Bengal
Financial Dept

Statistical Reporter

Dated 15th Nov 1875
Read 17th —
No 3709

Rec'd 1st
Read 3rd January 1876
No 4

Transcript of the Letter of the
first number of the Statistical
Reporter" is forwarded, and
the attention of Medical Officers
is invited to the Orders passed
on the subject in the Financial
Department Circular, dated
the 1st March 1875, No 1192
Statistical Reporter
Bengal

the Statute of Re-
ster' to deal for
the most part ×××
but by no means
precludeth any
Person -

The 32d of Geo
made the like offer
in Collectors made
liable one officer
made liable
Lords Treasurer made
liable Statute of

Rec'd 1895

The "Statistical Reporter"

and

the "Agriculturist".

Some time ago we had the "Indian Economist" published by Messrs Thacker & Co which also the Govt & Administration Reports are published.

This paper was bought, at considerable price, by the Govt of Bengal, who turned it into the "Statistical Reporter".

Messrs Thacker & Co now have the right of publication for 10 copies.

Meanwhile Messrs Thacker & Co have published a new paper the "Indian Agriculturist".

This paper was bought by the Govt of Bengal for 60 copies.

The papers contain the judgments of the Supreme Court Numbers -

Sth Day - Letter to Registrar Supreme Court declining Records Digests and reminder in letter.

Supreme Court Circular Letter Commissioner Calcutta - Sth Day

Letters to Executive Officers Bihar Orissa and Chota Nagpur Division

Letter Bihar Govt forwarding Report Famine Commissioner Orissa

Letter Govt India Home Dept Famine Relief Bihar Orissa

Letter Govt India Home Dept Famine Relief Bihar Orissa

Letter Govt India Home Dept Famine Relief Bihar

Jan 28/54.

Endorsement 30th Nov/75

Revenue 1875 Despatch
No 4874
Proceedings of the
Board of Revenue

Dated 21st December
1875
Desp 21
Rec'd 22d

No 102 — 24th January 1876
Transmitting the
Despatch noted
in the Margin
with Copies of
Returns and other
Papers called for
by the Despatch
noted in the
Margin

Read 14th February 1876
Answered 22d Feby 1876