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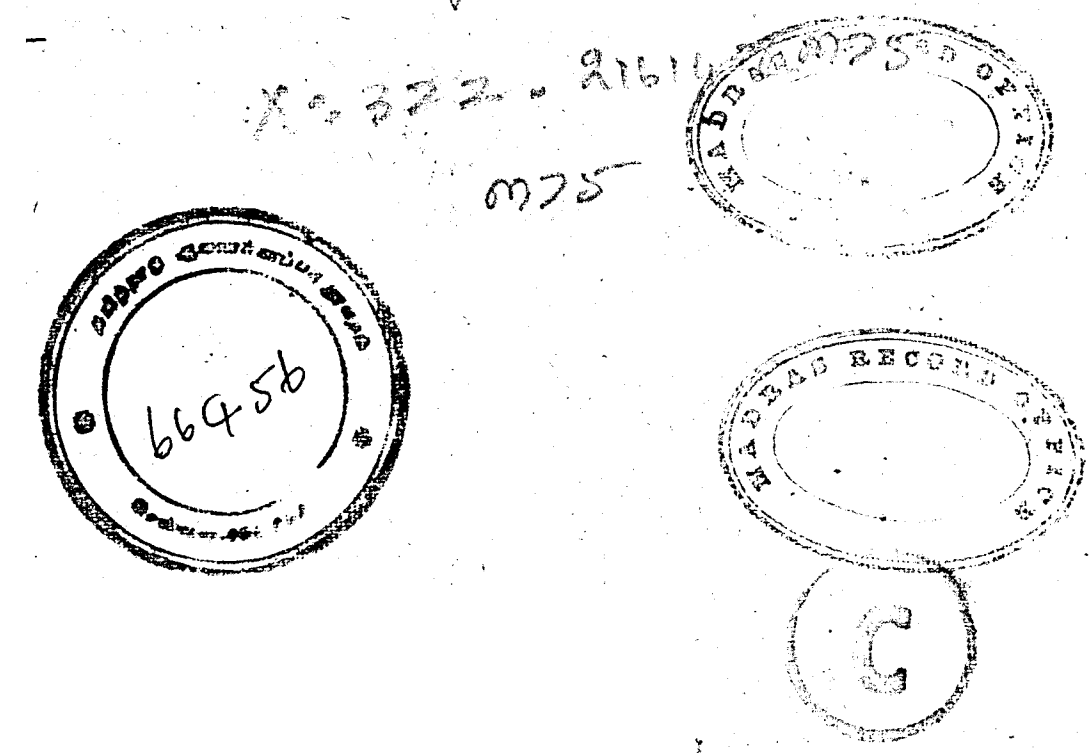
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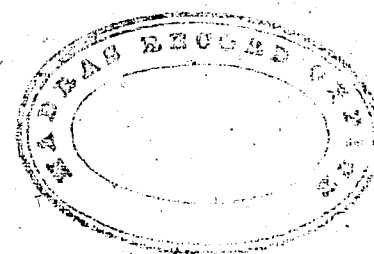
Settlement Report
Cumbum & Markapuram
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N. O. S. 2
No. 106

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Settlement Report
of
Cumbum & Markapur Taluq



381

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J. H. M. COX.
Deputy Director of Revenue Settlement.

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KURNOOL DISTRICT.*

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J. H. M. COX,

Deputy Director of Revenue Settlement.

No. 703
245.

REVENUE SETTLEMENT OFFICE,
CUDDAPAH, 23rd August 1875.

From

J. H. M. COX, Esq.,

Deputy Director of Revenue Settlement, Cuddapah.

To

C. RUNDALL, Esq.,

Acting Director of Revenue Settlement, Madras.

SIR,

I have the honor to submit herewith proposals for the settlement of Cumbum and Markapur, the last two Taluqs of the Kurnool District, which remain to be disposed of.

2. Both these Taluqs formerly belonged to Cuddapah, and were transferred to Kurnool at the same time as Koilkuntla in 1858. Being quite cut off, as it were, from the rest of the district by the lofty and broad range of the Nallamallas, or Black Hills, they have been formed into a distinct charge under the Head Assistant Collector, whose Head Quarters are at Cumbum.

3. *Demarcation, Classification and Survey.*—Demarcation and Classification operations were commenced by us simultaneously in both Taluqs in January 1866, a combined party being allotted to each under the superintendence of an Assistant Director. Markapur was completed in March 1867 and Cumbum in the

October following. The demarcation was carried out with rough stones of good size ;* all survey station marks, both on Village and Khandam Boundaries, being imbedded in masonry, and the auxiliaries having stones and earthen mounds raised round them. Clearly defined marks were cut on all the Boundary and Khandam stones, both survey stations and auxiliaries, by which they can be easily and readily recognized.

	Length. Feet.	Breadth. Feet.	Thickness. Inches.
* For Village Boundary Stations.....	3	× 1	× 9
For Khandam do.	2½	× 1	× 9
For Auxiliaries.....	2½	× 1	× 7
For Field marks	2	× ½	× 4

old fort. The glory of Yerrakondapalem has quite passed away. It boasts of containing a large stone in the middle of the village site, about which there is a superstition to the effect that if any of the Taluq officials should go near it, or even see it from a distance, they would be sure to lose their appointments.

32. *Roads.*—The only really made roads in the locality are confined to the Cumbum Taluq; the chief one being that connecting Cumbum with Kurnool through the Nandicanama Pass, so called from the neighbouring temple of Mahanandi, on the Nandial side of the Nallamallas. This is a very important Pass, forming the only good communication with Kurnool from this part of the District, and places to the east. Its length is about 25 miles, through more or less dense jungle infested with Tigers.

33. From near Tadicherla another line of road branches off from the above, going due south to Porumamilla, in the Budwail Taluq, and forming the communication with Cuddapah which is the nearest point on the line of Railway. In many parts, however, this is little more than a trace.

34. From Cumbum a third road turns eastward towards Ongole, and a fourth to the north-east leading to Vinukonda and so on to Guntur.

35. From the last named a trace has been made for a road to be carried along the western side of the Gundlacamma, to run as near as possible in a straight line to Doopaud, with a small branch turning eastward from near Vemulakota to Markapur. North of that the country is very stony and rocky, and the present cart tracts are for the most part always passable, even after the heaviest rain, so that no making of roads seems necessary. The ryots however ask for more lines of communication, and want a proper opening made through the Dapalli Canama to the north, to facilitate the passage of carts into the Palnad. There would no doubt be some advantage in improving the communication here, if it could be easily effected.

36. Hitherto, the only pretence to anything like a road in the Markapur Taluq, is an old one leading from Doopaud due east along the valley of the Tigalair, through the Mantralamma Pass, to Atmakur in the Nandikotkur Taluq. This might, with advantage, be improved and kept up, as it forms a direct communication with Kurnool. There is no continuation of this road from Doopaud to Vinukonda, as the ordnance map would lead one to suppose.

37. I might mention in passing that the black stone wheels employed for the small carts used in the northern and western part of Markapur, would be enough to destroy any attempt at a made road in a very short time; but they are almost the only kind really serviceable in such a stony locality.

38. There are several minor Passes over both the Nallamallas and Velligonda ranges, which do not call for any particular notice. They are traversible by foot passengers, and some are also used by the Brinjaries and Yanadies, on their way from the interior to the coast with their droves of cattle to fetch salt.

39. *Markets.*—There are no regular markets anywhere, except at Cumbum. Mr. F. R. H. Sharp, when Head Assistant Collector, tried to establish weekly markets at Markapur and some other places in both Taluqs, but his attempts signally failed.

40. *Climate and Rainfall.*—The climate of Cumbum is much the same as that of the three Taluqs of Budwail, Sidhout and Pullampet, which form the southern part of this long valley, but the more open and bare plains of Markapur with its poor rocky ground cause the temperature of that Taluq to be greater in the hot weather.

41. The whole tract gets the benefit of both the S. W. and N. E. monsoons, the latter being most felt. The subjoined table gives the registered Rain fall for the last 12 years as furnished to me from the Collector's Office at Kurnool, based upon the returns submitted each month to the Board of Revenue. The figures do not agree at all with those entered in the District Gazettes, but the Collector informs me that the ones now given must be considered more correct :—

Taluqs.	Months.	1863. Inches.	1864. Inches.	1865. Inches.	1866. Inches.	1867. Inches.	1868. Inches.	1869. Inches.	1870. Inches.	1871. Inches.	1872. Inches.	1873. Inches.	1874. Inches.	Total of 12 years 1863- 1874.	Yearly aver- age.
Cumbum.	January.....	Return not forthcoming.	...	...	...	...	3-	...	1-20	53	...	...	...	...	...
	February.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	March.....	...	...	...	...	...	...	2-06	...	...	...	...	...	...	...
	April.....	3-60	...	...	...	1-02	4-05	30	...	...	35	...	1-35	...	...
	May.....	3	1-50	9-	3-70	8-	6-06	85	1	1	1-70	2-30	6-70	...	...
	June.....	...	3-10	1-10	5-08	1-48	8-05	3-67	1-25	1-23	1-55	3-17	2-37	...	...
	July.....	1-80	2-50	6-50	4-60	2-83	2-72	1-35	3-55	5-34	4-	1-29	4-41	...	...
	August.....	2-20	2-80	9-10	6-70	3-90	1-22	1	2-39	1-	4-36	2-40	21	...	...
	September.....	8-	9-	2-	5-70	5-30	4-33	2-65	4-82	4-90	2-93	4-38	12-18	...	...
	October.....	13-10	...	5-	9-	14-98	60	4-15	5-55	1-60	7-70	12-31	6-20	...	...
	November.....	...	10-20 not forthcoming	1-80	1-93	...	65	2-02	3-02	5-10	3-10	81	30	...	...
	December.....	...	...	2-90	2-93	1-01	...	4-06	...	...	3-20	...	26	...	...
Markapur.	Totals.....	31-70	29-10	37-40	39-61	38-55	30-68	22-61	22-78	21-	28-89	27-16	34-37	363-88	30-32
	January.....	Return not forthcoming.	...	...	...	...	...	...	1-58	15	...	...	...	...	...
	February.....	...	...	1-60	...	...	...	...	...	...	...	...	...	...	...
	March.....	...	...	...	...	6-9	...	05	...	...	...	...	...	...	...
	April.....	3-40	1-0	8	...	1-40	...	1-15	...	...	...	...	2-75	...	...
	May.....	1-40	...	...	2-0	...	6-3	...	01	1-26	66	...	1-67	...	...
	June.....	...	4-10	...	...	3-01	7-07	1-73	1-30	55	3-0	2-80	2-78	...	...
	July.....	...	1-80	3-60	3-32	4-55	80	...	2-10	4-89	3-80	2-30	6-36	...	...
	August.....	6-14	7-20	5-90	11-60	8-70	68.	01	3-70	...	2-02	2-40	1-36	...	...
	September.....	9-0	2-20	3-40	2-20	6-10	7-27	6-09	3-45	6-90	6-71	2-58	10-48	...	...
	October.....	9-77	...	...	8-0	15-54	2-06	1-0	9-60	1-69	5-12	12-81	4-12	...	...
	November.....	...	12-98	1-60	1-48	...	1-37	1-85	1-0	6-81	...	80	...	...	...
	December.....	...	not forthcoming	...	...	8-0	...	3-55	...	...	2-82	...	...	...	...
Totals.....		33-91	40-28	27-30	28-60	53-30	25-25	17-77	23-01	22-25	24-13	23-69	29-52	34-94	29-9

55. Further enquiries resulted in my obtaining from the Collector an English translation of an old Telugu Paper which purports to be a History of the Cumbum Tank. It contains some account of the town of Cumbum and its antecedents, from which I extract the following :—

56. The first ruler, or Governor as he is called, that we find spoken of, is one Gopanavadiya, who was appointed to the post by the Gajapaties of Vizianagar, when they conquered this part of India. As he failed to make any remittance to his Suzeram at Vizianagram for several years, the Rajah sent his General, Narendra, with a large army, to collect the arrears of Revenue. On the General's arrival at Cumbum, Gopanavadiya's troops remained neutral, and he shut himself up, with a few faithful followers, in a fort on one of the hills in the middle of the large Tank. Narendra seeing that there was the probability of a protracted siege before the fort could be reduced, and not having the necessary funds to maintain his large army in the interval, conceived the idea of making a breach in the bund, not only to cut off the water supply of the whole garrison, but also to facilitate access to their fastness. For this rash act he incurred the vengeance of Heaven ; for, it is said, that when marching at the head of his troops he was struck dead, his head being split into a thousand pieces, and on the spot where he fell all his followers helped to throw up a monumental heap of stones, subsequently called Narendra's Mound.

57. Many years after, the name of Handi Hanumanayadu is mentioned as Governor of Cumbum. In his day a malarious wind, blowing from the north, carried off in hundreds the inhabitants as well as the cattle of the two Cumbums ; and the former panic-stricken deserted the villages, which were then situated close to the Tank bund, and migrated some distance to the eastward, where they formed two new Settlements, and named them respectively Peda and China Cumbum, after their old villages. The former—now known as plain *Cumbum*—had a mud fort

* Not more than 24 or 25 in it, and was situated 36 miles* to the south of Kocherlakota, another strong fortress. Two Sirdars, Kasturi

really. Raganna and Mutupati Chinnaya, were deputed to these two forts.

58. In the year 987 of the Hejira (A. D. 1570), the dominions of Kristnadevarayalu were overrun by the Mahomedans ; and Hyder-ul-Mulk, General of the Pasha of Bhaganaggur, was sent to subdue Cumbum and its neighbourhood. This he did after a bloody contest with Kasturi Raganna, in which the latter perished. Hyder-ul-Mulk strengthened Peda Cumbum with another good fort, to which a Killadar was appointed from Golconda. A Jaghir of 44 villages was made over to the Killadar, for the support of himself and his garrison.

59. After a time a new Sirdar, Nekanam Khan, arrived at Cumbum and made Mahomed Ashroff, son of Bijur Beg, Havildar of the new fort. Ashroff was a wise ruler and did much good to the people. He constructed a Mosque in the centre of the fort with the carved pillars and materials of an old ruined Hindu temple, and called it the Jumma Musjid. This musjid was completed in the year

1608 of the Hejira, and had a pillar erected in front of it, bearing a metrical inscription in Persian and Telugu which might be translated as follows :—

“Gopanavadiyalu—Lakshmi prosper him—raised the embankment of the “Cumbum Tank, which Narendra, the foe of mankind, cut through and destroyed. “Devala Varadarajamma acquired celebrity by a partial restoration of the bank ; “but Mahomed Ashroff, renowned for the strength of his arms, son of Bijur Beg, “completing the repairs that were still wanting with the funds he received from “Nekunam Khan, contributed to the immortal glory of his Sovereign.”

60. This musjid does not seem now to be in existence, nor the stone pillar above referred to. The mosque now called Jumma Musjid, situated in the town, is said to have been built by Mir Mahomed Said, in Hejira 1059, while the old ruined musjid in the fort, was constructed by one Mir Nizam Khan.

61. In process of time the country about Cumbum passed into the possession of Saadut Alla, the Nabob of Arcot ; and in his days Cumbum was ruled by Amildars and Foujdars, appointed by the Nabob.

62. After this Cumbum, with Cuddapah, fell into the hands of a Patan Chief named Davood Khan Meean, to whom they were presented as a Jaghir by the Ruler of Golconda. During his time a Reddi, named Chalichalamala, enjoyed the right of collecting two tolls, called Saritesamuki and Manu Kavali, of 5 Modas, or 10 per cent., on the Revenue, as a remuneration for his public services.

63. On the death of Meean Abdool, who succeeded Davood Khan Meean, the authorities, pleased with the diligence of the Reddi, made him Foujdard of Cumbum. He was in power for many years, constructed a new fort half a league to the north of Cumbum, and laid out a new park at a short distance from the Killa ; but when, at length, he got sufficiently powerful, he revolted against his Sovereign, and committed depredations on the surrounding villages. The liege lord, on hearing of the ravages perpetrated by his vassal in collision with the Reddis of Pelluru, sent his Sirdar, Galib Khan, with a force consisting partly of Cavalry and partly of Infantry to crush the rebels.

64. Galib Khan, arriving at Cumbum, destroyed the newly built fort ; then proceeding to Kocherlakota, he battered down the stone walls of the fort there, and finally, advancing on Pelluru, stormed the fortress, seized the Reddis, Perumallu and Tulasipati, and beheaded them. Order being thus restored, he built a village on the southern bank of the Gundlacumma near the temple of Lakshmi, situated on a hill, a league to the east of Vengilakota in the Markapur Taluq, calling it after himself, Galibkhannuggur. This village does not now exist.

65. During the administration of Masood Meean who reigned at Cuddapah, Sarvar Khan Meean was sent to rule over Cumbum. The latter continued in office for three years, during which he squandered away the State revenues, and never sent a cash to Headquarters. Masood Meean, displeased with this irregularity, ordered Fakir Alli, Jaghirdar of Banaganapalli, to seize Sarvar Khan, and bring him

a prisoner to Cuddapah. Accordingly Fakir Alli moved with his force to Cumbum, and after a month's siege succeeded in capturing Sarvar Khan and carrying him to Cuddapah, where he was thrown into a dungeon from which he never came out alive.

66. While Masood Meean was thus in the height of power, a horde of 80,000 Mahratta horse, under Bulwunt Row, poured into his dominions, and over-running Cuddapah and Cumbum, killed Masood and became masters of the country.

67. Bulwunt Row reigned for some years at Cuddapah, and then returned to Poona, passing through Cumbum on his way. After his departure the Mahomedan power was again restored, and Moochi Meeastte and Abdool Harli, became successive rulers of Cuddapah.

68. Hyder Alli, in his conquests of Gooty, Cuddapah and Kurnool, next took the country and added it to the dominions of Mysore; Ali Kaffur Meer Sahib, being appointed to rule as Viceroy at Cumbum. While proceeding on an expedition to Mangalagiri, probably to be present at the annual Festival held at the famous Pagoda there, he lost his son which made him retrace his steps to Cumbum, and soon after leave it for Arcot, directing the Killadar whom he left in charge to build a suburb adjoining the tomb of his son, now known as Kottapeta.

69. On the conquest of Mysore, Cumbum passed into the possession of the Nizam, and formed part of his territories until 1800, when it came under British rule and was taken over by Major (afterwards Sir Thomas) Munro who located one of his Collectors, Mr. Greeme, at Cumbum. In 1808 the Head Quarters of the principal European Officer was moved from Cumbum to Sidhout; and 10 years later to Cuddapah; an Assistant being stationed at Cumbum, where, after the Troops were withdrawn, a detachment of Ressala or Mounted Police was kept up till about 1866. The old fort was demolished some years before this, and all that now remains of the old buildings is a part of the Jail, now occupied by the Forester of the place, but in a very dilapidated condition.

70. Cumbum has of late years become very feverish, though from what cause is not quite clear, and the question of moving his Head Quarters to some more healthy locality has, I find, been lately mooted by the Head Assistant Collector Mr. Farmer.

71. It only remains for me to say under this head, that the country is largely studded with the remains of old forts built of rough stone; which, although all more or less in ruins, have in many cases, stood the ravages of time wonderfully well considering that each must at some time or other have been partly dismantled. One that I visited at Kottakota, in the south-west corner of the Cumbum Taluq, commands the best position of any I have seen in the open country, being built on a little rocky eminence. It boasts of the remains of a very good ditch, which has been cut, or rather blasted, with no little trouble and care out of the solid rock on which the fort stands. At the top of the highest tower there is still one of the old guns, measuring about 14 or 15 feet long in very good preservation.

72. *Revenue History.*—This, like the Political History of this tract, is mixed up with that of the Ceded Districts, and more particularly Cuddapah, to which, as already explained,* it belonged until the year 1858.

* Vide para. 2.

73. Among the old papers in the Collector's Office here, my Uncovenanted Assistant has found a Mahratta document showing the revenue realised in each of these Taluqs from the time that the country came into the possession of the British in Fusli 1210 (1800-1) to Fusli 1265 (1855-56). This is given in Appendix C, and I subjoin an abstract exhibiting the averages, first on the 8 years during which the Ryotwari system introduced by Sir Thomas Munro was in force, from Fusli 1210 to 1217; then on the Triennial and Decennial leases up to Fusli 1230; and subsequently those on each successive decade after the Ryotwari system was once more resumed.

not in this vol

Fuslis.	Years.	Averages.	
		Cumbum.	Markapur.
From Fusli 1210 to 1217, Ryotwari system.	1800 to 1807	Rs. 1,49,455	Rs. 1,13,174
Do. 1218 to 1220, Triennial lease.... ..	1808 to 1810	1,57,782	1,19,070
Do. 1221 to 1230, Decennial lease.	1811 to 1820	1,64,520	1,25,227
Do. 1231 to 1240, Ryotwari system.	1821 to 1830	1,34,777	1,10,064
Do. 1241 to 1250, Do.	1831 to 1840	1,20,272	78,448
Do. 1251 to 1260, Do.	1841 to 1850	1,41,410	97,901
Do. 1261 to 1265, Do.	1851 to 1855	1,44,642	99,204

74. From Fusli 1266 to 1272 we have no data showing the full amount of Revenue realised including Teervajasti and Fasaljasti, but that of the subsequent 10 years taken from the Demand Collection and Balance Statement (Appendix D) is shown below with the average for that period:—

Fuslis.	Years.	Cumbum.	Markapur.
1273	1863-64	Rs. 1,44,156	Rs. 77,445
1274	1864-65	1,42,429	81,051
1275	1865-66	1,41,841	64,937
1276	1866-67	1,47,244	68,272
1277	1867-68	1,40,783	73,034
1278	1868-69	1,32,893	73,715
1279	1869-70	1,45,879	79,168
1280	1870-71	1,44,916	83,356
1281	1871-72	1,39,728	82,817
1282	1872-73	1,39,328	75,788
Average of 10 years		1,41,920	75,958

have made since Mr. Minchin submitted his report already referred to. I give below the figures of the 6 years from Fusli 1268 to 1273, which he showed in the Statement (No.2) that accompanied his letter of the 29th August, 1864; and those for the subsequent 9 years up to Fusli 1282, the year on whose accounts our proposals are based.

Fuslis or Years.	Dry.		Wet.		Total.	
	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
<i>CUMBUM TALUQ.</i>						
1268—1858-59	67,232	60,669	8,737	62,639	75,969	1,23,308
1269—1859-60	70,791	65,329	9,087	65,060	79,878	1,30,389
1270—1860-61	71,724	68,630	8,199	57,706	79,923	1,26,336
1271—1861-62	73,624	65,770	8,823	62,631	82,447	1,28,401
1272—1862-63	70,091	64,596	8,444	61,011	78,535	1,25,607
1273—1863-64	72,882	66,193	8,537	59,992	81,419	1,26,185
1274—1864-65	71,909	66,849	8,789	61,824	80,698	1,28,673
1275—1865-66	74,130	70,800	7,541	56,996	81,671	1,26,896
1276—1866-67	74,420	71,252	7,512	56,411	81,932	1,27,663
1277—1867-68	73,544	70,927	7,497	56,434	81,041	1,27,361
1278—1868-69	73,908	71,222	7,500	56,490	81,408	1,27,712
1279—1869-70	73,983	71,099	7,479	56,251	81,462	1,27,350
1280—1870-71	74,176	71,172	7,415	55,896	81,591	1,27,068
1281—1871-72	72,932	70,231	7,305	55,008	80,237	1,25,239
1282—1872-73	74,153	70,558	7,169	53,944	81,322	1,24,502
<i>MARKAPUR TALUQ.</i>						
1268—1858-59	82,817	51,883	8,465	41,918	91,282	93,801
1269—1859-60	86,669	54,373	9,247	47,679	95,916	1,02,052
1270—1860-61	54,463	32,958	5,014	22,915	59,477	55,873
1271—1861-62	62,313	37,434	5,645	26,371	67,958	63,805
1272—1862-63	66,213	41,068	5,351	24,931	71,564	65,999
1273—1863-64	64,921	41,411	5,814	30,156	70,735	71,567
1274—1864-65	66,406	42,769	6,234	33,447	72,640	76,216
1275—1865-66	66,042	45,681	3,684	25,197	69,726	70,878
1276—1866-67	65,424	45,587	3,677	25,293	69,101	70,880
1277—1867-68	70,784	48,474	3,702	25,572	74,486	74,046
1278—1868-69	72,755	49,172	3,711	25,700	76,466	74,872
1279—1869-70	73,881	49,901	3,734	25,961	77,615	75,862
1280—1870-71	79,131	52,335	3,727	25,845	82,858	78,180
1281—1871-72	79,088	51,861	3,649	25,279	82,737	77,140
1282—1872-73	84,623	54,972	3,606	24,819	88,229	79,791

In the above I have included the Bagayat lands under the head of Wet.

87. As explained by Mr. Minchin in para. 5 of his letter, the comparison, as far as regards Markapur, can only be made from Fusli 1270 on account of the entries for the 2 previous years including the 99 villages transferred to Nellore.

88. The difference in the figures between Fuslis 1274 and 1275 is owing to the transfer of the old well lands from Bagayat to Dry in the latter year.

89. The result of the comparison is to show, that, though Cumbum has rather gone backward, there has been a decided advance in Markapur. It is evident therefore that there is a good deal requiring to be done to bring about the improvement that is desired in both Taluqs and this it is hoped the present settlement will tend to effect.

90. A glance at the figures in the Statement giving the Demand Collections and Balances during the last 10 years (Appendix D) will show, that in Cumbum especially, collections continue to be made with difficulty; and large permanent Remissions on Ryot's waste, &c., are still observable in both Taluqs.

91. From the following table, exhibiting the number and range of the rates under each of the heads of Dry, Wet and Teerwajasti, it will be seen that the confusion in them is nearly, if not quite, as great as it was when Mr. Minchin wrote. I have merged the several rates under Regada, Massab and Lal, whereas he gave them separately.

Taluqs.	DRY.			WET.			TEERWAJASTI.		
	No. of rates.	Mini-mum.	Maxi-mum.	No. of rates.	Mini-mum.	Maxi-mum.	No. of rates.	Mini-mum.	Maxi-mum.
		AS. P. RS. A. P.			AS. P. RS. A. P.			AS. P. RS. A. P.	
Cumbum	233	1 2 9	8 3	215	5 0 21	2 4	161	11 8 16	10 8
Markapur	83	1 2 3	11 6	84	11 8 20	6 3	110	10 0 10	0 0

92. The Teerwajasti rates shown above were not mentioned by Mr. Minchin, and of course they tend only to make matters more complicated, for the poor ryot, who is thus quite at the mercy of the Curnam, who can easily confuse him and just charge him what he likes.

93. These "Teerwajasti" rates are levied on garden lands under Tanks, termed in the accounts "Poonasa" when Paddy, Sugar-cane, Betel leaf, Turmeric and other regular wet crops are grown on them, their only legitimate crops being Raggi, Sadza, Indigo, Onions, or other garden produce requiring but a limited supply of water.

94. It has also been customary here to charge "Fasaljasti" on lands registered as "Dofasal" (double crop), when they grow certain 2nd crops on them; and in Mundlapad and Giddalur, a special double crop rate of Rupees 16-6-6 is levied on lands under the channels from the Saggilair and Yennamalair, when they are cultivated with wet crops.

95. All these anomalies will disappear in the settlement, and some of the undermentioned "Special Remissions" will also be absorbed :

(1.) *Turwa Cummi*—Remissions on wet lands under ruined Tanks cultivated with Dry crops; also lands on high level irrigated by baling, and lands left waste on account of high assessment. This will disappear in the settlement, as, in the case of the first named the lands will be transferred to Dry in our Revision of wet ayacuts, and the 2 others will be duly allowed for in fixing the settlement demand.

(2.) *Dasabandham allowances*.—These relate to lands under both Tanks and Channels and will have to be continued as in other parts of the Ceded Districts at the same rate as hitherto, as long as the Dasabandhamdars carry out the necessary repairs for these works; but I understand that in several places they are being given up.

(3.) *Kattugutta*. } Land granted on easy terms in consideration of
(4.) *Makata Cowl*. } the holders having reclaimed it from Forest or dug wells or formed Tanks at their own cost. These remissions must now cease as it can never have been intended that they should be continued in perpetuity, and the holders must long since have realised a fair return on the capital they laid out.

(5.) *Sheri*. } Deductions made from certain lands held by pen-
(6.) *Sagavatu*. } sioned Paligars, &c., and their relatives in the Markapur Taluq according to the terms of their Sunnuds. These will have to be continued as long as the lands remain in the hands of the heirs of the said Paligars.

(7.) *Nisab Rayati*.—Allowances made on certain Patta lands held by village servants in consideration of the Service Inams granted them being of small extent. This will have to be continued.

96. The particulars of the area under each of the above heads, with assessment and remissions granted in Fusli 1282, are given in the subjoined Statement.

Taluqs.		Items.	Area.	REVENUE ASSESSMENT.		
				Gross Assessment.	Remissions granted	Net amount collected.
1	Cumbum		Acres.	Rs.	Rs.	Rs.
		Teerwa Cummi	174	1,249	714	535
		Dasabandham	21	82	15	67
		Kattugutta	544	1,444	835	609
		Makta Cowl	6	94	35	59
		Total ..	745	2,869	1,599	1,270
2	Markapur	Teerwa Cummi	128	778	345	433
		Dasabandham	323	1,492	294	1,198
		Kattugutta	314	588	366	222
		Sagavatu	262	439	212	227
		Shéri	127	196	49	147
		Nisab Rayati	288	1,620	810	810
		Total ..	1,442	5,113	2,076	3,037
	Grand Total ..	2,187	7,982	3,675	4,307	

97. Before quitting this subject I must just mention that no less than 943 acres of Service, and 392 of Batavarti Inam land, in the Cumbum Taluq, have been relinquished by the holders within the last few years; owing chiefly to the high rates fixed upon them, though these are generally lower than those on the Government lands adjoining. Many cases of these high rates still exist.

98. *Number of Villages and Area*.—The number of Government villages, and Agrabarams, in each Taluq, with their respective area, is given in the subjoined Statement.

Taluqs.	GOVERNMENT.		PROPRIETARY.		TOTAL.		
	Villages.	Area.	Villages.	Area.	Villages.	Area.	
	No.	Acres.	No.	Acres.	No.	Acres.	
Cumbum	*72	3,69,157	*37	35,142	109	4,04,299	* Originally 71 and 38.
Markapur	†69	5,02,792	29	34,567	98	5,37,359	† Originally 67.
Total...	141	8,71,949	66	69,709	207	9,41,658	

99. In the Cumbum Taluq, one Government village (Daraga), has been amalgamated with another, (China Cumbum); and one Agraharam (Ayalur Papayapalle), resumed in 1866, was incorporated with the Government village of Idamakallu; while two hamlets, (Kondapeta and Kajipuram), which were quite detached from their Khasbahs, have been constituted separate villages; and similarly two hamlets in Markapur, (Duvvali and Razupalem), have been formed into distinct villages.

100. The above areas are according to the old Revenue accounts. The areas as per Survey will be spoken of further on.

101. *Area excluded from Survey.*—The unsurveyed area in these Taluqs is very great, owing to the large extent of Hills and Jungle, which was excluded from our demarcation operations. The figures given below, show what was the extent of land under occupation in the excluded area in Fusli 1282; and I have also entered, in a separate column the particulars of the occupied area originally left undemarcated. The former by no means represents, the same lands as that appearing under the latter head, but chiefly new cultivation.

Taluqs.	GOVERNMENT LANDS AS PER ACCOUNTS OF FUSLI 1282.				Inams.	Total.	Cultivation excluded from Survey at the time of Demarcation.
	Occupation.	Waste.	Poramboke.	Total.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cumbum	1,890	1,07,416	4,076	1,13,382	4,171	1,17,553	1,938
Markapur	3,689	1,68,424	5,111	1,77,224	3,429	1,80,653	1,616
Total.....	5,579	2,75,840	9,187	2,90,606	7,600	2,98,206	3,554

102. Although a large area* of waste land was laid out by us in each Taluq for future occupation, in localities chosen by the ryots themselves, they have not been satisfied with keeping to these demarcated fields, but have taken up land just where they pleased. This has obliged us, as in the Taluqs lately settled in the Kistna and Cuddapah Districts, to undertake, at the request of the Revenue authorities, the demarcation of these newly cultivated lands.

103. This work has lately been taken in hand and will have to be continued up to the time of settlement; so that we may, as much as possible, demarcate all such land for which Pattas have been issued by the Revenue authorities up to the date of our closing settlement operations. I say, as much as possible, as, in some instances, these lands, like those excluded from Survey at the time of demarcation, (shown in the last column of the above Statement), are situated at a distance from the other cultivation, and cannot be well connected with our work. Such fields, lying often in the middle of jungle, are only cultivated for 2 or 3 years, and then abandoned for fresh clearings.

* Cumbum. Acres.
21,778
Markapur. 68,089

104. *Proportion of Government and Inam land.*—The next Statement gives the details of Government land, Inams, and Porambokes, within the demarcated area; with the proportion of Government land under occupation, and of Inam to Government land.

Taluqs.	GOVERNMENT LAND.			Inams.	Agrahams.	Porambokes.	Total Demarcated Area.	PERCENTAGES.	
	Occupied	Waste.	Total.					of Cols. 2 and 4.	of Cols. 5 and 4.
1	2	3	4	5	6	7	8	9	10
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cumbum.	77,869	24,778	1,02,647	75,725	35,142	73,232	2,86,746	76	74
Markapur.	78,930	68,089	1,47,019	66,556	34,567	1,08,564	3,56,706	54	45
Total.....	1,56,799	92,867	2,49,666	1,42,281	69,709	1,81,796	6,43,452	63	57

105. The percentage of Inam land in Cumbum, is very large, being nearly equal to the occupied Government area; while in Markapur, it is very little less. A glance at the village war details, which may be gathered from Appendices E 1 and 2, will show that, in some villages, the extent of Inam holding predominates; but where this is the case, it will generally be found that the old assessment was very high; and it is no doubt often to compensate for this, that these large grants were made. The benefit, however, was not so great as would at first sight appear, as the Jodi assessment fixed on the Inams, in many villages, is undoubtedly high, as explained in a previous para. (97).

106. *Survey areas.*—As already stated, the Survey areas have been fully received for both Taluqs, and the village war results exhibiting the increases and decreases on the former areas, both in occupation and waste, and on the whole, as well as on Inams, are given in Appendices F 1 and 2. In the following abstract, taken from the above Statements, I have added the figures for Dry, Wet, and Poramboke.

Taluqs.	Items.	OCCUPIED.			WASTE.			Total occupied and Waste.	Inams.	Poramboke.	Total Ayacut of Government Villages.
		Dry.	Wet.	Total.	Dry.	Wet.	Total.				
Cumbum	As per Revenue accounts.	70,843	7,026	77,869	23,794	984	24,778	1,02,647	75,725	73,232	2,51,604
	As per Survey.	78,203	7,563	85,771	21,609	917	22,526	1,08,297	80,131	62,023	2,50,451
	Difference.	+7,365	+537	+7,902	-2,185	-67	-2,252	+5,650	+4,406	-11,209	-1,153
	Percentages.	+10.40	+7.64	+10.15	-9.18	-6.81	-9.09	+5.50	+5.32	-15.31	-0.46
Markapur	As per Revenue accounts.	73,961	4,969	78,930	67,424	665	68,089	1,47,019	66,556	1,08,564	3,22,139
	As per Survey.	83,783	5,561	89,349	62,776	622	63,398	1,52,747	73,653	1,00,902	3,27,302
	Difference.	+9,822	+592	+10,419	-4,648	-43	-4,691	+5,728	+7,097	-7,662	+5,163
	Percentages.	+13.29	+11.91	+13.20	-6.39	-6.47	-6.87	+3.89	+10.66	-7.60	+1.60

107. The results come nearer to those met with in the 28 villages in Sidhout, which Major Stuart gave in his Report on the three southern Taluqs, than that found in the more open country about Cuddapah, before reported on by me.

108. It will be observed that there is a decrease on the Waste, against an increase on the occupied area; showing that the ryots must, as usual, have encroached on the former, and no doubt on the Poramboke too. Considering the large decrease under the head of Poramboke, with a considerable increase on the other hand in the Inams, I think I am justified in saying, that the Inamdars must, in like manner, have added to their holdings also.

109. *Population and Agricultural Statistics.*—The annexed Statement gives the particulars of the population in each Taluq, according to the last three Quinquennial Returns; the number, and proportion of Agriculturists, and Non-Agriculturists; and the average Population per square mile.

Taluqs.	Faslis	Area in square miles.		HINDUS.		MAHOMEDANS.		CHRISTIANS.		TOTAL.		GRAND TOTAL.		AVERAGE OF POPULATION PER SQUARE MILE.	
		Including Hills and Jungles.	Excluding Hills and Jungles.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Agriculturists.	Non-Agriculturists.	Percentage of Agriculturists.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cumbum..	1271	632	389	46,391	42,674	5,062	4,443	..	..	51,456	47,017	61,271	37,202	98,473	62
	1276	632	389	50,029	47,892	5,610	5,265	222	219	55,861	53,376	85,307	23,930	1,09,237	78
	1281	632	389	55,873	54,555	6,247	5,765	356	339	62,476	60,659	61,869	61,266	1,23,135	50
Markapur ..	1271	840	503	34,889	32,511	1,819	1,595	..	..	36,708	34,106	39,036	31,778	70,814	84
	1276	840	503	38,058	36,239	2,051	1,914	1	3	40,110	38,156	58,459	19,807	78,266	75
	1281	840	503	43,921	42,692	2,298	2,208	616	600	46,865	45,500	59,987	32,378	92,365	65

110. It is difficult to understand, why there should have been such an increase in the number of agriculturists, and corresponding falling off in non-agriculturists, in Fasli 1276. It must be due to some mistake in making out the returns for that year. Similarly, I do not think the figures entered for agriculturists and non-agriculturists in Cumbum, in Fasli 1281, can be correct; for there is every reason to believe, that there, as elsewhere, the former are in the majority, unless, of course, women and children are classed under the latter head; in which case the proportion would no doubt be much greater the other way. Perhaps, more correct figures may be forthcoming from the Census Office in Madras.

111. As might be expected, the poor Taluq of Markapur is but thinly populated: after excluding the large area of hills and jungle, however, the proportion of souls to the square mile is not amiss. It is satisfactory to note, that in both Taluqs, there is a steady increase in the population.

112. The next Statement gives the number of Puttadars, and Pattas; with other agricultural statistics, for the same three periods.

Talugs.	Fuslis.	Population.	No. of PATTADARS.			No. of PATTAS.			CATTLE.				OCCUPIED LAND.		Average of each Pat- tadar's holding.		Average Assessment paid by each Patta- dar.					Average Area to each plough.	
			Resident.	Non-resident.	Total.	Individual.	Joint.	Total.	No. of Ploughs.	Ploughing.	Milch.	Sheep and Goats.	Area.	Assessment.									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18					
						Acres.	Acres.	Acres.					Acres.	Rs.	A.	C.	Rs.	As.	P.	A.	C.		
Markapur. Cumbum.	1271	93,473	12,890	3,568	16,458	11,152	1,693	12,845	8,387	17,835	18,877	19,186	82,447	1,51,236	6	42	11	12	5	9	83		
	1276	1,09,237	11,105	3,247	14,352	11,618	2,129	13,747	8,498	17,501	18,137	19,297	81,932	1,47,244	5	96	10	11	5	9	64		
	1281	1,23,135	11,823	4,321	16,144	10,913	2,894	13,807	7,838	15,676	22,128	24,371	80,237	1,39,728	5	81	10	1	11	10	24		
	1271	70,814	5,973	2,726	8,699	7,107	822	7,930	6,985	13,971	20,425	17,823	67,058	74,098	8	57	9	5	6	9	73		
	1276	78,266	7,931	1,920	9,851	7,582	1,474	9,056	6,151	12,302	17,989	34,214	69,101	68,272	7	63	7	8	7	11	23		
	1281	92,365	8,164	2,818	10,982	7,612	2,547	10,159	7,438	14,876	21,618	50,354	52,737	82,817	8	14	8	2	5	10	37		

113. I am afraid the above figures do not speak much in favour of the prosperity of the ryots in Cumbum, but this is to be attributed to the great mortality among the cattle, felt more particularly in that Taluq. It will be remembered that Mr. Thacker paid a special visit to this locality, to see what could be done to stop the cattle disease, which was so rife there. They still suffer a good deal in this respect.

114. The average size of the holdings being larger in Markapur, is what might be looked for, where the soil is poorer. The average assessment paid by each Pattadar is less than in Cumbum.

115. The cattle here are of small size, and the ryots always purchase bullocks for heavy work from the breeders in the Nellore District. It is customary, in many places, to yoke two, and even three, pairs of bullocks to a cart, especially where those with solid stone wheels are used—in the more hilly and rocky localities.

116. Large numbers of sheep and goats, bred here, are brought up by the Mussulman butchers, and taken to Kurnool, &c., for sale.

117. I ought perhaps, in passing, to refer to the hill tribes, called "Chentsas," who abound in this neighbourhood. They inhabit the Nallamallas, and live chiefly upon the products of the jungles. They barter honey and different fruits for grain; and some of them earn a livelihood, by guarding the crops and cattle of the ryots near their haunts.

118. *Rent Roll*.—The following is the Rent Roll for Fuslis 1271, 1276 and 1281.

Talugs.	Fusli.	INDIVIDUAL PATTAS.														JOINT PATTAS.		TOTAL.	
		Below 10 Rupees.		From 10 to 30 Rupees.		From 30 to 50 Rupees.		From 50 to 100 Rupees.		From 100 to 250 Rupees.		From 250 to 500 Rupees.		Total.		No.	Assessment.	No.	Assessment.
		No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.	No.	Assessment.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1. Cumbum.	1271	7,112	26,184	3,079	53,359	696	25,970	226	15,121	28	3,441	1	278	11,152	1,24,953	1,603	18,569	12,845	1,43,522
	1276	7,543	27,468	3,177	56,553	675	24,624	104	12,385	29	3,516	..	..	11,618	1,24,552	2,129	22,693	12,747	1,47,245
	1281	7,314	25,011	2,818	47,532	596	21,825	160	10,062	25	979	..	..	10,913	1,07,349	2,894	32,378	13,807	1,39,727
2. Markapur.	1271	5,027	21,621	1,737	27,323	233	9,065	55	6,132	10	1,236	..	..	7,167	65,317	823	8,781	7,939	74,098
	1276	5,874	21,834	1,463	24,325	197	7,340	42	2,515	6	723	..	..	7,582	56,687	1,474	11,585	9,056	68,272
	1281	5,646	22,728	1,636	24,947	241	8,435	35	5,142	4	463	..	..	7,612	61,716	2,547	21,101	10,159	82,817

The proportion of Joint Pattas has been increasing, and is as much as one-fourth in Markapur, and nearly one-fifth in Cumbum.

119. There has been a falling off in the number of the Pattas above 100 Rupees. Subjoined is the percentage of the holdings below 10 and 30 Rupees, and the average assessment under each.

Talugs.		PERCENTAGE OF PATTAS.		AVERAGE ASSESSMENT.					
		Below 10 Rupees.	Below 30 Rupees.	Below 10 Rupees.			Below 30 Rupees.		
		RS.	RS.	RS.	A.	P.	RS.	A.	P.
1	Cumbum.....	67	93	3	6	9	7	2	6
2	Markapur.....	74	96	4	0	5	6	8	9
	Total..	70	94	3	10	11	6	14	5

120. From these figures, it will be seen that, two-thirds of the holdings in Cumbum average less than Rs. 3-8; and three-fourths in Markapur about Rs. 4. It must not however be supposed, that these petty Pattadars have no other means of subsistence. They work more or less also for the well-to-do ryots, fell wood, and carry the same for sale. The women too assist their husbands in bringing grass and firewood from the neighbouring hills. Weaving is likewise carried on, in most villages though not to any great extent.

121. The condition of the people cannot be said to be much, if at all, better than it was in 1864; when Mr. Minchin, in writing to the Board of Revenue, characterized the ryots as "being largely in the hands of the village Soucars."

122. *Classification of Soils*.—The subjoined Table exhibits the distribution of the soils in this tract, according to the classes and sorts laid down in the Departmental Rules.

Series.	Description of soils.	Class and sort.	CUMBUM.		MARKAPUR.		TOTAL.	
			Area.	Percentage.	Area.	Percentage.	Area.	Percentage.
1	2	3	4	5	6	7	8	9
Exceptional.	Permanently improved land.	II	1	2,482	...	...	...	2,482
			2	130	...	...	...	130
	Total...	...	...	2,612	1.39	...	...	2,612
	Clayey.....	III	1	7,433	...	548	...	7,981
			2	9,235	...	290	...	9,525
			3	8,618	...	1,257	...	9,875
			4	4,587	...	2,596	...	7,183
	Loamy.....	IV	1	6,418	...	3,531	...	9,809
			2	5,680	...	6,260	...	11,940
			3	2,228	...	5,697	...	7,925
Black Cotton (Regur).	Sandy.....	V	1	79	...	5,697	...	90
			2	137	...	299	...	436
			3	990	...	3,251	...	4,241
	Total...	...	...	45,405	24.10	23,600	10.42	69,005
	Clayey.....	VI	1	11,573	...	1,678	...	13,251
			2	5,887	...	748	...	6,635
			3	3,699	...	41	...	3,740
	Loamy.....	VII	1	29,136	...	17,187	...	46,323
			2	34,232	...	99,132	...	1,33,364
			3	26,159	...	4,463	...	30,622
Red (Lab).	Sandy.....	VIII	1	4,558	...	3,908	...	8,466
			2	10,377	...	72,092	...	82,469
			3	14,790	...	3,551	...	18,341
	Total...	...	...	1,40,711	74.51	2,02,800	89.58	3,43,211
	Grand Total...	...	...	1,88,428	100	2,26,400	100	4,14,828

123. Classification operations were carried out here with only two sorts under each of the classes in the Red series, in the same way as was done previously in the Kurnool District and in Cuddapah; but when I discussed the subject with Mr. Puckle, he approved of my proposal to add a third sort; and accordingly, when going into the details of the results of applying my proposed settlement rates in each village, I have brought down the poorest soils, where necessary, under these lowest sorts. The modifications were required more in the Cumbum

137. *Cotton*.—This is sown along with Korra, as mentioned above; but, in the southern part of the Cumbum Taluq, it is grown by itself. It is generally of an inferior quality. There are usually three pickings..

138. *Horse Gram* is the crop grown in the very poorest soils; wherever Sajja fails the land is ploughed up, and Horse Gram put in as a second crop.

139. *Paddy*.—There are three kinds of Paddy known in Markapur, and a 4th (Chenangi) in Cumbum. They are valued in the following order:—(1) *Sambava* or *Sanna vadlu* (fine Paddy), and (2) *Budama*, both six months' crops; (3) *Vankalu* which comes to maturity in four months; and (4) *Chenangi* reaped generally in about three. The seed is for the most part raised in beds, and the young shoots are transplanted after six weeks; but in a few localities it is sown broad-cast.

140. *Raggy*.—This grain is chiefly cultivated under wells, which water no small portion of the irrigated area of these Taluqs. It also finds a place under the ayacut of minor tanks, or wherever the supply is scanty, as it does not require so much water as Paddy.

141. *Indigo* is grown both in Dry land, as well as in Wet; besides being sometimes cultivated as a garden crop. If in Dry, the yield is only about two average sized bandy-loads; while in Wet there is a second cutting, and, the plant being larger, as many as six and seven cart-loads of the leaf are obtained; but the produce of dry land is considered preferable, as it produces more, and better, coloring matter.

142. *Sugar-cane and Betel leaf Gardens*.—Four months after Paddy has been reaped, the ground is ploughed up, and seeds of the Avisi tree (agati Grandiflora) sown in rows, to form a support for the Betel leaf creeper, which is put in after the Avisi plants have got a little start above ground. In the case of Sugar-cane, the soil is more highly manured, and the cuttings are put in about the same length of time after Paddy is off the ground.

143. A Betel garden, as might be expected, is the more valuable of the two; but it requires much more labor, having to be watered every four or five days; while Sugar-cane only has to be flooded once in eight or ten.

144. The Betel leaf creepers are taken down every six months, and the stems turned down into the ground to shoot up again more thickly than before. These gardens have also to be carefully enclosed with a strong fence, to protect them from the wind, which often plays havoc among the tall slender Avisi trees used for the supports. These trees are not allowed to grow above seven or eight feet in height.

145. Both crops come to maturity in about ten months, a Sugar-cane garden lasting from ten to twelve years in good soil; and about four in poor land; while the Betel gardens have to be moved to fresh localities every two years or so.

146. After Betel, Paddy or Sugar-cane is grown; and, after Sugar-cane, either Paddy or Raggy, when the land may be again cultivated with the above crops. The size of these gardens vary from half an acre to two acres.

147. Under the Cumbum Tank irrigation, I am told that Sugar-cane is continued on the same land much too long, and that consequently the plants are poor, and the Sugar manufactured from them inferior, and for the most part of a dark color.

148. The Sugar is manufactured in the same rough and ready way that is adopted by the natives in other Districts. There are no less than five sorts turned out in Cumbum; but in Turimella, Mundlapad, and other places only two the second sort being made from the inferior stalk. I have not been able to ascertain why this Sugar does not come up to the quality of that produced at Gurramcondah. Its inferiority consists in it lacking the granulation of the latter, it absorbs moisture more readily, and often becomes quite like a paste.

149. I annex a Statement showing the area occupied by each of the special products, Cotton, Indigo, and Sugar-cane, during the last eleven years, in these Taluqs, both on Government and Inam lands. Though the cultivation has varied according to demand, there is for the most part a steady and considerable advance under each head.

Taluqs.	GOVERNMENT LAND.												INAMS.											
	Indigo.				Cotton.				Sugar-cane.				Indigo.				Cotton.				Sugar-cane.			
	Cumbum.		Markapur.		Cumbum.		Markapur.		Cumbum.		Markapur.		Cumbum.		Markapur.		Cumbum.		Markapur.		Cumbum.		Markapur.	
	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
1272	565	5,297	..	..	717	624	..	..	246	2,789	..	..	245	1,985	..	..	632	907	..	..	106	1,190	..	..
1273	739	6,412	..	..	1,943	2,151	..	..	189	2,241	..	..	251	2,060	..	..	1,021	2,875	..	..	80	1,067	..	..
1274	292	1,918	..	..	2,396	2,668	..	..	207	2,291	..	..	137	919	..	..	1,946	2,823	..	..	96	1,144	..	..
1275	460	4,641	..	..	3,307	2,227	..	..	268	2,964	..	..	145	1,620	..	..	2,350	2,306	..	..	153	1,729	..	..
1276	281	2,978	156	299	2,149	2,128	2,712	1,617	108	1,183	..	..	113	841	39	49	1,001	1,062	1,365	935	46	511	..	..
1277	436	3,335	276	490	3,001	2,588	2,666	1,737	243	2,764	..	..	104	979	504	706	2,182	2,526	1,571	1,204	88	969	..	..
1278	776	5,432	1,231	847	2,246	2,137	2,889	1,947	186	2,179	..	..	207	1,632	141	54	1,578	1,896	1,454	1,037	85	989	..	..
1279	684	3,082	1,208	1,594	2,304	2,552	3,503	2,237	182	2,387	..	..	345	1,243	211	262	1,867	2,385	2,577	1,731	64	784	..	..
1280	1,758	7,805	930	1,638	1,971	2,156	3,463	2,173	318	3,521	..	..	509	2,852	311	535	1,779	2,559	1,965	1,325	161	1,647	..	..
1281	967	5,129	953	1,227	2,314	2,601	4,036	2,610	477	5,357	..	..	680	4,163	216	273	2,704	2,928	2,480	2,017	225	2,495	..	..
1282	1,468	7,444	1,166	1,620	2,633	2,193	4,241	2,794	416	4,574	..	..	692	6,153	419	636	2,470	2,599	2,172	1,680	168	1,208	..	..

150. The low assessment on some of the land under Cotton, shows that this crop is often grown on poor soils, mixed, as has been already said,* with Korra. Indigo is chiefly grown on Wet lands and Sugar-cane is essentially a Wet crop.

* Para. 135.

151. *Irrigation.*—The sources of irrigation existing in these Taluqs are of three descriptions ; viz., (1) Tanks, (2) Channels from Rivers and Hill streams, and (3) Wells. The number in each Taluq is given below :—

Taluqs.	TANKS.				CHANNELS FROM RIVERS AND HILL STREAMS.				WELLS.			
	Government.	Dasabandham.	Private.	Total.	Government.	Dasabandham.	Private.	Total.	Donnu and Itifak.	Dasabandham.	Private.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
Cumbum.....	40	25	19	84	10	2	2	14	181	4	1,103	1,288
Markapur.....	35	31	65	131	...	...	7	7	235	5	1,577	1,817
Total...	75	56	84	215	10	2	9	21	416	9	2,680	3,105

152. The next Statement gives the area of Government and Inam land under the several Government Sources.

Taluqs.	Sources of Irrigation.	No. of works.	GOVERNMENT LAND.			Inam area.	Total area.
			Occupied area.	Unoccupied area.	Total.		
1	2	3	4	5	6	7	8
Cumbum.....	Tanks.....	65	5,846	824	6,670	4,321	10,991
	Channels.....	12	514	54	568	298	866
	Wells.....	185	666	106	772	232	1,004
	Total...	262	7,026	984	8,010	4,851	12,861
Markapur.....	Tanks.....	66	3,808	567	4,375	1,872	6,247
	Wells.....	240	1,161	98	1,259	126	1,385
	Total...	306	4,969	665	5,634	1,998	7,632
	Tanks.....	131	9,654	1,391	11,045	6,193	16,278
Total of both Taluqs.	Channels.....	12	514	54	568	298	866
	Wells.....	425	1,827	204	2,031	358	2,389
	Grand Total...	568	11,995	1,649	13,644	6,849	20,493

153. Lands under ruined Sources, hitherto entered as Wet in the Revenue Accounts, have now been transferred to Dry, and are not included in the above.

154. The following are the proposed changes in the Wet ayacut resulting from the examination on the ground made by this department, with reference to the Revision of Wet ayacuts in these Taluqs.

	Cumbum.	Markapur.	Total.
	Acres.	Acres.	Acres.
Wet ayacut as registered in Revenue Accounts.....	12,861	7,632	20,493
Deduct transferred to Dry.....	1,985	331	2,316
Balance..	10,876	7,301	18,177
Add transferred from Dry to Wet.....	2,180	3,120	5,300
Remaining Wet ayacut.....	13,056	10,421	23,477

155. These proposals have not been submitted for the approval of the Revenue authorities in the usual B. Statements, as Mr. Puckle deemed it unnecessary to go into all these further details now, and thought it better to leave the disposal of the matter till the time of Settlement, when he considered that it would be sufficient to “adopt the Wet area then held on Putta as the ayacut of each particular work.” The revision if carried out on his proposals, will vary considerably from that determined by the examinations on the ground, but the accounts based upon the latter, will no doubt be found very useful at this final adjustment of the Wet area.

156. At the time of the transfer of the old well lands to Dry in Fusli 1275, I find that some under Dasabandham Wells were inadvertently included with them. These have now been included in our proposed transfers from Dry to Wet, and the cases where they occur have been duly brought to the notice of the Collector, with a view to the error being rectified in the Revenue Accounts without waiting till the settlement is introduced.

157. Lands in the water-spread of Tanks, of which there is no small amount in these Taluqs, have also been treated by us as Wet. According to the proposals contained in the Returns sent in by the Classifiers and Head Classifiers who examined the ground the area shown under this head is 2,388 acres in the two Taluqs, but this is liable to correction and will no doubt require modifying when we go into particulars at the time of Settlement.

Taluqs.	Kurnam Area.	Survey Area.
Cumbum.....	1428-61	1513-60
Markapur.....	728-24	874-55
Total...	2156-85	2388-15

158. Similarly lands registered now as Dry, and which have been paying Teerwajasti for several years past, have likewise been adjusted under Wet. There is a large extent of this land in Markapur.

159. With the exception of the cases coming under the last paragraph, none of the transfers indicated above have been taken into account in calculating the financial results of the present proposals.

160. The Dasabandham allowances for Tanks and Channels in these Taluqs have, in some cases, been granted in money remissions, as explained in para. 95 ; and will have to be continued hereafter in the same manner.

161. (1) *Tanks*.—By far the largest Tank is the one at Cumbum, which, when full, covers an area of more than 4* square miles, and irrigates no less than 4,370 acres of Government and 1,864 of Inam land—total 6,119 acres in fifteen villages. It has quite a history of its own, which I briefly give below as gathered from the document referred to in para. 57.

* The area demarcated as Tank bed is about 3 square miles but the extent of land cultivated within the water-spread represents upwards of 1,000 acres more.

162. The credit of conceiving the bold idea of forming such a noble reservoir, by throwing a dam across the narrow opening through which rushed the united waters of the Gundlacumma (or Gundicamma), Jampalair, and Nallavagu, is given to the Hindu sage Jamathagni, who is said to have had his hermitage on the banks of the Gundica river, which rises near the Gundla Brahmeswara Peak. He thought that it would form a fine appendage to the temple of Gundla Brahmeswaram, which he had built on one of the hills to the west, and dedicated to Siva.

163. When Gopanavadiya became Governor of Cumbum, he saw the infinite advantage which the people might derive from this Tank, and therefore set to work to enlarge the reservoir by adding to the embankment, and making other improvements, with a view to utilizing the water for purposes of irrigation. This is said to have called forth the indignation of Gundica, who appeared to Gopanavadiya in a dream, in the form of a Naiad, and remonstrated against her waters being thus spent up ; the result of which she said, would be that her name would be soon forgotten. She required that two human lives should be sacrificed for her propitiation, and an escape formed, by means of which some of the water, at least, might find an exit ; and thus she would be able to continue her course to her lord the Ocean.

164. Two shepherd brothers—named Pedda Cumbadu and Chinna Cumbadu—volunteered their lives for the purpose, on condition that two sluices should be constructed, and called after them ; and that two villages should be similarly designated to commemorate their names, as a lasting remembrance of their great devotion in the cause of their country. Accordingly the sluice on the north was called after the elder brother, and that to the south after the younger ; and the names of the two neighbouring villages—Sivarayasamudram and Bukkarayasamudram—were changed to Pedda and Chinna Cumbum. These villages were originally opposite the sluices bearing the corresponding names, but some years later they were devastated by a pestilential wind from the north, which caused great mortality both among men and cattle. The inhabitants, panic-stricken, deserted the villages and emigrated some little distance to the east, where they formed the now existing Settlement of Pedda Cumbum and Chinna Cumbum ; the former being what is now known by the name of “*Cumbum*.”

165. At the same time that the above two sluices were built, a proper Calingula was formed at the gap to the north, called Nakkalagandi, where an opening had previously been made to allow for the escape of the surplus water.

166. The two main channels leading from the Pedda and Chinna Cumbadu sluices, still bear the names of Pedda and Chinna Kalava (great and little channels), the one irrigating lands to the north and the other to the south of the Gundlacumma. From these branch off in every direction a perfect net-work of smaller distributing channels.

167. By the above additions the circuit of the Tank was increased to some twelve miles.

168. After this came the wanton act of Narendra—already referred to—when the cutting of the embankment caused the greater part of the water to escape.

169. Nothing seems to have been done to close the breach for a long time—report says 50 years—when one Devalasani Varadarajama, the daughter of the then ruling power at Vizianagur, happening to pass through Cumbum on her way to join her husband at Vizianagram, determined to devote the whole of the large dowry which she carried with her, to the restoration of this magnificent work. Hence, the Tank is still called after her, *Varadarajama Cheruvu*. Owing however to the dishonesty of the parties to whom the work was entrusted, only a portion of the funds were spent for the purpose intended, and the bank was but partially restored.

170. Minor repairs were made at different times, but it was not until the reign of Nekanam Khan that things were brought to a satisfactory termination, as testified to by the inscription on a pillar put up in front of the Jumma Musjid, which was built by him.

171. He is said to have constructed the third sluice near the Calingula, which supplies water at a higher level to the lands to the east of Cumbum and finally unites with the Pedda Kalava.

172. A large upright slab of granite, now standing near the Calingula, bears two Persian inscriptions (one in relief)—dated respectively Hejira 1102 and 1193—both of which ascribe the formation of the above channel to Nawab Alli Raja Khan, and express a hope that the extension of cultivation will result in the people of Cumbum being able to live wholly on Rice instead of Cholum, and that the wealth of the country may become equal to that of Cashmere !

173. A later Telugu inscription on a stone lying in front of one of the small temples on the Tank bund, confirms the story of the partial restoration of the Tank by Varadarajama, and its completion by Mahomed Ashroff ; adding that some further repairs were made to the northern sluice in May 1852, under the directions of Major Roberts, Civil Engineer of the 2nd Division.

174. There are two other large slabs with Persian inscriptions upon them, at either extremity of the embankment; but notwithstanding all my endeavours, I was not able to get them deciphered.

175. The only other Tanks of any consequence in the Cumbum Taluq are, the one at Kakarla, a little north of the Cumbum Reservoir; and two at Komaravol: while in Markapur, none but those of Markapur, Dupad, Baddivid, and Yerrakondapalem, deserve any notice. Though the water-spread of some others may seem great, they are very shallow, and the area irrigated by them is therefore less than might be expected.

176. (2) *Channels from Rivers and Hill Streams.*—These Channels are all in the Cumbum Taluq, and are supplied from rough stone dams thrown across the Gundlacumma, Jampalair, Sagilair and southern Yannamalair. Besides having ayacuts of their own, some of them also form supply channels to Tanks. These remarks refer to Government sources. The private ones are generally very insignificant, and are not carefully kept up.

177. (3) *Wells.* These are of two kinds, viz: Doruvu wells, which are situated on the banks of rivers or other streams of sufficient importance to be considered Government sources; and Itifak wells, or such as lie within the prescribed limits (10 yards) of any Government sources, whether stream or Tank. All wells situated in the midst of wet cultivation or adjoining wet fields, in such a manner as mainly to derive their supply from the existence of the Government source by percolation, are also included under the head of Itifak, as laid down in Board's Proceedings of 23rd October, 1873, No. 2,169. These wells have a fair supply when there is none elsewhere, and the ryots are obliged to acknowledge that they do manifestly benefit from their proximity to Government irrigation.

178. Doruvu wells on the banks of the Gundlacumma in the Markapur Taluq cost a good deal, on account of the banks being very high, and the ground in many places very false. In consideration of this additional expense, and the great labor attendant on lifting the water to such a height, I have endeavoured to deal leniently with the lands under them by rating them lowly.

179. A much larger number of Doruvu wells existed at one time, but some have been damaged, and several have disappeared entirely, from the erosion of the banks at the places where they stood, while others have been rendered useless by the silting up of the pools in the river bed, from which they used to derive their supply of water. Notwithstanding all these drawbacks, it is a remarkable fact that little or nothing has been done to extend this system of irrigation for which there are many facilities in places where a comparatively small expenditure would suffice. Want of capital is no doubt, from what I could ascertain, the great difficulty; but I am afraid no little blame is to be attributed to the ryots' reluctance to undertake the additional labor that such cultivation involves. I think that, if anything, the cultivators here are more backward in this respect than in most places, and that where they find they can manage to live on with a minimum of trouble they do not care, as a rule, to exert themselves to better their position.

180. All this may be owing a good deal to the hopeless extent to which the ryots are already involved with the money lenders, and to the hard terms the latter demand for further advances. As however Government are now willing to help the ryots with funds, when necessary, under the Land Improvement Act, I trust the day is not far distant when we may hope to see them benefitting by these generous offers, and I venture to express a hope that the relief which the proposed settlement will afford, in adjusting some of the unduly high rates that many of the landholders have hitherto been paying, will stimulate them to greater exertions, and rouse in them a desire to rid themselves as soon as possible of the cruel bondage which they have been under to the money lenders—a bondage which has been detrimental not only to their own happiness, but the prosperity of the country at large.

181. These Doruvu wells, I may remark, are the Kolmotos referred to in N. Gopalakistamma Chetty's report on Markapur. He proposed that the lands under them should be transferred to Dry, but to this Mr. Minchin demurred,* saying that the "use of the Government water is so valuable to the cultivators that even when raised by artificial means it can easily be paid for at the low Wet rates which he proposed."

182. A reduction of 1 Rupee per acre will be made, as in the Budwail, Sidhout and Pullampet Taluqs, on all lands under wells, and those irrigated by baling, to compensate for the expense incurred in lifting the water; and in the case of the former the charge will be a consolidated rate for two crops. The lands irrigated by baling are invariably more favorably situated than those under wells, and do not therefore appear to require the same concession as the latter with reference to remission of second crop assessment.

183. *Tanks handed over to villagers at special rates, and private sources.*—Ruined Tanks have been made over to the ryots in these Taluqs on special rates varying from Rupees 2 to Rs. 3-4-6 per acre. These rates will be continued in our Settlement on the tract originally granted on these terms, and, as has been proposed in Cuddapah, all additional cultivation charged for at the ordinary Dry rates.

184. In our late examination of Wet ayacuts in these Taluqs, I adopted with the Collector's sanction, the following general rules for the treatment of Private Tanks; and think the same might be followed in the case of Private Channels, some of which, though drawing water from a Government Source, have hitherto been only paying Dry assessment

(1) When the Tank did not interfere with any Government source, the land under it was treated as Dry.

(2) When the Tank received its supply from any stream or channel that usually flowed on to a Government work, the land under it was classed as Wet.

185. *Improvement and extension of Irrigation works.*—Captain Taylor, lately Acting District Engineer at Kurnool, when holding a similar appointment

in this District some years ago, commenced a scheme for diverting the water of the Sagilair above Giddalur, and carrying it by a channel northwards, past Timmapuram Agraharam and Racherla, and thus into the stream which flows into the Cumbum Tank ; but nothing was done beyond making a few excavations here and there in the neighbourhood of Giddalur.

186. I should not think any such addition to the present supply channels to the large Tank were necessary, as already the volume of water that it receives is so great that a very considerable extent of land belonging to the villages of Bogol and Lingapuram, above the Tank, are yearly submerged, the water sometimes coming very nearly up to the sites of both villages. In the late examination made by our men with reference to the proposed revision of Wet ayacuts, no less than 542 acres in Bogol and 322 in Lingapuram have been registered as waterspread belonging to the Cumbum Tank. The greater part of this is immemorial occupation, and will I think have to be treated exceptionally, to such extent as may not practically interfere with the Tank. They are invariably cultivated after the water in the Tank has subsided, and they are the best Dry lands in the neighbourhood. I was anxious while in that neighbourhood to go over the ground with the Head Assistant Collector and Tahsildar in order to settle something about these lands, but they could not manage to spare the time. Mr. Farmer promised to see the place and come to some decision with the Tahsildar as soon as possible, but I have not yet heard that he has done so. I think perhaps the Engineer Department might be consulted in the matter and the subject more fully discussed and satisfactorily disposed of in communication with the Revenue authorities and villagers at time of Settlement.

187. I do not know whether it would be deemed advisable to lower the level of the Calingula as it may be said that the present supply of water is already insufficient to irrigate the whole ayacut under the Tank as there is a large extent of waste. Much might however be done to remedy this state of things by a more careful expenditure of the water. The flow from the sluices does not appear to be properly regulated, and, owing to the want of the necessary shutters to the side channels, the ryots told me they had to stop the water by stuffing straw and bushes with earth into the openings. This is of course quite inadequate to prevent the unnecessary escape of water, and I was often struck with the large stream, which was continually flowing into the Gundlacumma, which receives the drainage of all the lands below the Tank. The minor channels, not to say anything of the three main ones, are not kept in anything like good repair ; and it would appear that there is a very insufficient staff to look after the distribution of the water and see that none is wasted.

188. This subject has, I understand, lately engaged the attention of the Revenue and Engineer officers ; and while I was at Cumbum last year, Mr. Farmer was preparing a report, with sketches, showing what improvements could be made.

189. The following Statement which I got from the Tahsildar, shows how much of the Government area of 4,370 acres hitherto registered as the ayacut

under the Tank, has been under occupation during the last ten years, and what extent of additional land has been yearly irrigated and charged with Teerwajasti.

Fuslis.	Extent of Ayacut under occupation.	Extent of other land irrigated by the tank and paying Teerwajasti.	Total irrigated area.
1274	3,800	248	4,048
1275	3,766	232	4,048
1276	3,940	262	4,202
1277	3,776	219	3,995
1278	3,666	217	3,883
1279	3,617	246	3,863
1280	3,711	232	3,943
1281	3,633	239	3,872
1282	3,518	243	3,761
1283	3,400	80	3,480

190. According to the ayacut Revision accounts prepared by the Classifiers of this Department, it is only proposed to retain 3,173 acres as the area under this source ; but I expect that when the matter is gone into more carefully at the time of Settlement, such extensive modifications will not be found necessary.

191. A much more easy way of increasing the supply of the Cumbum Tank than the cutting of the channel from the Sagilair, referred to in para. 185, if it should be thought that something of the kind is necessary, would be to divert the stream which flows into the Kakarla Tank by the valley to the south, which I understand is quite practicable.

192. N. Gopalakistamma Chetty in his Report already referred* to, mentions several irrigation works which he thought might, with advantage, be carried out in the Markapur Taluq, but only two of these—relating to the improvement of the supply to the Markapur and Dupad Tanks—are referred to by the Engineer officers to show that they are not feasible. The others they evidently considered were either quite impracticable or not worth considering.

193. Another scheme which Mr. Minchin speaks of in para. 27 of his letter of the 29th August, 1864, No. 145, does not seem either to have secured the support of the Engineer Department ; but Captain Taylor is very full of an extensive work which he recommended in 1869 should be undertaken near the village of Mumadivaram, in the south-east corner of the Markapur Taluq, where “the Gundlacumma passes through a mountain gorge.” It would appear to lie at the spot where the Kandlair, coming down from the north, joins the Gundlacumma ; and the drainage area, Captain Taylor says, would be nearly 3,500 square miles.

"A bund here, 600 yards wide and 80 feet high, would give a reservoir 25 miles "long and 15 broad." This would immerse a large extent of country, a good part of it possibly land belonging to the Darisi Division of the Venkatagiri Zemindary. "The return," Captain Taylor estimated, "would be probably 30 lacs of Rupees or "at least 30 per cent. on outlay." The land to be watered by this immense Tank is all situated in the Vinukonda Taluq of the Kistna District.

194. With such a large surface of hill drainage, and the natural facilities which the configuration of the country here affords for forming numerous tanks of almost any size, it seems a pity that something should not be done to try and store water, even in small quantities, wherever this is possible, especially in a tract where, as explained by Mr. Minchin, "the soil, which under Dry cultivation produces the "most scanty crops, is admirably suited for irrigation." The advantages to be derived by an outlay of Government money on such works in a locality like this, is not, I think, to be estimated in the way that the Engineer Department are inclined to look at it, viz., in the light of the percentage that will be forthcoming on the outlay. The indirect benefit that Government would and must derive from the improved condition of the ryots should rather be considered, and I am sure that a judicious expenditure of funds in promoting Wet cultivation will go very far to attract settlers and capitalists. It is, I think, a case more to be taken in hand by the local Revenue officers than by the Engineer Department, and I doubt not but that the former would be able to get the ryots to take an active part in forwarding any projects that might be proposed, by giving their labor *gratis*, for they are, as a rule, too poor to furnish any funds.

195. From what I learnt in different places I fear that the state of affairs has not improved since Gopalakistamma Chetty complained in 1864, that a great many of the Tanks were "in very bad repair." The ryots are also as fond as ever of ploughing up and cultivating large portions of the waterspread. This has of course caused the Tanks to silt up, but in our revision of Wet ayacuts we have tranferred all these lands to Wet, with a view to obliging the ryots to relinquish them, in order that they may be transferred to the right head of Poramboke, unless they are willing to pay the higher rate of assessment. With a view not to delay these adjustments till the time of settlement, I have addressed the Collector to see whether he is willing to introduce the changes now, the Head Assistant having expressed himself quite prepared to carry them out if the former approved. This will have the additional advantage of drawing the attention of the ryots to the subject at once, so that they may be better able to appeal early, where necessary, for I have too often found that they are so apathetic that it is not until they are called upon really to pay up the higher wet assessment that they begin to open their eyes to the state of things, and so appeals are continually coming in long after settlement.

196. *Grouping of villages.*—We now come to the important subject of grouping the villages, and these I will speak of under Dry and Wet separately as they have to be treated differently, according to their respective merits under each head.

197. *Dry grouping.*—There is a tract of superior soil in the middle of the Cumbum Taluq situated in 8 villages, and these I propose forming into the first group. Twenty-one villages lying in the valley to the south of Cumbum, and about Cumbum itself, contain very poor soils and have therefore been placed in the third group; while the remaining forty-one form the second group in this Taluq.

198. In Markapur only thirteen villages in the south-east corner of the Taluq, comprising a stretch of fair cotton soil have been classed in the second group; while the bulk of the Taluq has, as might be expected from its poor nature, come under the third and last class. The villages of Gannepalli, Velagalapaya, Nallagunta, Cherlopalli and some others situated in the narrow valleys to the west of the Taluq have very good soils; but considering that they are difficult of access, are very feverish, and suffer from the ravages of wild animals, I have made no distinction but have classed them also in the lowest group. The villages in the valleys in the Cumbum Taluq running up into the Nallamallas, are much more accessible and do not at all require the same concession.

199. *Wet grouping.*—In wet I have also formed three groups. The first comprises the villages with really good sources of irrigation, viz., channels from the Gundlacumma and Sagilair, and irrigation from the Cumbum Tank except in the case of four villages situated at a distance from the Tank and indifferently supplied. The second applies to ordinary Tanks of fair size; whilst the third includes all the minor sources. Where there is an inferior source in a village as well as a superior one, due allowance has been made by reducing the lands under the former a sort, which is equivalent to rating the lands under that source a group lower.

200. The subjoined table exhibits the grouping both in Dry and Wet in each Taluq; and the position of these groups is shown in the sketches accompanying this Report as Appendices G 1 and 2.

Taluqs.	DRY.					WET.				
	1st Group.	2nd Group.	3rd Group.	Villages containing no Dry.	Total.	1st Group.	2nd Group.	3rd Group.	Villages containing no Wet.	Total.
Cumbum. ...	8	41	21	2	72	14	41	10	7	72
Markapur. ...	...	13	56	...	69	...	22	27	20	69
Total...	8	54	77	2	141	14	63	37	27	141

201. Before I leave this subject I should like to mention a circumstance which came to my notice while discussing this part of my proposals with the villagers. It strongly proves the truth of what has been said more than once, that

the ryot can, and will, exert himself to make more out of the soil by industrious husbandry when it becomes absolutely necessary for him to do so to meet a higher rate of assessment that may have been fixed on it.

202. All the villagers, together with the Tahsildar and the Revenue Inspector, maintained that there was one village (Narava) that was far superior to all the others in the Cumbum Taluq, and they thought it ought to be classed higher than any. The ryots of the village itself agreed that the lands were by no means good—the usual cry—but they could not deny that they were in the habit of getting a second dry crop off a great many of their fields, while nowhere else in the Taluq was such a thing known.

203. They pleaded however, that the old assessment was very heavy, and here was the real secret. Some of the lands were rated as high as Rs. 9-8-3 per acre, the average Dry rate on the whole village being more than Rupees 5 the acre; while in the two highest villages adjoining (Kongalavid and Giddalur) the highest Dry rates were Rupees 4-6-0 and Rupees 5-4-0 respectively, and the averages Rupees 2-4-7 and Rupees 2-1-2. I could see no real difference in the soils of all three villages myself, beyond the higher rated ones being perhaps a little better manured, and the Tahsildar afterwards admitted that he thought they must be all equally good though the villagers maintained that there was a difference, the Narava people for the most part forbearing to give an opinion at all. The Giddalur ryots expressed their willingness to exchange lands with those of Narava; but the latter seemed by no means desirous of giving them up, unless the present high rates were to be continued, in which case they saw no hopes of clearing off their present debts. They were not a little delighted on my assuring them that the Settlement Dry rates would certainly not be anything like so high.

204. There is comparatively very little waste in the village except relinquished Inams which here, as in other places in these Taluqs, have been unduly highly assessed and have therefore been thrown up by the Inamdars.

205. Narava is one of the villages in which the proportion of Inam land is very large, being nearly three times as much as the Government area; but as these lands too are very highly assessed, the average Dry rate on the whole village including Government and Inam land is Rupees 4-10-8 per acre.

206. There is a great deal of truth I think in what has been said about the cultivator or the soil in this country having on the whole a very easy time of it, for while others work for their livelihood all the year round, he, for at least six months if not more,—except where he goes in for much Wet cultivation and gardening—leads an idle life, lounging about the village Choultry and gossiping with his neighbours; and when he is busy cultivating his land it is often done in the most slovenly manner. The slight improvement in this respect which is met with in the Cuddapah ryots has not yet reached the tract of country now reported on.

207. *Standard Crops.*—The following Statement exhibits the percentages of the several crops in each Taluq in Fusli 1282 as taken from the table given in para.

Crops.	PERCENTAGES.		
	Cumbum.	Markapur.	On the whole.
<i>Dry.</i>			
1. Jonna	28	7	17
2. Sajja	14	27	21
3. Araka	8	9	8
4. Variga	6	6	6
5. Korra	21	25	23
6. Cotton	4	5	5
7. Horse Gram	14	16	15
8. Minor Crops	5	5	5
Total... ..	100	100	100
<i>Wet.</i>			
1. Paddy	47	34	41
2. Raggy	31	42	36
3. Indigo	15	15	15
4. Minor Crops	7	9	8
Total... ..	100	100	100

208. *Dry standards.*—In Dry Jonna is the grain most extensively grown in Cumbum; and in Markapur Sajja. Korra and Horse Gram are found to a large extent in both Taluqs. Araka, Variga, Cotton and the minor crops together make up 23 and 25 per cent. in Cumbum and Markapur respectively.

209. Cotton as in all previous Settlements must be classed with the more valuable products, Jonna and Sajja; and Araka and Variga with Korra and Horse Gram. As the minor crops comprise the grains chiefly mixed with Jonna and Sajja, as well as the valuable crops of Wheat, Bengal Gram, Gingelly and Castor Oil seed, they may very well be all put with the first named.

210. Jonna and Korra then being taken as the representative crops, as

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	PERCENTAGES.		
	Cumbum.	Markapur.	On the whole.
Jonna	28	7	17
Sajja... ..	14	27	21
Cotton	4	5	5
Minor Crops	5	5	5
Superior Crops ...	51	44	48
Korra	21	25	23
Horse Gram	14	16	15
Arika	8	9	8
Variga	6	6	6
Inferior Crops ...	49	56	52

211. As might be expected the proportions of the more valuable crops is lower in Markapur, where the poorer soils predominate.

212. I propose taking Jonna as the standard crop for the Regar series, (Classes III, IV and V) as was done universally in Kurnool Proper, Pattikonda, Koilkuntla and the adjoining Taluqs in the Cuddapah District ; and for the Red series I think I shall be justified in adopting half Jonna and half Korra, as Major Stuart did in the neighbouring Taluqs, which in many ways are very similar to these. In doing so we are dealing very liberally with these poor soils as compared with what was taken in Nellore.

* Vide para. 112 of Major Stuart's Settlement Report on Budwail, Sidhout and Pullampet.

213. *Wet standard.*—Paddy must, as a matter of course, be adopted under this head, and as usual we have taken the average of the two sorts.

214. *Grain values.*—The number of experiments made by our Department to ascertain the out-turn of produce per acre on the different descriptions of soils, in each of these Taluqs, is 1183, viz., 160 in Jonna, 233 in Sajja, 566 in Korra, and 224 in Paddy. The majority were made in 1866, when our parties were working in the Taluqs ; but in 1865 and in five subsequent years, (1867-71-72-73 and 74) a few men were specially detached to make additional kyles, and the result of all is given in Appendices H 1, 2, 3 and 4. Though Sajja has not been taken as a representative crop, I have thought it better to include it in the above Statements, as it is a grain so largely grown, and a good many kyles were made in it.

215. The following Abstract gives the result of the said kyles, together with the figures which the Tahsildars and Villagers have quoted as their opinions regarding a fair out-turn ; and with them I show the Grain values which I pro-

pose to adopt. The Tahsildars' and Villagers' quotations are, as usual, very much below the mark and often very conflicting.

[illegible]

216. The next table compares my proposals with the Grain values adopted for Pattikonda, and those which Major Stuart fixed for the three southern Taluqs adjoining these.

Class and Sort.	JONNA.												KORRA.						PADDY.											
	Adopted for Partikonda.						Proposed for Bud-wail, Sidhout and Cumbum and Markapur.						Proposed for Bud-wail, Sidhout and Fullampett.			Proposed for Bud-wail, Sidhout and Fullampett.			Proposed for Bud-wail, Sidhout and Fullampett.			Proposed for Cumbum and Markapur.								
	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.	4th Group.	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.	1st Group.	2nd Group.	3rd Group.					
II.	1 450	440	400	500	440	380	325	440	350	300	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	2 ..	...	...	300	250	210	180	350	500	240	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
III.	1 350	320	500	400	340	280	250	350	500	240	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	2 280	240	230	300	250	210	180	300	240	180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
IV.	3 200	180	150	220	180	150	125	240	180	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	4 120	120	120	140	120	100	90	180	150	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
V.	1 280	240	230	300	250	210	180	300	240	180	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	2 200	180	150	220	180	150	125	240	180	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
VI.	3 120	120	120	140	120	100	90	180	150	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	180	150	220	180	150	125	240	180	150	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
VII.	2 120	120	120	140	120	100	90	180	150	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	3 80	80	80	80	80	80	70	150	100	80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
VIII.	1 220	220	220	250	240	220	200	250	240	200	280	250	240	220	250	220	250	220	250	220	250	220	250	220	250					
	2 150	150	150	220	200	180	150	240	200	160	240	220	200	180	250	220	180	250	220	180	250	220	180	250	220					
IX.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 170	170	170	220	200	180	150	240	200	160	240	220	200	180	250	220	180	250	220	180	250	220	180	250	220					
X.	2 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XI.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XII.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XIII.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XIV.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XV.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XVI.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XVII.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XVIII.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XIX.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XX.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XXI.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XXII.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XXIII.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XXIV.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XXV.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XXVI.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XXVII.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XXVIII.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XXIX.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XXX.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XXXI.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XXXII.	1 100	100	100	140	120	120	80	200	100	120	160	140	120	220	180	120	220	180	120	220	180	120	220	180	120					
	2 60	60	60	80	80	80	70	160	120	80	160	100	100	80	180	120	80	180	120	80	180	120	80	180	120					
XXXIII.	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
	1 200	200	200	250	220	200	180	250	220	180	250	220	200	250	220	180	250	220	180	250	220	180	250	220	180					
XXXIV.	2 150	150	150	200	180	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150	200	180	150					
	3 ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
XXXV.	1 100	100	100	140	120	120	80	200	100	120	160	140																		

217. My proposals for Jonna may at first sight appear high taken with Major Stuart's figures; but a comparison will show that the result of the experiments made here gives a higher outturn, and this is accounted for by the greater expenditure in manuring, which will be spoken of when we come to discuss the subject of cultivation expenses.

218. In Korra the difference is not so great, and by the addition of the third sort under each description of soil in the red series to which this grain applies, I have been able to allow for a more gradual fall than Major Stuart could.

219. In Paddy the valuations are decidedly moderate, and will, I think, be found to be very fair.

220. In the present calculations it will be observed that there is a steady gradation in the sorts, as well as in the groups, which I have endeavoured to work out with a view to adopting the sliding scale of rates which Mr. Puckle found of such advantage in the south, and which I must say that, in the introduction of my past proposals, I have more than once wished that I had.

221. *Commutation rates.*—Although these Taluqs belonged to the Cuddapah District up to the year 1859 (Fasli 1269-70) I have, as in the case of Pattikonda, taken the prices of Kurnool for the series of twenty years—Fasli 1255-74—fixed by Government to be adopted as the data in determining the commutation rate; and I have shown in Appendix I, the prices of each Taluq, side by side with those of the District in the usual form.

222. Price lists are only procurable for the last ten years of the twenty for the Cumbum Taluq, and for seventeen for Markapur; while in Korra only fifteen are forthcoming for the District. For comparison, therefore, I give in the subjoined Abstract the Taluq averages with those of the District for the corresponding number of years in each case, as well as the District averages for the whole series of twenty years for Jonna and Paddy, and fifteen for Korra.

	JONNA.		KORRA.		PADDY, 1ST AND 2ND SORT AVERAGE.	
	No. of years.	Averages.	No. of years.	Averages.	No. of years.	Averages.
Cumbum.....	10	Rs. 167	6	Rs. 128	10	Rs. 140½
District.....	10	182	6	116	10	164
Markapur.....	17	146	13	82	17	134
District.....	17	155	13	102	17	133½
District Fasli 1255-74.....	20	145	15	97½	20	133

223. I have here also, as in Pattikonda, taken the average of the whole year, instead of those of the ryots, selling months. Not only have I done so because there seems to be an advantage in basing the propositions now made on data which have already been accepted as fair for another portion of the same District, but on account of the doubts I have as to whether the figures given as the ryots' selling prices are *bonâ-fide* such. Looking at the entries in the price list—Appendix I—it will be observed that, when the averages of the whole year vary, those shown for the ryots' selling months are often put down as the same for several years running, sometimes in a round sum; the natural inference is that they do not represent the actual prices of the period, but were merely inserted at a guess

will be found in Appendices N 1 and 2, and O 1 and 2. I subjoin an abstract, for ready reference.

Class and Sort.		DRY.								WET.							
		As per Revenue Accounts.		As per proposed Settlement.		Difference.		As per Revenue Accts.		As per proposed Settlement.		Difference.					
		Area.	Assessment.	Survey Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	Survey Area.	Assessment.	Area.	Assessment.				
		Acres.	Rs.	Acres.	Rs.	A.	Acres.	Rs.	A.	Acres.	Rs.	Acres.	Rs.	A.	Acres.	Rs.	A.
II.	1	...	...	...	...	...	...	...	...	1,512	17,065	1,595	15,100	8 + 83	-1964	8	...
	2	...	...	...	...	...	...	...	...	97	506	104	853	0 + 7	+ 347	0	...
III.	1	2,365	7,029	2,500	6,397	8 + 135	- 631	8	1,714	17,497	1,843	12,644	8 + 129	-4852	8	...	
	2	3,926	6,926	4,130	7,169	4 + 204	+ 243	4	513	3,214	536	3,003	0 + 23	- 211	0	...	
	3	5,570	5,137	5,921	5,594	4 + 351	+ 457	4	107	386	112	528	0 + 5	+ 142	0	...	
	4	4,034	2,754	4,359	2,758	8 + 325	+ 4	8	...	3	2	7	0 + 2	+ 4	0	...	
IV.	1	4,609	9,369	5,041	6,777	...	+ 432	-2,592	0	1,423	12,397	1,491	11,169	8 + 68	-1227	8	...
	2	4,633	5,253	5,232	4,771	4 + 599	- 481	12	1,484	8,271	1,635	10,182	8 + 151	+1911	8	...	
	3	2,735	1,684	2,967	1,967	4 + 232	+ 283	4	553	2,375	622	3,288	0 + 69	+ 913	0	...	
V.	1	44	66	51	46	12 + 7	- 19	4	13	72	14	75	0 + 1	+ 3	0	...	
	2	124	142	151	94	8 + 27	- 47	8	83	245	93	314	8 + 10	+ 69	8	...	
	3	1,639	764	1,943	769	8 + 304	+ 5	8	48	164	68	176	0 + 20	+ 12	0	...	
VI.	1	5,433	9,805	5,877	7,429	12 + 444	-2,375	4	829	6,089	882	4,651	0 + 53	-1438	0	...	
	2	2,691	2,596	2,927	2,639	4 + 236	+ 43	4	281	1,218	332	1,491	0 + 51	- 273	0	...	
	3	1,560	658	1,719	895	0 + 159	+ 237	0	42	94	46	198	0 + 4	- 104	0	...	
VII.	1	18,113	20,413	19,840	17,595	4 + 1727	-2,817	12	1,367	7,242	1,515	7,238	8 + 148	- 3	8	...	
	2	44,863	29,259	50,546	29,514	0 + 5683	+ 255	0	1,691	6,125	1,904	6,672	0 + 213	+ 547	0	...	
	3	12,058	5,388	13,766	6,671	4 + 1708	+1,283	4	113	300	157	472	8 + 44	+ 172	8	...	
VIII.	1	2,376	1,544	2,571	1,559	8 + 195	+ 15	8	33	129	50	154	0 + 17	+ 25	0	...	
	2	21,514	9,875	24,837	7,148	0 + 3323	-2,727	0	82	272	107	289	8 + 25	+ 17	8	...	
	3	6,273	1,795	7,305	1,942	0 + 1032	+ 147	0	10	24	16	45	8 + 6	+ 22	8	...	
		1,44,560	1,20,457	1,61,683	1,11,739	12 + 17123	-8,717	4	11,995	83,688	13,124	78,553	8 + 1129	-5134	8	...	
Lands under special rates.		244	593	313	819	13 + 69	+2 26	13	...	...	...	...	...	...	...	0	...
Total...		1,44,804	1,21,050	1,61,996	1,12,559	9 + 17192	- 8,490	7	11,995	83,688	13,124	78,553	8 + 1129	-5134	8	...	...

244. It will be seen that while there is an increase in area of no less than 18,321 acres, there is a decrease in the assessment proposed of Rupees 13,625. Of this sum Rupees 4,194 will be foregone in Cumbum, and Rupees 9,431 in Markapur. The result taken upon the several classes and sorts is of course very uneven, for, as has been often said, the old assessment contains numerous inequalities which it is the object of the present Settlement to rectify.

245. The next Statement is an abstract of Appendices P 1 and 2 and Q 1 and 2, giving the comparison of the existing Revenue assessment, with the

proposed Settlement demand, and the averages both in Dry and Wet for each group of villages.

Talugs.	Groups.	AS PER REVENUE ACCOUNT.		AS PER PROPOSED SETTLEMENT.			DIFFERENCE.			Percentage of columns 4 and 8.	Averages as per Revenue Accounts.			Averages as per proposed Settlement.		
		Area.	Assessment.	Area.	Assessment.		Area.	Assessment.								
1	2	3	4	5	6		7	8		9	10		11			
		Acres.	RS.	Acres.	RS.	A.	Acres.	RS.	A.	RS.	RS.	A.	P.	RS.	A.	P.
Dry.																
Cumbum	1st Group ..	7,549	14,973	8,168	13,482	8 + 619	- 1,490	8 - 10		1	15	9		1	10	5
	2nd do ..	46,792	45,620	51,511	44,316	4 + 4,719	- 1,303	12 - 3		0	15	7		0	13	9
	3rd do ..	16,502	9,527	18,529	9,721	0 + 2,027	+ 194	0 + 2		0	9	3		0	8	5
Total		70,843	70,120	78,208	67,519	12 + 7,365	- 2,600	4 - 4		0	15	10		0	13	10
Markapur	2nd Group ..	15,149	12,197	17,035	12,306	0 + 1,886	+ 109	0 + 1		0	12	11		0	11	7
	3rd do ..	58,812	38,733	66,753	32,733	13 + 7,941	- 5,999	3 - 15		0	10	6		0	7	10
	Total	73,961	50,930	83,788	45,039	13 + 9,827	- 5,890	3 - 12		0	11	0		0	8	7
Total	1st Group ..	7,549	14,973	8,168	13,482	8 + 619	- 1,490	8 - 10		1	15	9		1	10	5
	2nd do ..	61,941	57,817	68,546	56,622	4 + 6,605	- 1,194	12 - 2		0	14	11		0	13	3
	3rd do ..	75,314	48,260	85,282	42,454	13 + 9,968	- 5,805	3 - 12		0	10	3		0	8	0
Total Dry		1,44,804	1,21,050	1,61,996	1,12,559	9 + 17,192	- 8,490	7 - 7		0	13	5		0	11	1

WET.

Cumbum	1st Group	3,056	28,163	3,264	26,817	0 + 208	- 1,346	0	- 5	9	3	5	8	3	5
	2nd do	3,552	23,547	3,828	23,230	0 + 276	- 317	0	- 1	6	10	1	6	1	1
	3rd do	418	2,226	471	2,295	8 + 53	+ 69	8	+ 3	5	5	2	4	14	0
Total		7,026	53,936	7,563	52,342	8 + 537	- 1,593	8	- 3	7	10	10	6	14	9
Markapur	2nd Group	2,992	21,638	3,273	17,932	8 + 281	- 3,705	8	- 17	7	3	9	5	7	8
	3rd do	1,977	8,114	2,288	8,278	8 + 311	+ 164	8	+ 2	4	1	8	3	9	11
	Total	4,969	29,752	5,561	26,211	0 + 592	- 3,541	0	- 12	5	15	10	4	11	5
Total	1st Group	3,056	28,163	3,264	26,817	0 + 208	- 1,346	0	- 5	9	3	5	8	3	5
	2nd do	6,544	45,185	7,101	41,162	8 + 557	- 4,022	8	- 9	6	14	6	5	12	9
	3rd do	2,395	10,340	2,759	10,574	0 + 364	+ 234	0	+ 2	4	5	1	3	13	4
Total Wet		11,995	83,688	13,124	78,553	8 + 1,129	- 5,134	8	- 6	6	15	8	5	15	9
Grand Total Dry and Wet		1,56,799	2,04,738	1,75,120	1,91,113	1 + 18,321	- 13,624	15	- 7	1	4	11	1	1	6

246. I give in the margin the averages based on the modifications proposed by Mr. Minchin, together with the present Revenue averages, and those resulting from my proposals. In Dry, the rates now worked out do not fall so low as Mr. Minchin's figures, but they are much under the existing Revenue ones. In

Wet they are below both. As however, the Settlement averages are calculated on the increased survey areas, the falling off does not in any case represent so great a reduction as Mr. Minchin contemplated.

247. I have gone as carefully as I could into the Accounts of each village in working up the present proposals, and believe that the results arrived at, and the amount of alleviation proposed, is, on the whole, fair; though further slight modifications may as usual be found necessary when going into individual cases at the time of Settlement. The poor Taluq of Markapur has, it will be seen, been leniently treated.

248. *Second Crop Assessment.*—No Account can be furnished for the lands registered as second crop for the reason given in para. 96, viz: that many of them are charged with Fasaljasti when a second crop is grown. The amount thus realized in each Taluq in Fasli 1282 is given in the margin.

Cumbum, Rs. 14,058
Markapur, „ 329
Total Rs... 14,387

249. The Inams which have hitherto been exempted from Fasaljasti have this year been charged with the same by orders of the Board of Revenue.

250. In carrying out the composition for second crop at the time of Settlement,—which the ryots in several places expressed themselves willing to do,—I would propose adopting Mr. Puckle's method of forming blocks according to the facilities for irrigation, all lands within any one block, including Inams, to be compounded for at a given rate varying from $\frac{1}{3}$ to $\frac{1}{5}$.

251. *Waste Lands.*—Appendices R 1 and 2, exhibit the extent and proposed assessment of the culturable waste marked into fields and classified in these Taluqs at the time of demarcation. The Accounts for lands since demarcated have not yet been closed. The following is an Abstract of the above. The average rates are moderate.

Taluqs.	DRY.			WET.		
	Survey Area.	Proposed Settlement Assessment.	Average per Acre.	Survey Area.	Proposed Settlement Assessment.	Average per Acre.
1.	2.	3.	4.	5.	6.	7.
	Acres.	Rs.	A. As. P.	Acres.	Rs.	A. As. P.
Cumbum.....	21,609	12,777	8 9 6	917	5,516	8 6 0 3
Markapur.....	62,776	25,248	4 6 5	622	2,573	0 4 2 2
Total...	84,385	38,025	12 7 3	1,539	8,089	8 5 4 1

252. *Extra Cesses.*—The road and village cesses have already been introduced here. The effect of the Settlement will be to slightly decrease them.

253. *Remissions.*—The remissions referred to in para. 97, are the ones which come under this category. The deductions made as Dasabandham, Sheri, Sagavatu, and Nisab Rayati are those to be continued at the rates hitherto in

existence, calculated on the Settlement demand. The following is a Statement showing the gross and net assessment hitherto levied on this account and that resulting from the Settlement proposals.

Items.	Rate of Remission	Survey Area.	REVENUE ASSESSMENT.			PROPOSED SETTLEMENT ASSESSMENT.			Difference of Columns 6 & 9.
			Gross.	Remissions.	Net.	Gross.	Remission.	Net.	
1	2	3	4	5	6	7	8	9	10
Dasabandham.....	$\frac{1}{4}$	373	1,574	309	1,265	1,728	0	432	0 + 31 0
Sheri.....	$\frac{1}{4}$	142	196	49	147	169	4	42	5 126 15 — 20 1
Sagavatu.....	$\frac{1}{2}$	302	439	212	227	271	0	135	8 135 8 — 91 8
Nisab Rayati.....	$\frac{1}{2}$	290	1,620	810	810	694	4	347	2 347 2 — 462 14
Total.....		1,107	3,829	1,380	2,449	2,862	8	956	15 1,905 9 — 543 7

Remissions in the Revenue assessment do not always agree with the rates shown above in consequence of errors in calculation.

254. It may be as well to see how the Kattugutta and Maktakowl lands will fare with reference to our classification, I therefore give the figures below :

Class and Sort.	Area.	Revenue Assessment.	Proposed Settlement Assessment.	Difference.
II	1	16	76	152
III	1	19	120	107
	2	48	65	92
	3	32	12	24
IV	1	43	151	215
	2	9	21	24
	3	96	22	72
VI	1	85	83	131
	2	92	92	148
VII	1	132	150	231
	2	326	95	289
VIII	1	1	0	8
	2	34	3	17
Total.....	933	890	1,504	12

255. *Introduction of Settlement.*—It will as usual be necessary to allow the officer entrusted with the introduction of the Settlement some margin for the adjustment of minor details as they come up in individual cases, and I think perhaps that when these are gone into, it may be deemed advisable to make some further reduction, so that on the whole the result will possibly be to give a still further relief than my proposals exhibit.

256. Should it be deemed advisable to carry out the block system in these Taluqs, according to Mr. Puckle's proposals for all future Settlements, it will be all the more necessary to allow the Settling Officer a large margin for modifications. Arranging the hitherto fieldwar classification into blocks will however take some little time, and delay the introduction somewhat; and should it not be deemed advisable to spend this additional labor on the present scheme, I would still advocate its adoption in the case of wet lands as the forming of blocks will greatly facilitate the matter of compounding for second crop.

257. I trust that if you see no objection the necessary powers may also be obtained to enable the Settling Officer to dispose of the following matters at time of Settlement as was proposed by Mr. Puckle. His action would of course be subject to the approval of the Collector :

- (1.) Transferring Pattas.
- (2.) Assigning lands for pasturage.
- (3.) Adjusting village sites and other Porambokes.

258. *Concluding remarks.*—In conclusion I beg to express my regret that so much delay has taken place in the submission of this Report. The substance of it was written up about a year ago when I visited the Taluqs, on my way back from the Kistna District, for the purpose of collecting all the materials for it; but much remained to be done in the way of applying the rates, and working up the Financial results which, on my return to this, had to put on one side for more pressing work relating to the closing of the Accounts of the lately settled Taluqs of Cuddapah, &c., disposing of appeals, preparing of Increment Statements, &c. &c. Meanwhile the area lists for the remaining villages were received and fresh abstracts had consequently to be made out. My own time and that of my Uncovenanted Assistant and other subordinates has been fully taken up with all this until a few days since when we were able to give attention more particularly to the present work.

259. I am greatly indebted to my Uncovenanted Assistant, Dechiraz Venkata Row, for the valuable help he has afforded me in working up the several Accounts now submitted, and furnishing me with different suggestions which his past great experience in the Department has enabled him to do. It is with much regret that I look forward to his proposed transfer to the Chingleput party, but I trust that the change will be followed with the desired result, and that he will soon have recovered from the debilitating effects of the Fever from which he has suffered so much at times since he came to this District.

I have the honor to be,

Sir,

Your most obedient Servant,

J. H. M. COX,

Dy. Director of Revenue Settlement

APPENDIX B.

GEOLOGICAL SKETCH OF CUMBUM AND MARKAPUR.

The Cumbum and Markapur Taluqs are of very varied physical aspect, giving to the westward a series of narrow flat valleys winding among some rather elevated mountain masses which to the eastward and southward are succeeded by the wider plains with lessening hill ridges of Cumbum, Markapur, and Dupad on the one side and of the Giddalur country on the other. At the south-east corner the Cumbum plain is closed in by the Mokesheegundum ridges and the northern extremity of the Yellacondah.

The principal mountain mass is the Eeshwarnacoopum, around which diminishing ridges and narrow valleys are carved out in a remarkably concentric manner. A lesser though equally lofty mass is the Byrencondah to the W. N. W. of Cumbum.

The drainage is mostly collected in the Gundlacamma river, the waters of a large section of the Nallamallay mountains flowing out near Cumbum by a gap in the barrier ridge to the west while those gathered on the Eeshwarnacoopum join the river close to Markapur, after which at Dupad a fresh supply comes from the northern Nallamallays by the Tigalair. Only a small area to the south around Giddalur is drained by the head feeders of the Sagalair.

The rocks of this region belong to the *Cuddapah Formation*, a series which has not as yet given any fossil evidence whereby its age in the geological sequence may be satisfactorily settled. There are other reasons however for considering it as very possibly belonging to the Cambrian or Silurian period.

Only some of the groups of the *Cuddapahs* are however found in the Cumbum field, two of these being most prevalent, viz., the *Cumbum slates* and the *Byrencondah Quartzites* named from that town and its mountain. In other words, the principal rocks are *clay slates* (metamorphised clays and shales) and quartzites, altered sand stones and conglomerates arranged in groups or zones, Cumbum standing on a broad belt of the first and the summit of Byrencondah being made up of strata of the second.

There are other rocks but these are only accessory and of local occurrence, as *lime stones* in the form of thin bands of strata, and very frequent veins or reefs of *quartz*, the former intercolated, and the latter infiltrated among the *Cumbum slates*. The quartz veins are not known to contain any minerals of importance, except *hermatitic iron ore* to a small extent.

There is one case of igneous rock known in the neighbourhood, but whether as an intrusion or as the possible summit of an old hill on the ancient floor of the Cuddapah basin around which these slates and quartzites were originally deposited is not ascertainable owing to the concealment of any junction under the alluvium in this locality. The rock in question is a coarse *syersite*, and it forms the Pagoda hill of Idamkull about 7 miles S. E. of Giddalur. The preferable view is that the rock is not intrusive as regards the slates.

Taking the whole area, all the flat country is essentially of *clay slates* belonging to one or other of the slate groups; the Cumbum plains, for instance, being the slates of that name, the narrow and flat valleys of Bolapalli and Kakerla, west of Markapur of another and lower set, and the small broad valley of Poolalcheruvu, S. W. of Byremcondah of a higher set, each of which differs the one from the other in some marked respect. On the other hand, the hill ranges are mostly made up of *quartzites* (or if both slates and *quartzites*) each in their turn differing by some marked character.

These different sets or zones of rock have throughout the District been subjected in by-gone periods to many movements as upheaval and the reverse, crushing, folding, &c., but they were mainly elevated in a huge dome with undulations of varied intensity all round it, the whole of which was then exposed to the denuding process which ultimately reduced the country to its present contour. By this means the lowest beds of the series were raised up in this dome, and after it had as it were been pared down by denudation they became exposed as the summit of Eeshwarnacoopum round whose peaks may be traced the up-cropping hard ridges of higher and higher (in the series) zones of quartzites, while the narrow valleys between are of intermediate slate bands, until the more marked valley of slates of Bolapalli and Kakerla is reached. These dip down at 30° to 40° eastward under the thin-bedded and rippled quartzites of the ridge west of Markapur and Cumbum which, as they are traced southwards bend round in a loop and then run up to form the summit beds of Byrencondah, indeed there can hardly be any doubt that the beds of Cumbum Tank bund were once continuous in a great arch with those on the top of this mountain.

Outside the ridge of quartzites just mentioned, the regularity of the dome and its encircling valleys and ridges gives place to a series of waves or undulations in the strata which is very rapid to the south of Cumbum while to the north it is more gentle. The rapid S. E. folds are now visible in the Moksheegundum hills a set of attenuated elipsoidal domes, whose northern ends sink down into, and are lost under the slates of the Cumbum plain. The Yellacondah range opposite is the final rising up again of the Byrencondah quartzites before they drop down abruptly against the gneiss of the Nellore country.

The clay slates of all the groups are generally rather talcose or chloritic and not very hard. Those of the Kakerla valley are more talcose and of a pale greenish color shining brilliantly in the sun-light. The Cumbum slates are rather harder not so talcose and generally of grey colors. As with all the rest of the clay slates of the Cuddapah and Kurnool Districts, there is here no approach to the slates of commerce; the rocks are not hard enough, nor are they cleaved to the same extent as in proper slates, while the other planes of separation such as bedding and jointing are not sufficiently obliterated. On this last account thick cleaved and irregularly-jointed sub-angular masses of rock are only obtainable giving coarse roofing slates.

The quartzites are of no particular interest industrially except as building material or that they occasionally contain enough iron ore to serve as a precarious

and local source for village smelting. Very often the ferruginous element is strong enough to give color to the rocks themselves, or to redden the sandy soils lying around their outcrop.

The valleys already described have all been filled in and rendered comparatively level by *clays* and *sandy deposits* of various kinds derived from the clay slates, or the altered sand stones and these in their turn have been made more even-faced by coverings of the much newer *cotton soil*, or the *olluvium* along the immediate river banks, or by the more or less loose *sandy* soils usually met with.

The older of these form the subsoils and are mainly grey and white sandy clays with at times a good deal of *Kunkar* scattered through them in small irregular nodules and strings. They also show intercolated layers and banks of pebbles and coarse shingle of quartzites. In other parts of the District as in the Kundair valley, chipped stone implements have been found in the layers of coarse shingle, but the Cumbum gravel beds have not been sufficiently sea for them. Implements were found scattered about among the surface soils of the Bolapalli valley and at Ambavaram a short distance N. W. of Giddalur.

The only Cotton soil areas of any extent are those of Giddalur, Cumbum, and Markapur. The first of these is small, but sufficiently large to be a feature in that valley which is otherwise mainly of poor clayey soils. It lies to the east and south-east of the village between the Giddalur and Razupalem ridges but dies out to the north and north-east in the slate debris soils which in addition to being already poor and cold are filled with comminuted quartz from the reefs running up the Razupalem valley. The Cumbum cotton soil is much more extensive, it covers the plain to the south as far as and beyond Vungupad, after which red sandy soils show until there is another small spread of regar in the valley further south. To the north of Cumbum beyond the Yanegaycondah ridge there is a good width of Cotton soil on either bank of the Gundlacamma up to and beyond Markapur.

The country along the eastern side of this last regar plain as also to the east of Giddalur is broken and irregular with low ridges of quartzites, and slates with infiltrations and beds of lime stone, and is covered as might be expected with the debris of these rocks or coarse sandy soils with an intermixture of white or grey clays some of which are more of the nature of soda soils. There are also red sandy soils which evidently derive their ferruginous character from the hæmatite and micaceous iron ore occurring in some beds of the quartzites or in the quartz reefs. Red soils are prevalent over the wide and comparatively flat country to the E. N. E. of Cumbum leading out into the Nellore District.

The Markapur country opens out with that of Dupad, which is more a flat of sandy and slatey soils levelled out by thick yellow and brown alluvial soils in the long valley going west from Dupad.

The only other region of comparatively good soils is that of the narrow Kakerla and Bolapalli valley, but these are only at intervals, the main soils and specially the sub soils being from the greenish talcose slates.

It must be pretty evident from the foregoing accounts of the rocks and their position in this part of the Kurnool District, that there is here a poor country as far as its agricultural prospects are concerned. The greater part of the country is hilly, where it is of very hard and intractable rocks; or if of the more easily weathered slates, not presenting sufficient holding ground for any thickness of soils. The hilly region is now thinly covered with jungle but was in former days doubtless much more extensively overgrown, under which circumstances weathering influences would be more powerful, soil would be retained which is at present washed away by rains which in their turn are also allowed to disappear to a great extent by evaporation instead of being stored among the rocks.

The low country is mostly of poor cold and thin soils resulting to a great extent from the disintegration of slates which are talcose and chloritic in their constitution and therefore probably giving a large percentage of magnesia which is not a desirable element in soils. This general poverty is however in some places redeemed by the presence of calcareous matter either in the form of *Kankur* or in the debris from the few limestone bands near Cumbum. The only really good soils are the regar and the proper river alluvium, and these as has been shown, are only of local occurrence.

This general barrenness has been met in one part of the country by storing up water in the extensive and very picturesque tank near Cumbum. All the water collected by the Gundlacamma prior to its reaching the town is forced to pass from its catchment basin by a narrow gap or rift in the long quartzite ridge to the west. This has been closed up by a lofty bund, the water being thus held back in the lower part of the Bolapalli valley and distributed at will over the alluvial soils of the river banks and well on to the former soils beyond which are thus not only watered but gradually covered with a richer deposit of soil.

There are still however other narrow outlets of catchment basins at many other points in the District, which when viewed alongside the magnificent work at Cumbum may appear very small, but are still possibly of sufficient size to warrant their being bunded up in the same way. In the particular area now treated of the gaps cut by the tributaries of the same river flowing in the Markapur country and of the Dupad river, all in the same confining ridge of altered sandstones might be utilized in this way to a greater extent than is done by the small banks formed at one or two of them. It is a fact clear that the prosperity of these Taluqs depends a very great deal not on the soils themselves, but on their physical arrangement. By the inequality of the ground a very large surface of the country is exposed for the collection of water, and for the growth of jungle—while the ridge-locked valleys of many of the valleys is such as to offer most favorable opportunities for storing up the water as reservoirs.

(Signed) WILLIAM KING,
Deputy Superintendent,
Geological Survey, India.

J. H. M. COX,
Depy. Director of Rev. Settlement.

CALCUTTA, August 7th, 1874.

Revenue Settlement Office,
Cuddapah,
23rd August, 1875.

(True copy.)

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