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THE LAND REVENUE OF BOMBAY

THE LAND REVENUE OF BOMBAY

A HISTORY OF ITS ADMINISTRATION, RISE, AND PROGRESS

BY .

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Bombay Civil Service (Retired)

VOL. I.

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P R E F A C E.

A LARGE portion of the income of the Government of India is derived from the Land Revenue, the proportions, according to the last Statistical Returns published, those of 1889-90, being as follows:—

	Tens of Rupees.
Land Revenue	23,961,899
Opium	8,583,056
Salt	8,187,739
Stamps	4,087,908
Excise	4,891,894
Provincial Rates	3,410,055
Customs	1,506,686
Assessed Taxes	1,595,274
Forests	1,486,308
Registration	353,792
Tributes from Native States	777,707
Interest	873,201
Post Office, Telegraph, and Mint	2,337,624
Civil Departments	1,556,372
Miscellaneous	1,264,409
Railways	16,605,601
Irrigation	1,991,078
Buildings and Roads	605,398
Military Departments	944,707
Total	55,041,203

It will thus be seen that the proportion which the Land Revenue bears to the whole is about 24 to 81.

The items of which the Land Revenue is made up are of considerable importance, from a practical as well as a theoretical point of view. It has accordingly occurred to the writer that much benefit may be derived from a study of the details of the subject, in order to ascertain whether, by comparing the different systems for their assessment and collection in force in various parts of the country, modifications may not suggest themselves by which, even if this source of income may not be improved, better administration may be attained to, and some measure of certainty in its amount may at least be confidently anticipated.

Commencing from very moderate beginnings, the growth of the Land Revenue of British India has been naturally contemporaneous with the extension of the territory under British rule. In the earlier days of the East India Company, or Companies, trade was the only object, and it was not till driven by the competition of other European Powers that the British took part in the politics of the country, and obtained cessions of territory from Native Powers in return for military aid rendered them, and otherwise.

The acquisition of territory brought with it the necessity for a revenue wherewith to meet the expense of administration. The sources from which that revenue was to be derived were in the first instance, of course, those from which our predecessors in rule had obtained it, and with the latter, as with ourselves, the chief of these sources was the taxation of land. The system (or rather systems, for their variety was great) under which Native Rulers had levied this taxation had at first perforce to be adopted as it stood. Common sense, however,

if we do not give ourselves credit for any higher motive, soon led to a conviction that our inheritance in this respect was an unfortunate one, and must be modified, in our own interest, as well as that of the people we were called on to rule.

Accordingly, we find our earliest administrators turning their attention towards the reform of the Land Revenue administration, and if there were no other ground on which England might claim credit in the eyes of the civilised world for her conduct towards her great Eastern dependency, she certainly might justly claim it on that of the single-mindedness and upright views with which that reform has been approached both by the Local Officers and the controlling authority at home. In the proposals of the former, in the measures adopted by the Presidency Governments, and in the final orders of the Court of Directors of the Honourable East India Company, there is but one tone, that of moderation and justice, whatever might be the resulting consequences. It need hardly be said that the same spirit is observable in the more recent proceedings of the Home Government since India has been brought under the direct control of the Queen's Ministry.

It is with the history of the gradual changes in the Land Revenue administration of the older Provinces of Bombay that it is proposed to deal in the following pages. The source from which information on the subject has been derived is unimpeachable, being the actual Records of Government, which contain in *extenso* the correspondence connected with each particular change introduced, the whole of those Records having been kindly placed at the disposal of the writer by the authorities at the India Office.

Selections from these Records have of late years been published from time to time by the Local Governments, but these

have related only to particularly interesting or important measures, and cannot be expected to place before the public a general or comprehensive view of the administration as a whole. This it is hoped this work will do in as brief a form as may be compatible with thoroughness.

It would only lead to confusion if an attempt were made to write a chronological account of the reforms carried out in the three Presidencies of Bengal, Madras, and Bombay, the system in each being essentially different. Each of these, moreover, to be understood, requires separate study. The writer has taken the Bombay Presidency, with which he is personally familiar, only alluding to the systems in force in the other Presidencies where such allusion was found necessary to elucidate some special point in that to which he has confined his present task.

The map that precedes the revenue history of each Collectorate has been reduced by photography from an original supplied by the Government of Bombay, and represents the Collectorate as it is now constituted. The system of transliteration adopted for Native names and words is the Hunterian, the vowel sounds being as follows:—

a	is the English a	in "about."
á	is	„ a in "bard."
e	is	„ e in "eh."
i	is	„ i in "in."
f	is	„ ee in "seen."
o	is	„ o in "oh."
u	is	„ u in "put."
ú	is	„ oo in "boon."

No particular difference is made between dental and cerebral t and d.

The order in which the Collectorates have been introduced is geographical and linguistic. Gujarát (Guzerat), in which the

vernacular is Gujaráti, comes first in the extreme north of the Presidency, and contains the Collectorates or Districts of Ahmad-ábád, Khedá, the Panch Maháls, Bharuch, and Surat. Next come the Northern Konkan, with the Collectorate of Tháná, and the Southern Konkan, with Kolába and Ratnágiri. The language of all these is Mahratti. North Kánára, where Kanarese is spoken, completes the below-Ghát portion of the Presidency on the sea-coast. Above the Sahyádrí range come in the North Khándesh and Násik, and farther south Ahmadnagar, Sholápur, Pána (Poona), Satára, Bijápur, Kaládgi, which are the Deccan Collectorates, and Belgám and Dharvár in the Southern Mahratta country, in which Mahratti is the vernacular, but Kanarese is also used in the last four.

The revision of the thirty-years' Revenue Settlement being continually in progress in different Collectorates, this history has been brought down to the latest possible date.

CONTENTS.

	PAGE
INTRODUCTION	1
COLLECTORATES—	
AHMADABAD	12
KHEDA (KAIRA)	76
PANCH MAHALS	110
BHARUCH (BROACH)	130
SURAT (SURAT)	168
THANA (TANNA)	225
KOLABA (COLABA)	258
KHANDESH (CANDEISH)	277

THE
LAND REVENUE OF BOMBAY.

INTRODUCTION.

It was in the Province of Gujarát (Gujarásht̄ra, the country of the Gujars), the region situated round the Gulf of Cambay, to the north of Bombay itself, that the East India Company first commenced to have territorial jurisdiction, and to derive a direct revenue from the land in the Bombay Presidency. The portion of the Province now under the direct Land Revenue administration of the Government of Bombay comprises the five collectorates, or Collectors' charges, of Ahmadábád, Kheda, the Panch Maháls, Bharuch, and Surat.*

In the reign of Akbar, who ascended the throne of Delhi in A.D. 1556, the Province appears, according to the *Ayín-i-Akbari*, to have been divided into five *sircars* or governments, under the *subah* or viceroyalty of Gujarát. The *sircars* were those of Ahmadábád, Bharuch, Chámpáner, Surat, and Godhra, which respectively contained twenty-eight, fourteen, nine, thirty-one, and twelve maháls or districts. A good many of the names of the maháls given in the *Ayín-i-Akbari* can still be traced in the

* Bharuch and Kheda were, until the adoption of the revised system of spelling, officially known as Broach and Kaira.

names of the modern sub-divisions of the country or of towns; but the greater number, owing probably to errors in transliterating Gujaráti names into Persian, and mistakes in copying MS., are unrecognizable. They comprise portions of country which have since come under the rule of the Gaikvár or other semi-independent chiefs, such as Idar (Edur), as well as other districts paying land revenue directly to Bombay. The revenues, which are given in *dáms*, forty of which would about equal a rupee, include those derived from tributes, customs, excise, and taxes on trades and professions, in addition to those drawn from the land. The returns in that book are thus useless for the purpose of instituting any comparison between the existing area of the Province, as reckoned by the Mahomedans, and that from which the present land revenue is derived, or between the revenues of the two periods. It need, therefore, only be noted here that some kind of land revenue settlement appears to have been made by Raja Todarmal, Akbar's Finance Minister. In what detail that settlement was carried out, and whether it was ever practically applied to the assessment and collection of the land revenue, cannot be ascertained with that approach to accuracy which could alone render the information valuable for statistical purposes. Even if accurate information on the point were attainable, it would be impossible to trace the effects of the settlement down to modern times. There is a vague idea prevalent in the country that the State in the days of Akbar had direct dealings with the tenants of its own lands; that there was, in fact, to some extent, what would now be termed a *rayatvári* settlement; but even the oldest Mazmundar, the hereditary accountants, who were the depositaries of information on such matters under Native Governments, have no records to show what it was. And the details of such settlement as there may have been have disappeared in the subsequent days of disorder that followed the downfall of the Empire of Delhi, and whilst the farming system of the Mahrattas, to be particularly described hereafter, prevailed. No good purpose would, therefore, be served by going back beyond the period of the introduction of British rule, and attempting to describe more particularly what may with perfect correctness be termed a condition of confusion, if not chaos, as far as any central

administration of a land revenue system was concerned. There was, in fact, no one revenue system. Every province had its own variety of systems, differing from each other according to the manner in which the geographical affected the political position of the country in which they prevailed. Such systems, again, varied according to local usage and the state of civilization and agricultural skill to which the inhabitants of each locality had attained. In parts of the country, within comparatively easy striking distance of the armed forces of the *de facto* Government, matters assumed a certain degree of regularity. There the land revenue might be levied according to some method prescribed by the ruling power. It was, however, not only too expensive a matter to keep up large standing armies for the collection of revenue at a distance from head-quarters, but its levy by such means was only practicable at certain seasons of the year, when the crops forming the source from which payment could be derived were available for the purpose. At other seasons, accordingly, the maintenance of such forces would have served no practical end. They were only made use of in parts of the country which were not within such easy striking distance in the annual or periodical manner adopted by the Mahrattas in their *mulk-giri* (literally "country-seizing") expeditions into the peninsula of Káthiavád (Kattywar). There was no power of combination among the numerous petty chiefs to enable them to join their forces and resist the tax-gathering army. Consequently, each head of an estate, which might consist of a single village or circle of villages, would make the best terms for himself that he could, either by the display of some kind of armed opposition, or by address, or bribery, or any other device, and the army would pass on to its next victim, leaving the one settled with to come to terms with his own shareholders or tenants according to their own local customs. Such a method of collecting revenue, barring the occasional burning of a particularly refractory village, or the slaughter of a few villagers, would not leave much serious mischief behind it, for, during the rest of the year, the country would be left to itself to recover. The chief would understand his interest too well to press too hardly upon his own people to enable him to pay up the demands

made upon him for rent or tribute. He would raise money by the sale or mortgage of some of his land, or meet the difficulty in some way that would not affect his tenants. But it was otherwise under the farming system introduced by the Mahrattas. The courtiers at the Court of the Peshva or other Mahratta ruler would be encouraged to bid against each other for the farm of the revenue of a *táluka* or other subdivision of a district, the highest bidder obtaining the most favour. The successful competitor might proceed personally to his charge, or might, and frequently did, sublet his farm to someone as needy as, or more impecunious than, himself. The latter would call together the hereditary district officers, the Deshmukhs, and the Deshpándis, who were intimately acquainted with the circumstances of each village of the district, and inform them that a certain sum, of course a good deal in excess of what had been bid for the farm, must be made up. This sum would be assessed, according to the supposed capability of the inhabitants to pay, upon the several villages. The sum assessed upon each village would be distributed by its head-men (Patels or Patails, as they were sometimes called) upon those cultivating its lands, either as hereditary or casual tenants, and collected in the various ways known to Native revenue collectors. Some of these are thus described in a minute by the Hon. Mountstuart Elphinstone, Governor of Bombay, when British rule was first introduced into the Deccan, the country above the Syhádri range of hills in Western India:—

“If a Ryot refused or was unable to pay his revenue, the Sebundy (revenue-collecting peon) pressed him for it, confined him in the village choky (lock-up), exposed him to the sun, put a heavy stone on his head, and prevented his eating and drinking until he paid. If this did not succeed, he was carried to the Mamlutdar (or chief native officer of a district—in the farming days the farmer himself, probably), his cattle were sold, and himself thrown into prison or into irons.”

The same reliable authority thus describes the farming system:—

“The office of Mamlutdar, instead of being conferred as a favour on a person of experience and probity, who could be punished by removal if his conduct did not give satisfaction, was

put up to auction among the Peshva's attendants, who were encouraged to bid high, and sometimes disgraced if they showed a reluctance to enter on this sort of speculation. Next year the same operation was renewed, and the district was generally transferred to a higher bidder. The Mamlutdar, thus constituted, had no time for inquiry, and no motive for forbearance; he let out his district at an enhanced rate to under-farmers, who repeated the operation till it reached the Patels."

"If one of these officers farmed his own village, he became absolute master of everyone in it. No complaints were listened to, and the Mamlutdar, who was formerly a check on the Patel, as the Government was on the Mamlutdar, now afforded him an excuse for tyranny, bearing the blame of his exactions. (S.O.) If the Patel refused to farm the village at the rate proposed, the case was perhaps worse, as the Mamlutdar's own officers undertook to levy the sum determined on, with less knowledge and less mercy than the Patel. In either case, the actual state of the cultivation was in essentials entirely disregarded. A man's means of payment, not the land he occupied, were the scale on which he was assessed; no moderation was shown in levying the sum fixed, and every pretext for fine and forfeiture, every means of rigour and confiscation, were employed to squeeze the utmost out of the people before the arrival of the day when the Mamlutdar was to give up his charge. Amidst all this violence an account was prepared as if the settlement had been made in the most deliberate manner. This account was, of course, fictitious, and the collections were always underrated, as it enabled the Patel to impose on the next Mamlutdar, and the Mamlutdar to deceive the Government and his fellows. The next Mamlutdar pretended to be deceived; he agreed to the most moderate terms, and gave every encouragement except *subari* (allowances in cash) to increase the cultivation, but when the crops were on the ground, or when the end of his period drew near, he threw off the mask and plundered like his predecessors. In consequence of this plan, the assessment of the land, being proposed early in the season, would be made with some reference to former practice, and *audir waurid* and other *putters* (cesses) would accumulate until the time when the Mamlutdar came to make up his accounts. It was then that his

exactions were most severely felt, for he had a fixed sum to complete, and if the collections fell short of it, he portioned out the balance among the exhausted villages, imposed a *jastee puttee* or extra assessment, to pay it, and left the Patels to extort it on whatever pretence and by whatever means they thought proper. We are now suffering from this system; for as we have no true accounts, and are afraid to over-assess, we are obliged to be content with whatever the people agree to. Captain Briggs' collections in Candeish, though willingly acceded to by the ryots, are yet much heavier than any that appear in the accounts during the ten years of oppression that have depopulated Candeish. Some places no doubt escaped the oppressions of the farming system. Where a village belonged to a man of influence, or a favourite of such a man, the assessment fell light on him, and he gained by the immigration of Ryots occasioned by the misfortunes of his neighbours."

Such, then, was the state of affairs with which the British Government had to deal in commencing their administration of their chief source of income. With no record of the area of their landed estates, or even of the precise locality of these, except what might be termed in a treaty the Purgunnah of So-and-so—with old ties between landlord or proprietor and tenants broken up as a result of the iniquitous oppression of the farmers, which obliged every man to look to himself alone, and dissolved all the elements of cohesion that may have existed among communities or coparcenary bodies—with lands from which the income of the State was derivable mortgaged or sold in large quantities to meet undue revenue exactions, and no field registers or rent-rolls to show what taxable land still remained or what such land had paid or could fairly be made to pay—it was the task of our early administrators, with no knowledge of actual facts, and no organized establishments instructed in the method of acquiring such facts, difficult of themselves to ascertain, and rendered still more difficult by the reticence of hereditary district officers interested in concealing them, to evolve order out of confusion, and create a land-revenue system capable of being administered from one supervising and responsible centre, for the mutual benefit of the governors and the governed.

These were the general principles on which they proceeded in their mighty and beneficent task. First and foremost, the farming out of revenue was to be abolished, and its administration was to be carried out by selected officers immediately responsible to Government, residing in their own districts, and devoting their whole time to their affairs. In other respects, no innovations were to be made in the native systems except to do away with obviously unjust taxes, such as the *jásti patis* or extra cesses, and impose no new ones in their place. The revenue was to be levied as far as possible on actual cultivation, and the assessments were to be light, more uniform, and more clearly defined. The straggling revenue divisions of the Mahrattas were formed into compact divisions, each yielding from fifty to seventy thousand rupees a year, and placed under Mamlutdars. The powers of these officers were limited, and the principle of fixed pay and no perquisites insisted on. Faith was to be kept with the Ryot; liberal assistance in the shape of cash advances was to be given him in carrying on his cultivation, and he was not to be harassed by false accusations as pretexts to extort money. The foundation for the assessment was to be the amount paid by each village in times when the people considered themselves to have been well governed, deductions being made from this in proportion to the diminution of cultivation, and further allowances on any specific grounds alleged by the Ryots. The apportionment of the assessment on individuals was to be made by the village officers, and, if all were satisfied, Puttahs (Patás) or writings confirmatory of the allotments were to be given, a check being kept upon the proceedings of those officers by complaints being readily heard, and reasonable redress being afforded.

It can readily be understood that these principles, admirable as they were in themselves, could not be immediately put into practical application. As already noted, the very foundation of any revenue system, viz., a register of areas of holdings and of rents, was not in existence, and could not suddenly be improvised, although, from the attachment of the people to their ancestral fields, all of which bore distinctive names known to the villagers, the divisions of properties were well understood, and it needed but little extra elaboration to frame a complete numbered record of

them. To a certain extent, therefore, the farming out of the revenues of villages was an absolute necessity until data could be obtained on which to base assessment according to area of cultivation. The system of farming out of whole districts, common among the Mahrattas, was, however, at once abandoned, and where the necessities of the case compelled a continuance of the system with regard to individual villages, the greatest care was observed to give the farms to the head-men of the villages themselves, and not to outsiders, or even to the hereditary District Officers. The latter had been in the habit of taking such farms, and had thus acquired an influence which was at once found to be injurious to the interests both of the State and the people. The revenue reports of the commencement of the nineteenth century, from which period direct British administration in the Bombay Presidency dates, abound with references to this influence and the measures taken to counteract or do away with it. One of the most obvious of these measures was, of course, the framing of Field Registers containing details of the area, tenure, rental, &c., of each field in a village in numerical order, to enable the revenue authorities to dispense with the assistance of the Hereditary Officers, hitherto the only depositories of such information. This was gradually effected by the introduction into each village, or group of villages, of village accountants (called Taláti in Gujarát and Kulkarni in the Deccan and Konkan), salaried servants of Government, whose duty it was to administer the revenue in conjunction with, and partly in subordination to the head-men (Patels). This reform was only gradually introduced, and it was not until A.D. 1814 that these officers were placed on a formal legal footing as to duties and pay by Bombay Regulation II. of that year.

It will be pertinent to inquire at this point why inquiries were not instituted, as in other parts of India, to ascertain whether there might be in existence single proprietors or proprietary bodies with whom agreements could be entered into for the payment of revenue in lump sums, and the labour of detailed accounts with individual cultivators necessary under a *rayatvári* settlement be thus saved. Now, no doubt such proprietary bodies did exist in ancient times in most parts of Bombay, as they do now in

some, but, as shown above, the state of agricultural society had become so completely disorganized in consequence of the revenue system adopted by the Mahrattas, and such cohesion as may once have existed among communities had been so entirely loosened, that it would have been futile to introduce a system for the successful working of which a certain degree of mutual confidence among the members of the community would have been requisite. No doubt the Mirásdars, the hereditary occupants or proprietary tenants of the Deccan, were the direct descendants and successors of the Jathádars, who, like the Narvádars and Bhágdars of Gujarát, formerly paid for their villages in lump rentals. In the days of farming and extortion, however, they had so lost touch with each other and their tenants that they would no longer have undertaken a joint and several responsibility for the payment of the dues of the State, nor would their tenants, grown accustomed to the independence of dealing directly with the officers of the State, have easily consented to resume dependence on their former landlords. The re-introduction of the system of village settlements was thus in most parts of the Presidency practically impossible. Efforts were not wanting on the part of many of the early collectors to bring it about, but, with the exception of the Narvádári villages in Kheda, and the Bhágdári villages in Bharuch, where, in spite of the farming system, the communities still adhered to their old customs, those efforts were all destined to failure, and the *rayatwari* became the prevalent tenure of Bombay.

The most marked exception from this has been in the portions of the Ahmadábád collectorate lying to the west and north-west of the Gulf of Cambay, within the limits of Káthiávd (Kattywar), and in the extreme north-east towards Rajputána. In the former, large estates formerly held by Rajpoot chiefs exempt from all control by Central power (except such as may be ascribed to the march of the Mulk-girl expeditions alluded to above) had, by inheritance consequent on the subdivision of families, and by mortgage, sale, or gift to individuals or charitable or religious institutions, been parcelled out into smaller estates, consisting sometimes of single villages or portions of villages; but, from being comparatively out of arm's length from the chief seats of the

Mahratta power, they had never had the farming system extended to them, and never lost the idea of proprietary title attaching to the heads of their communities. These have always been known under the name of Tálukdári villages. Similar to these were certain estates held also on the payment of rentals settled in the lump with their heads, who were Koli Thákurás (Kolis probably partly of Rajpoot origin), and others known as the Mehvási villages in the North-East. These owed the preservation of their ancient customs chiefly to the then wild and jungly nature of the country in which they were situated, a circumstance that effectually prevented the entrance among them of Brahmin farmers of revenue, whom the independent inhabitants would not have tolerated.

Of a somewhat similar tenure, but of dissimilar origin, were certain estates held by Kasbátis, Mussulman gentlemen of influence who were allowed to farm estates composed of Government villages, paying rentals in the lump for their farm—in Dholka and Viramgám on a species of feudal tenure—on the condition of defending the frontier against the incursions of the Káthis from Káthiavád, on which those districts border. This last class has almost disappeared, and their villages are managed under the ordinary *rayatvári* system like other Government (Khálsá) villages. In the Tálukdári and Mehvási estates no direct relations between the sub-tenants of the soil and the State have been established, except during such periods as the villages may have been attached and placed under the Collector's management. The proprietary title of the holders has, after various fluctuations in opinion as to their status, been acknowledged by law, and no interference is exercised by Government between them and their tenants. The rights of the latter are guarded by what is called the dhára, or written village ordinance, the provisions of which could, in case of dispute, be enforced through the Civil Courts.

There is one more body of men whose position as land-holders it is necessary briefly to notice. These are the Khots (Khotés) of the Southern Konkan, believed originally to have been mere farmers of revenue, but whose tenure has from usage, and lately by law, become hereditary, and to regulate the relations between whom and their tenants it has been found necessary for the State to

INTRODUCTION.

11

interfere in a limited degree. The matter will be referred to more in detail in the subsequent pages.

This general sketch of the state of affairs existing in the Bombay Presidency at and for some time after the introduction of British rule will, it is hoped, have prepared the reader to follow and understand the gradual development of ideas on the subject of the administration of the land revenue, which has culminated in the Bombay Revenue Survey Settlements for periods of thirty years at fixed rates, with legal protection against increase on account of improvements made by the tenants, and the recognition of an heritable and transferable right of property in their holding, subject only to the payment of the dues of the State.

AHMADÁBÁD.

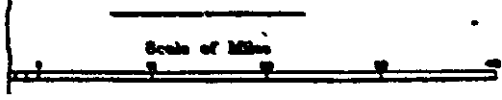
AHMADÁBÁD, the most northerly of the Bombay Collectories, is of a very irregular shape, and lies between $21^{\circ} 25' 18''$ and $23^{\circ} 37'$ N. Lat., and $71^{\circ} 21'$ and $73^{\circ} 28'$ E. Long. It contains an area of 3,854 square miles, and is about equal to Khedá, Bharuch, and Surat put together. It lies to the North, North-east and West of the Gulf of Cambay, and is much intermixed with the territories of H.H. the Gaikvár on the North and North-east, and with the States under the Political Agency of Káthiávád on the West. The Táluka of Parántej, as will be seen from the map, is isolated from the rest of the Collectory on the North-east. The Tálukas of Daskrohi (in which Ahmadábád, the chief town, is situated), Víramgám, Sánand, and Dholka form the centre of the Collectory on the North and Northwest of the Gulf of Cambay. The remaining Tálukas of Dhandhuka and Gogha (Gogo) lie to the West of the Gulf, and are almost entirely surrounded by Káthiávád territory. The last-mentioned Táluka is almost opposite the Baruch Collectory on the East of the Gulf.

The first territorial connection of the British with this, the most northerly of the Gujaráti Collectories, arose from the cession to them, by the Rajpoot or *Grassia* proprietors, of the port of Dholera, situated on the west coast of the Gulf of Cambay, near its head, together with nine villages subordinate to it and in its immediate neighbourhood. The Chief (Thákor) of Bhaunagar

- Q Pany Duran Head quarters and Market Town
 - A Place of Pilgrimage and Fair
 - B Travellers Bungalow
 - C District Do
 - D Head Post Office
 - E Sub Post Office
 - F Branch Do
 - T Telegraph Office
 - M Municipality
 - H Hospital
 - D Dispensary
 - S Town School
 - W Ferry
 - II Bridge
 - Post
 - Made Road
 - Railway line
 - Railway Station
 - o Light House
 - ↓ Post
- 6517 Heights above mean Sea level



DABAD COLLECTORATE



who was in possession of large estates in the present subdivisions of Dhandhuka and Gogha (Dhundooka and Gogo, as commonly called), in the former of which Dhollera lies, had for several years been intriguing to acquire greater influence in that part of the country, and this had led the Grassias of Dhollera to beg for the protection of the English against him. This was acceded to in 1802, and the cession of the port and villages was agreed to by the Gaikvár, who then held a farm of the Peshva's right to levy tribute in the Peninsula of Kathiávád, on condition that the rental and tribute due to the latter were regularly paid. The fact of this cession throws a strong light on the relations existing between the Rajpoot and other holders of estates in Kathiávád and the Supreme Power for the time being, which will be of great use hereafter when we come to study the manner in which these estates have been treated under British rule.

By the treaty of Bassein (31st December 1802) the whole of Dhandhuka (inclusive of Ránpur) and Gogha were ceded to the British by the Peshvá, and shortly afterwards the subdivision of Dholka was also ceded by the Gaikvar for the support of a subsidiary force. These territories remained until 1805 in the charge of the Resident at the Gaikvar's Court at Baroda, and from that time till 1818, when Ahmadábád was formed into a separate Collectorate, formed part of the Collectorate of Kheda (Kaira), or, as it was then called, the Eastern Zillah (district) North of the Myhee river. In treating of the history of their revenue administration under British rule, however, it will be more convenient to deal with them as if they had from the first been attached to their present Collectorate, Ahmadábád.

By the treaty of Poonah in 1817, the Peshvá ceded his share in the city of Ahmadábád and the subdivision of Daskrohi, with the subdivisions of Viramgám and Parántej, and his share in Idodás and Harsol. Subsequently, by the cession by the Gaikvar of his own share in the city and the Daskrohi subdivision, the Western Zillah North of the Myhee, or what is now the Collectorate of Ahmadábád, assumed its present form from 1818. This Collectorate, or more especially the Western and North-western portions of it, with, to some extent, the subdivision of Parántej, lying to the North-east, differs from the other Collectorates in the Pro-

vinces in containing a far larger proportion of villages in which the agency of the State has never been employed in regulating the terms between landlords or proprietors and their tenants. The distinction between these villages and those in which the State had direct dealings with the Ryots has sometimes, though not accurately, been made by describing the former as *Mevási* (from *Mevás*, a jungle, and therefore unsettled) and the latter as *rásti*, or settled. The term *Mevási* really applied only to certain of the villages in the *Parántej* subdivision inhabited by petty Koli chiefs, or coparcenary holders, from which even to the present day the revenue derived is more of the nature of a tribute than a direct land-tax. By far the larger class of villages in which the tenants have been left to deal with their landlords were those in what have generally been termed the *Tálukdári* estates in the subdivisions of *Viramgám*, *Dholka*, *Dhandhuka*, and *Gogha*. These include a few estates held by *Kasbátis* (literally Town Mussulmans, from *Kasbáh*, a town), mostly in the first two of these, and others held by Koli *Thákuras* (petty Koli chiefs) in *Viramgám*. The distinction between the two main classes of villages is thus drawn by the Hon. Mountstuart Elphinstone in his *Minute*, dated 6th April, 1821, on *Ahmadábád* and *Khedá*: —“ Each of these Collectorates contains two sorts of villages, *khalsa* and *grassia*. The former are directly under the Government; the latter held by a *grassia* chief, to whom the Government looks for revenue, and formerly looked to for maintaining order. The most striking division of the *grassia* villages is those held by *Rajpoots* or *Grassias* properly so called, and those held by *Coolies*, generally termed *mowass*. The former, though foreigners, were in possession of *Guzerat* when the *Mussulmans* invaded it: they retained some *talooks* and villages at that time, and they recovered others by encroachment on the final weakness of the *Moguls*. They are at once a more civilized and a more warlike race than the *Coolies*, and it is perhaps owing to these circumstances, as well as to their having more recently possessed the government of the province, that their claims appear to be much more respected than those of the *Coolies*. The latter, though probably the aborigines, seem generally to be considered as rebellious, or at least refractory villagers, who have, from the weakness of former

Governments, eluded or resisted the just claims of the Circar. Both pay a sum to Government, which Government appears to have had the right to increase. It was not usual to interfere with the management of their villages or to examine the state of their receipts. Our Government has asserted the right, without always assuming the exercise of internal interference; but it is only of late that it has begun to inquire into the collections, by establishing Tullatees in *grassia* and *mowass* villages. The whole of the Pergunnahs of Dhundhuka, Ranpore, and Gogha, except the *cusbas* (or chief towns) are in the hands of *grassia* Rajpoots, as is a considerable portion of Dholka. There were a few also in Veerungaum, which have been swallowed up during the exactions of the Mahrattas. The Cusbattees of Dholka, though Musulmans, and the Chief of Patree, though a Coombe, and though both of them differ from the others in the nature of their tenures, may yet be reckoned in this class; but by far the greater number are Rajpoots; they resemble their neighbours and brethren in Jhalawar, but are more intelligent and respectable. The chiefs of Limree and Bhownuggur are among the number of our subjects in those districts, though they have large possessions elsewhere. They are all quiet and obedient. * * * The principal Mowassees are the Coolies of Chooval, and those of Purantej, Hursole, and Morassa districts. The former are quite reduced, have received Tullatees, and pay all their revenue but twenty-five per cent.; but the latter maintain their independence, and, in some instances, their rebellious and predatory spirit."

Up to the time of the introduction of British rule the revenue in the Peshvá's portion of Kathiávd, viz. that outside the present Ahmadábád Collectorate, was collected by what has already been described as a Mulk-gírf (country-seising) expedition. An armed force marched through the country and collected what it could, the amount levied from the several estates depending on their power of resistance and the address or skill in bribery of their proprietors. In the Gaikvár's portion, now included in Ahmadábád, which was more accessible, and thus more easily controlled from head-quarters at Baroda, the more civilised, though in the end the more pernicious, system of management through farmers, generally themselves the *kumásidars* or subordinate divisional

managers, was adopted. In the estates held by Rajpoot or Koli chiefs the farmers were forced to be content with what they could get. In the *rásti* or peaceable villages it was found advisable in many cases to make use of the agency of Kasbátis, Mussulmans of capital and influence, who, by lending money and acting as revenue securities, had raised themselves to the position of middlemen; and in others to farm out individual villages to the Patels or head-men. In no case was there any direct interposition by the officers of the State between the ryots and their landlords, the rentals imposed on the villages being apportioned among the former according to the usual custom of the country. In the villages farmed out to the Patels here, as in other parts of the Province, village lands were frequently found to have been sold or mortgaged to raise money wherewith to meet the farmers' demands when the ordinary collections were insufficient. The Kasbátis, it may be noted, held their estates on a kind of feudal tenure, being bound to furnish men at a certain fixed rate of pay, to repel invasions of the Káthis, and keep the peace on the frontier of Kathiávád.

By the advice of Col. Walker, then Resident at Baroda, very little change, except the abolition of the agency of farmers, was made in the method of revenue management. The method of collecting tribute from the more powerful chiefs was to be continued as heretofore. "At present," he wrote, "we have the chiefs' trust and respect in a very high degree. An attempt forcibly to change their customs would rob us of their friendship, and if the attempt failed, we should besides their hatred have their contempt. An acknowledgement of their submission as subjects should be taken; but no attempt should be made to raise the revenue demand. In unsettled villages, without any acknowledged chief, the revenue should be collected from the cultivators or the village head-men, and not from one of the superior holders or from a surety. In quiet villages, instead of the destructive system of farming and the agency of middlemen with its disgraceful collusion and chicanery, the Company's servants should collect the revenue, and so secure the obedience and gratitude of the cultivators. Finally, from illegally alienated Government lands a large increase of revenue should be drawn."

For some years Col. Walker's advice appears to have been followed. The earlier Collectors were clearly of opinion that the Talukdars had proprietary rights over their villages; and even at the present day, if a ryot in one of those villages were asked if his Thakor had the right to oust him from his holding, he would unquestionably answer, "Yes; is he not the *dhani* (lord)?" The result of an inquiry into the matter in 1810-11, by the Collector of Kheda, was that the Bombay Government in those days acknowledged such a right on the one hand, while on the other the local officers were allowed to pursue a policy of such excessive enhancements of rental that the possession of the right left their holders no profit. At a later period, the right was declared to be that of hereditary farmers during the pleasure of Government, an opinion deduced from the terms of the leases that were from time to time granted to them, outside which documents they were said to possess no rights. At the same time, one great calamity was avoided that might have befallen a class of men who had become greatly burdened with debt from various causes—inordinate exactions, pride of birth and position, the introduction of laws by which debts, which under native rule would only have been moral obligations, were enforced by decrees of Civil Courts, &c.: this was the actual sale of their properties. Their villages were frequently attached and placed under the Collectors' management in execution of decrees, a management that sometimes resulted in the increase rather than the lessening of the Talukdars' difficulties. The attachments were occasionally continued in the case of Kasbatis until there remained no hope of the debts being liquidated, and the villages were resumed and taken under direct Government management. But the proprietary title to no village was ever sold.

It will be as well to complete at once, abandoning the chronological order of events, the history of the treatment of these estates. Special laws passed for the purpose enabled the debts of the Talukdars to be inquired into summarily outside the Civil Courts, the jurisdiction of which was raised for a time; decrees were passed for such portions of the debts as seemed equitable to be enforced by the management of their estates by a special officer; the estates, once freed from debt, were handed

over to the Tálukdars, who were thenceforward to sink or swim like the owners of other property. To ascertain and secure the rights of the State, the estates were roughly measured and assessed, and new leases, based on an estimate of 50 per cent. of the net revenues thus determined, were granted. A more melancholy instance of blundering mismanagement of a peculiarly fine proprietary body of men, partly through their own fault and partly through the ignorance of the officers of Government, cannot, it is believed, be adduced throughout the annals of the British administration in India; nor is it by any means certain that the measures of relief finally adopted will not result, in the course of a few generations, in the gradual degradation of these Rajpoot nobles down to the dead level of cultivating ryots, if not to the lowering of many of them to be hewers of wood and drawers of water to the moneyed classes, who will gradually possess themselves of their properties. The fundamental error, from the time when the matter began to be considered from a revenue point of view, was the confounding of a tribute, the amount of which partly depended on the condition of agricultural prosperity of an estate (there being no mercantile or other condition to look to for guidance), with the right to a share in the actual produce of an estate. The idea generally prevalent when, on the introduction of British rule, a more civilised method of fixing an annual revenue to be paid by an estate than that of what an armed force could manage to collect, was thought out, was that, after the cultivators' share of produce had been deducted (the *kheroo-bhág*), the remainder (*ráj-bhág*) should be about equally shared between the proprietor and the State. Thus, where the cultivator paid half his crop, the *grassia* and Government got a quarter each; where the former retained only one-third, the remaining two-thirds were shared by the latter. From this it was assumed that the *grassia's* share might descend as low as one-third of the revenue of his estate. Accordingly, 30 per cent. (even at this calculation it should have been 33½ per cent.) was at once adopted as the standard of what it was sufficient to leave him to pay his expenses and support himself. The fault lay in this standard being the only one looked to, in place of all other circumstances being taken into consideration at the same time; circumstances

such as the position he had to keep up, the numbers of the junior branches of the family and other dependants he had to support, &c. These never left their ancestral home to carve out a fortune for themselves elsewhere, but remained and increased in geometrical ratio while the ground that was to feed them only yielded its produce in arithmetical. The customs and religious habits of the people forced them to maintain idle retainers, such as bards, to minister to their pride, as well as Brahmins and other religious mendicants. The patrimony grew smaller, while the laws relating to debt, introduced with British rule, pressed severely on men for the most part entirely uneducated, who were in the habit of signing their names carelessly to bonds and aments which under Native government would have been pieces of waste paper. To such a people our judicial as well as our revenue system was utterly unsuited, and resulted in a manner briefly described above. This will be seen more in detail as our history proceeds.

The state of affairs in 1821 is described in a revenue letter from Bombay to the Court of Directors, based on a minute by the Hon Mountstuart Elphinstone, as follows:—

“The late Mr. Rowles, who devoted much attention to these rights, was of opinion that a clear proprietary right exists throughout these Pergunnahs (Dhundhuka, Ránpore, and Gogo), and that, with the exception of the *casbas* of Dhundhuka and Ránpore, there is no land the produce of which is entirely divided between the Government and cultivator, like the greater part of the Eastern division.”

“The revenues appear to have been generally settled with the proprietor; and, though liable to decrease or increase, direct contributions into the produce have not been made, except where the Zametee or proprietor may have failed to make good his assessment.”

“When this occurred, the cultivator's share was first divided off (which varied from two-thirds to one-half, and an allowance for seed), and the remainder was equally divided between the Circar (Government) and the Gámatee, which seems to establish that the proprietor's share, under any circumstances, was equal to what Government was entitled to, or from one-sixth to one-

fourth of the gross produce; but the expense of the scrutiny was borne by the proprietor."

"From the uncertain data on which our assessments have hitherto been made, they have become unequal in many cases. In some villages the rights of the proprietors, in others those of Government, have been trencched upon."

After referring to the objections that had been made on the part of the *grassias* to the introduction of Tullatees and Police Patels into their villages, the minute proceeds to say: "Unless, therefore, it was possible to introduce effectually the control of Government into all transactions between the *grassias* of the Western Districts and their ryots, it appeared to us to be better to sustain from all interference in the internal administration of a few villages. Under these impressions we have directed that Tullatees should be sent to villages belonging to Grassias, where they have not yet been introduced, and that they should be removed from those in which they have actually been established. The payments of the Grassias and Cusbatees of Dholka are henceforth regulated in such a manner as to leave 30 per cent. on the revenue, instead of 20 per cent. as at present. Fixed leases are to be granted to these chiefs for five years on the above principles, as we consider it desirable that in future settlements the above proportion should not be exceeded." Immediately afterwards it is laid down that the leases were to be granted for seven years, and the report thus concludes:—

"At the expiration of seven years their payments will require to be regulated on such information as may be obtainable without the appointment of Tullatees. A moderate increase, proportioned to the improvement in their villages, will then be obtained; but the tribute of no Grassia or Gamatu should ever, in our opinion, exceed two-thirds of the share taken from the cultivator."

There can be little doubt that this decision, given with the praiseworthy view of upholding the supposed independence and dignity of these Rajpoot proprietors, was the chief cause of their rapid decadence, until at last legislation had to be resorted to to save them as a body from utter ruin. In Mr. Elphinstone's minute referred to above, it is stated that the effect of the change

that had taken place in the principle of the Dholka payments from that of a tribute to a certain proportion of the produce left to the Grassins had been as follows :—

	A.D. 1802.	A.D. 1817.	A.D. 1820.
Rental of—	Rs.	Rs.	Rs.
Taluka of Koth . .	48,000	57,000	72,000
„ Gángar . .	15,500	19,000	23,000
„ Utelia . .	6,000	6,000	11,000
Bápumyan Kasbáti .	50,000	73,000	89,000
Latifkhan Kasbáti .	11,000	13,000	16,000

When, in order to save the dignity of the Tálukdars, the accountants were removed from their estates, the Collectors had no data whatever to go upon in fixing the rentals, and these in most cases went on increasing, notwithstanding that the burden of the Tálukdars, through the multiplication of their families in the piping times of peace under British rule, increased still more rapidly. It was not till a good many of the Kasbátis' estates had been resumed, in consequence of their indebtedness preventing them from managing their properties, and many of the Tálukdári villages had remained under attachment in the Collector's hands for years without any apparent hope of ultimate release, that some alleviation was at last afforded in 1850 by an order being issued that in fixing the rentals consideration should be paid to the averages of the previous thirty years. The result, as shown by the returns of the settlement of that year, was a considerable diminution of the rentals of the Tálukdári estates. Although there is a similar absence of information on which to base the settlements in the Mevási estates of the Parántej subdivision, the like evil consequences have been avoided by studied moderation having been exercised in fixing the rentals, increases of more than 5 per cent. having seldom been made, and decreases even having been allowed, with the avowed view of keeping alive the idea that the demand was more of the nature of a tribute than of a right on the part of the State to a portion of the village revenues. This is borne out by the following figures, showing the rentals of the Mevási estates in 1818, the

earliest date at which they are procurable separately from the revenue of the rest of the Collectorate, and those of the present day;—

1818.	1869.	1875-76.
Rs. 14,070	Rs. 13,560	Rs. 10,710

One of the strangest pieces of fortune fell to the lot of the few Tálukdári estates situated to the eastward of the Sábarmuti river, which, in consequence of their position, were included in the Khedá Collectorate, or Eastern Zillah north of the Myhee, and not in Ahmadábád, when the two were separated in 1818. The orders relating to the appointment of village accountants were never extended to the former, and the original idea of the Grassias' payments being of the nature of a tribute having been preserved, the rentals of the estates in it have remained fixed as at first.

But we must now proceed to notice what took place with regard to the administration of villages other than Tálukdari and Mevási in the Ahmadábád Collectorate.

Before this Collectorate was formed, the subdivisions of Dholka, Dhandhuka, and Gogha were included in the Eastern Zillah North of the Myhee, and their revenues managed on the same general principles as the rest of the latter. For the first five years the revenue was farmed out to the Desáis and Amíns, a class of officers holding nearly the same position as the farmer. After this the villages were farmed out to their Patels or head-men, but as it was found that no true account of the state of the country could be obtained from these persons, a scheme of setting up competitors to the Patels was resorted to, and leases were given to the highest bidders. This system, however, was only partially adopted. Up to 1816 hardly any villages had been settled on the principle of the State dealing with individual cultivators, but the system was gradually introduced, until, in 1820, 370 out of 560 villages were so managed. Even in villages that were thus leased, however, that principle had virtually been adopted, for, as the village accountants became efficient, no farm was ever given until every ryot's rent had been settled, and the Patel or farmer had no risk of loss or chance of gain except by discovering abusea.

When the remaining subdivisions came under British jurisdiction in consequence of the treaty of Poona, and Ahmadábád became a separate Collectorate, the absence of all reliable information on the details of revenue management necessitated a large resort to the farming system, and strangers who bid the highest terms were freely admitted to them whenever the Patels, to whom the preference was always given, would not take them. In such cases, the rights of the ryots were preserved by the farmers being bound to respect existing tenures and conform to all village customs. The Collector and his assistants moved freely about the country and checked abuses. Many villages were let out on terms unfavourable to the State, with a view to induce immigration from the neighbouring Gaikvár's territories. The system on the whole was found to succeed, although it would be difficult to say whether the assessments were heavy or otherwise: at all events, collections were made without distraint of property and but little imprisonment of defaulters, while very few remissions had to be granted and no advances from the treasury, and ryots were not known to leave British territory, or even move from village to village. The variety of systems of revenue management, adapted in each case to the habits and immemorial customs of the people, were but little interfered with, and this, together with the repression of disorder by the strong hand of British power, tended, if not to a rapid development of prosperity, at all events to keep the people contented, and allowed time to exercise its due effect in preparing them for the introduction of the more radical reforms of the Bombay Revenue Survey, commenced in 1853. To show the complicated nature of the revenue systems in force, a specimen of that of one village, taken from the records of what was termed the Revenue Survey of 1820-26, is given in a Note. In other villages, matters were complicated by members of various castes having to pay, in different quarters of the same village, rates varying according to caste, crop, and season of cultivation, or different shares of produce regulated by similar considerations, sometimes combined with the payment of plough-tax and other cash levies, and sometimes not. The cesses even varied according to caste, and according to whether alienated as well as Government land was held by the same person. In *dhigvatsi* (division of pro-

duce) villages, the assessment was sometimes made on eye-estimates of the produce of standing crops, and sometimes on actual division after these had been reaped. To crown all, in some cases (in one the custom was established by one of our own early Collectors) men of different castes were supposed to cultivate holdings of a certain rental, and whoever did not do so had to pay up in cash (under the name of *khutta kharch vera*, "cess for deficient expenses") the difference between his actual and theoretically correct holding.

NOTE.—VILLAGE *dhárá* (written revenue usage) OF PARÁNTEJ.

Assessment of Government Lands.

In certain divisions of the village, when *khurif* (early cold-weather crops) was manured, it paid half-produce, and when unmanured two-fifths. One tract of manured land, from which the Kasbátis received *sukhai* (fee) paid one-third to Government. Ground at a distance from the village paid two-fifths or one-third; newly-cultivated land, one-fifth or one-quarter for the first year, and one quarter or one-third for the second year. Some fields of *bájri* (millet) in a ravine paid a quarter-share. Crops grown in the *bók* (an old river-bed), and in lands irrigated from temporary wells when the rain-fall was scanty, two-thirds or one-third. Indian corn here paid one-third or a quarter, and rice generally one-quarter.

The following *bábtis* (grain cesses) were taken from the gross produce before it was divided:—

Sirkári (Government share).

$1\frac{1}{2}$ seer per maund (40 seers) as *seri* or fee to Government.

$\frac{1}{4}$ seer per maund for *tolámani*, for weighing grain.

6 seers per 100 maunds for *Khidmatgári*, service fees.

Parbhári Bábti, cesses for other persons and purposes.

$\frac{1}{4}$ seer per maund for *Gám-kharch*, village expenses.

$\frac{1}{4}$ seer per maund for *Desái dasturi* (Desais' fees), and in two kinds of crops only $\frac{1}{2}$.

AHMADA'BA'D.

$\frac{1}{2}$ seer per maund for Haváldar (revenue peon), who also receives $\frac{1}{2}$ maund of grain in the husk, and 20 bundles of *bájri* per plough. Pagi (village trackers) receive the same.

$\frac{1}{2}$ seer per maund for Kotvál (general village servant), who also has 15 seers of grain in the husk and 15 bundles of *bájri* per plough.

1 seer per plough to the Thákor Mandir, a temple in the town.

4 seers to the cultivator as *khór* (eating expenses).

In addition to the above, each ryot from his own share of the produce paid 1 seer per maund of grain (*seriku*) in the Government share to Government, and $\frac{1}{2}$ maund per plough to the carpenter, blacksmith, leather-dresser, and barber. When crops were estimated by eye, in place of being divided, the only *bábtis* levied from the ryot's share were 1 seer to Government, and $\frac{1}{2}$ seer as *tolímáni* per maund in the Government share.

Tobacco and *brinjals* paid a crop-rate of Rs. 5 per *bigha*, and other vegetables generally Rs. 2 $\frac{1}{2}$. Land under one particular well paid Rs. 9 $\frac{1}{2}$ in the lump, and 4 *bighas* cultivated by a Patel Rs. 12. Some *bájri*, *banti*, and *bávta* (inferior grains), in a ravine paid 1 Rupee per *kodáli* (hoe), and 5 seers each to the Patel and Desai. *Singára* (ground nuts) in beds of tanks paid $\frac{1}{2}$ to Government after deduction of $\frac{1}{2}$ seer each for the Desái, Patels, Pagi, and Haváldar, and $\frac{1}{2}$ for the Kotvál. Government lands watered from alienated wells paid half of these rates.

Rabi, or late crops.

Before division of produce paid—

$\frac{1}{2}$ seer per maund, as *tolímáni*.

10 seers per water-bag used to irrigate, as village expenses.

10 seers per water-bag as fees to Desáis, Haváldar, carpenter, blacksmith, and barber.

20 seers to Mochi (leather-dresser).

5 seers to Pagi.

4 seers to Kotvál.

5 seers to Ryot for eating.

If the crops were estimated, in place of being actually divided, all these were paid out of the ryot's share alone.

Alienated lands paid various lump amounts in cash or grain.

Seven Patels were permitted to cultivate alienated land with late crops with one plough each; if more ploughs were used, they paid half a rupee per plough. Kumbis paid half a rupee and other castes a quarter rupee per plough who raised late crops on alienated lands.

Plough tax—

	Rs.
32½ ploughs paid . . .	13 each
7½ " " . . .	12 "
1 " " . . .	11½ "
9 " " . . .	11 "
5½ " " . . .	10 "
½ " " . . .	8 "
1 " " . . .	7 "
1 " " . . .	6½ "
1 " " . . .	6 "
1 " " . . .	3 "
4 " " . . .	4 "

Vodhur vera (lump cesses).

	Rs.
Kumbis	14½
Suthvára	9½
Bámbi	52

The Patels levied 1 rupee per plough and Rs. 25 in the lump from the holders of alienated land for village expenses.

These complicated systems remained for the most part in force until they were completely set aside by the revision which was commenced in 1853. The Survey in 1820-26, under Captain Cruikshank and others, was perfect in its way. It prepared beautiful maps of each *vásti* village, the Mehvái not coming within the scope of its operations; it settled a number of harassing boundary disputes; it collected valuable agricultural and other statistics for all the subdivisions of the Collectorate but

Dhandhuka and Gogha, and measured in detail all cultivated lands, marking village sites, distinguishing natural features and prominent buildings, such as isolated temples and mosques. Notwithstanding this, the measurements thus carefully made were never adopted as the basis of the revenue settlements, but, until they were finally superseded by the more recent Revenue Survey measurements, stood uselessly in the field registers side by side with the estimated areas according to which the assessments were made and collected. Notwithstanding instructions from Government, issued for many years from time to time, that these cumbrous and complicated systems must be got rid of, a few spasmodic efforts at revision, by means of a classification of soils by committees of experts, were the only result; only a few villages here and there were revised, and no systematic endeavour was ever made to take the matter in hand and deal with a subdivision or large tract of country, as in other Collectorates. These spasmodic efforts at reform possess no very great interest for the general reader, and will be but casually touched on in the course of the following pages. No regular inquiry, again, was made into the titles on which alienated lands were held, as was done by the Bharuch Survey Department under Col. Monier Williams: all were finally disposed of under the Summary Settlement, to be described under Surat. In the meanwhile, however, a good deal of revenue was derived, both here and in Kheda, from these lands by the indirect method of imposing heavier assessments than they would otherwise have had to pay on those who were supposed to be Government cultivators when they threw up Government and cultivated alienated lands. This direct tax on industry appears to have been equal to about one-third of the ordinary rate per *bigla*, and to have been imposed in 1820 for the purpose of preventing ryots from forsaking the cultivation of Government land and resorting to alienated. The measure was not so extraordinary or out of the way as it would appear to be at first sight, for, in the same manner that there was a division of village lands into *talpat* or State property, and *vānti* or "divided" land held by the original Grassia proprietors ousted by the Mussulmans in former days, the village sites and the people inhabiting them

were also divided, those in the *talpat* part of the village belonging to Government and only cultivating Government land, and *vice versa*; the former were *sirkári úsámi* (Government men), and the latter *vántá-ni-úsámi* or *vántá* men. It was quite according to the custom and feeling of the time that a *talpat* man should be prevented from wasting the energy he should bestow on the cultivation of Government land by devoting his attention to *vántá*, and the holders of the latter equally resented one of their men cultivating *talpat*. This tax bore the name of *Svádíá*, as well as what was really a direct quit-rent leviable on alienated land of all descriptions when cultivated with particular crops; the latter was sometimes confined to the occasion of raising of sugar-cane or valuable irrigated crops, and was then called *máliát-svádíá* (garden-crop cess). When the new *svádíá* was abolished in 1826, therefore, for the purpose of removing all restrictions on the ryots' cultivation, the old one was still continued. The value of the new impost at that time in *Kheda* was about Rs. 12,560, and it had amount^{ed} since its imposition in 1819-20 in *Ahmadábád* to about Rs. 35,190 per annum. It was reported by the Collector in 1831 that the old impost was not considered unfair, and that the increase in cultivation subsequent to the abolition of the new one had made up for the loss temporarily sustained. Another form of this indirect method of taxing alienated lands will be noticed under the *Kheda* Collectorate under the name of *Veta*.

The leases of the *Tálukdari* estates in *Dhandhuka* and *Gogha* having expired in 1822, the Collector caused estimates of the produce of the villages to be made by men specially deputed for the purpose. The returns, no doubt, were untrustworthy, as all estimates of crops must be very uncertain, but they were the best obtainable. Having compared these with such other information as could be got together, the Collector proposed to grant new leases for seven years at a reduction of about Rs. 2,000 on the rentals of the preceding year, Rs. 1,70,606. The leases, it was hoped, would give the *Tálukdárs* time to recover from the depressed condition to which they had been reduced, partly through their own indolence, ignorance, and improvidence, and partly through the large quantities of land held by members of

their families and others who paid no revenue to the Gámetis, alienations, it was reported, which would not be recognized if the estates reverted to Government. The settlement of leases proposed met with the approval of Government.

The Collector's report for 1822-23 on the subdivision of Parántej, inclusive of Harsol and Báyard, showed that, although the season had been unfavourable and the grant of remissions had been necessary, there was a general improvement in the condition of the villages. The demands of the Gaikvar for *gháns-dáiná* (grass and grain) levies against some of the villages having accumulated for some years, the pressure upon them was unusually heavy, and the Collector proposed that if these could not be reduced, those of the Government for the season should be lowered. He also proposed that cash advances should be made to encourage the sinking of wells, the villagers supplying the necessary labour. Both these proposals were sanctioned.

In the same year an arrangement was made with the Kasbátis in Virangám, who were threatened with the total deprivation of the estates they held, that they should be allowed to retain the management of nine villages, with 20 per cent. of their revenues, during the pleasure of Government. The villages held by Bápumyan, Kasbáti in Dholka, were also placed under attachment, in consequence of non-payment of revenue; Ra. 5,000 were, however, remitted on the rental of 1822-23, although in the succeeding year he was refused any remission on account of the failure of his crops. This method of alternately pulling the strings tightly and letting them loose went on with this Kasbáti for many years until the whole Táluka was at last resumed and managed as *káilái* (directly-managed Government property).

The chief events of 1825 were that the claim of the Thákore of Bháonagar to have his rental fixed permanently, like that of Limree, was negatived, although his seven-years' lease was extended to ten, and village accountants were reported to have been appointed to the whole of the Government villages in the Collectorate, as they had been also in Surat. On the Collector of the former proposing that the duties of these officers should be confined to the keeping of village accounts and records, and that they should not interfere with the collection of revenue, this being

left to the Patels, whose influence and authority had deteriorated in consequence of the action of the Taláti, Government issued instructions that the accountant's duty was only to keep the accounts and correspondence of his village, and the exercise of independent authority by him was an innovation which must be checked. From the nature of things, however, this kind of struggle of authority must and does continue to the present day, and it depends on the ability and temperament of the individuals who shall be supreme. As a rule it is found that the hereditary Patel and the stipendiary accountant somehow manage to pull very fairly together. The Patel, if an educated man can generally hold his own if he chooses; but where he is ignorant or careless, the accountant becomes his master.

In 1826 a partial reform in the system of revenue management was effected by the abolition of certain grain cesses and the incorporation of others with the plough tax. Leases for three years were also granted to the Koli Thákaras, in the Chuvál of Viram-gám, for their Tálukdári estates.

In 1828 orders were issued with regard to the affairs of Bá-pumyan, Kasbáti of Dholka that a sufficient number of his villages to cover his debts to Government should be placed under attachment, and he should be left to his fate with his creditors. In a report on the revenue system in force in this Collectorate submitted in the same year, the following are the outlines given:—

Parántej subdivision, 124 Khálsá and 45 Tálukdári and Mehvasi villages. In the former the revenue is levied in kind. When the grain is ripe, the Taláti, Patel, and two or more respectable Patels from neighbouring villages, proceed to each field and estimate its crops, either standing or stacked; this is called *kullar*. If the Ryot agrees to the estimate, he can take his crop at once; but if he does not, it is taken to the village *khali* (village grain store-yard) and divided: this is called *mákkal*. Every cultivator can retain the Government share of his grain by paying for it. If he does not, it is taken to the head-quarters of the subdivision and sold. This applies chiefly to the monsoon or early crop; the little late crop there is, is always estimated by *kullar*. In addition to this there are various *bábtis* (grain cesses) and other *veras*

(cesses) paid in cash. In the Tálukdári and Mehvási villages the Collector has only a rough estimate of produce, with their condition and former collections, to go on in fixing the rentals.

Subdivision of Viramgám, 73 Rásti and 96 Tálukdári villages. The system does not differ materially from that of Parántej, but the Government share of grain is, as a rule, higher and the plough tax lower.

In Dhundhuka, Ránpur, and Gogha there are only 11 Khálsá villages, all the rest, 325 in number, being Tálukdári. In the former the revenue is estimated as in Parántej, and taken in kind.

In Dholka, the Khálsá villages are generally managed on the cash crop-rate system, but in a few the revenue is taken in kind. The Talátis prepare field-registers, each field being regularly numbered, and its area of waste and cultivated land entered, but, as already stated, only in estimated *bighas*. These are inspected by a revenue officer and the Patels of neighbouring villages. If the cultivator objects to the area recorded, it is measured. In Daskrohi there are 148 villages, all Khálsá, and managed on the cash crop-rate, share of produce, or *khátábandi* (lump payments on holdings) systems. The area in crop-rate villages was estimated, as in Dholka, and the crops in the share-of-produce villages by the subdivisional revenue officers, as in Parántej. The late and hot-weather crops and produce of fruit-trees were estimated with reference to the produce of former years and the state of the season. Alienated lands paid a quit rent, sometimes on cultivation and sometimes whether they were waste or not. The estimates were carefully examined when the Collector or his assistant made the final settlement for the year. Patels of villages were generally given the option of taking leases of their villages; otherwise, the villages were managed directly by Government officers.

In renewing the leases of a number of Tálukdári villages in Dhundhuka and Gogha in this year, the Jivái lands set apart for the support of the Tálukdárs' families were taken into consideration. The circumstances of the Gámetis were reported to be no better than they were seven years previously; many were burdened with debt, and many villages were under attachment.

The *bighá* rates in Dholka and Daskrohi being reported to be pressing heavily on the ryots, sanction was accorded to their reduction according to the relative fertility of the soil divided into three classes, to which sufficient attention had not been paid by the Pancháyets. It was also ruled that a Tálukdar's right to his estate ceases with the expiration of his lease, and until the settlement is resumed; and such renewal being at the option of Government, he had no further right to the produce of his estate. During the currency of a lease, a Tálukdar's creditors have a right to the produce, but as the ryots' interests would probably suffer from their interference, care should be taken to give no lease until some satisfactory arrangements as to the Tálukdar's debts had been come to. When a limit was set to the demands the Collector might make on the Tálukdar, the rights of the State were not meant to be affected; the limit was set with a view to protect the Tálukdar against over-assessment by too zealous officers, and to lay down a system of settlement favourable to a class that it was desirable to treat with forbearance on account of their past fortunes and prescriptive claims, but conferred no hereditary right. Any attempt, therefore, to satisfy a creditor's claim, founded on a decree against a Tálukdar, from the proceeds of his estate should be resisted on the ground that the estate was not the property of the latter. It will be noticed how entirely contradictory these orders were to the earlier notions entertained as to the Tálukdars' proprietary rights.

Leave was given at the same time to give extended leases of other villages that might be improvable to respectable farmers for ten in place of seven years.

In his Minute penned in 1830, Sir J. Malcolm for the most part considered the system of revenue administration in Northern Gujarát fairly adapted to the circumstances of the time. He deprecated any great changes, but proposed that assessments should be lowered in individual cases on the expiration of current leases when the rates were found to be too heavy. In the case of Bápumyan, Kasbáti, of Dholka, he saw no remedy, in consequence of that person's indebtedness, but the resumption of his estate and the grant of a pension to his family. He was also, as a political measure, in favour of granting the Thákor of Bháonagar a

permanent in place of a fluctuating settlement, of which the latter complained greatly.

On the Collector of Ahmadábád reporting in 1831 that the Survey measurements had never been adopted in making assessments to the land revenue, but that the records were useful for the statistical information they contained, the Revenue Commissioner was directed to advise on the desirability or otherwise of making use of the measurements. The proposal was, however, never carried out.

In 1833 much difficulty was found in disposing of the Government share of grain produce, in consequence of the lowness of prices. A large stock was brought into Ahmadábád from Dholka and sold at a sacrifice.

In 1837 an endeavour was made to secure the re-establishment of villages in Parántej by the offer of 5 *bighas* in free gift (*inám*) for every family introduced, and by rewards of Rs. 70 for the building of new houses. In the same year the following draft of an Enactment to amend the law relating to the recovery of arrears of land revenue was proposed by the Sudder Adawlut. This draft was not forwarded to the Supreme Government at Calcutta, but the idea of enacting some such law was adhered to in theory :

“Be it enacted that, besides the paramount claim given to Government by existing laws on crops on land for arrears of revenue, the said land itself shall be alike liable for the same in preference to all other claims, whether it be in the occupation of the defaulter or whether transferred, provided always that such paramount right of Government shall be limited to revenue of not longer standing than three years, and provided that no new occupant or holder shall be liable in his person or property for revenue which became due prior to his title to the land.”

In 1838 the assessments in a good many villages in the subdivisions of Parántej, Virangám, and Daskrohi were revised in the usual manner by means of Pancháyats. The measure was, however, found fault with by Government, as the rates appeared to be fixed irrespectively of the quality of the soil, and directed to be merely tentative ; the settlements were to be made annually for

two or three years in order to gain experience of the suitability or otherwise of the new rates. In the following year, in commenting on certain *khátábandi* settlements (lump sums on entire holdings) proposed by the Collector, Government called for information as to whether, on the abolition of a plough tax and the substitution of a money rate per *bigha*, a fair proportion of the former had been imposed on alienated lands, as the means for its payment were evidently provided by the latter lands as well as by the Government lands held by those who paid it. When the Regulations of 1827 were passed, provision to meet the case had been distinctly made in Reg. XVII., Sec. vi., cl. 3, where it was laid down that, when any cess was levied from a particular class of people holding land exempt from the payment of public revenue, the produce of such land being evidently the means of paying the cess, the payment, with the consent of the holders, might be laid on a portion of the land, and the remainder exempted from all liability.

In 1840 a proposal by the Collector to introduce a new kind of *hundábandi* (lump assessment on holdings) was negatived on account of the uncertain method of calculation on which it was to be based. This was to ascertain the gross produce of every field in a holding, and, taking a fixed proportion of its money value, to place it as an assessment on the land, whether waste or cultivated. It was very properly declared to be impossible to settle beforehand what proportion of produce should be the assessment, as a half in one place might really be lighter than a fifth in another. It was declared in the same year that Government had never intended to insist on 70 per cent. of the net produce in *Tálukdári* villages being assumed as the proper rental, but that this had been fixed to secure a limit to the demands of over-zealous officers, the fact being that *Tálukdárs* as a rule enjoyed more than 30 per cent. *Jivái* (maintenance) alienations were of no concern to Government as long as the rentals were paid, but when those alienations had been carried to such an extent as to interfere with their payment, the proper remedy would be to attach the estates, and recover the demands of Government without regard to any such alienations. Opinion was at the same time called for as to whether *jivái* held exempt

from assessment for more than thirty years, the ordinary period of limitation, would be held to have a good title as against a Government demand for land revenue.

It was in 1850 that the new system of fixing new leases for the Tálukdári estates according to the average payments for thirty years, with a deduction on account of the losses the Tálukdárs had sustained through the abolition of miscellaneous taxes on traders abolished by Act XIX. of 1841, was brought into force, much to the relief of the class, whose rentals were consequently considerably reduced in the new leases granted them for fifteen years.

About this period complaints were constantly made by the Revenue Commissioner and Government of the slow progress made in the Collectorate in the revision of assessments, and of the inefficient manner in which the proceedings of the Pancháyats were supervised. Such complaints seem to have had little effect, however, for up to the time of the introduction of the Revenue Survey Settlement in 1853 very little was done in the matter.

The large balances allowed to accumulate in Tálukdári villages, and the various systems of fixing the rentals adopted in managing such as were under attachment, did not escape notice and censure. Although it had been distinctly laid down that the principle of settlement was to take 70 per cent. of the net produce for the State, and leave 30 per cent. for the Tálukdár to secure himself against loss, the Collector in some cases fixed his demand according to actual realisations, and in others reduced the nominal rental. If a Tálukdár threw up his lease or failed to give security, Government had a right to the full revenue, and not only to 70 per cent. of it. The Collector should not be the mere agent of the civil courts in the management of villages placed under attachment for the recovery of the Tálukdárs' debts, but all the first realisations should be credited to Government, and the balance only, if any, paid into Court: there would thus be less chance of the mismanagement and accumulation of balances that had been brought to light. In 1843 the Collector gave as a cause for this, that the men placed in charge of attached villages were frequently in the hands of the Tálukdárs. It should be

recommended that in most of these parishes the very words of the orders of Government have been quoted.

With reference to the orders noted above that, in revising the assessments of villages paying revenue in the shape of a *phoenja* tax, a fair proportion should be assessed on *pieced* land, Government, in considering certain revisions proposed in 1892, directed that, in the case of lands held *à l'usage* *com* in consideration of alienated together with Government land, the extra assessment must be imposed on the latter unless the holders of the former would consent to pay a quit-rent for their land. The Collector was directed to assess himself on averages the value of lands of holdings by granting low rates and to put on suitably the words of revision. By this time the advisability of commencing the conversion of dry-crop into irrigated land by the offer of liberal terms had forced itself on the notice of Government, and orders were issued for the grant of leases for thirty years in the Deccan and Southern Mahratta country. Collectors, according to the system virtually in force in all places where the Revenue Survey assessment had been introduced, thought to say, however, the orders were not confined to the *Kandha* or *Shyamba*, as those parts of the country were not believed to require such arrangements. Various methods for procuring the spirit of enterprise in all parts of the Presidency had, however, been in force from very early days; it appears unnecessary to enter into general detail with regard to them. The Collector in 1846, was directed to assist orders which allowed of advances being made for the repairs of old wells; and his proposal to give several *barans* of settlement according to the grant or less extent of working new wells was regarded as *unphilosophical* and *unreasonable*.

No change of importance took place in the Collectorate till 1851, when the Revenue Commissioner took objection to the *Shyamba* *barbars* of a revised assessment then, according to the *Shyamba* *Barbar* system, into 175 villages, by the first Assistant's change of the Collectorate without reference to higher authorities. In the end of this year the first step was a thorough revision of the assessment of the whole Collectorate was taken by the measurement of the *Shyamba* *barbars* being commenced under

an officer from the Southern Mahratta country Survey, associated with a Civilian acquainted with the province, to exercise a general control over the system of measurement and classification of soils, and especially to take charge of the revision of assessment. With the officer in charge of the details of the technical operations there were sent up a few measurers and two experienced classers of soil, to form the nucleus of a new Gujarát Revenue Survey Department, which was directed to be organized for the purpose of dealing gradually with the whole province.

Soon after the commencement of measuring operations in 1852, an endeavour was made to economise by making use of old measurements made a few years before, in which masonry boundary marks had been erected at the corners of fields in such a way as to enable the old numbers thus formed to be traced on the spot. It was found, however, that in forming these numbers no attention had been paid to the actual boundaries of existing fields, which had in some cases been divided up and included in several of the larger or section numbers. To adjust such a system, which was of course subversive of all the principles of a properly-regulated revenue settlement, it was found would involve more labour and expense than a complete re-measurement of the land, and the old measurements were accordingly set aside with the sanction of Government, the land being divided into Survey fields, on the principles of the Revenue Survey, containing as a theoretical standard as much land as could be cultivated by a plough or two ploughs. Existing boundaries were in no case disturbed, and wherever two or more fields were thrown in to form a Survey field of the theoretical size, each of these was separately measured by a subordinate agency before the money rent was fixed, and a separate assessment recorded upon each plot, so as not to interfere with existing occupancy.

The soil of Gujarát being very unlike that of the Deccan and Southern Mahratta country, where the classers had been accustomed to work, it was found necessary to arrange a new system of classification. It may be said roughly that all the soil of the province is of alluvial or diluvial origin, there being rarely any rock from the wearing down of which soil could be formed. Its two main divisions are the black (*bili*) and the light-coloured

(*goráru* or *gorát*), the former having probably been formed in the estuaries of the great rivers running into the Gulf of Cambay, the Taptee, the Nerbudda, the Myhee, and the Sábarmati, and smaller streams; and the latter farther inland and away from those estuaries; the former is diluvial, the latter alluvial. In the estimation of the people the light soil was, as a rule, the more valuable; and it is an undoubted fact that the parts of the country where it prevails show more outward signs of prosperity than black-soil regions. On looking closely into the matter, it was evident that this was to be attributed more chiefly to the greater industry and agricultural skill of the people than to the intrinsic superiority of the light soil to that of the black. The latter was clearly by nature the more fertile of the two, and required less labour and manure, although the former, when better tilled and manured, produced the more valuable crops. In the new classification scale, accordingly, black was reckoned the best, or 16-anna soil, while *goráru* was put down as 12 or 14. A scale of faults, according to which the value of the soil deteriorated, was arranged on the same principles as in the original method pursued elsewhere, but differing materially from those. Want of depth, for instance, which counted for much in a rocky country like the Deccan, was practically never found in Gujarát, while in the latter an excess of sand, tending to loosen the particles of soil too much, and impregnation with salt, were elements affecting the value of the soil unknown in the former country.

Land was found to be so much subdivided that it was advisable to limit to six the number of cultivators whose lands could be measured together to form a Survey Field of the standard size, in order to avoid complications in the matter of subdivision of assessments.

Orders were issued in 1852 that the conversion of dry crop into rice land, subsequently to the revisions of assessment by Pancháyats, should entitle those who thus invested their capital and labour to exemption from extra assessment on account of the greater value bestowed upon the land.

The first subdivision to be brought under the revised system of assessment was that of Dholka, and as this was the first Survey settlement in a new province, it was deemed advisable

to proceed cautiously. It was accordingly in the first instance determined, under the advice of Captain Wingate, to introduce it experimentally in seven villages. The rates in these were sanctioned in 1852, and subsequently two other batches of thirty-seven and fifty villages respectively were settled in 1855 and 1858, together with eight Tálukdári villages under the Collector's management in the latter year, making altogether 102 into which revised rates were introduced. In six of the seven villages first settled the current systems were :

In two, entire division of produce (*bhágvatai*).

In one, a fixed *bigha* rate for only the last two years.

In two, a crop-rate system (*jinasvár bighoti*).

In one, the two latter combined.

They were thus, in consequence of the variety of systems prevalent, well suited for the proposed experiment. The maximum dry-crop rates proposed, which were subsequently extended to the whole 102 villages, were Rs. 2 4a., Rs. 2 0a., Rs. 1 12a., Rs. 1 8a., and R. 1 per acre for five groups. The first year's experiment proving satisfactory, these rates were adopted for the subdivision in the following groups. The net increase in the experimental villages had been Rs. 1,575 in the first year:—

1st group, of 21 villages, 18 of which were within 4 or 5 miles of Dholka, the principal market-town of the subdivision, and three near Ahmadábád.

2nd group, of 41 villages, 38 of which were farther from Dholka than those of the 1st group, and 3 near Ahmadábád. Of the latter, Sánand was a large village, with a small market in itself.

3rd group, of 16 villages, of which the market for 13 was Dholka, and of 3 Sánand or Ahmadábád.

4th group, of 23 Dholka and 3 Viramgám villages, some of which had their market in Viramgám and Sánand.

5th group, of 3 villages near the Nal, a large shallow lake on the west of the subdivision, with a deal of waste and unarable land.

Although there had been a Revenue Survey of Dholka, as well as other parts of Gujarát, in 1823-24, the revenue, as elsewhere in the Province, continued to be levied according to the *ásvá*

or estimated *bigha*; hence, although trustworthy accounts of revenue remissions and collections for a number of years were forthcoming, they were comparatively useless, as the area to which the figures applied, especially in the division-of-produce villages, had been merely estimated. The old Survey records, however, afforded statistical information on the progress in material prosperity of the seven villages into which the first experimental revision was introduced, and was quoted by the Survey Commissioner in forwarding the Settlement Officer's report on the revision, which may be considered applicable to the whole subdivision. It is shown in the following statement:—

	1828-24.	1852-53.	Incr. per cent.
Houses, tiled	381	682	} 63
„ thatched	534	871	
Population	1,484	2,312	56
Ploughs	205½	312	52
Carts	59	68	15
Cultivation in 50 villages	2,742	2,965	8

The full information contained in the tabular statements forwarded by the Settlement Officer with his successive reports on the three batches of villages into which the new settlement was introduced is unfortunately not procurable, as the statements have not been printed with the correspondence lately published on the revision of that settlement, on the expiration of the thirty years' guarantee. The settlement was greatly complicated by the various cesses and water-rates paid under certain circumstances by holders of Government lands (Government or *talpat* cultivators, as they were called, in opposition to *vántá* cultivators) when they cultivated alienated land, and by the varying quit-rents and water-rates payable by the owners of that land under different circumstances, all of which payments had to be converted, as far as possible, into direct and permanent quit-rents. Another cause of the settlement being one of peculiar difficulty arose from the right, possessed by different fields, to take water from wells not being capable of exact definition, so that it was found impracticable to impose a permanent garden assessment on particular lands, as had been done in the Deccan and Khándesh. Various

plans were brought forward for overcoming this difficulty, and that which eventually found favour, and was sanctioned by Government, was that of assessing in lump sums the water-bags of each well according to the varying circumstances of each case, such sums to be leviable when the water-bag was used, irrespectively of the particular fields irrigated and of the crops grown. It appears that fault has been found with this method of assessment because the cultivators have, by working the same water-bag by night as well as by day, in reality paid only half assessment. It is clear, however, that this was foreseen by the Settlement Officer at the time, and he considered that if a cultivator chose to work extra time, he was fairly entitled to do so, and reap the benefit without extra payment. Another difficulty arose in the assessment of the greater portion of the rice lands. These generally had no source of water-supply but that derived from the particular tanks under which they were situated, and, when that supply failed from deficiency of rain, lay altogether waste and unprofitable, there being no means of growing a second crop by which the cultivators could recoup themselves for their loss. This led to the system of permanent assessment on such lands, practicable in the Konkan and elsewhere, being abandoned, and separate water and soil assessments being fixed on rice cultivation, the former under certain rules not being leviable when the water-supply failed. Owing to these complications it was difficult fairly to compare the respective results of the old and new systems of assessment. The average assessment on dry-crop lands for twenty-eight years previous to the settlement in the crop-rate villages among the seven experimental ones was Rs. 2 5s. 3p. per *bigha*, or about Rs. 3 15s. 4p. per acre. This the Settlement Officer, looking at the low prices of agricultural produce obtaining at the time, considered far too high, and the average under the rates proposed in the seven experimental villages accordingly came to Rs. 1 4s. 4p. per acre, varying from Rs. 1 1s. 4p. to Rs. 1 10s. 8p. Under the old rates the seven villages in only one instance showed an increase in the cultivated area, and this, in that one, had not been followed by an advance in prosperity. The following were the average prices of some of the principal agricultural products in the ten years 1813 to 1823,

and in the five years of the time of the new settlement, proving that their values had fallen in several cases by about a half:—

	1818 to 1828.	1850 to 1854.
Kamod rice	72 $\frac{1}{2}$	58 $\frac{1}{2}$
Coarse rice	56	95 $\frac{1}{2}$
Bájri	33 $\frac{1}{2}$	61 $\frac{1}{2}$
Jowári	49	85 $\frac{1}{2}$
Molasses	9 $\frac{1}{2}$	16 $\frac{2}{3}$
Wheat	30 $\frac{1}{2}$	58 $\frac{1}{2}$
Grain	36 $\frac{1}{2}$	54 $\frac{2}{3}$
Barley	54	98 $\frac{1}{3}$

There were, moreover, at the time no signs perceptible of a probable rise, and it was accordingly necessary to keep the assessments low to meet the circumstances. In the report on the thirty-eight villages subsequently settled, it was shown that the average area of cultivation during the first five years, for which a diagram was furnished containing returns for twenty-eight years previous to the settlement, had been 84,936 *bighas*, and that for the last five 79,851, an actual decrease, notwithstanding that population had in the same period increased 22 per cent. It was also proved that hardly a year had passed in which remissions—in unfavourable years very heavy remissions—had not had to be given, and that the average collections per acre had been Rs. 5 2s. in the crop-rate villages, a sum which could never have been realised if it had not been for the large quantity of alienated land held by the cultivators which enabled them to pay. The comparative increase in the number of ploughs in the crop-rate and division-of-produce villages—one to every seven people in the latter, and one to every thirty-one and a half in the former—was also evidence of the heaviness of the assessments, which precluded the possibility of an adequate increase of agricultural stock and capital. The people generally, although well clothed and apparently prosperous, were deeply in debt, and were driven to the aid of money-lenders to procure the necessary funds even for each season's agricultural operations. As a rule, they lived from hand to mouth, and were in the condition of labourers to their creditors, who entirely absorbed the surplus produce of the land. Under

such circumstances it was evident that the new assessment must be kept low. The rates proposed for wells, in lieu, as explained above, of an assessment on the land under them, was, for those of permanent construction, from Rs. 9 to Rs. 5, and for temporary wells (*kachá*) from Rs. 4½ to Rs. 3, per water-bag. In the 2nd and 5th groups water could be raised respectively from the Sábarmati river and from the Nal by means of *dhekuris* or water-lifts; for these a similar plan of assessment per water-bag—in the former of Rs. 10, and in the latter of Rs. 4—was proposed. The maximum water-rate adopted for rice-land, in addition to the soil-rate, to be levied on the principle already explained, was Rs. 6 for the whole subdivision, to be modified at the settlement in different villages according to the classification and any other circumstances that might appear to require consideration. The general result of the adoption of the proposed rates, sanctioned by Government as a temporary measure in 1855, was as follows:—

	Rs.
Under the old system . . .	1,00,037
Under the new system . . .	65,782
	<hr style="width: 100%;"/>
Decrease . . .	34,255

These figures contain items of miscellaneous revenue. The actual diminution in the crop-rate villages, in which the reductions of rates were heaviest, was Rs. 26,775; and in division-of-produce villages, Rs. 10,854. The statements that have been printed do not admit of a comparison of the percentages. Taking the whole of the forty-five villages (38+7), the realisable assessment for 1854-55 was less than the average of ten years, from 1844-45 to 1853-54, by Rs. 31,591. In the following year, 1855-56, an extension of the cultivated area took place, amounting to 4,664 acres, and the revenue increased by Rs. 5,083.

In 1856 the remaining fifty-eight villages were brought under the new settlement at the same rates that had been applied in the rest of the subdivision; and in the year following it was reported that there had been an increase in cultivation of 6,874 acres, assessed at Rs. 8,587. In the thirty-seven villages (one of the thirty-eight had to be postponed for a year) there had been an increase of 3,091 acres, assessed at Rs. 4,441; and in

the seven first settled, an increase of 3,775 acres, assessed at Rs. 7,897 since the first year. The total increase in the 102 villages had thus been 14,783 acres, assessed at Rs. 22,428, a fair proof of the success of the new system. The general result of its adoption in the whole 102 villages will be seen below:—

	Revenue for Year of Settlement.			Average of ten Years' Collections.		
	Rs.	a.	p.	Rs.	a.	p.
7 villages . . .	5,336	12	0	9,121	0	0
37 „ . . .	50,840	8	4	77,204	8	2
58 „ . . .	74,216	5	7	1,17,101	2	1
	<u>1,30,393</u>	<u>9</u>	<u>11</u>	<u>2,03,426</u>	<u>10</u>	<u>3</u>

The reduction was thus Rs. 73,033 0a. 4p., or about 35.9 per cent. Divided between the crop-rate and division-of-produce villages, this reduction was as follows:—

	Ten Years' Average.			New Assessment.			Per- centage.
	Rs.	a.	p.	Rs.	a.	p.	
Crop-rate villages .	1,40,462	0	4	82,033	4	0	22.5
Division-of-produce villages . . .	62,964	9	11	48,360	5	11	13.4

The average rate per acre in the former had been Rs. 5 4a. 8p., and in the latter Rs. 3 2a. 5p., so that the greater reduction in the crop-rate villages was needed merely to equalize the assessment in the two classes. The necessity for this was borne out by the fact that in the crop-rate villages population had only increased by 21.8, and ploughs at the rate of one to every 32½ human beings; while, in the other class, population had advanced 35.8 per cent., and ploughs at the rate of one for every 8½. According to the new rates, the average area of cultivated land in the possession of each person in crop-rate villages was 1 acre 8 gunthás, of an average assessment of Rs. 2 1a. 1p., whilst in division-of-produce villages each individual held 1a. 16gs., assessed at Rs. 2 2a. 8p.

Government, in the first instance, considered these reductions too great, and called for further explanations, but finally sanctioned the Settlement Officer's proposals in 1858 and 1859 for a

period of thirty years reckoned from 1856-57, with the exception of that relating to waste lands, in which he considered the preferable plan would be to put a grazing tax on the cattle of professional shepherds. In this matter, an order was given to let out the grazing lands to the village communities or other farmers for either a single year or a term of years, sufficient land being measured off in the first instance to meet the demands of increasing cultivation, a portion being also reserved for competition among the cultivators of each village, to provide grazing ground for their own cattle. The farmers were to be allowed to levy grazing taxes varying according to circumstances, the rates being fixed by the Collector.

As Dholka is one of the subdivisions of Ahmadábád in which the Survey assessment has been revised on the expiration of the first thirty years' lease, it will be more convenient to give an account of the revision, before describing the original settlement in the rest of the Collectorate. Since the date of the latter, nineteen villages have been transferred to the new subdivision of Sánand, and one to Mátar, in the Kheda Collectorate; the eight Tálukdári villages, then under the Collector's management, have been transferred to their former proprietors, and two Kasbáti villages have become *khálsá*; so that seventy-six villages have come under the revised settlement. Dholka is, therefore, now bounded on the north by Sánand and a part of Viramgám. For the purposes of the revision, four villages, the measurements of which were found unsatisfactory, have been re-surveyed, and an entire re-classification of soils made in two, in addition to that of the classification of rice water, and a new classification of subsoil water in all lands presumed to possess such natural facilities for irrigation, with a view to dispensing with all special well-assessment. The details of this last process are not given in the Report, but the general idea is to parcel out the whole tract into separate divisions that appear, from the general quality of the water in the wells of each, and all information available on the subject, to possess water, within reasonable reach of the surface, of sweet, brackish, or nearly salt quality. This having been done, a general rate of assessment has been placed on all soils in which the natural facility for irrigation can be made use

of, sufficient to cover the loss to Government of remitting all direct assessment on existing wells, and provide a moderate revenue from the extra value of land possessing such natural facility. It is hardly necessary to point out that this process must, from its very nature, be to a great extent arbitrary; for the most gifted, skilled geologist, let alone an ordinary native classer, cannot tell, from inquiries on the surface, what may be the water-bearing strata beneath, or what may be the quality of the water, nor *à fortiori* can he tell what changes may take place in those strata or the quality of their water hereafter. Empirical as this process must be, its effects are saved from being mischievous, as bearing on the assessment of the land, by the extremely low extra rates the possession of these natural facilities for irrigation has been supposed to warrant; those extra rates, as already noted, being supposed to do little more than make up to the State the loss from the abandonment of revenue now derived from the direct assessment of irrigated lands. 88,837 acres have been classed as in possession of these natural properties. With these exceptions, the old classification has been merely tested in order to form a judgment of its general correctness. The rainfall in the present subdivision, from 1869-70 to 1885-86, is given at an average of 33.68 inches. The area of the different descriptions of cultivation under the system of classification in use at the original and revised settlements is as follows:—

	Old. Acres.	New. Acres.
Arable dry crop	162,889	164,744
Rice	14,257	12,967
Garden	8,010	—
<i>Bhátá</i> (alluvial) assessed	—	2,460
" " unassessed	—	2,055
Under water-lift from streams	—	3,475
Unarable unassessed	28,982	28,950
	<u>214,138</u>	<u>214,651</u>

Under the principles applied in the revision settlement, all land possessing subsoil water advantages is recorded as "dry-crop, irrigable," and not as "garden land" in the sense of being

pecially assessed on account of using well-water. There are no data sufficiently complete to show correctly how much the area under well irrigation had extended during the Survey lease. The only considerable change that had taken place in the agriculture of Dholka, in the thirty years, appears to have been in the extension of wheat cultivation, which was the consequence of the demand for Indian wheat for export to Europe that took place under the high prices of that article from 1875 to 1879. There had been a contraction of the area when prices subsequently fell, but in 1885 there were still about 48,000 acres, or 84 per cent. of the whole cultivated area, cropped with it. Cotton remained at about the same area as it rose to under the stimulus of the high prices of the time of the American War. The total area of occupied Government land in 1885-86 was 89,159 acres, showing an increase of nearly 50 per cent. over the cultivation of 1856-57, the first year of the original settlement. This tract of country has not improved much in the matter of communications, owing to the extreme costliness of road-making in a country where there is no stone *in situ*, the whole consisting of deep alluvial soil. A road from Ahmadábád towards Dhandhuka has been partially constructed, and is connected with Dholka by a cleared road. There are also cleared roads from Dholka to Ahmadábád and towards the Sábarmati in the direction of Kheda. The effect of the construction of the B. B. & C. I. Railroad has been to make the market of Dholka of comparatively little importance, as the trade of the whole district now centres in Ahmadábád itself. The only fair, of any importance, is one held annually at Vaothá, to the south-east of Dholka, but even there trade to the value of only about Ra. 30,000 appears to be done. The manufacture of country cloth, oil, and dye from safflower is carried on to some extent in Dholka, and two cotton-ginning factories have been established at Bávala and Dholka. Rice and wheat are the only agricultural products exported to any extent; the value of the former is estimated at about two and a quarter lakhs per annum. In the whole seventy-six villages population had increased only 9 per cent., but the proportion varied greatly in different parts. In the best and most highly cultivated it had only advanced $2\frac{1}{2}$ per cent., and in the worst, towards the Nal, $62\frac{1}{2}$ per cent., probably in conse-

quence of immigration from Kathiárád. In the latter, agricultural cattle had increased 76, and ploughs 83, per cent.; and in the four other proposed groups of villages from 26 and 13½ to 50 and 53 respectively. Houses in the lowest group had risen 317 per cent. in tiled, and decreased 63 in thatched dwellings, but actually decreased in one group in which the increase in population was 20 per cent. (It is doubtful whether these statistics can be accurate.) Carts had everywhere been multiplied, in the whole tract by 37 per cent. On the whole there can be no doubt that there had been a great advance in material prosperity, but it was in reality less in the lowest class of villages than the mere statistics would warrant the assumption of; for the occupied area in these had only half the number of agricultural cattle of those in the rest of the subdivision, and the incidence of population per acre was double, proving that their prosperity was less substantial and progressive. Of the occupied area about 73½ per cent. was held by the persons whose names were recorded as those of the Survey occupants, and 26½ per cent. was sublet, 20¼ on condition of cash payments and 5¼ on grain rents. Land sold had averaged ten years' assessment as its sale value, and in a large number of mortgages in the three years preceding the revision (2,100 cases) the money advanced amounted, on an average, to 20 times the assessment, proving that land was a very valuable security. Money wages to field labourers had risen about 60 per cent. Of 510 cases in which notices for the sale of occupancy rights had been issued for the recovery of arrears of revenue in three years, the occupancy had been actually sold in only one case, showing that the revenue was collected with ease. On all these considerations it was proposed to raise the maximum rate for the whole from Rs. 2¼ to Rs. 2½, or a little over 11 per cent. A greater rise, up to Rs. 2¾, would have been proposed but for the limitation of 33 per cent. placed by orders from Government on the increase of assessment on revision in any district. The Acting Survey Commissioner was of opinion that there had not been much under-assessment, as had generally been supposed to be the case. Prices had been at their lowest in 1854-56, and there was, at the time, no apparent prospect of their rising. The new grouping for maximum rates of dry-crop assessment now

referred to Ahmadábád as a market, instead of partly to it and partly to Dholka, and was as follows:—

1st group.—Maximum rate, Rs. 2½. All the northern portion of the subdivision, with the town of Dholka and a few villages to its south and west, altogether 25 villages.

2nd group.—Maximum, Rs. 2½. 28 villages to the south-east of Dholka along the Sábarmati river, thence inland to the boundaries of the Tálukdári villages of Koth and Gángad, with a few to the west of Dholka within easy reach of the metalled road from Bávala to Ahmadábád.

3rd group.—Maximum, Rs. 2. 9 villages, of which 5 were to the south and 4 to the north-west of Dholka.

4th group.—Maximum, Rs. 1 12a. 10 villages, some of which are the most distant of the *khálsá* villages and others on the south-west and north-west frontiers.

5th group.—Maximum, Rs. 1 2a. 4 villages, situated on or near the Nal, with a poor soil, and a population of a backward, unimproving type.

The maximum water-rates for rice fixed at the first settlement remained unchanged, ranging from Rs. 6 to Rs. 4 according to the quality of the water-supply in different villages. There had been a re-classification of the unoccupied *bhátá* or alluvial lands on the banks of the Sábarmati, after the first settlement of Dholka, in accordance with the principles adopted in the settlement of the then Jetalpur subdivision, and it had been partly assessed at permanent rates, non-permanent land being measured annually and assessed at maximum rates then fixed, and lands liable to annual fluctuation in quantity and quality being sold annually by auction. Maximum rates of from Rs. 8 to Rs. 6 were fixed, which gave average rates as follows:—

	Rs.	a.	p.	
In the highest rated villages . . .	9	12	0	per acre
In the medium rated villages . . .	9	11	2	„
In the lowest rated villages . . .	5	12	2	„

A total area of 481 acres was recorded under this head, permanently assessed at Rs. 3,998. For lands watered by lift from the Sábarmati and the Sukhni Nadi, a dried-up old bed of the same,

in the east, and from the Rodh river and the Nal in the west, maximum water-rates of Rs. 1½ and R. 1 were proposed, giving average rates of 10a. 1p., and 4a. 11p. on the Rodh, and 3a. 10p. on the Nal. The total assessment of 618 acres from this source was Rs. 188 more than the total amount levied under the existing system from the assessment on water-bags. The estimated result of the adoption of the proposed rates was as follows:—

Class.	Vil- lages.	By Former Survey.		By Revision Survey.						Per-centage Increase.
		Government Occupied Land.		Government Occupied Land.		Government Waste.		Total.		
		Acres.	Rupees.	Acres.	Rupees.	Acres.	Rupees.	Acres.	Rupees.	
1	25	28,958	58,132	29,007	76,801	3,635	4,897	32,842	81,698	32
2	28	31,402	56,043	31,443	67,964	5,842	6,971	37,065	74,935	21½
3	9	10,564	15,758	10,595	19,949	2,306	2,520	12,901	22,469	26½
4	10	14,781	20,204	14,717	24,374	3,598	3,837	18,315	28,211	20½
5	4	3,453	2,896	3,410	3,025	1,578	1,638	4,988	4,663	12½
	76	89,158	1,52,833	89,172	1,92,113	16,959	19,983	106,131	2,11,976	25½

The total increase is thus, 25½ on the whole seventy-six villages, an enhancement which, considering the great increase in value of agricultural produce since the first settlement, may be said to be very moderate, if not unnecessarily so, under all the circumstances. In two villages in which the increase in assessment exceeded the limits laid down by Government, it was satisfactorily accounted for by the increase consequent on the new system of assessing alluvial lands. The average per acre on dry-crop land under the first settlement was R. 1 6a. 3p., and under revision R. 1 11a. 9p., an increase of 24½ per cent. It was proposed that the produce of all fruit-trees in occupied Government lands should be conceded to the occupants, as it had been in other districts. The average annual receipts had been Rs. 2,379. The change of system from assessment on the water-bag to one of assessment for subsoil water advantages increased the revenue from Rs. 6,000 to Rs. 7,200. In sanctioning the proposed rates, Government agreed with the Collector and Revenue Commissioner in their proposal to lower two villages, from the third and fourth classes, one class each, and with regard to *bhátá*, or alluvial soil, directed that the system of assessing for subsoil water advantages should be extended to it as well as other lands. The pro-

posal with regard to the concession of produce of fruit-trees to the Survey occupants of fields in which they stood was approved. Orders were also issued that proposals for a revision of rentals in Tálukdári villages should be submitted. The usual guarantee for the permanency of the new rates for thirty years was ordered to count from the year of their actual levy.

JETALPUR.

The subdivision of Jetalpur, since abolished, had revised rates introduced into it in 1858-59, but in consequence of great fault being found with the classification of garden and rice lands by the Settlement Officer, a good deal of correspondence ensued, leading to the supersession of the Superintendent. The classification was revised under his successor, and a final Report for the confirmation of the rates for ten years was not submitted till 1863. Jetalpur was bounded on the north by the Daskrohi subdivision, on the south and east by Mátar in Kheda, and on the west by Dholka. It contained sixty-two villages, of which five were alienated. The soil was mostly *goráru*, except in the south and east, where it became blackish. It contained also some very valuable *bááid*, or alluvial soil, in which sugar-cane could be raised without manure. Irrigation from rivers was also resorted to, as it could be with comparative ease. Some parts of the tract were undulating, in the hollows of which good rice was raised, and seldom failed, except in very scanty monsoons. The best rice was raised near the Khári river, where sluices had been created at the expense of Government, and second crops could frequently be grown. In nine of the villages a crop-rate system still prevailed, and, in one, division of produce. In thirty-five a *bigha* rate had been fixed by Pancháyat at various times from 1837 down to 1853-54. The measurements of the old Revenue Survey had never been made use of, although recorded in the village field registers. According to the village accounts, the average area of cultivation from 1828-29 to 1833-34 had been (taking the acre as equal to one and seven-tenths *bigha*) 28,326 acres, and, in the five years before the settlement, 31,331, showing an increase of only 10½ per cent. Population, in 1821-22, recorded

by the old Survey at 39,412, had risen to 53,209, or 35 per cent. The average assessment for thirty years had been Rs. 1,58,028, and the realisations 1,50,043, showing that Rs. 7,985 had on the average been remitted or struck off as irrecoverable. For the last ten years the average remissions had risen to Rs. 9,500 on an average assessment of Rs. 1,53,344 for the same period, showing that the district had been over-assessed. The market for the whole subdivision was Ahmadábád itself, which, although there were no made roads, was easily accessible from all parts by the country cart-tracks.

The grouping of the villages for maximum rates of dry-crop assessment was accordingly regulated by distance from that town. They were as follows:—

	Rs. a.
1st group, 3 villages near Ahmadábád, maximum	2 12
2nd group, 42 villages, at a greater distance, maximum	2 8
3rd group, 10 villages, still farther	2 4
4th group, 1 village, most distant	2 0

The maximum rice-water rate proposed varied from Rs. 10 on the Khári river to Rs. 4 where the supply was uncertain. As it was found in Jetalpur that the rights of land to water from the various wells could be defined, there was no occasion to adopt the system of assessment on the water-bag used in districts previously settled, and a maximum rate of Rs. 8 8a. per acre, giving an average of about Rs. 5, was proposed. For lands irrigated by lift from rivers, rates varying from Rs. 12 per water-bag from the Sábarmati to Rs. 8 from the Mesva and Khári were adopted. The estimated result from the adoption of these rates was as below:—

	On cultivation.		Waste	Total	Average on 10
	Area.	Rupees.	Assessment.	Ra.	years' cultivation, Ra.
Dry-crop	18,120	31,710	39,644	71,354	—
Garden .	3,145	14,152	—	14,152	—
Rice .	13,877	82,903	31,766	1,14,669	—
	35,142	1,28,765	71,410	2,00,175	1,53,344

The estimated decrease on ten years' collections was thus Rs. 24,579, or 16 per cent. The dry-crop rate was reduced from

Rs. 2 7a. 4p., the average for the same period, to R. 1 12a. The average assessment on the total area for thirty years had been Rs. 5 2a., and was reduced to Rs. 3 10a. 6p. By the time the inquiries required for the reclassification of the garden and rice-lands had been completed, a large expansion of the cultivated area in dry-crop and rice had taken place, and the actual assessments were reported to be—

	Rs.
In dry crop	78,062
In garden	13,852
In rice	1,29,123

showing a total of Rs. 2,16,137 in consequence of revision and the expansion of cultivation. This was Rs. 16,042 above the total assessment estimated in the first instance, and R. 62,793 above the average of the ten years preceding the settlement. The Superintendent considered that the low dry-crop rates were counterbalanced by the high rice-water rates. He recommended that in failures of rice, remissions should not be given except where two-thirds of a holding was rice land and two-thirds of the rice was lost. Government guaranteed the permanency of the rates only for ten years, till 1872-73, up to which time the water-bag assessment on alluvial lands was not to be interfered with.

DASKROHI.

The subdivision of Daskrohi, immediately surrounding Ahmad-ábád, was reported on for revision of assessment in 1860, but final sanction was not given by Government till 1864. It is bounded from the north-west to the north-east by the Gaikvár's districts of Kadi and Degám, on the east by the Keda Col-lectorate, on the south by Jetalpur, and on the west by Dholka. It contained 130 directly-managed villages, and fourteen alienated, one of the former being Chhoti Daskrohi, which is within the walls of Ahmadábád. The population of the Government vil-lages, exclusive of the city, which was 88,192, was 36,320, or about 303 per square mile. It contained a large proportion of Kunbis, who were well-to-do, and lived in substantial houses. Its chief river was the Sábarmati, but the Mesva and the Khári

ran through a portion of it. Its surface is undulating, with a few low hills in the east and south. On the east of the Sábarmati it is well wooded, but not so much so on the west. The soil is almost all *goráru*, a little of it rather too sandy, but most of it as productive, probably, as any soil in India; it, however, requires manuring, and is therefore inferior to black in natural qualities. There is a good deal of *bhátá* alluvial and rice, more or less, in a large number of villages. In the garden lands near the town large quantities of vegetables and green crops for fodder were raised. In 1755 the revenue of the subordinate district, like that of the town, had been divided between the Peshwa and the Gaikwár, 55 villages going to the former and 58 to the latter; and the Mahratta farming system having been adopted, a great variety of tenures was introduced. After the country came under British rule in 1817-18, the farming system was continued for a few years, until our early administrators understood more of the details of management required. The system was found from experience to be so mischievous that resort was next had to village settlements with their head-men. Objection was taken to this from the Patels being poor, and looking to their own interests rather than those of the State, and a *rayatvári* system was consequently adopted. The division-of-produce system being found objectionable, crop-rates, plough-tax, *khátábandi* (lump sums on holdings), and other methods of management in great variety were tried. Fixed rates per *bigha* were settled by Panchayats under different Collectors for sixty-two villages at various times. In 1820-21, Captain Cruikshank's Revenue Survey made a measurement of the lands; but as the numbers into which he divided them did not correspond with the actual fields, his measurements were not adopted as the basis of revenue management. Much statistical information of value was, however, collected, from which the following comparisons were derived. At that time Daskrohi included a part of Jetalpur, which was made into a separate subdivision in 1840. By the old Survey, the population of Daskrohi, exclusive of that of the town, was 45,852, or nearly 188½ per square mile; by the new it was 78,392, or over 322 per square mile, an increase of more than 70 per cent. in 40 years. In the same period houses had increased from 13,529 to 25,907 (22,012

tiled and 8,895 thatched), or 91½ per cent. The wells, formerly 962 in working order and 307 out of repair, had now increased respectively to 1,776 and decreased to 228; and the number of ploughs advanced from 5,009 to 8,047. At the old Survey the assessment on the cultivated area and waste were as follows in Government land :—

Dry Crop.			Garden.			Rice.		
Cult.	Waste.	Total.	Cult.	Waste.	Total.	Cult.	Waste.	Total.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
49,883	24,242	74,125	8,696	1,038	9,734	6,034	3,039	9,073
TOTAL.			TOTAL.					
			Cult.	Waste.	Total.			
			Rs.	Rs.	Rs.			
			92,932	42,192	1,35,124			

By the time the new settlement was introduced the total increase had been 35·11 per cent., and on rice and garden lands 50 per cent. Prices at first had been low; they rose greatly in the famine year of 1832–33, and then fell again till 1851, from which time up till 1857 they had risen again. Remissions had averaged Rs. 5,166 a year, or 3·64 per cent. on the gross revenue, and for the last seven years had been nominal. Prices were still rising, and the B. B. & C. I. Railway approaching completion. The latter event would greatly raise the importance of Ahmadábád as a market. For maximum rates of dry-crop assessment it was accordingly proposed to divide the 119 villages into six groups according to their distance from market, with the exception of one village on the north road which had a small market in itself. The proposed groups, maximum and average rates, contrasted as follows :—

Class.	Villages.	Maxi- mum. Rs. a.	Avra. old Rates. Rs. a. p.	Avra. new Rates. Rs. a. p.	
1	32	3 8	3 3 4	2 9 1	
2	26	3 4	3 10 1	2 4 9	
3	18	3 0	2 6 3	2 3 2	In the settlement
4	19	2 12	2 3 6	1 15 5	20 of the villages
5	21	3 8	1 13 2	1 11 7	were amalgamated
6	3	2 4	2 4 6	1 9 9	into 4.

On the Report reaching the Collector, he considered the rates too low, and proposed an addition of 4 annas to each of them. This was sanctioned by the Revenue Commissioner. A maximum rice-water rate of Rs. 4 on a 16 anna classification, calculated to give an average rate of Rs. 2 9a. 11p., and one of Rs. 8 8a. in alluvial *bhátá*, to yield an average of about Rs. 5, the existing average being Rs. 5 15a. 6p., was also proposed. The latter was raised to Rs. 10 in 1st and 2nd class villages. The results, according to the Superintendent's proposals, contrasted as follows:—

Ten Years' Average Rate and Assessment.		According to Old Rates on Cultivation of 1859-60.	
Rs. a. p.	Rs.	Average. Rs. a. p.	Total. Rs.
2 15 2	1,74,142	3 2 0	1,85,046

By Old Rates on Cul- tivation of 1860-61.		On the Same by New Rates.	
Average. Rs. a. p.	Total. Rs.	Average. Rs. a. p.	Total. Rs.
3 1 7	2,01,804	2 11 8	1,76,585

The following figures show the comparative changes according to the old rates on the cultivation of 1860-61, and over the average for ten years after the proposed alterations:—

	Dry Crop. Rs.	Garden. Rs.	Rice. Rs.	Total. Rs.
Ten years' averages	1,42,959	39,095	18,915	2,00,969
By new rates	1,23,538	32,364	29,326	1,85,226
Incr. and decr.	-19,423	-6,731	+10,411	-15,743

The large increase under the head of Rice was due to an alteration in the system of classification, and to an increase from dry-crop land having been converted into rice. These proposals were finally sanctioned in 1864, and their permanency guaranteed till 1866-87.

PARANTEJ.

Proposals for the revision of assessment in the Parántej sub-division of the Collectorate were submitted by the Superintendent of Survey in 1861, and sanctioned by Government, as they were originally proposed, on the recommendation of the Revenue Com-

AHMADA'BA'D.

missioner, Mr. Mansfield, at the end of the same year, notwithstanding that the Collector had pointed out that in the grouping of the villages but little, if any, attention had been paid to the principles of the Joint Report. A glance at the map of the subdivision would prove this, if the Superintendent himself had not admitted it in his Report. The subdivision is separated from the rest of the Collectorate in the north-east, and, with the exception of a small portion that touches Kapadvanj, in Khedá, is surrounded on all sides, partly by Gaikvári, and partly by Idar, territory. It had nominally four divisions, Parántej itself, under a Mámlatdar, and Harsol, Modásá, and Báýad, under Thándars or Moháلكaris. In the present account they will be treated as two, viz., Parántej with Harsol, and Modásá with Báýad. The surface of the country, which rises to low hills in the north-east of Parántej, is on the whole gently undulating, and is watered by six rivers, the Sábar-mati, the Hátmati, the Khári, the Mesvá, the Májam, and the Vátrak. There is also, from the point of junction of the first two rivers to below Parántej, a curious depression, evidently an old river-bed, called the Bók, in which the water lies very near the surface, and is used extensively for rice-beds and other irrigations. The soil is, for the most part, the ordinary light-coloured soil of Gujarát, but is not so fertile as that farther south, near the Ábád and Khedá. In the north of Modásá it becomes rocky, but in some parts of Parántej water lies so near the surface that it can be raised from mere pits, and so thoroughly irrigated the ground that two or three crops in the year can be raised on it. The difference between the two divisions is marked in several ways, Parántej having a population of 208 to the square mile, comparatively well-to-do, industrious, and skilful cultivators, mostly Kunbis, and Modásá one of only 96, mostly poor and unskilful Kolia, only reclaimed from turbulence and habits of plunder since the advent of British rule. It was stated by Lieutenant Melville in 1823, in addition to the population of 524 in 1823, that according to the report of this part of the country had once been well populated and prosperous, but had been depopulated in the famine of 1747, at which time a large portion of Modásá and Báýad had relapsed into jungle, and had not been able to recover itself in the co-

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turbed times of war between the Moguls and Mahrattas. The crops raised were mostly *bájri*, *javári*, and other cereals, with some wheat and sugar-cane, the system of husbandry not differing from that in the country nearer Ahmadábád. Irrigation was carried on entirely from wells, many of them temporary, for which the nearness of water to the surface and its general sweetness afforded great facilities, of which much more advantage might be taken than there was. Parántej, containing about 8,600 inhabitants, Harsol, Modásá, Báyard, Dhansúra, and other villages, were all fair markets; but the tendency of traffic generally was towards Ahmadábád, although transit duties levied in the intervening Gaikvári territory offered a great obstacle to it. There were no made roads, but, the country being open, there was no great hindrance to traffic except during the rainy season.

Parántej, inclusive of Modásá, contained 285 square miles, or 82,567 acres. The area of Parántej alone was nearly 162 square miles, or 103,662 acres, of which 89,179 were arable, with 71 to thísá villages and 32,868 inhabitants. Modásá, with 45 Khálsá averages, had 11,887 people, with 12,877 acres of unarable land.

In addition to these there were six Tálukdári, forty Mevási, and several villages shared with Idar. The revenue management, on the first division of British rule in 1818, was very varied, as in the several Collectorate, consisting of the division-of-produce

Incr. and crop-rates on the *bigha* of cultivation, of plough and and often of several of these combined in the same The large increas-37-38 the Collector, Mr. Jackson, introduced *bigha* tion in the system with the crops raised, into twenty-nine villages crop land having 1 three of Modásá, and Mr. Fawcett, in 1850-51, finally sanctioned of Parántej and forty-two of Modásá, one village 1886-87.

g still allowed to be held on the payment of Rs. 15 a pamp (*udhar jamábandi*). The settlements were made by *ryats*, who classed the land as of first, second, and third and fixed two scales of payment on skilful and unskilful respectively, called *bhartiá* and *ragar-bhartiá*. Looking

Propos, they did in fixing the assessments, at the general condition division means for the time being of the inhabitants of the several of Surges, the rates they fixed were very uneven, there being a difference of as much as 13·4 in the average rates of two of precisely

similar soil adjoining each other. In the interval of thirty-five years between the old Revenue Survey, which was never made use of for revenue purposes, and the Survey Settlement, the subdivision had made a wonderful advance in material prosperity, owing to the establishment of order, to which it had long been a stranger, as the following statement proves:—

	Population.		Increase per cent.	Houses.		Increase per cent.
	Old Survey.	New.		Old Survey.	New.	
Parántej .	19,639	32,868	67	5,660	10,815	83
Modásá .	5,248	11,887	126	1,607	3,256	102
	<u>24,887</u>	<u>44,755</u>	<u>80</u>	<u>7,267</u>	<u>13,571</u>	<u>86</u>
	Ploughs.			Wells in repair.		
Parántej .	2,065	4,251	105	122	181	48
Modásá .	925	2,130	136	214	348	62
	<u>2,990</u>	<u>6,381</u>	<u>115</u>	<u>336</u>	<u>529</u>	<u>57</u>
	Wells out of repair.			Population per sq. mile.		
Parántej .	85	15	—	121	203	67
Modásá .	52	18	—	42	97	131
	<u>137</u>	<u>33</u>	<u>—</u>	<u>163</u>	<u>300</u>	<u>84</u>

The revenue had advanced as follows, on the whole subdivision :

	Average. Ra.		1859-60	Ra.		Increase in 24 Years.	Revenue in the same Period.		In- crease p.c.
	1819 to 1826	51,812		93,037, or 79 per cent.	Ra.		Ra.		
	1837-38 to 1857-58 to 1839-40.	1859-60.							
	Average Acres.	Average Acres.		Ra.	Ra.		Ra.	Ra.	
Parántej	21,952	41,680	90 p.c.	32,296	52,525	58			
Modásá	7,252	15,779	117 p.c.	12,155	19,231	58			
	<u>29,204</u>	<u>57,459</u>	<u>97</u>	<u>45,451</u>	<u>71,756</u>	<u>58</u>			

During this time the average remissions in Parántej had been 2, and, in Modásá, 2½ per cent. After Mr. Fawcett's settlement the area and revenue decreased for a time, and remissions increased, but they very soon recovered themselves. Prices of pro-

duce had lately increased considerably, but the proportion of waste to cultivation in Modásá still remained large, viz., about 29,000 acres to 19,000. On all these considerations it was not thought advisable to raise the assessment much, notwithstanding the rapid strides the country had evidently made. As the grouping for maximum rates of dry-crop assessment was avowedly made on a consideration of what the several villages were paying, and not with reference to distance from markets, it remains only to state what the number of villages and the maximum rates in each were fixed at. They were as follows:—

PARÁNTEJ.

	Villages.	Rates.		Average Old Rate.		Average New Rate.			
		Rs.	a.	Rs.	a.	p.	Rs.	a.	p.
1st group	9	2	0	1	10	1	1	6	9
2nd group	32	1	12	1	4	6	1	4	6
3rd group	29	1	8	1	0	6	1	0	9
4th group	1	1	0						

MODÁSÁ.

	Villages.	Rates.		Average Old Rate.		Average New Rate.			
		Rs.	a.	Rs.	a.	p.	Rs.	a.	p.
1st group	8	1	8	1	3	11	1	0	8
2nd group	23	1	4	0	14	8	0	13	5
3rd group	14	1	0	0	12	8	0	10	10

For rice-water it was proposed merely to double the dry-crop rate in the very limited area in which rice was grown, and for other irrigated lands to adopt a maximum of Rs. 5 an acre.

The general result on the whole subdivision will be seen from the following statement:—

	Ten Years' average Collections.	Collections of 1850-60.	Assessment on Cultivation according to ten Years' average Rate.	On cultivated Area according to Survey Rates.	By Survey Rates on Waste Area.	Total Survey Assessment.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Parántej	49,933	52,803	64,246	63,578	23,337	86,915
Modásá	17,163	21,139	23,690	19,566	23,429	42,995
	<u>67,096</u>	<u>73,942</u>	<u>87,936</u>	<u>83,144</u>	<u>46,766</u>	<u>1,29,910</u>

The Survey assessment was thus—

More than the ten year's average by Rs. 16,048 or 19·8 per cent.

More than the collections of 1859-60 by Rs. 9,202 or 12·4 per cent.

Less than the assessment on cultivation at ten year's average rate by Rs. 4,792 or 5·4 per cent.

The Superintendent's proposals were approved by Government at the end of 1861, but the period for which the rates were to be guaranteed was not fixed until the following year, when the Collector, after a season's experience, had reported that they were working satisfactorily.

DHANDHUKA.

The few Khálsa villages, and a few Tálukdári under the Collector's management in this subdivision, had an experimental settlement introduced into them in 1858, which was sanctioned by Government. Of the former class there were twenty, and of the latter nine. The whole subdivision consisted of 183 villages, of a total area of 8,86,027, but the remainder were all Tálukdári or alienated. It lies at the head of the Gulf of Cambay on the west, and is surrounded, except where it touches Dholka on the north-east, by villages under the control of the Political Agent in Káthiávd. It being almost level, and there being no perceptible variation in the climate, the only criterion on which to group the villages to be settled, which were scattered, was by their distance from markets and the general condition of the inhabitants. The old Revenue Survey of the Province had not been extended to Dhandhuka, but a few villages had been measured by the Collector's establishment. The existing system of revenue management having been that of division of produce (*bhāigatai*), and the recorded area of lands being as unreliable as the revenue returns, the maximum rates of dry-crop assessment it was proposed to adopt were merely temporary and experimental, and were subsequently considerably modified. The chief market towns were those of Dhandhuka, Dholári, Ránpur, Barvála, and Botád.

None of the twenty-nine villages were affected by the market of Ránpur but Ránpur itself, and none of them were near Botád, so that the grouping depended on the other three. The following rates were accordingly proposed:—

Rs. a.	
2 8	for Dhandhuka itself.
2 4	for Padána, near Dhandhuka.
1 12	for Ránpur, and nine villages near Dholará.
1 8	for three near Dhandhuka and Barválá, and five near Barválá.
1 4	for one village near the port of Bávaliari, and R. 1 for four near Dholará, one of which was entirely waste.

There was rice in only one village, for which a maximum of Rs. 3 was proposed, and for a small amount of garden cultivation at the rate of Rs. 10 per water-bag, to be placed permanently on the land. The total old assessment for 1855-56 came to Rs. 59,614, and fell to 41,628, a reduction of 30 per cent. The new assessment was Rs. 15,800, or $27\frac{1}{2}$ per cent. below the average revenue under the division-of-produce system for ten years.

GOGHA.

There were only four *khálea* villages in the subdivision of Gogha (Gogo), for which revised rates were proposed in 1858 and sanctioned in 1859. The markets were the seaports of Gogha and Bhaunagar. There had been revisions of assessment in 1839-40 and in 1850-51, in the former of which uniform rates were imposed as follows:—

	Dry Crop.	Garden.
	Rs. a. p.	Rs. a. p.
Bhekra . . .	12 0 per <i>bigha</i> , or	2 8 0 per <i>bigha</i> , or
	1 4 5 „ acre	4 4 0 „ acre
Khokra Mota .	8 0 „ <i>bigha</i> , or	2 8 0 „ <i>bigha</i> , or
	15 7 „ acre	4 4 0 „ acre
Karera . . .	6 0 „ <i>bigha</i> , or	2 0 0 „ <i>bigha</i> , or
	10 0 „ acre	8 6 8 „ acre

In the latter year the lands were classified into 1st, 2nd, and 3rd, at the following rates:—

	Dry Crop.			Garden.		
	1st.	2nd.	3rd.	1st.	2nd.	3rd.
	s.	s.	s.	Rs. a.	Rs. a.	Rs. a.
Bhekra	13	11	8	3 0	2 8	2 0
Khokra Mota . .	8	6	4	2 12	2 8	2 0
Karera	8	6	4	2 8	2 0	1 8

This classification was very faulty, especially in Bhekra.

Under the latter, cultivation in Bhekra steadily decreased. The average assessment for nineteen years was R. 1 4a. 2p. in Bhekra, 12a. 2p. in Khokra, and 11a. 8p. in Karera. The new maximum rates proposed were Rs. 3 for Gogha, Rs. 2½ for Bhekra, which was the best placed for markets, and Rs. 2 for Khokra and Karera. The result was as follows:—

	Old Assessment.		New Assessment.		Average 19 Years.		New Assessment		Assessment on Waste.
	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	Rs.	a. p.	
Gogha	12	5 4	20	0 0	—	—	—	—	—
Bhakra	1,038	8 1	842	4 0	1 4 2	1 0 3	185		
Khokra Mota . .	339	8 8	308	0 0	12 2	11 6	100		
Karera	830	3 9	789	0 0	11 8	11 8	330		

There was no rice cultivation in any of the villages. A maximum of Rs. 5 was proposed for garden lands under wells.

The Viramgám Táluka, brought under the Revenue Survey settlement in 1857-58, came under revision in 1890. To quote the words of the Collector of Ahmadábád, the result of the settlement showed how the imposition of a moderate and equable rate of assessment, coupled with the [development of the country by the extension of improved means of communication in a district, could, during a single generation, more than double the area of cultivation and the revenue derived from it by Government, even among a turbulent and thriftless race, and although the soil, when contrasted with that of other parts of the Collectorate, was comparatively poor. For revision purposes, the measurement and classification of soils carried out at the first settlement were tested, and found fairly accurate. Out of 2,232 Survey Fields in

which the old measurements were examined, only about 6 per cent. were found to be wrong in area beyond 10 per cent.; and in six out of sixty-nine villages coming under the revision, classification of soil had to be done over again.

At the time of the first settlement, seventy-eight villages had to be dealt with, and the subsequent lapse to Government of two alienated villages brought the total to eighty. Eleven of these having been included in the new Táluka of Sánand, the remaining sixty-nine have come under revision.

The Táluka has benefited greatly by the extension to it of the B. B. & C. I. Railway from Ahmadábád to the town of Viramgám, and the construction of branch lines thence to the large salt-works at Khárághora and into Káthiávára. Viramgám has also been connected with the station of Mehsána on the Rájputána line. The villages on this line, however, are almost entirely Tálukdári, held by Koli Thákuras of the Chuvál. The exceptions in the Khálsá villages are in Detroj and four adjoining villages, which will contain a new station, and have accordingly been raised one class in the new grouping for maximum dry-crop rates. Khárághora and Ogán have been also raised from the original third to the new second group; the former on account of the extension of the salt-works having created a market there, and its being now the terminus of the branch line from Viramgám, and the latter in consequence of its proximity to the station of Jakhváda on the Sánand and Ahmadábád line. With these exceptions, the original grouping of 1857-58 for maximum rates of dry-crop assessment remains as it was.

The maximum dry-crop rate adopted for this Táluka in that year was four annas lower than that of Dholka, on account of its greater distance from the market of Ahmadábád, the large area of land still waste in it, the generally lower status of the population, and the inferiority of their cultivation. Both Tálukas have now been placed on an equality in this respect, and one maximum of Rs. 2 8a. has been adopted, the course of events having improved the condition of Viramgám and left Dholka behind in the matter of improved means of communication, notwithstanding the superiority of the soil and water of the latter. This improvement has admitted of the maximum rates in the

second and third groups of villages being increased by six annas, that is, from Rs. 1 12a. and Rs. 1 8a. respectively to Rs. 2 2a. and Rs. 1 14a. In the fourth group, consisting of two villages near the brackish lake of the Nal, the soil of which is much impregnated with salt, the original maximum of Rs. 1 4a. has been retained. These villages are remote, and have not profited by the railways. It will be seen by the following figures that the result anticipated by the Settlement Officer in 1857-58 from the settlement has been amply realised:—

	Occupied Acres.	Assessment in Rs.
1857-58	71,989	77,354
1888-89	146,088	1,56,493
Increase	<u>74,099</u>	<u>79,139</u>
	or	or
	102·7 per cent.	102·8 per cent.

Other facts prove that the increased receipts from the Government land revenue are in no way oppressive to the holders of land. In the two years preceding the revision, in which the rainfall was unusually scanty, there were issued respectively 124 and 524 notices of sale of occupancy rights in land, in consequence of failure to pay the revenue, the number in 1886-87 having been only twenty-one, but of these actual distraint only took place in two and three cases. That the value of land under the Survey settlement is large is proved by returns of sales under the orders of the Civil Courts, and of mortgages and leases given by the Deputy Superintendent of the Survey. For the five years 1884-85 to 1888-89, under the first of these heads, the average proportion the highest sums realised bore to the Government assessment was 34·46, under the second 114·19 (of mortgages with possession of land 179), and under the third 22·74.

The statistics of population, &c., during the period of the settlement are equally favourable as to the result of the introduction of the new system. It must at the same time be remembered that the value of agricultural produce has very largely increased, and the opening of railways and establishment of cotton factories in the Taluka have given a stimulus to labour and thrown a good deal of money into the country. Population has increased by over

50 per cent., houses by 35 per cent., carts by 77 per cent., and ploughs by 58 per cent. The number of sheep and goats is very greatly in excess of that of 1857-58, this being probably due to increased facilities for export to Bombay and other large markets. On the other hand, agricultural cattle and cows and buffaloes have decreased, such decrease being due, as in other districts, to the expansion of cultivation and decrease of area of waste land, over which numbers of useless animals in former days enjoyed free pasturage.

During the thirty years' currency of the settlement, the number of wells rose from 384 to 799 (108 per cent.), a sure sign of the prosperity of the people, especially when it is considered that very little of the water procurable is sweet, and much of it very brackish. In the same period 2,096 acres of ordinary dry-crop land have been converted into *kiári*, or rice-beds. The amount of capital thus invested in improvements, for the benefit of themselves and their successors, by the cultivators, is a proof that the people are sensible of the value of the concession to them, under the system, that they will derive the full value of their own expenditure. That they fully appreciate the increased facilities they now enjoy for access to other than local markets is shown by the growth of the area under cotton, an exportable product, from 32.56 per cent. of the whole cultivated area in 1877-78 to 51.17 at the present time.

The average increase of assessment under the revision for the four groups of villages respectively came to $36\frac{1}{2}$, 33, $31\frac{1}{2}$, and 67 per cent.; but these were, by the orders of Government, all brought down in the application of the rates, so as not to exceed the 33 per cent. allowed by the rules, by remitting, during the currency of the new settlement, the whole of the subsoil water-rates proposed to be substituted for the rates for water-bag, leviable under the original settlement on irrigated lands, and by a reduction of rates in the two poor villages of the fourth group. One village was subsequently lowered from the second to the third group, and sanction accorded to the new settlement for thirty years under the Survey rules from 1888-89. One departure appears to have been allowed from the usual terms of settlement, in only giving occupants the usufruct in place of proprietary right

in fruit trees in their occupancies, in consequence of the temptation held out to them, by the great demand for railway sleepers, to cut down trees and sell the wood for that purpose. It may be found advisable to relax this order in practice by allowing the local authorities to permit the felling of trees on the condition of two or three trees being raised in place of every old tree cut down.

DASKROHI.

The Táluka of Daskrohi, in which Ahmadábád itself is situated, came under revision in 1889. The original settlement was spread over several years, owing to wrong classification of rice lands in the first instance; to the difficulty of fixing a permanent assessment on lands on the banks of the Sábarmati River, which were liable to be washed away or to deteriorate in value in consequence of the erosive action of floods; and to other causes. The final guarantee for thirty years permanency of settlement appears not to have been given until 1866.

It consisted, in 1860-61, of 119 villages, and had transferred to it in 1867 twenty-nine from the Táluka of Jetalpur, which lay immediately to its south. Of these, one was subsequently granted in *ináma* to the family of Gajánand Vishal, for his services during the Mutiny of 1857; eleven were handed over to the new Táluka of Sánand; twelve, of which the lands were intermixed, were amalgamated into one; and one, consisting of lands situated within the walls of the town of Ahmadábád, was specially settled in 1881. Deducting these twenty-five, there remained four, which, with the original 119, made up the 123 finally brought under revision.

Daskrohi is favourably situated in being close to the large market of Ahmadábád, now an important railway centre, and in having a second railway station, Bárejri, within its limits. It contains much superior soil of the *goráwa* or white description, and its *bañáá*, alluvial land on the banks of the river, is particularly fertile. Owing to these circumstances, it bears, with one exception, the highest assessment in the Collectorate, the original dry-crop maximum of Rs. 3 12a. having now been raised to Rs. 4 4a.

For revision purposes, the measurements in 117 villages and the classification of soils in 111 were found sufficiently accurate to be confirmed. In three villages the measurements were made over again in consequence of errors being discovered, and in three more on account of changes through the action of the river, and of Survey fields having been appropriated to building and railway purposes. Errors were found in the original classification sufficiently large to condemn it in four villages, and portions of three others; whilst four more had to be re-classified owing to changes in Survey fields, as in the case of the re-measured villages. Special assessment, varying according to subsoil water advantages, has been substituted for existing assessment on wells, and special extra assessment has been imposed on lands which are irrigable from wells on the river bank that have an unfailing supply of sweet water. Extra rates have also been put on rice lands under a small irrigation work in the neighbourhood of Ahmadábád, carried out at the expense of the State.

The Táluka has benefited greatly since the settlement of 1860, from the marked rise in the value of agricultural produce and the establishment of railway communication, which has tended to constitute the town of Ahmadábád the largest market in the Province of Gujarát. Its progress has not been so marked as that of Viramgám, there having been less room for expansion in it than in the latter comparatively more backward Táluka. It has, however, been substantial, as shown by the population having increased by 25 per cent., tiled houses by 26·3 (accompanied by a diminution of 6 per cent. in thatched houses), carts by 16·5, and ploughs by 21·3 per cent. The increase in the number of agricultural cattle by 4 per cent. points to more thorough cultivation, whilst the diminution in cattle of other kinds, and sheep and goats, is no doubt due to contraction of area of pasturage. The difference between the area of land in occupation in 1860 and in 1887-88, which amounted to 27,540 acres, or 27·7 per cent., has kept pace with the increase in population and houses, whilst the sinking of 740 new wells, and the repairing of 1,570 formerly in bad order, show that agricultural capital is being invested in the soil, for which the existence of subsoil water in unlimited quantities and within a reasonable depth of the surface affords ample scope. A

further proof of such investment lies in the conversion of over 5,000 acres of dry-crop into rice land in the course of the Survey lease. That the agriculturists are disposed to take advantage of other facilities for getting larger returns from their lands is, moreover, shown by their having so far overcome their religious prejudices as to purchase nearly 7,500 cart-loads of the night-soil of the town converted into *poudrette*. Statistics connected with the sale, mortgage, and leasing of lands prove that the occupancy right has acquired a considerable saleable value. In the three years preceding the revision, the sale of 830 acres of revenue-paying land fetched Rs. 84,858, or over 25½ years' assessment; 202 acres were leased at nearly treble their assessment; and 582½ acres were mortgaged for about twenty-eight times the Government rental.

Not much change has been made in the grouping of the villages for maximum rates of dry-crop assessment, nearness to or distance from the market of Ahmadábád having been in both original and revision settlements the chief factors taken into consideration. There are still six groups with maxima of from Rs. 4½ to Rs. 3, in place of from Rs. 3 12a. to Rs. 2½. The general result is an increase of Rs. 62,843, or about 22 per cent. on the rental of Government occupied land. This is a very moderate enhancement when it is considered that a large income from lands formerly assessed as garden has been foregone, and considerable loss to the revenue has been caused by alluvial lands on the river-banks having been washed away. The percentage increase in the different groups varies from 10 per cent. in the first to 50½ in the sixth class, and is, as was to be expected, in inverse ratio to the area of garden lands in each, on which the old well assessment has been remitted under the new system of taxation according to subsoil water advantages. The alluvial soil in and on the banks of the Sábarmati and other rivers has been assessed, in consequence of its superior natural fertility and water privileges, at special rates, averaging about Rs. 7 2a. per acre.

The proprietary right in all fruit trees standing on occupied lands has been granted to the occupants according to the Survey rules.

DHANDHUKA.

The settlement of the twelve *khálsá* or directly-managed Government villages in the Dhandhuka Táluka, carried out in 1857-58 and 1858-59, has now been revised. To these may be added a new settlement in one village, formerly held under the Tálukdár tenure, that has lately lapsed to Government. Thirteen villages are thus included in the last settlement. The work in the original measurement and classification of soils was found to require but little correction. The difference in area under the two was very trifling—a little over 33 acres only out of 88,953. Such was the case also in the matter of classification of soils, which are almost all of an equal quality of black, suited to the growth of wheat and cotton, the area under these crops being respectively 25 and 40½ per cent. of the whole. The Táluka has profited little in the course of the Survey lease from improvement in its means of communication, only the town of Ránpur in the west having within its limits a station of the Wudhwán and Bhaunagar Railway. Dhandhuka is still the chief market, while that at Dholera has fallen off, partly in consequence of much cotton now finding its way to Bombay via Bhaunagar instead of by Dholera, and partly from the silting up of the creek at the latter port, which has removed the place of shipment about two miles farther from the town. Ránpur has, of course, risen in importance from having a railway station, and its maximum rate of assessment has been proportionately increased, as will be seen hereafter. The roads in the Táluka are pretty much in the same condition as they were. It lies out of the way of traffic, and is rarely visited by Europeans other than the Civil Staff of the Collectorate. The occupancy right in land has acquired a saleable value, but a small one when compared with that in the rest of the Collectorate; in the three years preceding the revision it realised rather less than eight times the Government assessment. This applies to dry-crop land, the area under rice and garden cultivation being hardly worth consideration. The condition of the occupants of land in Dhandhuka itself is said to be deteriorated of late years, and to be better now than it was years ago. The maximum assessment, at first introduced ex-

perimentally in lieu of the old division-of-produce system, was found to involve such a large loss of revenue that it was increased in 1863 by 60 per cent., that is, from Rs. 2½ to Rs. 4; and those in Ránpur and three other villages by four annas in each. These new rates, with those originally adopted in the remaining seven villages, have remained in force up to the time of revision. The general result has been an increase of Rs. 4,562, or about 10½ per cent., in the Government revenue; and the trifling remissions that have had to be given, with the few cases of distraint and sale of occupancy rights for the recovery of rent, show that the assessment has not been beyond the capacity of the land to bear. There are unfortunately no means of comparing the statistics of population, &c., at the commencement and termination of the Survey lease, as those formerly collected were burnt some years ago in a fire in the Survey Record Office, so that any improvement that may have taken place cannot be ascertained. The villages are so scattered that there can be no real grouping made of them with reference to markets, and the revision of rates has consequently resolved itself into one based on a consideration of the circumstances of each village. The maximum of Dhandhuka has thus been raised from Rs. 4 to Rs. 4½, that of Ránpur from Rs. 2 to Rs. 3, and those in the remainder by four annas, with one exception, in which the rate of Rs. 1½ is maintained. For the village of Aníali Káthíní, now settled for the first time, a maximum of Rs. 1 12a. per acre has been adopted. The general result has been to raise the Government demand on the twelve villages, excluding the last mentioned, by 35½ per cent., but the increase in the individual villages does not exceed the limit laid down by the rules. The Resolution of Government, in sanctioning the proposals, ordered that the general limit of 33 per cent. increase should not be exceeded in the practical application of the rates, and gave a guarantee for the permanence of the latter for the usual term of thirty years, in opposition to the wish of the Revenue Commissioner to sanction them for only fifteen.

The proprietary right in a few fruit trees in Dhandhuka has been given to the occupants of the land in which they are growing.

SÁNAND.

The revision of the original Survey Settlement has now been carried out in the villages of this Táluka, which has been made up, since that settlement, of the following villages :—

20	Khálsá villages formerly in Dholka.		
11	„	„	Daskrohi.
11	„	„	Virangám.
5	„	„	Jetalpur.
—			
47			
39	Tálukdári and Inámi of Dholka and Virangám.		

Of the total number of Khálsá villages, only four were more or less measured *de novo*, in consequence of errors found in the old measurement; and out of 2,592 Survey fields tested, the error in 2,195 was less than 5 per cent. Classification of soils was re-done in nine villages, and partially in one, while in thirty-seven the old classification was confirmed. There is an increase of about 194 acres on the original area of 126,555, the discrepancy between the two measurements being thus very trifling.

In the course of the first Survey lease the arable dry-crop land has increased by about 3,500 acres, whereas the rice and garden lands have fallen off to the extent of over 3,000. One reason of the great reduction in the latter was the damage done by an unusually heavy flood in the Sábarmati river in 1877, reducing the revenue from *bhátá* alluvial lands from Rs. 8,148 to Rs. 927 in the single village of Kásandra, and leaving a large area of sand where there was formerly flourishing garden cultivation. Rice also appears to be a very precarious crop, owing to the uncertainty of the rainfall, which, in eleven years out of the seventeen for which returns are given, was considerably under the general average of about thirty inches in the neighbourhood. Rice is still, however, such a favourite crop, that 3,437 acres of dry-crop land have been converted into rice-beds. This increase has, no doubt, been greatly prompted by the knowledge that the full benefit of the improvement is secured by law to the tenant.

Another fact of an unusual character with regard to the agri-

culture of the Táluka is brought to notice in the extension of tobacco, grown as a dry crop, from 48 to 743 acres.

Within the last twenty years the means of communication have been greatly improved by the construction of the railway to Viramgám, with three stations, one of them at Sánand itself, within the limits of the Táluka; a metalled road from Sarkhej in the east, passing through Sánand to Viramgám; and a second, connecting the Táluka with Bávala in Dholka, and thence with the port of Dholera, on the Gulf of Cambay, are also of use for the conveyance of agricultural produce. Road-making in a part of the country where there is no stone must always be a very expensive matter.

There are many signs of increased material prosperity since the introduction of the Survey system. Population has increased by nearly 29 per cent., and the number of houses inhabited by them by over 20 per cent.; another circumstance with regard to this particular being noteworthy, viz., that there has been a diminution of thatched tenements to the extent of 67, and an increase of substantial tiled houses of 88, per cent. The area of increase in actual cultivation has been unusually large, having risen from 24,494 acres in 1859-60 to 60,629 acres in 1889-90, or 147·5 per cent., being an increase per head of population from ·61 to 1·18. A diminution of about 4 per cent. in the proportion that agriculturists formerly bore to non-agriculturists proves that, with the opening out of the country, a great want is being supplied, viz., the establishment of means of livelihood other than agriculture. There are now two cotton-spinning factories at the town of Sánand, whence a good deal of cotton is exported to Surat, Bombay, and elsewhere.

Agricultural cattle have increased by 9·5 per cent., and non-agricultural decreased by over 19 per cent., owing, no doubt, to the extension of the cultivated and contraction of pasturage area. Over 11 per cent. of the Survey fields in the Táluka are, however, still unoccupied, which leaves room for the sheep and goats which are bred and exported, and have increased by over 1,300 in the last thirty years. Carts are reported to have decreased in number, but the returns in this respect are considered untrustworthy. On the whole, there can be no doubt that this tract of country has

greatly improved in prosperity during the Survey lease. The opening up of the country by the railroad to Bombay has tended to equalise the values of agricultural produce, which are now about double of what they were when the first settlement was introduced. The value of the occupancy right in land is now considerable; this is proved by its having fetched, in the years 1884 to 1888, at forced sales by order of Court, from eleven to nearly twenty-three times the amount of the assessment, and having been let on lease for from thirty-one to forty-five times that amount, whilst in cases of mortgage the returns are equally favourable. Contrasting the area in occupation and realisations of revenue in 1860-61 and 1889-90, the following figures show that the State has also benefited:—

	Area under Occupation. Acres.	Revenue. Rs.	Per-centage. Area.	Increase. Revenue.
1860-61 . .	41,404	82,289		
1889-90 . .	60,630	1,09,929		
	<hr/> 19,226	<hr/> 27,640	46·4	33·6

The new grouping of the villages comprised in the present Táluka has been carried out correctly with reference to market facilities, those near Sánand and Ahmadábád, fourteen in number, being in the first group with a maximum dry-crop rate of Rs. 3¼; a second group of sixteen villages, somewhat farther from market, with a maximum of Rs. 2¼; a third, of nine villages, with one of Rs. 2¼; and two others of four villages, with maxima of Rs. 2 and Rs. 1½ respectively. These rates are similar to those of the neighbouring villages of Daskrohi, Dholka, and Viramgám already noticed.

The orders of Government with regard to doing away with separate water-rates on land under wells, and assessment for sub-water facilities, remarked on under the head of Dholka, have been duly observed. There now remain for revision in the Ahmadábád Collectorate only the Táluka of Parántej and the few *khálsá* villages in the Gogha Táluka. Of the unmixed benefits conferred by the introduction of the Revenue Survey system, both on the State and its subjects, there can be no doubt. The cumbersome methods of realising the land revenue inherited from our

Native predecessors, or others but little better invented by the early Collectors, some of which have been described above—methods under which there was no proper safeguard against embezzlement of the dues of the State, and the ryots were hindered from improving their own condition by fear of extra taxation of capital and labour they might invest—have been done away with. The day has gone by when a cultivator accustomed to the old division-of-produce system could say, as was actually said to the writer of this history some forty years ago, that the land would produce nothing more, its fertility having been destroyed by the dragging of iron chains over it. There has been substituted for this and equally uncivilized plans of revenue collection the simple Survey tenure, under which a really valuable property has been secured for the occupants, and the State has been saved from the possibility of fraud, except by the inconceivable combination of the whole staff of a Collectorate. The rapid increase of population and agricultural capital and stock, the development of agriculture, and the ease with which the Land Revenue is collected when compared with the constant remissions that had to be given, and the balances left outstanding in former years, have been amply proved in the foregoing pages; and the following summary for the Tálukas hitherto brought under revision of the revenue at the commencement and end of the first Survey lease, shows the extent to which the State has benefited by the liberal policy pursued:—

Táluka.	Land Revenue at Settlement. Rs.	Land Revenue at Revision. Rs.	Increase per cent.
Dholka . . .	1,52,832	1,92,113	25·7
Sánand . . .	1,09,929	1,40,544	27·5
Viramgám . .	77,354	1,56,493	102·3
Daakrohi . . .	2,85,381	3,52,217	23·4
Dhandhuka . .	47,926	64,809	35·2

KHEDA (KAIRA).

THE district or Collectorate of Kheda lies between $22^{\circ} 15' 25''$ and $23^{\circ} 10'$ N. Lat., and $72^{\circ} 33' 40''$ and $73^{\circ} 0' 27''$ E. Long., and has a total area of about 1,600 square miles. It lies to the north-east of the Gulf of Cambay, and east and south-east of the Ahmadábád Collectorate. As a whole, it is the richest and most densely populated portion of the Bombay Presidency, the population averaging nearly 490 souls to the square mile. It consists of seven Tálukas, commencing on the north, near Parántej in Ahmadábád, with Kapadvanj, and running to the south and south-east with Thásra, Mehmádábád, Nadiád (Neriad), Mátar, Anand, and Borsad. On the south and east it is bounded by the Máhi (Myhee) river, which flows into the Gulf of Cambay at the town of that name. The Tálukas of Borsad and Anand are much intermixed with Gaikvári and Cambay (Khambát) territory, and on the west the Collectorate is for a short distance separated from that of Ahmadábád by the Sábarmati river, which also joins the Gulf of Cambay at its head.

The territories composing the present Collectorate of Kheda (or Kaira, as it is more generally called) came under British rule partly in 1802-3 and partly in 1817. It has already been stated, under the heading of the Ahmadábád Collectorate, that the subdivisions of Dholka, Dhandhuka, and Gogha were included in Kheda until the eastern and western *sillahs* (districts) north of the Myhee river were constituted in 1818. The early history of those subdivisions having been sketched under the former, our

attention may now be confined to the territory comprised in Kheda proper, as it exists at the present day. There has been little change in it since the commencement. For about three years from 1880 the subdivision of Kapadvanj was transferred to Ahmadábád when Kheda was made a Sub-collectorate, but it was re-included in the latter when it regained its former consequence as a full Collector's charge in 1883. The territories ceded in 1803 were, in addition to Dholka, Dhandhuka, and Gogha, mentioned above, the fort and town of Kheda, and the present subdivisions of Nadiád (Neriad), Mátar, and Mahundha from the Gaikvár, and some villages round Nápád from the Peshva. In 1817 the Gaikvár also ceded Mehmádábád, Alina, Thásra, Antroli, and half of Petlád and the country subordinate to it, to provide payment for additional subsidiary forces; and Kapadvanj and Bhálaj were exchanged for Bijápur in Northern Gujarát, the administration of the latter proving inconvenient in consequence of the lawlessness of its inhabitants. Petlád was subsequently re-transferred to the Gaikvár, and the Collectorate now consists of the seven subdivisions of Kapadvanj, Thásra, Mehmádábád, Mátar, Nadiád, Anand, and Borsad, the most fertile and densely populated portion of the Province. With the exception of a few towards the Sábarmati held by some of the Kasbátis of Dholka, there is no class of villages exactly corresponding with those in the Tálukdári estates in Ahmadábád. In the south-eastern corner of the district, however, on the bank of the Myhee, there are a good many held by petty Koli chiefs which have always paid the same rentals since the introduction of British rule, and have preserved their independence even more than the Mehvási holders in the north-east of Ahmadábád. There are two other classes of villages peculiar to this Collectorate, viz., those held by the Maliks in Thásra, and the Narvádári, the constitution of which is coparcenary and very similar to that of the Bhágdári villages in Bharuch. The former consists of twenty-seven villages, originally granted rent-free by Mahmud Begada, Sultan of Gujarát, to certain Mussulman soldiers of the Malik tribe for their valour at the siege of Pávágad in the Panch Maháls in the year 1483. This rent-free tenure, after lasting for over 200 years, was encroached upon by the Mahrattas, and, after various

changes of fortune, even after the commencement of British rule, it was finally settled that the Maliks should be allowed to hold the lands cultivated by themselves in 1819 rent-free, and on the remainder receive a share varying in different villages from seven-sixteenths to nine-sixteenths of the revenue, according to the Survey rates, which were to be administered by Government officers. Village accountants appointed by the Maliks were to be paid by Government.

For the first five years of British rule the subdivisions of this Collectorate were farmed out to the Desáís and Amíns. This system was succeeded for some time by leases of their own villages being given to the Patels; but as it was found that no true account of the revenues could be thus obtained, a scheme of setting up competitors to them was resorted to, and villages to some extent were leased out to the highest bidders. In the meantime, however, village accountants had been gradually introduced and more accurate information thus obtained, which enabled the Collector to protect the ryots from over-exactions on the part of the farmers, as well as effect other important improvements in administration, such as relieving them from the necessity of providing a banker's security, for which heavy interest was demanded, for their revenue payments. This paved the way towards the adoption of the *rayatvári* system of direct dealing with individual cultivators, until, in 1820, 370 out of 560 villages were so managed. In Mr. Elphinstone's Minute of 1821 on the Ahmadábád and Kheda Collectorates, strong disapproval was expressed of the plan of giving farms to strangers, but that of farming to the Patels of villages was considered less objectionable. The latter was not unpopular among the people themselves, but it had the disadvantage that Patels were not generally in possession of capital, as most stranger farmers would be. The Collector, moreover, would probably not be so careful to watch its operation as in the case of a farmer, and abuses might continue for a long time without discovery if the Patel could manage to stifle inquiry, as he could do more easily than a stranger. The chief argument in favour of a *rayatvári* settlement, on the other hand, was that there would be no one to share the produce of the soil but the State and the ryot himself. The objections to it

were that it tended to lessen the influence of the Patels and disorganize the system of village government, the value of which had lately been rated so highly. It would also entail on the Collector a great deal of inquiry into details; but, if farming gave less trouble, it was because the Collector neglected those very inquiries which formed an important part of his duty. It certainly exposed Government to a greater risk of loss of revenue than farming; but if this loss were not so great as to derange the finances generally, it was better that Government should suffer than the ryot. The *narrá* system, where the *Pátidárs* (sharers) were numerous, had many of the advantages of the *rayatvári* without risk of loss to Government, as the ryots were guarded against over-exaction by being able to move away to other villages. The inconvenience of it was that as long as one sharer was badly off, the revenue of the others could not be raised, however much their circumstances might have improved; and, on the other hand, remission could not be granted to a sharer in distress, because all the rest had a right to participate in what was given. It provided safeguards against over-assessment under a rapacious Government, but was also a bar to the just claims of the State.

On the whole, the Minute gave a preference to leases to Patels to the exclusion of strangers. The terms of the leases should be moderate, and the payments of each ryot fixed with simplicity and at a low rate. They might be given for five years, if security were given for payment of a heavy penalty if the villages were not found in prosperous condition at the expiration of the leases. Under such conditions the only profit to the Patel would be from the cultivation of new land, and he would be answerable for the ryots' defaults. A modification of this plan might be to settle with each ryot for five years, and to farm out the waste lands to the Patels. These proposals applied to *senja* (simple) villages, and in *Narrá* or *Pátidári* villages leases might also be given for similar periods, after the liability of alienated lands to assessment had been inquired into and disposed of. In the meanwhile there was no objection to the grant of *istíasá* or gradually increasing leases in villages capable of improvement by fresh cultivation, in which success would depend on introducing new cultivators. These would be safe from ill-treatment for the first few years, and

could afterwards protect themselves by written agreements. A regular Survey assessment was strongly approved where inquiry showed that the present assessments were unequal in particular instances, a reform in which would not unsettle the country generally. The proceedings of Pancháyats entrusted with the task of revision should, however, be minutely supervised by the Collector. The assessment of alienated land should be approached cautiously on account of the distress that would be caused to individuals by any large measure of resumption, and of the difficulty of detailed inquiries; but excessive assessment on *talpat* (Government) lands might at all events fairly be placed on the alienated lands held together with them.

These alienated lands were of the same nature as those described in other parts of Gujarát, and as with regard to them a similar compromise was finally effected as in Surat, by their titles being confirmed and new deeds granted on payment of quit-rents varying in amount according to the nature of their tenure, further detailed notice of the subject here is unnecessary. In the Kheda Collectorate, however, the practice of indirectly assessing such lands to the State revenue, even in Narvádári villages not directly managed by Government officers, was from the first carried to a greater extent than elsewhere. This practice is alluded to in the concluding sentence of Mr. Elphinstone's Minute quoted above, and was known by the name of *vetá*. A person having a holding comprising both Government land and alienated had a much heavier assessment than it would fairly bear imposed on the former in consideration of the latter held with it rent-free or paying only a quit-rent, and a distinct provision was made in the old Bombay Revenue Regulation XVII. of 1827, Sec. iv., cl. 4, by which such excess of assessment could be placed on the land enjoyed without being assessed or assessed below its value.

The detailed measurement of the Collectorate in the years 1820 to 1826 was made no more use of here than in the other Gujarát Collectorates, the revenue up to the time of the Revenue Survey settlement having always been collected according to *áará* or estimated *bighas*; nor was any inquiry held, as was done by Col. Monier Williams in Bharuch, into the titles of alienated lands.

In Kheda, as elsewhere, the influence of the Hereditary Officers ceased as soon as the practice of farming the revenue to them was discontinued, a course rendered practicable by the accumulation of detailed information on revenue matters by means of village accountants. This was not accomplished in a day, nor without opposition on the part of those officers and the Patels at their instigation. In 1814-15, for instance, the Bháts of Mátar, a caste of bards who bore a semi-sacred character and had been in the habit of providing security for the payment of village revenues, murdered two of their women to intimidate the officers of Government from appointing village accountants; and the Patels of Nadiád had to be superseded by the Collector, for opposition to the direct management he considered it advisable to introduce, some of them being even punished as criminals for conspiracy. By tact and perseverance, however, confidence was gradually inspired, and the revenues of the district steadily increased. A number of Narvá villages, in which that system had broken down in consequence of over-assessment and general mismanagement, were restored to their proprietors under their old tenure, and antiquated methods of assessment, according to crop-rates and payment of plough-tax and other money cesses, were by degrees superseded by fixed rates upon the *bigha* assessed by Paucháyats throughout the Collectorate. This was entirely in accordance with the orders of the Court of Directors, who as early as 1818 sent out instructions that, "in place of ryots' contributions being regulated by the computed value of a certain proportion of each crop, the average quantity and value of the produce for a term of years should be made the standard of value of the Government share, and the money value of this considered the maximum demand. All increase in production, from whatever causes arising, was to be the exclusive property of the ryots, subject to repayment of any advances made to them." This wise and liberal policy was never lost sight of in Kheda, but steadily pursued, much to the credit of successive Collectors, however rough and ready were the means they adopted to carry it into effect, from time to time, through the instrumentality of juries of experts.

In 1814-15 the villages held by the Thákor of Bhaunagar were

declared liable to have their rentals increased, like other Tálukdári estates in Dhandhuka and Gogha in the Gaikvár's territories in Káthiávd. It was clearly proved by ancient rent-rolls of both subdivisions that the rentals of the Chief had fluctuated from time to time both upwards and downwards, and from one of the former, dated ninety years previously, it appeared that at that time the estate had been assessed Rs. 27,000 a year higher. The Collector believed that the subsequent decrease was entirely due to the venality, remissness, or imbecility of Native officials. He considered that the Rs. 18,000 added to the rental were far below what the State had a right to demand, viz. the equivalent of one-third of the gross produce, and saw no reason why Bhau-nagar should pay what was estimated to be only 15 per cent. of the revenues while the inferior Grassias paid as much as 25.

The effect of the punishment inflicted on the Patels of Nadiád and the introduction of direct Government management into that subdivision appears to have been marked. Its revenue at the cession had been calculated at Rs. 1,75,000, but the area of cultivation had been found by survey to be considerably in excess of the estimate, and the revenue had now reached Rs. 2,62,263. The item of village expenses in the Collectorate was at this time carefully inquired into, and reduced from Rs. 23,948 to Rs. 5,863. Inquiries were also instituted into the necessity for the large establishment of hereditary District Revenue Officers in Nadiád, consisting of seven principal and three inferior Desáis, a Muz-moondar (district accountant), and three Amín Patels. The services of the Desáis appear to have been at once dispensed with as useless.

In addition to the territorial changes involved in the Province of Gujarát in the formation of the new Collectorates of Ahmad-ábád and Kheda, and the consolidation of Bharuch, in consequence of the various cessions and exchanges of portions of country that took place in 1817-18, a considerable modification was made in the duties of the Collectors of Land Revenue by the transfer of the management of the Land Customs, which had up to that time been in their hands, to the Collector of Sea Customs.

In 1818-19, with reference to the wish expressed by the Court of Directors that ryots' payments should be fixed on a considera-

tion of the average produce of a series of years, the Collector reported on the impossibility of acquiring such information, and urged that any sudden change of system in the direction of a permanent settlement was unadvisable. All that was required, he considered, to complete the prosperity of the district was to grant proprietary rights to the cultivators themselves or village shareholders (Narvādars), but not in any way to create Zamindári rights, as had been done in other parts of India. As the revision of assessments by Pancháyats had been found productive of mischievous effects through the absence of efficient supervision of their proceedings, Government at this time issued orders that no general measure of the kind should be carried out except under the close personal inspection of the Collectors and their Assistants. With regard to the granting of leases, orders were issued that none should be given to single farmers except in the case of villages that had declined in prosperity and required the expenditure of large capital to reinstate them. It would be less objectionable to grant them to single Patels in large directly-managed (*senja*) villages, but as it would tend to cut off direct communication between the ryots and the Collector, and divert profits to the Patels, it was undesirable to grant such leases; existing laws were not, however, to be disturbed. The same course might be followed in the case of leases of their own holdings already given to individual ryots, but they were as a rule unadvisable, as the losses of unsuccessful ryots fell, in consequence of their want of capital, on Government, while successful ones kept all their profits to themselves. There would be no objection to granting them in sharehold villages, where most of the people belonged to the Pátidári or shareholding class, as soon as it had been ascertained where there was any alienated land that could be brought under assessment. In the case of leases proposed to be given to individual ryots, it should first be ascertained that no change, however moderate and gradual, was required to remove inequality of assessment. When this had been done, leases for five years might be granted to Pátidárs where they much exceeded ordinary ryots in numbers.

In 1823 the Company's divided jurisdiction with the Peshvá in Pítlád was exchanged for the Gaikvár's rights in the town of

Umret, and Pitlád has since that time remained entirely subject to the latter power. To prevent harshness in individual cases on the resumption and assessment of alienated lands, leave was granted to continue the exemptions during the lifetime of existing holders. In the case of lands held by Bháts, Brahmins, and members of the turbulent classes, a moderate quit-rent was to be imposed, liable to increase after twenty years. Half-yearly reports were to be made of what had been done, to enable Government to check any harshness in the proceedings of the local authorities.

In 1824 a considerable burden was removed from Kumávisdars and other Native Revenue Officers by their being released from the obligation to provide the security of bankers for their good conduct, and being allowed to give the security of other respectable individuals.

In 1826 the following rules were issued for the revision of assessments in the Kheda Collectorate:—

1st.—If there had been an increase of revenue in a village since the introduction of British rule, any increase arising from enhanced assessments should be reduced, unless the Collector were fully persuaded it was not too high to afford a liberal subsistence to the ryots. If the increase had arisen from extension of cultivation, the opportunity should be taken advantage of to lighten the assessment without loss to Government by lowering all old rates that appeared to press heavily on the ryots.

2nd.—The same rule should be observed when a settlement was made with Patels. It should also be ascertained whether the capital invested in improvements had diminished. If so, it would clearly discourage the carrying out of improvements; and in fixing assessments care should be taken to give due consideration to the equitable claims of the Patels, particularly in co-shared villages, where, owing to their division into shares, the revenue might still continue to be paid.

3rd.—Where no increase of revenue had occurred under British rule, such would probably be traceable to the rates being too high, or there being no room left for extension of cultivation. In the former case the rates might be lowered at once, and in the latter, after the necessary reductions had been made, a guarantee might be given for the permanency of the rates for ten years.

In 1829 it was reported to the Court of Directors that their instructions with regard to assessing land on a correct estimate of its general value, and not with reference to that of each particular crop raised, had been carried out to some extent in Kheda. The Collectors were ordered to send in their annual revenue reports by August, and in making the settlement for each year to hold in deposit all increase over the settlement of the previous year pending the orders of Government. When remissions had to be granted, collections were to be made only provisionally.

In answer to observations from the Court of Directors, Government reported that in Pitlād, where the assessments had been found to be too high, the extent of each ryot's holding and his payments had been clearly laid down with reference to his circumstances and the average produce of his land, the old payments being revised where necessary, and leases for from seven to eleven years granted. This referred chiefly to Kunbis, Pátidárs, and other respectable classes, but it was hoped the prejudices of other classes against leases would be gradually overcome. Leases to Patels were not altogether objectionable, as the Court seemed inclined to think; they preserved the Patels' legitimate influence, and indirectly guaranteed against increase of assessment any ryots who had not taken leases. The Court's objection had probably arisen from an idea that leases given to them would give them too much influence; but such was not the case, as they had now no control over the ryots' assessments and cultivation, and the provisions of Chap. vi., Reg. XVII., 1827, would prevent all exercise of undue power on their part.

In this year the system was introduced of taking payment from the ryots by instalments, according to the prevalent crops, without requiring them to provide a banker's security. Their best interests were thus protected without injustice to those of the Patels. What was insecure and nominal under Native rule had now become real, and private property in the land would soon be created. In Narvádári villages shares that had lapsed in the times of misrule had been offered again on low leases, and many had been re-established. All proprietary and other rights were being preserved inviolate, and it was hoped that by the protection thus afforded to all, prosperity would be increased and

a class of wealthy landlords be raised. What does not appear to have been sufficiently taken into consideration was the rapid increase of population and its pressure upon the soil.

At different times endeavours were made to encourage the production of various kinds of valuable crops by imposing lower rates of assessment on the lands in which they were raised. This deviation from the rule of political economy that "a demand will always create a supply" has invariably resulted in failure, as was to be expected. The cultivation of hemp in the Konkan, and of Bourbon and other exotic varieties of cotton in Gujarát, was thus promoted for many years, but finally abandoned. Similarly, in this year the cultivation of sugar-cane in Kheda was directed to be encouraged by the offer of low rates of assessment.

In 1826 a Report on the subdivision of Nadiád was submitted to Government showing the progress of its revenue under British administration and previously. The following is a summary of the Report. Under the Gaikvár it was farmed to the Desáís, and yielded as follows:—

	Rs.		Rs.
1802 . . .	2,42,596	1806 . . .	2,33,701
1803 . . .	2,32,428	1807 . . .	2,34,601
1804 . . .	2,32,901	1808 . . .	2,37,858
1805 . . .	2,32,901	1809 . . .	2,44,136

In the following year it was taken under British management, and annual settlements made with the Patels for five years, as below:—

	Rs.		Rs.
1810 . . .	2,38,785	1813 . . .	2,56,774
1811 . . .	2,48,065	1814 . . .	2,60,409
1812 . . .	2,51,744		

In 1815 (Sumwut 1872) the Taláti (village accountant) Regulation was introduced, but it was not effectually carried out till three years afterwards. Its effect up to that time was to increase the revenue by Rs. 18,000, so that the average in the first five years of its operation came to Rs. 2,99,815. By 1826 it was reported that the settlements in almost the whole of the Collectorate were made with the Patels of villages. Police regulations had been introduced, and arrangements made with the Mehvási chiefs, so

that there had been an increase in cultivation to the extent of 25,320 *bighas*. Endeavours were being made to improve the condition of the country in various ways, as by the re-establishment of the Narvádári system in villages in which shares had fallen through, by giving gradually-increasing leases to admit of the cultivation being brought up to its former level, and by the reform of such abuses as that found to exist in Mehmádábád, where, at the commencement of the cultivating season, the ryots were not allowed to go out with their ploughs until they had agreed to cultivate a certain quantity of land.

A Report of this year describes the general Revenue system of the Collectorate in the following terms:—

There were only 97 *sanja* (directly-managed) to 437 Narvádári villages. In the latter the village lands, as well as the houses, are divided among the different shares. The leading member in each share is looked on as its proprietor, and is responsible for its revenue, the whole of the sharers being similarly answerable for the total demand on the village. The first shares established under Native rule were formed capriciously or by tyrannical orders. (This is contrary to the general tradition, according to which the shares in such villages were formed by the members of a family dividing the land among themselves according to the Hindoo laws of inheritance; and the division was fairly made in consequence of their intimate acquaintance with the productive qualities of the soil.) Under British rule endeavours had been constantly directed to equalising the shares according to the capabilities of the land. The division was into rupees, págris (turbans), annas, &c., according to the custom of each village. Sub-tenants made their own agreements as to the money-rents or share of produce they were to pay for their lands; but where a money-rate per *bigha* had been established, it could not be increased without the Collector's permission, as the Narvádárs' own payments were regulated by it. In most Narvádári villages there was a certain amount of *majmáa* or common land, which was separately administered, to provide for village charges, service lands, &c. (The lands of a lapsed share were, however, not infrequently thrown into the *majmáa*, and their produce enjoyed in common by the whole of the sharers.)

In the *senja*, or non-shared villages, several systems were in existence. The first was a simple rate per *bigha*, fixed according to the quality of the soil (*aval*, *döem*, or *söem*, 1st, 2nd, or 3rd), the crop, and the caste of the cultivator. Ryots in villages managed on this system were, as a rule, not so substantial as those in *Narvá* or *khátábandi* villages.

The second was the *khátábandi*, in which, after rates per *bigha* had been fixed in a similar manner, ryots became responsible for their entire holdings, whether these were cultivated or waste. This tended to encourage improvements more than the first, as the benefit of them was secured to the cultivator.

The third was the *vetá*. A certain quantity of land was set apart as *vetá*, say fifty *bighas*. Of this a cultivator might have a holding of only a single *bigha* or part of a *bigha*, and this was heavily assessed in consideration of the alienated land, such as *vecháña*, *geráña*, &c., held together with it rent free or lightly assessed. Cesses were sometimes imposed in addition to the rate on the land. No portion of such a holding could be thrown up, but the whole must be held or relinquished together, and exorbitant rents were accordingly submitted to. It was the tenure alluded to in Reg. XVII., 1827, Sec. iv., cl. 4.

Fourthly, *hal-vera*, or plough cess. A plough and a pair of bullocks were roughly estimated to be able to cultivate a certain quantity of land, varying according to quality, and paid a cess of from one to twenty rupees.

Fifthly, *úsámi-vera*, or personal cess, varying according to annual increase or decrease of cultivation of rent-free or quit-rent-paying land, from Rs. 2 to Rs. 100 per man.

Sixthly, *bhág-vatai*, or division-of-produce system. This was peculiar to rice and wheat villages. Rice grown in the monsoon paid a share of one-half, and if a late crop were grown on the same land, one-fourth of that also. A late crop grown alone paid one-half.

Seventhly, *phátá-chás* (literally, broken-furrow). This was a fixed rate per *bigha* on all lands cultivated, whether Government or alienated, and was in force in a few villages only.

In about October, on the cultivators applying for leave to cut their crops, such leave was at once granted to respectable people.

In the case of poor people, likely to give trouble in the collection of revenue, security was still demanded—not that of a banker, as formerly, but of one cultivator for another. The first instalment of revenue was made payable on the 1st of November, by which time the early rice, *kodrá* and *báotú*, had generally been realised. The *bijri* crop was still in stock, but preparations for separating it had been commenced. The second instalment was payable in December. In some villages there were only three instalments, but as a rule there were four to six for the whole Collectorate. By November or December estimates of produce for the annual settlement, showing the area of cultivation in early and late crops, the general condition of the country, the necessity for remissions, &c., were usually ready to lay before the Collector, being confined, in Narvadári villages, to lands directly administered or paying quit-rent only. The Mámlatdár was then called up with the Patels of villages, and the consent of the latter obtained, if possible, to the payment of sums in the lump for whole villages, fixed so as to allow for remissions to be given to poor cultivators, to cover losses of all descriptions, and to leave a profit to the Patels. If they agreed, leases for six or seven years were sometimes given; but in every case the rights of the ryots themselves were carefully guarded. The general system in this Collectorate was approved by Sir J. Malcolm in 1830, in a Minute recorded with regard to what he had seen in his tour through the Province.

About this time a good deal of discussion arose as to the advisability of levying a *wasaríá*, or succession tax, on alienated lands. Various opinions were elicited. The Court of Directors agreed to the principle, but suggested the expediency of converting it into a fixed rent payable annually. The Government of India left the matter to the discretion of the Local Government, but the proposal was never carried into practical effect.

Up to 1840 nothing very special in the way of reform appears to have been carried out in Kheda. Rs. 6 a month was fixed as the minimum pay of Talátis (village accountants), to whose accounts great attention was paid; and a proposal to pay subsistence allowance to boys being trained for employment in that capacity was sanctioned. Talátis were also to be encouraged in the zealous performance of this duty, by being employed on

vacancies in the regular ranks of the stipendiary service. The practice of indiscriminate billeting on individuals (*mohsali*) for the collection of revenue was checked; *karam-vera*, a species of poll-tax varying according to a cultivator's circumstances, which still existed in a few villages, was abolished, and a *bigha* rate substituted; and the Revenue system generally was closely supervised for the correction of abuses. On the expiration of 308 leases, which had been given in 1826-27, it was reported that seventy-six had improved under well-to-do farmers, but no application was made for the renewal of the leases. The condition of 100 was much the same as before, and these might be left under direct Government management. 132 had been neglected. *Pot-vera*, a tax on leather-dressers for the privilege of taking the skins of dead cattle, found to be still in existence in 257 villages, although nominally abolished under the head of taxes on trade, was ordered to be put a stop to. Increased pay to a certain number of Taláti was sanctioned, and the conversion of objectionable systems of management into the levying of fixed rates per *bigha* was steadily pursued.

In 1841, on the inhabitants of some villages raising an objection to the imposition on alienated land of a proportion of the plough-tax, which it was proposed to abolish and substitute cash rates on the land, Government directed the law contained in Reg. XVII., 1827, Sec. vi., cl. 2, forbidding the alienation of any such land without the Collector's sanction, to be enforced, pointing out that the imposition of the proposed assessment on the alienated land could not be carried out without the consent of the people who paid the tax.

In 1843 the Collector submitted the result of the revision of assessment in 227 villages, as follows:—

	Average for Ten Years. Rs.	Last Year of Old System. Rs.	Under the New System. Rs.
In 103 <i>bhágvatái</i> (division of produce) . .	38,048	41,848	45,002
In addition a light rate was fixed on 46,108 <i>bighas</i> of arable waste.			
In 25 crop-rate and plough-tax villages .	34,748	35,293	38,317
In addition 9,191 arable <i>bighas</i> were assessed.			
In 80 <i>bighoti</i> and plough-tax villages . .	—	75,078	73,710
In addition 4,301 <i>bighas</i> of waste as- sessed.			

	Average for Ten Years.	Last Year of Old System.	Under the New System.
	Rs.	Rs.	Rs.
In 7 <i>bighoti</i> and <i>khatbandi</i> villages . . .	—	10,102	10,018
In 4 poll-tax (<i>karam-vera</i>) villages . . .	1,188	1,047½	1,046
In addition 5,868 <i>bighas</i> of waste as- sessed.			
In 8 fluctuating <i>bighoti</i> villages . . .	14,608	13,868	14,007
In addition 5,158 <i>bighas</i> of waste were assessed.			

Rates from Rs. 8½ to Rs. 12 per *bigha* were imposed on irrigated lands under wells.

The juries of experts classified dry-crop lands, rice, and black soil under three qualities, and considered in every case the capability of a field as well as the advantages and disadvantages of its position. A detailed Report on every holding was then submitted to the Mámlatdár, when, if objections were raised in any particular fields, they were inspected again, and their assessments lowered if found too heavy. All details were entered in a book signed by the jury, the Patel, Taláti, and Mámlatdár. The book was forwarded, with the Patel and Taláti, to the Collector, before whom, after due inquiry, the signature of the Patel, as representing the villagers, was attached. Of late years all revisions had been submitted to Government for sanction.

In 1844 the following rules, proposed by the Revenue Commissioner for the encouragement of the construction of wells, received the sanction of Government:—

1st.—A lease for thirty years was to be given to anyone making a well. 2nd.—Advances were not to be given to people possessing capital, and none to others who could not give security that half of the cost should be contributed in money, labour, or materials. 3rd.—In the latter case advances might be given on good security, at the Collector's discretion, at 5 per cent. interest, to be repaid in not more than five years from the date of the well yielding a return. 4th.—Advances for the repair of old wells might be given without interest. Any special cases might be submitted for the orders of Government.

The land revenue of the Collectorate advanced from this period, 1844-45—when it amounted to Rs. 15,49,890—to the first introduction of the Survey Settlement in 1863-64 (Rs. 17,40,530). No accurate comparison can be made of the progress of the district

from the time of the Old Survey in 1820-25, on account of the limited scope of that operation. The revenue between that time and 1844-45 had, however, if anything, fallen off as a result of the fall in prices, although the area of cultivation, especially in the outlying districts, had increased in consequence of the more settled condition of the country. The general condition, as shown by the increase of population, houses, and agricultural stock, had improved, but the revenue administration was in great need of reform, if for no other reason because of the demands of Government being still levied on the *ásrá* or estimated *bigha*, a system which of course led to great inequality in the assessments.

In 1862 the work of revision was commenced in the Mátar (Mehmadábád) subdivision. The subdivision is favourably situated with regard to markets, having within its limits, in addition to smaller market-towns, those of Kheda (Kaira) and Mehmadaábád, itself a station of the E. B. & C. I. Railway; by the railway the large markets of Ahmadábád, Nadiád, Baroda, &c., are easy of access. The population is very dense and, on the whole, remarkably well-off. The majority are Kolis, who are here almost the equals of the Kunbis in agricultural skill and resources. The old methods of levying the assessment at the commencement of British rule were almost as varied as in Ahmadábád, comprising *bhágvatai* (division of produce) either by actual division (*mákhhal*) or estimate of standing crops; crop-rates (*jinasvár bighoti*) varying with the caste of the cultivators; *khátábandi*, or assessments in the lump on holdings, under which the cultivator paid very heavy rates for a portion called the *veta* in consideration of other land held with it or at comparatively low rates; *phátáchás*, also a lump assessment on the holding based on a uniform rate per *bigha*; or plough-tax and other cesses.

Of the ninety-seven villages in the subdivision, four were held on the Narvadári tenure. A very large proportion of the arable area—about one half—was alienated. In the majority of villages a regular assessment on the *bigha* had been introduced between 1840 and 1844; the division-of-produce system and assessment by means of plough-tax and other cesses, however, still prevailed in some villages at the time of the Survey Settlement. For dry-crop maximum rates the subdivision was divided into four groups, the

first of which contained only the three towns of Kheda, Mehmādābād, and Mátar. The three other groups apparently contained respectively forty-one, thirty-one, and twenty-one villages. The number of the Government Selections from which this information is derived is so badly printed that it is impossible to understand what the grouping actually was; and the coloured group-map, which accompanied the Superintendent's original Report, and would have cleared up the doubtful points, has unfortunately not been printed. The maximum dry-crop rates proposed were Rs. 4½, Rs. 4½, Rs. 4½, and Rs. 4 for the four groups respectively. These rates raised the assessment in some villages so greatly, the old assessments fixed by Pancháyats having been excessively uneven, that the Revenue Commissioner, Mr. B. H. Ellis, directed the lowering of the maximum rates in fourteen villages, in some instances by as much as twelve annas, quite irrespectively of their position with reference to markets. This was undoubtedly wrong in principle, and in fact amounted to a perpetuation of the old irregularity of assessment which it was one of the objects of the Survey Settlement to do away with. This might most probably have been avoided, as was afterwards done in Nadiád, and the assessments lowered, not by a reduction of the maximum rate below those of the classes to which the villages by their position belonged, but by not increasing the rates of fields for proximity to village site, as was usually done in consequence of such a position facilitating their manuring and watching, and by lowering rates more rapidly than was customary as fields receded from the village site. The Superintendent's Report, moreover, does not give the names of the villages in the last three groups, so that the absence of the coloured group-map is particularly unfortunate. The statements accompanying the Report do not give the detailed result of the adoption of the new rates in the different groups of villages, nor is there any record to show the effect of the lowering of rates ordered by Mr. Ellis; but it appears that the assessment on Government land was on the whole raised from Rs. 2,02,766 according to the old system in 1862-63 to Rs. 2,12,327, an increase of Rs. 9,561, or 4·7 per cent., although intended to be increased by 10 per cent. according to the Superintendent's proposals. At the same time, in consequence of the commutation

of indirect into direct payments on alienated land, the assessment of such land was raised from Rs. 79,300 to Rs. 88,020, an increase of Rs. 8,720, or 11 per cent. The average dry-crop rate on the whole area came to Rs. 2 14a. 4p.

The maximum rates proposed for rice-water in addition to the dry-crop rates varied from Rs. 2 8a. to Rs. 4, according to the position of the rice-beds of each village; and that for alluvial soils (*bhátá*) Rs. 8, except in villages of the first group and one the lands of which adjoined those of Kheda, where it was Rs. 9. For lands watered by lift from rivers a uniform maximum of Rs. 2 was proposed. As the detailed statement of the settlement has not been printed, and the acreage of lands coming under these heads is thus not ascertainable, the average assessment according to these several rates cannot be given. That the settlement was on the whole satisfactory to the people was proved by the eagerness with which they took up waste lands and the high value they put on occupancy rights. The rates were guaranteed for thirty years, except in the Tálukdári villages temporarily under the Collector's management.

With regard to assessments in the Ahmadábád Collectorate paid in the lump on certain alienated lands, it had been found that the state of the law prevented their being spread, without formal application from the holders, rateably on the lands liable to pay them, and they had been accordingly left as they stood. It now appeared that there was no real legal objection to the quit-rents being thus spread, and the plan was adopted as most convenient, and fairer than to make the nominal proprietors pay for land a portion of which had passed out of their control. Of the remaining cesses, many of which were only occasionally levied under certain circumstances, some were commuted equitably into permanent quit-rents, whilst others that were trifling in amount were remitted altogether, and a constant source of variation in the revenue demands was thus put an end to. Similar principles were acted upon in the settlement of alienated lands throughout the Collectorate.

In 1863 the subdivision of Mahundha, now mostly absorbed in Mehmádábád, came under revision. It contained at the time of settlement ninety-five villages, of which six were alienated, and

two paid lump rentals (*udhar jamábandi*); the rest were *khálsá* or Government.

Over 40 per cent. of the area was alienated under various tenures. Its soil, except in the north-east, consisted of the usual rich, light-coloured *goráru* soil of Gujarát. In the north-east there is a good deal of hard, dark-coloured *mál* land, which is believed to be unculturable, but could probably be turned to good account if a proper system of subsoil drainage were to be adopted. There is so little alluvial soil that no special rate was imposed, and its assessment, if it should be cultivated, was left to be levied in the shape of a water-bag on the wells in it. Little land could be irrigated by lifts from streams, as the water in these is generally brackish in consequence of the impregnation of the subsoil with salt. The subdivision is well situated with regard to markets and communications, being within easy reach of the railway stations of Mehmadábad and Nadiád, and having other large local markets, such as Umret, Bháraj, and Dákor, at convenient distances from some or other of its villages. The southern and western portion is densely populated, and, with the exception of the Chuvália Kolis in the poorer villages in the north and east, the inhabitants are for the most part expert agriculturists. The original systems of revenue management prevalent were the division-of-produce and others already mentioned under Mátar, with cesses of various kinds on alienated lands; but these had been gradually superseded by *bigha* rates fixed by Pancháyats. Statistical information available from the records of the Old Survey of 1820-25 showed that population in fifty-eight villages of the subdivision had increased by 49 per cent., and ploughs by 43 per cent. At the former time there were 238 wells out of repair and 245 in repair, whereas 572 were in repair and only 34 out of order in 1862. In the twenty years preceding the settlement the area under tillage had increased by 17.31 per cent., whilst at the time of settlement 72 per cent. of the arable area was cultivated. In the twenty-three years previous to the settlement remissions had been necessary only to the extent of $1\frac{1}{2}$ per cent. of the entire rental of Government land, so that it was evident, however uneven the distribution of the burden may have been, that the subdivision on the whole had

not been too heavily assessed, although the average realisations had been Rs. 3 9a. per acre.

For maximum rates of dry-crop assessment the villages were divided into eleven groups, determined as much as possible by distance from markets, facility of communication therewith, and general position in the subdivision, and in a few special cases by the amount of waste land in a village or the particular poverty of its Koli inhabitants. The details were given by the Superintendent of Survey as follows, but owing to the want of a group-map it is difficult to follow them :—The first group contained but a single village, assessed at a maximum rate of Rs. 4 8a. in consequence of its close proximity to the large town and railway station of Nadiád (Neriád). Its old average dry-crop rate was Rs. 4 13a. 7p., and the new came to Rs. 3 7a. 7p., but the total assessment was only reduced by Rs. 120 as compared with the average collections of ten years. The rate of the next group, one of thirty-one villages, was lowered four annas. Its villages lay on the western and southern borders of the subdivision. Those on the west were favourably situated for access to the station of Mehmádábád, and those on the south equally so with regard to Nadiád, those which are cut off from the latter during the rainy season by the river Seri being able to communicate with Mehmádábád. The next group, of eighteen villages, had a maximum dry-crop rate of Rs. 4. They consisted partly of villages in the centre of the subdivision near the Mohr river, and partly of a few of the most south-easterly villages adjoining Nadiád on the south and the Thásrá subdivision on the east. Some of them were well placed for the Mahundhá market, but some were not so favourably situated in consequence of the intervention of the Seri and Mohr rivers; hence the lowering of the maximum by R. $\frac{1}{4}$. The next group, of nine villages, had a similar lowering of rate from having only the inferior markets of Alíná and Chunei; and the fifth, of seven villages, was also lowered from having no market but Katlál. A sixth group, with a maximum of Rs. 3 4a., had no large markets, but could resort to Alíná and Dákor. The seventh group, of only three villages, is on the eastern border of the subdivision, and, from lying in the unfertile part where the *mál* soil prevails, would have been assessed lower but for having access to

the market of Dákor. For giving the next group of three villages a lower rate of Rs. 2 12a. the reason assigned was that they contained a deal of waste land and had local peculiarities, but what these were was not stated. The village of Vásná was constituted a group by itself, at Rs. 2 8a., because it had hitherto paid a much higher rate. In the tenth class, with a maximum of Rs. 2 4a., were placed three villages, for no other apparent reason but that they were inhabited by poor Kolis and had much waste land in them. It was hoped that cultivators would be drawn to one of them that was only thinly inhabited by the imposition of a low rate. The last group, at a maximum of Rs. 2, consisted of ten villages on the east and north-east, badly situated with regard to markets; and said to be the poorest in the subdivision. They contained much of the *wál* land, to bring which into cultivation it was proposed either to farm out the villages to capitalists at moderate assessments, or to make cash advances to the cultivators to enable them to carry out subsoil drainage. There can be little doubt, from a consideration of the reasons given for this grouping, that, alarmed at the sudden increase to the assessment which the adoption of more uniform rates would have caused, the Superintendent, with the sanction of the Revenue Commissioner, Mr. Ellis, to some extent sacrificed principle to expediency, as in the case of Mátar. For rice water an extra rate of a rupee less than that of the dry-crop in each group was proposed, and, in the few cases in which water was lifted from rivers for irrigation, a separate rate on the water-bag.

The general result was reported as follows:—

Average assessment per acre according to cultivation at the time of settlement—

Average.	Total Assessment.
Ra. a. p.	Ra.
2 15 11	1,86,745

Average assessment on the same area at the old rates—

Average.	Total Assessment.
Ra. a. p.	Ra.
3 0 11	1,90,739

Average of old rates on cultivation of 1861-2, inclusive of cesses—

Average.	Total Assessment.
Rs. a. p.	Rs.
3 8 3	1,80,861

Average according to new rates on the average area under cultivation for ten years—

Average.	Total Assessment.
Rs. a. p.	Rs.
3 9 4	1,69,282

The actual increase in the year of settlement (1862-63) was a decrease of Rs. 6,036, or rather over 3 per cent. Quit-rents on alienated lands were increased by Rs. 1,480, or 1·4 per cent., by the commutation of fluctuating cesses, &c., into fixed payments and the transfer to them of a portion of plough-tax, &c., nominally paid by Government lands. An immediate increase of about 10 per cent. on the whole rental was anticipated from the probability that all the waste included in Survey numbers, the assessment of which was remitted in the year of settlement, would be taken up and paid for.

The average dry-crop rates under the maximum noted above were in the several groups as below:—

Group.	Maximum Rate.	Average.
	Rs. a.	Rs. a. p.
1	4 8	3 7 7
2	4 4	3 4 0
3	4 0	3 0 0
4	3 12	2 12 0
5	3 8	2 8 0
6	3 4	2 7 6
7	3 0	2 3 0
8	2 12	1 11 9
9	2 8	1 11 5
10	2 4	1 5 10
11	2 0	1 4 9

It was decided in the course of the correspondence relating to this settlement, that where alienated land deriving water from a

source created by the expenditure of Government capital had not been made to pay extra assessment on account of the benefit it derived from such water, it should at all events be made to bear a fair share of the cost of maintaining the works. For this purpose an extra water rate was ordered to be levied on the alienated land deriving water from the sluices made at the public cost on the Khári river in the Mátar subdivision.

Revised rates were introduced experimentally into the subdivisions of Thásrá and Kapadvanj (Kupperwunj) in 1864, under the Revenue Commissioner's sanction, and reported to Government in the following year. In addition to the Maliki villages, a short history of and the final settlement in which have been given above, the former subdivision contained 53 Government villages. The soil was for the most part the ordinary *goráru*, or light-coloured soil of Gujarát, becoming more sandy as the Máhi river, which forms the eastern boundary of the subdivision, is approached, but a portion of it is the *míl* already alluded to. The whole tract had easy access to several stations of the B. B. & C. I. Railway, in addition to the local markets of Thásrá, Umret, and Dákor. The population was dense, and the people almost all agriculturists, well-to-do. Of the area of culturable land 72½ per cent. was under cultivation. The increase in cultivation had not been so great as in other parts of the district, in consequence of inequitable assessment under similar methods of revenue management to those described above. The operations of the old Survey of 1820-25 only extended to a few villages of Thásrá formerly under Nadiád; in these population had increased by 22 per cent., houses by 78, draught cattle by 51, and ploughs by 112 per cent. The number of classes into which the subdivision was grouped for maximum rates of dry-crop assessment, with the rates and reasons for their adoption, appear to have been stated in detail in the Superintendent's Report, on which the Revenue Commissioner authorised an experimental settlement in 1864 (166A of 23rd March); but this letter has not been printed with the other papers, so that there are no data on which to compare the old with the new average rates. The average dry-crop rate under the Survey settlement was Rs. 1 14s. 11p. per acre, that on garden land Rs. 3 9s. 8p., and that on rice Rs. 3 13s. The nett

total increase according to the settlement was about Rs. 1,863, but as this was arrived at by calculating the true area found by measurement, instead of the old estimated area, at the old rates, it is impossible to say what the real increase was: it is given by the Superintendent at 20 per cent., inclusive of the assessment on waste land measured in to form Survey numbers. In permanent garden lands the method of assessment adopted was to throw on the land under the several wells what was called a *bágáyat kassar*, or garden-crop assessment, calculated according to the capacity and quality of the wells and the area of land irrigable. On lands capable of being irrigated by lift from rivers a light water rate at a rupee an acre was imposed, whether they were then irrigated or not. These were in addition to the dry-crop rates. Rice water rates were calculated in the same manner as that shown above under Máhundhá, at a rupee less than the maximum dry-crop rate in the several groups. The settlement was well received by the ryots, and all numbers either wholly or partially cultivated, as well as a great many waste numbers, were agreed to on the new terms. Enclosures round houses were allowed to be held free of assessment, even when cultivated, to the extent of an acre, and all excess beyond this assessed.

The Kapadvanj subdivision was revised in the same year. The soil is similar to that of Thásrá and Máhundhá. The assessment under the old systems of revenue management had been moderate, the average rate having been R. 1 13a. 1p., as against Rs. 3 0a. 9p. in Thásrá. Kapadvanj itself was a place of importance, not only as the seat of a local manufacture of glass and soap, but as an entrepôt for much of the trade between Gujarát and Marwar. The moderate assessment, and the development of trade in consequence of the opening of the railway, had caused a rapid increase of cultivation within the preceding twenty years, to the extent of about 71 per cent. The subdivision was not so densely populated as other parts of the Collectorate, but was decidedly prosperous; this was apparently proved by the unusual circumstance of females preponderating over males, from which it was inferred that the prosperity of the people had enabled them to indulge largely in polygamy. The Kolis, of whom about one-third of the population was composed, were

thrifless and improvident, and judging from the number of agricultural cattle, which bore the proportion of five bullocks to every four families, the style of agriculture on the whole could not have been very efficient. There were in the subdivision sixty-eight Government villages, six alienated and two *udhar jamábandi* (fixed lump assessment); the sixty-eight villages only came under settlement. There is, unfortunately, among the papers relating to the settlement which have been printed, no record of the groups into which the villages were thrown for maximum dry-crop rates or of the rates adopted for those groups: reference is only made to the Report in which the Superintendent of Survey proposed them and gave his reasons. The Revenue Commissioner appears to have somewhat modified the proposals, and, there is reason to believe, set aside the Survey principle of assessment according to climate and distance from market. The Collector remarks in one of his letters that the Superintendent had taken great care to consider how far the prosperity and capabilities of each village were affected by the general character of the Koli cultivators hitherto paying a lower rate. The general result of the revision was as follows:—

No. of Villages.	Cultivated Area according to Old System. Assessment in 1883-84.	Acres of Cultivation.	Cultivated Area according to New System.		
			Assessment, inclusive of Quit-rents, &c., on Alienated Land. Rs.	Increase per cent. on Cultivation.	Increase if Waste in partially-cultivated Numbers had been charged for.
68	1,02,866	46,002	73,700 28,148	1	27.1
			1,01,848		

From the manner in which the revenue from quit-rents, &c., on alienated is mixed up with that derived from Government land, this statement cannot be quite depended on, but the return is near enough for practical purposes. The increase on cultivation agrees with that given by the Superintendent, but that in the last column is about 11 per cent. less than what is shown in his Report. It is at all events clear that the enhancement of demand was very moderate, as it rested with the people themselves to take up on the new terms those fields in which waste land had been included by the Survey or relinquish them. Rice and garden lands were assessed on similar principles to those in other

subdivisions already described. The average assessments on the different descriptions ranged as follows :—

	Rs.	a.	p.	Thásrá rates.
On dry crop	1	4	1	1 14 11
On garden lands	3	3	8	3 9 8
On rice	2	13	2	3 13 0
General average	1	8	5	

The Thásrá averages placed side by side with these prove that the rates in Kapadvanj were the more moderate of the two. The proposed rates in both were guaranteed for thirty years, as usual. About this time a proposal was made to allow the holders of land assessed at garden rates to redeem their liability to this payment at fifteen years' purchase. It was argued that it would be better to secure this cash payment than run the risk of wells falling in and becoming useless, an event of not unfrequent occurrence, in which case the extra water assessment would have to be remitted. The principle was sanctioned by the Local and Home Governments, but the matter ended by the offer being in no case accepted by the people themselves. It was at this period also that the Bombay Government, of which Mr. Ellis had become a member, sanctioned, by way of experiment, a proposal to do away with all extra assessment on well-watered lands and place an extra rate on lands adjudged to contain water-bearing strata, to make up for the resulting loss of revenue. This has subsequently been carried into practical effect, as noticed under the heading of the Panch Maháls Collectorate.

Proposals for the revision of assessment in the Nadiád (Neriád) subdivision were submitted in 1865. It contained 88 villages, 73 of which were *khálsá* or Government villages : of these 47 were *senjá* (directly managed *rayatvári*), and 26 held on the Narvadári tenure. It is a typical Gujarát district, beautifully wooded, highly cultivated, with an ample water-supply from fine wells, and very productive, probably not so much on account of its natural fertility as in consequence of its superior style of cultivation by its intelligent people. It is densely populated, even more so than Belgium ; and there is only about half an acre of arable

land in it per head. The B. B. & C. I. Railway runs through it, and has one station at Nadiád itself and another at Anand, to one of which all its villages have easy access. In addition to the chief town, it has good markets in the large villages of Bhálaj, Umret and Dákor, the last a great place of Hindoo pilgrimage. Since the revision was carried out, the advantages of this tract of country have been greatly increased by the extension of railway communication past Dákor and across the Máhi river to Godhra in the Panch Maháls, whence it is in course of extension to Málwa and Central India. In addition to the ordinary products of its rich *goráru* soil, the subdivision is famous for its tobacco, which now finds its way to most parts of India. On the whole, there is no richer country in the Bombay Presidency, or probably in all Hindustan. The old revenue systems already noticed had been gradually superseded by *bigha* rates fixed by Pancháyats, who, it was found, had based their rates rather on the paying capabilities of the ryots than on those of the soil, the result having been a very unequal assessment: the average dry-crop rate was as low as 13s. 10p. in some villages, and as high as Rs. 14 11s. 7p. in others close to them, with soil of nearly the same degree of fertility. This inequality extended even to lands in the same villages. Notwithstanding this, however, the condition of the country was so prosperous, and the demand for land so great, that 96 per cent. of the whole arable area was under cultivation. After personal consultation between the Revenue Commissioner and the Superintendent of Survey, the subdivision was divided for maximum rates of dry-crop assessment into six groups. The Superintendent had in the first instance proposed eight groups with somewhat different maximum rates than those finally adopted; by altering the maximum and seeing that the principle of lowering and raising of fields for distance from or nearness to village sites was so modified as to create a substantial difference between the rates of Kunbis and Kolis, in fair proportion to the deficiency of agricultural stock and capital of the latter as compared with those of the former, the difficulty that had arisen in the more northerly subdivisions from the very different rates hitherto paid by the members of the two castes, elsewhere pro-

vided for by placing villages in wrong groups, was completely met. The groups and maximum rates were as follows:—

The first group contained only the town of Nadiád itself, comprising seven *pátis* or subdivisions, which were in reality seven distinct Narvádári villages. These had clearly the finest position and the greatest advantages in the whole Collectorate. The maximum rate, Rs. 6 4a., was an increase of four annas above that first proposed.

The remaining groups, settled according to distance from the two railway stations of Nadiád and Anand, were composed respectively of 15, 28, 16, 11, and 5 villages, with maximum rates of Rs. 5½, 5, 4½, and 3½, those of the last two groups being lowered by gradations of half-rupees on account of general want of agricultural stock, as well as greater distance from markets. Leave was given, if it should be found necessary to make a distinction in the assessment of villages in consideration of any marked deficiency in the agricultural skill and capital of their inhabitants, to make it in garden and not in dry-crop lands, for the reason that it would be in the former, and not in the latter, that the superior hereditary knowledge of the Kunbis over the Kolis would tell. The rate for assessment of garden lands was so fixed as to make the highest rate one of Rs. 15, the old rate in a part of Nadiád having been as high as Rs. 18 4a. 8p. The rice water rates, fixed as in other cases, in the several groups at one rupee less than the maximum dry-crop rates, gave an average in the first group of about Rs. 7½, and proportionately less in the rest.

Petitions were subsequently made by the ryots against the garden-land assessment, and it was found necessary to make further inquiries, especially in cases in which it might be found that the full area of land a well was capable of watering had not the right to draw water from it. It was finally decided, after the rate had been temporarily reduced by one-third, that the full well-rate (*bágáyat kasar*), with a view to provide sufficient land for rotation of crops, should not be imposed unless double the area irrigable according to the Survey calculation from each water-bag of a well was found to derive water from it by right. Land deriving water without a proprietary right was not to be taken into account in ascertaining this area, but in cases in which

wells had been dug in Government lands of small area for the evident purpose of watering adjacent alienated land, an extra water cess (*piává*) of Rs. 2 per acre of such irrigated alienated land was to be levied. Temporary sanction to the collection of the proposed rates was given, and the final settlement postponed till 1868. In the final orders issued by Government the remonstrances of the Revenue Commissioner against the abandonment of the true principle of grouping for maximum rates were set aside in some cases, and lower rates given to certain villages which had been assessed previously at low rates on account of the caste of their cultivators, and entries ordered to be made in the Survey Records which would ensure such villages being placed in their proper classes on the revision of the Settlement after the thirty years for which it was guaranteed.

The precarious position of tenants of permanent occupancy in Narvádári villages was also brought to the notice of Government by the Revenue Commissioner. In consequence of the Survey Act (Bombay, I. of 1865) making no provision for the preservation of the rights of tenants who, although their names were not recorded as those of the persons responsible to Government for the payment of the revenue, were in reality entitled to hold their lands at fixed rents not liable to be raised by the Narvádárs, such tenants could not be recognized as Survey occupants, and thus lost valuable heritable and transferable rights. This most important question was set aside by a remark that the observations of the Revenue Commissioner were not understood. The changes in the grouping of villages directed by Government have rendered valueless the returns prepared by the Superintendent of the effect of the new rates of assessment in the several villages and groups. The general result was a raising of the total assessment by about 10 per cent., which, considering the great advantages possessed by the subdivision, was certainly moderate.

Borad, the last remaining subdivision in the Collectorate, was revised in 1868. Its position, the fertility of its soil, and the superiority of its agriculture place it almost on a par with Nadiád. The railway is easily accessible from it, and the station of Vásad is close to its north-eastern corner; but it has the disadvantage of being very much intermixed with the Gaikvár's territories of

the Pitlád Táluka, and its shape is therefore not very compact for administrative purposes, one village being quite isolated and others running down to near the head of the Gulf of Cambay. Its population was more dense even than that of Nadiád, and the fact of 86 per cent. of the whole arable area being under cultivation proved the generally prosperous condition of the people. In the twenty years preceding the Settlement the cultivated area had increased from 61,851 to 64,393 acres, and the remissions in the last ten years had been only about 1 per cent. In the same period, however, the price of agricultural produce had risen very much, and it was noticeable that in the first ten of the twenty the average high rate of assessment, Rs. 5 4a. 2p. per acre, had tended to prevent any but a small increase of cultivation. It would therefore not have been prudent to increase the burden of assessment and not leave a margin for a possible general fall of prices in a long lease of thirty years.

The subdivision was classed for maximum rates of dry-crop assessment in five groups, with a special group of nine villages near the Máhi river, much cut up by ravines, in which the soil was very apt to have the fertilising particles washed out of it. The maximum rate was Rs. 6, which was that adopted in the second group of Nadiád villages. The second group was lowered half a rupee, and the reductions in the other groups down to the fifth were by a gradation of four annas in each group, but that of the sixth was twelve annas less than in the group above, in consequence of the peculiarity in their formation just noticed. For rice water assessment the same plan as that adopted elsewhere, of fixing it at a rupee less than the dry-crop rate of such group, was proposed. The Revenue Commissioner dissented from the principle involved in this, as it gave a double reduction in rice lands for distance from markets, which was not given in dry-crop and garden lands, but did not press his objection, as the area of rice was less than 5,000 acres out of a total of 67,250. The same maximum water-rate for garden land was adopted as in Nadiád, the circumstances of the two subdivisions being very similar. Care was taken to make all the allowances made in the latter in applying this rate to the lands under different wells. The general

average rate of assessment under the new system was Rs. 4 14a. 2p. against Rs. 5 4a. 2p. under the old. The actual reduction on Government land was a reduction of Rs. 4,077 10a. 10p. on a total of Rs. 3,32,990 $\frac{1}{4}$, or under 1 $\frac{1}{4}$ per cent. It would have been more if the area by measurement had not turned out to be greater than that recorded, and but for the assessment of a good deal of rice land hitherto entered as dry crop. Room was still left for an increase of about Rs. 10,540 when the remaining arable waste was taken up.

In thirty-five out of the total number of fifty-four Narvádári villages in Borsad, the Narvádárs, in place of adhering to their customary divisions into fractional shares of revenue under various denominations, consented to continue the system of joint and several responsibility for the payment of the whole revenue, and agreed that each should for his own part pay the full Survey assessment on the portion of land measured into his individual share. Where this was not agreed to, the Survey assessment was apportioned on each share according to their customary proportionate payments. A good deal of complication arose in all the villages held under this tenure in consequence of alienated land of different tenures being largely included in varying proportions in the shares on which assessment was paid. In some cases the Narvádárs elected to retain this land in their shares and pay the full Survey assessment on it, for various reasons: in one case, because they thought the exclusion of such lands from the Narvá would lower them in the eyes of their fellows; in another because the Narvádárs hoped to be able to resume the lands and make them liable for payment of full assessment, and so on. In most cases, however, it was agreed that all alienated lands should be excluded from the Narvá, and to such lands the Summary Settlement, by which on payment of a quit-rent doubtful titles were amended by new title-deeds, was allowed to be extended. Allusion has been made above to the precarious condition in which tenants of permanent occupancy, including in many cases subordinate sharers, in Narvádári villages were placed from the Survey Act permitting the recognition of the right of Survey occupancy only in the case of tenants having a right to pay their rents

directly to village accountants as representatives of Government, thus excluding all having customary rights to pay fixed rents in Narvádári villages in limitation of the rights of Narvádárs to levy such rents as they might arrange for with their tenants. At the time of settlement an endeavour was made to protect the rights of such customary tenants by the preparation of *íkrár-námás*, or records of rights, signed by the parties, in which all customary rights were recorded. These records will of course in case of dispute contain valuable evidence on which the Civil Courts will be able to come to an equitable decision, but such entries do not, as in the N. W. Provinces, have the force of judicial decrees. With this exception, no attempt was made to interfere in the arrangements for the payment of rents existing between the Narvádárs as landlords and their sub-sharers or customary tenants: consequently, none of the complications which arose in the Kolába and Ratnágiri Collectorates, from an opposite course of proceeding in endeavouring to regulate the terms on which the Khots should levy rents from their tenants, have arisen in the Narvádári, Bhágdári, and Tálukdári villages of Kheda, Bharuch and Ahmadábád. The only point on which it might be advisable to interfere tentatively and cautiously would be in the matter of the right to make improvements. A tenant in such villages might hold under a superior holder who had not the capital or wish to make improvements, but would be deterred from making them at his own cost unless he were in some way protected against their being made use of as an excuse on which to demand increased rent. He could, of course, protect himself by entering into a special agreement with his superior holder before he spent his money, and on the whole it might be better to leave the people alone to make their own arrangements; but when the time arises for a revision of the first settlement, it would be quite worthy of inquiry to ascertain whether the existing state of affairs does or does not stand in the way of the carrying out of such improvements as the construction of wells, which in the case of the occurrence of famines would be of such vast public importance. The general financial result of the Survey settlement in the whole Collectorate is shown in the following statement:—

Name of Subdivision.	Year of Settlement.	Ten Years' Average Collections.	Collections of Year before Settlement.	Year of Settlement.				Increase per cent.
				Old System.		New System.		
				Total Collections.	Rate per Acre.	Total Collections.	Rate per Acre.	
		Rs.	Rs.	Rs.	R. s. p.	Rs.	R. s. p.	
Mahundha -	1862-3	1,70,264	1,81,910	1,90,739	3 0 11	2,08,487	1 13 1	6½
Matar - - -	1863-3	1,74,086	1,97,683	2,02,766	3 8 10	2,41,071	3 11 0	19
Nadiad - - -	1865-6	2,15,018	2,19,039	2,13,132	4 2 1	2,30,515	4 6 2	2½
Borsad - - -	1866-7	3,19,100	3,23,448	3,19,455	4 12 4	3,28,913	4 14 2	3
Kapadvanj -	1863-4	64,742	75,343	72,844	1 9 4	1,00,353	1 8 0	37½
Thasra - - -	1863-4	1,33,411	1,47,601	1,44,511	2 12 3	1,66,807	2 6 8	15½
Total - - -		10,79,621	11,45,045	11,43,447	3 6 4	12,71,146	3 3 4	11

The general land revenue of the Collectorate has increased from Rs. 11,84,390 in 1833-34 to Rs. 19,54,430 in 1877-78: it now averages about 19½ lacs of rupees.

PANCH MAHÁLS.

THIS district, lately made into a full Collectorate combined with the Political charge of adjacent Native States formerly under the Máhi Kántha Agency, consists of two isolated portions, the one on the west, almost adjoining the Kheda Collectorate, consisting of the subdivisions of Godhra and Kálol (including the petty subdivision, or Maháلكari's charge, of Hálol), and that on the east containing those of Dohad and Jhálod. Both blocks are surrounded by Native territory, and the western one touches that of H. H. the Gaikvár in the south-west corner. It contains about 1,595 square miles, and is situated between $22^{\circ} 30'$ and $23^{\circ} 10'$ N. Lat., and $73^{\circ} 35'$ and $74^{\circ} 10'$ E. Long. It is on the whole the most sparsely populated part of the Presidency, containing only 151 souls to the square mile, as well as the most jungly and backward.

From 1853 to 1860 this district was held by the British Government in charge for Sindia, and managed by the Political Agent in the Revá Kánthá. It was then handed over in exchange for lands near Jhánsi, and from 1861 has formed one of the districts of the Bombay Presidency. Until May 1864 it continued to form part of the charge of the Political Agent, and was then placed under the Kheda Collectorate, in charge of an officer called a First Assistant Collector, who was also Agent to the Governor, the Bombay Regulations not having as yet been introduced. Finally, in 1877, it was made into a separate Collectorate, under a Collector, who was also placed in charge of the Revá Kánthá States. It comprises three subdivisions, viz., Godhrá and Kálol in the west,

bordering on the Kheda Collectorate, and Dohad in the east, separated from the former by the small State of Bária. Under Kálol is the petty division of Hálol, and under Dohad is that of Jhálod. When the district was handed over by Sindia it was in disorder. For many years it had been in the hands of revenue contractors, who managed the district as they chose. They realised their revenue demands from the heads of villages, from chiefs who held estates of several villages, or from petty contractors who farmed the revenue of groups of villages. As the chiefs seldom paid willingly, they had to provide sureties, to whom they paid heavy interest. Their rentals were fixed by a guess at their probable revenue. Where the head-men of villages were dealt with, they were made responsible for an amount fixed on a rough calculation of what the villages had paid and were supposed to be able to pay. Sub-contractors for the revenues of villages generally held leases for five years with annually-increasing rentals. In some cases, where the Revenue was levied by Government officers directly from the ryots, it was levied either by a plough-tax, division-of-produce, or a rate per *bigha*, varying according to the caste and condition of the cultivator, and the description of crop raised. Under British management the position of the petty chiefs (Thákors and Tálukdárs) has, with a few exceptions, been left unchanged, and the rentals they paid on the introduction of British rule have been continued. No interference is exercised between them and their tenants, from whom rents are levied in the variety of methods known to Native usage. In the remaining villages the system of farming out the revenues has entirely ceased, and the revenue is collected directly by Government officers under the *rayatsári* system. In the latter villages it very early came to notice that very large areas of land were claimed to be held as alienated, either entirely rent free or paying only a quit-rent. An inquiry into these, in 1853-54, showed that the possession of much of this land was supported by no regular title-deeds; but Sindia's Government, before whom the results of the inquiry were laid, did not appear disposed to take any further steps in the matter. In 1865, after the district had become British, with a view to put a stop to further claims, which, in the absence of field registers, could be made without check, it was determined, under the

Revenue Commissioner's orders, to form a register of all claims. This registration formed the basis of settlement when a set of rules was drawn up in 1872 for their adjudication. These provided that lands alienated for religious or charitable purposes should be continued, either if their value was allowed for in the exchange of territory with Sindia, or if between 1853 and 1860 they had been recognized as rent-free; that personal grants free from a stipulation of service should, on payment of one-eighth of the assessment, be continued if they were recognized in the exchange accounts, or, having been allowed between 1853 and 1860, had been registered in 1865; that, unless claims registered in 1865 were found to be unfounded, they should be continued on payment of from a quarter to a half of the assessment; that village servants' claims should be decided according to the general rules on that subject; and that lands claimed by several persons should be fully assessed unless one of them proved his title in a Civil Court. All alienations have since been settled under these rules. Between 1855 and 1858 a few villages in Godhra and Kálol were assessed by Pancháyats from Kheda, but no regular revision of assessment was attempted until the Revenue Survey was regularly introduced between 1871 and 1885.

GODHRA.

In 1873 an experimental settlement was introduced, under the Revenue Commissioner's sanction, into the subdivision of Godhra. It lies in the western portion of the district, separated from the detached subdivisions of Dohad and Jhálod by the country of Dergad Bária. In the west of the subdivision, bordering on the Máhi river, the common light-coloured *goráru* soil of Gujarát prevails, while more towards the east it becomes of a darker colour, though it never turns into the regular *regar* or black cotton-soil. Owing to the scantiness of the population—only 107 to the square mile—which liberal offers of land to be held on easy terms have had but little effect in inducing immigrants to complement, a large portion of the country is covered with teak and

other jungle, in the midst of which old wells of large dimensions bear witness to a time when population was much denser and its condition more prosperous. The town of Godhra has been since long past of some importance as an entrepôt for the trade between Gujarát and Málwa, salt, tobacco, and other products of the former passing eastwards, and opium, until it was diverted by the construction of railways in Central India, with wheat passing westwards. Its importance has been greatly increased since the introduction of the Settlement, by the town having become the terminus of a branch of the B. B. & C. I. Railway passing by Dákor and Páli on the Málvi. This line will no doubt in the future be extended to Málwa and Rutlám *vid* Dohad, there being no formidable engineering difficulties to be met with on the route. The former revenue system, which had hardly been interfered with since the introduction of British rule, was for the most part the rude one of the levy of a plough tax. It prevailed in 131 out of the 144 Government villages of the subdivision. In six villages there was a *bigha* rate, levied on the *ásrá* or estimated *bigha*, and in two more a crop-rate assessment (*jinásúr bighoti*); in the remaining five, actual division of produce or a division by eye-estimate of the out-turn was the system in force. Cultivation was in most places—especially in the more jungly portions of the country, where the people have their huts with a small quantity of land round each dotted about—of a very uncertain character, the merest freak or accident frequently inducing them to abandon one spot and establish themselves in another. The proportion of cultivators who practice this nomadic kind of cultivation was 90 per cent. of the whole number, mostly Talabda Kolia, Vanjáraa (Brinjarries), Bhils, and Naikras. It was, of course, impossible to form an accurate estimate of the average rate per acre hitherto paid, the area in the occupancy of each individual having been only roughly guessed, and the amount he paid not being determined by that area, but by his supposed ability to pay. It was therefore necessary that the fixed assessment, to have any chance of success in gradually weaning the people from their rude habits to become permanent agriculturists, should be very moderate. Some idea of the general character of the inhabitants may be formed from a consideration of the descriptions of houses they occupied. These

were, inclusive of Godhra, in which the majority of the better class were to be found, 2,092 tiled, 2,257 inferior, and 8,650 wattle and daub huts. The only respect in which they were fairly well off was that of agricultural stock, which the large area of grazing ground available everywhere enabled them to keep without expense. All old records relating to the revenue of Godhra having been retained at Gwálor by Holkar's Government, statistics only of payments of plough-tax were available as a guide to the pitch of the new assessment. These showed that in ten years—from 1863-64 to 1872-73—the average Government demand had in the first five years been Rs. 35,666 with Rs. 285 of remissions, and in the second five, Rs. 44,317 with Rs. 232 remission. The increase of Rs. 8,651, or 24·2 per cent., proved that the country was advancing under British management. The general plan of grouping for maximum rates of dry-crop assessment adopted was to place Godhra itself and a few surrounding villages, with others on the west of the subdivision, as being most benefited by proximity to the markets of Gujarát, in the first class; they were twenty-five in number. The second group numbered forty-two, and lay to the east and north of the first, with three or four villages adjoining the Kálol subdivision in the south, and thus having an additional market in Kálol. For these a drop of twelve annas in the maximum rate was proposed, which brought it down to a rupee. The third group, of twenty-six villages, lay farther to the east, and, with the fourth, of the remaining fifty-five villages, were very jungly and inhabited by a wild, unsettled set of inhabitants. The two last groups were lowered by two annas each from the maximum of the second group. In carrying out these proposals it was found advisable, in consequence of the abject poverty of the people in some villages, to lower temporarily the rates from those of the classes in which they were situated. For this lowering no guarantee was to be given, but the low rates were to be continued until the local authorities were of opinion that the condition of the people had so improved as to enable them to bear the full group maximum. With one exception, in which the reduction was twelve annas, the maximum in these twenty-eight villages, which belonged to all the groups, was lowered from two to four annas. Rice rates were proposed, in addition to the

PANCH MAHALS.

dry-crop, at one rupee in the first group, twelve annas in the second, and eight annas in the third and fourth. There was a small quantity of *bhātā* (alluvial soil) on the bank of the Māhi, for which a maximum of Rs. 3 on a 24-anna classification was proposed.

The general result is seen in the following statement:—

Class.	Villages.	Past Realisations.		New Assessment.	Survey Rates. Increase per cent.	
		Ten Years' Average.	1872-73.		Over Ten Years' Average.	Over 1872-73.
1	21	15,783	14,039	14,691	—	4
2	42	6,863	5,812	7,061	3	22
3	26	3,097	3,162	4,192	35	33
4	55	14,282	16,143	17,253	21	7
	144	40,025	39,161	43,197	8	10

NOTE.—In the first class there was a decrease of 7 per cent. on ten years' average collections.

A large area of waste lands was included in the reserved forest area, and the assessment of the remaining arable portion was Rs. 6,542. When this Report was reviewed by Government, certain alterations in grouping and assessment were made, on the ground that the fall in the value of land, as it lay farther removed from what would most probably soon become the great trade route for the export of agricultural commodities from the Panch Mahals *via* Pāli on the Māhi river, towards the B. B. & C. I. Railway, had not been sufficiently appreciated. Godhra was reduced to a maximum of R. 1 8a., and only ten villages in the west retained in the first class at R. 1 12a.; and thirteen villages of the second were lowered to the third group. The temporary reduction of rates in certain villages proposed by the Superintendent was restricted to five years, on the ground that it did not tend to the investment of capital to leave the assessment uncertain. Fault was also found with the way in which waste land had been thrown into Survey fields, and orders were given that an examination should be held, and new subordinate numbers formed where the people desired it. It was also ordered that

where assessment had been increased by more than 20 per cent. by the inclusion of such waste to make up numbers, the increase should be gradually levied at the rate of one-fifth in successive years. With regard to grazing of cattle, it was directed that waste numbers should be sold annually by auction, and permanent residents should have the right of free grazing on all fields not sold, strangers paying a grazing tax according to rates to be submitted to and approved by Government. The settlement was guaranteed for thirty years.

KALOL.

In the Kálol subdivision an experimental settlement was introduced under the Revenue Commissioner's sanction in 1871, and the rates finally sanctioned in 1872. It lies to the south of Godhra, and partakes much more than that subdivision of the regular Gujarát characteristics of light-coloured soil, good cultivation, and to some extent an industrious Kunbi population. It contains sixty-eight villages, of which fifty-eight are *kháleá*, managed directly by Government officers. Out of the 55,059 acres of Government land in it, 24,705 were still lying waste. A large portion of this lay in the western villages, inhabited by Chárans, who possessed large herds of cattle for breeding purposes, and kept settlers off the land by threats of material damage to their crops, as well as the fear of the consequences of their curses. Chárans in Gujarát bear a semi-religious character, and in olden days possessed great influence. The density of population was far greater than in Godhra, being 251 to the square mile, and the Táluka possesses more signs than the latter of having once been in a much more prosperous condition, even before the rich country of Nadiád, in Kheda, had been reclaimed from the jungle. Whilst under charge of a Political Superintendent on behalf of Holkar, rough survey operations were carried out between 1855 and 1858, and, on rates of assessment proposed by Pancháyats of Kheda Patels, rates per *bigha* were introduced by Major Wallace in 1865-66 into sixteen villages, but no record is forthcoming of the principles on which

the settlement were based, or of its financial result. The rates adopted were on three classes of soil, as follows :—

	Awals, or 1st.	Dõem, or 2nd.	Sõem, or 3rd.
	R. a. p.	R. a. p.	R. a. p.
Dry crop .	1 12 0	1 1 6	0 10 6
Rice rates .	3 8 0	2 3 0	1 5 0

A higher rate of Rs. 8 12a. was levied on sugar-cane cultivation.

In twenty-seven villages settlements continued to be made by lump assessment on holdings (*uchak khâtâbandi*). The assessments were lowered or raised during short leases, on rough estimates of the ability of the people to pay. In three villages the division-of-produce system, and in one a crop-rate system prevailed. In the remaining eleven villages a plough-tax, up to a maximum of Rs. 15 a plough, was levied. In a few places a few cash cesses were also paid. No records of areas of cultivation were kept up to within five years of the settlement, and consequently only the collections for the seventeen years of British rule could be traced. These rose from Rs. 36,556 in 1853-54 to Rs. 52,105 in 1869-70, an increase of 42 per cent. In the last five years the recorded area of tillage was on an average 20,399 *bighas*, and the realisations Rs. 40,207, giving an average of R. 1 15a. 6p. per *bigha*, or R. 3 7a. 1p. per acre. The increase of revenue in those five years was equal to 25 per cent. For maximum rates of dry-crop assessment the subdivision was divided into five groups, the first containing the town of Kâlol alone. This has a fair market, and its maximum was fixed at Rs. 3. The second, of twenty-seven villages, is on the south of the subdivision and is most favourably situated for the market of Baroda: its maximum was R. 2½. With these was included the town of Vejalpur, in the north of the subdivision, which had a fair market in itself. The third group, which took in the whole of the north of the subdivision and a few villages to the east of the second, contained seventeen villages: its maximum was Rs. 2. The fourth group consisted of nine villages, to the east of the second and third groups, more or less wild and covered with jungle, which was even more the case in the fifth group of eight villages

in the extreme east and north-east. Rice water rates were fixed from a maximum of Rs. 9 to one of Rs. 4, according to the varying water-supply. For garden lands a rate of Rs. 24 per water-bag was fixed, to be levied in full only where there was sufficient land to admit of a rotation of crops. The general results of the revision was as follows:—

Group.	Villages.	Average of 5 Years' Collections.	Collections of 1870-71.	New Assessment.	Decrease per cent.
		Rs.	Rs.	Rs.	Rs.
1	1	1,811	1,845	2,004	—
2	27	19,292	20,188	25,865	—
3	17	13,074	15,701	18,740	—
4	9	5,006	6,257	6,080	—
5	8	1,535	2,546	2,151	—
8	62	40,218	49,037	54,840	9·17

In forwarding the proposals the Revenue Commissioner proposed certain modifications. The maximum of R. 1 in the fifth group was raised to Rs. 1½, and a few alterations were made in the grouping of the fourth by raising a few villages in it to the third group. These modifications were adopted by Government, and the permanence of the proposed rates for thirty years was guaranteed.

DOHAD.

A revision of the old system of assessment was first carried out experimentally in the Dohad subdivision in 1879, and sanctioned by Government for five years. It contained seventy-seven Government villages, which were grouped for maximum rates of dry-crop assessment in five classes. There were, in addition to these, thirty-six villages held on leases, and eight alienated. The first group contained only the town of Dohad, which has a rather important market, being to some extent an entrepôt for the trade between Gujarát and Málwa; the maximum dry-crop rate for Dohad was Rs. 2 an acre. The next group, of eighteen villages, for which a maximum rate of R. 1 12 s. was adopted, lay round Dohad within a few miles. The third consisted of twenty-

five villages at a greater distance from the market and on all sides of it, with a maximum of R. 1 8a. The fourth was a continuous group of twenty-three villages on the Alirájpur and Devgad Bária frontiers, from south-east to south-west of the subdivision, with a maximum of R. 1 4a. The reason assigned for lowering the rate in this group was the strange one that their position offered unprincipled neighbours facilities for cattle-lifting and crop-stealing, and that this insecurity of position could not be overlooked. Apart from this, however, the whole group lay at some distance from the market of Dohad. The fifth group consisted of ten villages on the west of and at no great distance from the market of Dohad, but was assessed at a low maximum rate of R. 1 on account of their elevation tending to make the tract of country in which they lay more arid and unsuited for cultivation.

The rice produced in the whole subdivision was stated to be very good in quality, and to be in great demand in Málwa and Márwár. The rates proposed for this class of cultivation were the soil rates of the several groups with Rs. 2 additional for water. The application of these rates gave an average of Rs. 2 2a. against one of a little over R. 1 for dry-crop. The small area of garden lands under wells, under twenty-four acres, was assessed at a maximum of Rs. 4 in the first group, lowered for each of the other groups by half a rupee. Land under *dhekuris* (water-bags filled from streams) was assessed in the same manner as rice lands, the average rate coming to about Rs. 2½.

Compared with the revenue under the existing revenue system, the result of the introduction of the new rates was as follows:—

Number of Villages.	Old System.		Survey System.		
	Ten Years' Average Assessment.	1876-77 Assessment.	Acres.	Assessment.	Increase per cent.
1	Rs. 2,401	Rs. 2,048	4,713	Rs. 6,899	Rs. 236½
13	13,227	13,788	13,618	19,987	45
23	20,302	19,760	34,565	27,224	37½
23	15,913	15,303	19,582	18,187	18½
10	3,805	3,711	8,104	4,982	33½
77	57,648	54,610	72,582	77,259	41½

The very large increase in the assessment of Dohad itself arose from the previous rates having been unreasonably low when compared with those in force in the remainder of the subdivision. The old system had been one of the loosest, the payments by the various ryots having been based solely on personal considerations, without reference to any particular description of land in each holding. Each holder was assessed by the hereditary District Officers, assisted by the Patels, at what he was supposed to be able to pay. Under an assessment calculated according to the actual area in each man's possession, therefore, an increase or decrease in payment afforded no proper criterion of the suitability of the new rates; and whether those adopted for Dohad were too high, or those of other villages were too low, was to be left to the test of time. Some glaring instances of inequality and unfairness of assessment were quoted by the Superintendent of Survey: the average rate of Dohad, which contained mostly skilled agriculturists, was Ga. 11p., whereas in two other villages entirely occupied by Bhils, the worst of cultivators, the averages were respectively 11a. 3p. and Rs. 1 3a. 6p. per acre. The old records of area were also entirely untrustworthy, the total acreage according to the Revenue accounts having been 36,729, and that according to the Survey 81,051.

On the expiration of the experimental settlement for five years, a revision of the rates was carried out in 1885. In the first of the five years the introduction of the new rates was postponed in consequence of the badness of the season and a fear that the proposed enhancement might drive the wilder castes of agriculturists away into neighbouring foreign states. In the next season, although it, too, was very unfavourable, the settlement was introduced, and the Superintendent reported that the people were so thoroughly satisfied with it that there was not a single refusal to accept the terms offered.

At the revision, with the exception of one village which was raised from the fifth to the fourth class, the original grouping, as well as the maximum rates for the several groups first proposed, were retained. As had been anticipated from the change from a very loose to an exact system of assessment, as well as from the unfavourable character of the first two seasons, the area

under cultivation had fallen off a good deal, viz. from 72,582 acres in 1876-77 to 57,331 in 1878-79, and the assessment from Rs. 77,252 to Rs. 62,293. The increase by the Survey assessment on the Government cultivated area was consequently only 39 in place of 41½ per cent. From 1880-81 somewhat of a reaction took place, and the area under cultivation and the revenue up to 1882-83 were as follows:—

	Arees.	Assessment. Rs.	Remis- sions. Rs.	For Col- lection. Rs.	Out- standing. Rs.
1880-81	47,625	54,915	496	54,419	1,300
1881-82	47,389	54,483	194	54,289	1,032
1882-83	47,154	54,255	185	54,070	811

Although the area under cultivation had not increased, the diminution was small, and both the remissions and outstanding balances had decreased. In this revision the system carried out elsewhere of abandoning all special rates on wells and water-lifts, and in their place substituting a slight extra assessment on lands believed to possess subsoil water advantages, was adopted. The area to which this system was applied being 47,154 acres, and the extra assessment Rs. 1,554, the increase comes to about 2½ per cent., the average extra rate being 1s. 3p. per acre on the land deemed irrigable. This increase is almost inappreciable, and will not influence cultivation. The knowledge that nothing more can be charged for land in consequence of improvements that may be made in it, because its capability of improvement has already been discounted, may possibly tend to encourage the investment of capital in such improvements more than the statutory guarantee that they will not be taxed. Where water existing in the subsoil is certain to be sweet, and the extra tax imposed is trifling, much harm cannot be done by its imposition; but it is to be hoped that such a hazardous experiment in the classification of soils as to trust to a classer's judgment in assigning extra relative value to a soil supposed to hold water-bearing strata within twenty-two feet of the surface, in tracts of country where the springs are just as likely to be brackish or salt as sweet, will only be tried after the most mature deliberation and experience. The rates were

guaranteed by Government for twenty in place of the usual thirty years of the Survey settlements.

The settlement of the *patábandi* villages will be noticed hereafter.

JHALOD.

Proposals for the revision of assessment in the Jhálod Mahál-kari's charge, subordinate to the subdivision of Dohad, were submitted by the Superintendent of Survey in 1881. It formed the northern portion of the latter, and was very similar to it in general character. The existing revenue system was equally rude with that of Dohad, each man's holding being assessed in the lump, whatever description of land it contained, without any fixed rates, and without consideration of the area it was supposed to contain. The average size of the *bigha* was evidently under-estimated by the Survey Department, as the land entered in the accounts at 19,022 acres, calculated according to the standard *bigha* of about one and seven-tenths to an acre, turned out on measurement to be 41,086 acres. There were ninety-nine villages in the Mahál, but thirteen of these being alienated and fourteen held on somewhat similar terms to the Mevási villages in the Ahmadábád Collectorate, only seventy-two directly managed Government villages remained for settlement. These were classed for maximum rates of dry-crop assessment, according to their distance from the market-towns of Jhálod and Limri, into four groups. The first consisted of the town of Jhálod with one village in its immediate neighbourhood, and had a maximum the same as the second group of villages in Dohad, viz. R. 1½. The other three groups, consisting respectively of eleven, twenty-four, and thirty-five villages, had maximum rates of R. 1½, R. 1¼, and R. 1, as the third, fourth, and fifth groups of Dohad. A great portion of the soil, estimated at a third, was capable of bearing two crops a year without irrigation. To meet this peculiarity, and give its fair proportionate value to the best soil, the classification scale of sixteen annas was extended to twenty-four, and it is clear that it

has only been in consequence of the great bulk of the cultivators being unskilled agriculturists, such as Bhlis, that the resources of this tract of country have not been developed to a greater extent than they have been. The position of the whole tract is, moreover, unfortunate for the encouragement of agriculture, as it is surrounded on three sides by foreign territory, in the transport of produce through which it is liable to the imposition of transit duties, the effect of which was estimated by the Superintendent to be equivalent to an extra assessment of a rupee an acre. For the 668 acres of rice cultivation it was proposed to double the soil rate of the locality where it was found, and for lands under wells and water-lifts from streams (*dhekuri*) the maximum dry-crop rate of the group in addition to the dry-crop rate of the soil. The averages derived from these rates were 13a. 10p. in dry-crop lands, Rs. 1 12a. 10p. in rice, and Rs. 2 6a. in garden cultivation. The two latter were evidently disproportionately low when compared with the first, but the intention was deliberate, with a view to encourage the better kinds of cultivation in a backward country. The increase over ten years' average revenue was only 13·8.

Before the rates were introduced under the sanction of Government, doubts had arisen as to the correctness of the classification of soils, which was accordingly thoroughly scrutinized and revised. Two villages were entirely re-classified, and four partially so; while in four others an adjustment was found practicable on the results of the tests that had been taken. The rates were sanctioned for only two years, with a view to the guarantee expiring at the same time as that of the main body of the subdivision. Before the expiration of the two years for which the settlement had been sanctioned, it had been determined to abandon, as in Dohad, all special assessments on lands under wells and water-lifts from streams, and impose on all lands adjudged to be irrigable from water to be found within twenty-two feet of the surface what would make up for the loss in revenue from such abandonment. This was accordingly done. It was not found necessary to alter the grouping of villages for dry-crop assessment, or the maximum rates temporarily sanctioned. The revenue had fluctuated so much that, whereas the revenue under the settlement

exceeded that of 1879-80 by 30½, it was only 3·47 above that of 1880-81.

The general result, as compared with the revenue of 1881-82, and the average of ten years, was as follows:—

No. of Villages.	Average of 10 yrs.	Revenue of 1881-2.	Survey Assessment.				Increase over	
			Dry Crop.	Rice.	Garden.	Total.	10 Yrs.	1881-2.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
2	2,910	2,521	3,157	352	94	3,603	23·6	42·9
11	7 330	6,547	8,022	745	506	9,273	26·5	41·6
24	10,994	9,285	11,479	377	396	12,252	11·4	31·9
35	8,250	6,452	8,686	156	226	9,068	9·9	40·5
Total	29,484	24,805	31,344	1,630	1,222	34,196	15·9	37·8

Both in Dohad and Jhálod up to ¼ acre of *váda* or *gharkáchá* (inclosure or homestead) has been allowed to be retained rent-free, and in other villages up to one acre, the remainder of such inclosures being assessed. All cesses falling on the cultivating classes have been abolished, as being absorbed in the assessment on the land. In giving sanction to the proposed rates, which were guaranteed for twenty years in order to bring the guaranteed period to an end at about the same time in the whole of the Panch Maháls Collectorate, Government entered into an elaborate defence of their policy of abandoning all extra assessment on land irrigated from wells and water-lifts, and imposing the amount thus abandoned on the lands adjudged to be irrigable from springs supposed to exist within about twenty-two feet of the surface. The remarks that have been made on this subject in the review of the revision of assessment in Dohad are applicable here also. It may be noticed also that, whereas the resulting extra assessment on the supposed irrigable land will prevent a loss of revenue, and the extra rate will fall lightly where natural facilities for irrigation have been made but little use of, as in these two tracts of country, the case may be very different in districts where irrigation has been largely developed. The extra assessment in such tracts may be found to be considerable, and this affords another reason for the proposed policy being only

adopted with caution and after due inquiry and deliberation. There is, moreover, somewhat of a suspicion of undue leaning in favour of capital invested in the improvement of lands by the construction of wells, at however remote a period, and under whatever circumstances (such as their having been often made out of the actual revenues of the State when villages had been let out on lease), when similar expenditure incurred in the embankment of rice lands, often at considerable expense, has not been so leniently dealt with.

HÁLOL.

In 1880 proposals were submitted for the revision of assessment of the Hálol subdivision of the Panch Maháls. It contained altogether 166 villages, of which fifteen were held on service and other alienated tenures; 77 were Tálukdári (somewhat similar to the *mevsi* estates of Ahmadábád and the *udhar jamabandi* of Kheda), one *dubhigi* or *sharikati* (shared with Government), and 78 *rayatwari* under the direct management of Government officers. The settlement applied only to this last class. The greater portion of the inhabitants are poor cultivators, such as Bhíls, Kolis and Naikras, who have failed to develop the natural resources of the country. It is scantily populated, and although the soil on the whole was fertile, water procurable for irrigation at no depth from the surface, and the B. B. & C. I. Railway, with Baroda and other markets within reasonable distance, the Superintendent did not hold out any hope of rapid improvement under better system of revenue management than that prevailing, in consequence of the unthrifty and uncivilized character of the mass of the inhabitants. He predicted that whatever inducements for improvement or advantages might be offered to them, they would remain poor to the end of the chapter, and would receive the usual quantity of seed for sowing from the Wánia money-lender, returning him the major portion of the field produce, and he alone would profit by any low assessment that might be imposed on the land. He

accordingly carried out his opinions to their logical consequence, by proposing higher rates than in the more forward portions of the Collectorate; but these proposals not meeting with the approval of the Collector and Survey Commissioner, Government finally sanctioned rates as detailed below.

The revenue system in force in the seventy-three villages was originally that of a plough-tax (*halbandi*), which varied from one to twenty rupees on the plough according to the cultivator's ability to pay. A plough of land was considered to be 20 *bighas*, or about 11½ acres. The maximum rate per acre might thus be estimated at R. 1 12a. In 1871 this system was superseded by a so-called *bighoti*, or cash-rate per *bigha*. This was, however, merely carried out by dividing the revenue of each village by its estimated area to obtain a village assessment rate, which, as far as can be ascertained from the returns available, was only levied in the case of new land being taken up for cultivation. The rates in different villages were naturally very unequal, varying from one-third of an anna per acre in a village inhabited by Naikras to Rs. 2 4a. 8p. in Hálol itself, many of the cultivators of which were skilled agriculturists. *Uparvadia* cultivators, living in one village and cultivating in another, paid crop-rates of six annas per *bigha* (four-sevenths of an acre) for *kodrá*, and a rupee for other descriptions of produce. Sugar-cane in Hálol paid at the rate of Rs. 30 10a., and other villages; at the rate of Rs. 21; and many fine wells were lying unused in consequence of the heaviness of the tax. The area of cultivation had risen from 9,624 acres in 1869-70 to 11,867 in 1878-79, and the revenue from Rs. 14,238 to Rs. 17,448; the former, however, cannot be at all relied on as accurate.

In proposing maximum rates of dry-crop assessment, the Superintendent—guided, as stated by him, by market facilities and climatic differences (N.B.—Such differences in this small tract of country are inappreciable), and in a less degree by fixity of holdings and the preponderance of cultivators of the unsettled tribes, freedom from jungle, and other peculiarities—arranged the subdivision in five groups, the first of which consisted only of Hálol itself and three hamlets subordinate to it. The second

consisted of eighteen villages, some near the market of Hálol, some in the north and adjacent to villages of Kálol, which they resembled, and the rest in the south-west, which were not so unhealthy as most parts of the subdivision, and were about eighteen miles distant from the market of Baroda. The third group had twenty villages, which were said to be of medium quality, and excluded all jungle villages and those in which the Bhl and Naikra elements prevailed; the malarious influence of the hills and low jungle was said also not to affect these villages. The fourth group contained twenty-three villages, mostly to the east and south-east of Chámpáner, in a more or less malarious tract, and mostly inhabited by Kolis, Bhlis, and Naikras of unsettled and not industrious habits. It was generally covered with forest and scrub jungle. The last group was one of ten villages, in the same direction from Chámpáner as those of the fourth group, and with all the characteristics of that group intensified. This grouping, with the exception of the first and second, is, in fact, one in accordance with the prevailing castes and habits of the inhabitants, and in the circumstances of the country could perhaps hardly be avoided. The distinction drawn between the fourth and fifth groups was objected to by the Collector as not existing in reality. The grouping sanctioned by Government was for Hálol alone to form the first, and its hamlets the second class, and for the villages placed by the Superintendent in his second, third, fourth, and fifth groups to form the third, fourth, fifth, and sixth groups. The maximum rates approved of were two rupees for the first, and four annas for each group in descending order down to twelve annas for the lowest. For garden lands the maximum rates approved of were respectively Rs. 6, 5, 4, 3½, 2½, and 1½, and for rice and water-lift garden lands double the dry-crop rate in each group, as proposed by the Superintendent. With a view to modifications that might be found advisable after experience of the working of the new system, a guarantee for the permanency of the rates for only five years was accorded. The result of the revision as a whole was as follows, the details for the different descriptions of land not being given in the Superintendent's final Report:—

No. of Villages according to Class.	10 Years' Average Collections.	Revenue of 1880-81.	Under the Survey System.	Per-centage Increase and Decrease as compared with	
				10 Years' Average.	1880-81.
	Rs.	Rs.	Rs.		
1	2,015	2,398	2,463	+22 $\frac{1}{4}$	+ 2 $\frac{3}{4}$
3	423	462	588	+13	+ 5
18	8,340	8,248	7,204	-13 $\frac{1}{2}$	-12 $\frac{1}{2}$
20	4,163	4,030	4,584	+10 $\frac{1}{4}$	+13 $\frac{3}{4}$
23	1,035	684	1,029	-	+50 $\frac{1}{4}$
8	747	324	330	-29 $\frac{3}{4}$	+ 6 $\frac{1}{4}$
Total	16,723	16,146	16,198	- 3	+ $\frac{1}{4}$

In giving a final sanction to the rates after their introduction, Government directed that no separate rate should be levied on the *koss*, or water-bag, of unbuilt wells, but that merely the highest dry-crop rate should be imposed. It was not stated whether this rate should be temporary when such a well was made use of, or permanently imposed on the land in which such a well had once been used, an omission likely to lead to future correspondence and confusion. The rates on the whole were acknowledged to be very moderate.

On the expiration of the five years' guarantee the villages came under revision again in 1885. No alteration of the maximum rates of dry-crop assessment or of the grouping of villages originally adopted was proposed, the only alteration being, as in Dohad and Jhálod, that of abandoning all extra assessment on lands watered from wells, whether temporary or permanent, and imposing in its place a slight extra assessment on lands adjudged to be irrigable with water procurable within a short distance of the surface. Such land was classified according to the depth at which water was adjudged to be procurable. (N.B.—The word "adjudged" is used advisedly, as borings cannot be made in every field, and the depth of the water-bearing strata may vary.) Where this depth was over thirty-five feet, no extra assessment was to be imposed. A depth of under twenty feet was considered

first class, one of from twenty to thirty second class, and one of from thirty to thirty-five third class, and lower assessment was proposed as the depth increased. The area under water-lifts from streams only amounted to sixteen and a half acres, and the Special Settlement was extended to such lands as well. The extra assessment arising from this proposed change of system amounted to only Rs. 237, or about $1\frac{1}{3}$ per cent. on Government land in occupation. The proposals were sanctioned by Government, and a guarantee for the permanence of the rates given for twenty years, as in Dohad and Jhálod. Extensive tracts have been reserved in this Collectorate for forest reserves.

BHARUCH (BROACH).

THE Collectorate of Bharuch, a name probably derived from Bhagu Rishi, a sage of ancient days to whom legend imputes a change in the course of the river Nerbuddah near the town, lies on the east side of the Gulf of Cambay, between $21^{\circ} 25' 45''$ and $22^{\circ} 15' 16''$ N. lat., and $72^{\circ} 34' 19''$ and $73^{\circ} 12' 15''$ E. long. Its area is about 1,458 square miles, with a population of 240 to the square mile. It is bounded on the north by the river Máhi, on the west by the Gulf of Cambay, on the east and partly on the south by Gaikvári and Rájpipla territory. In the remaining portion of its southern boundary lies the Táluka of Olpád, under Surat. It consists of five Tálukas, viz. Jambúsar, Amód, Vágrá (including Dhej), Bharuch, and Ankleshvar (including Hánsot). It is celebrated for its cotton, well known in the English market, and has about 95 per cent. of its total area under cultivation.

In consequence of certain claims of the Naváb of Surat on the Customs Revenue of the port of Bharuch, and of the English on account of extra duty levied on cloth, the Naváb of the latter place was called on to pay $1\frac{1}{2}$ lakh of rupees. An attempt made in 1771 to levy the claim by force of arms from the town having failed, a combined military and naval force formally assaulted and took it by storm on the 18th November, 1772, the commanding officer, General Wedderburn, whose tomb stands on the ramparts of the fort, being killed on the occasion. From this event the territorial connection of the English with the district dates. The territory attached to it at the time comprised

what are now the subdivisions of Bharuch and Vágrá, and was estimated to yield rather over five lakhs of annual revenue, of which 40 per cent. only went to the English and 60 per cent. to the Gáikvar. In various ways the remainder of what now constitutes the Collectorate, viz. the subdivisions of Jambúsar and Amod on the north of the Nerbudda, and Ankleshvar and Hánsot on the south, was soon afterwards acquired, and the whole continued under British management until 1783, when it was ceded to Máhádáji Sindia, "in testimony of the sense entertained of the conduct manifested by him to the British army at Vadgám in 1779, and of his humane treatment and release of the English gentlemen who had been hostages."

During the next nineteen years, up to the date of the treaty of Bassain on the 31st December 1802, Bharuch remained under Mahratta rule. Operations against Sindia's possessions in Gujarrát being undertaken in consequence of that treaty, Bharuch was again stormed and captured in 1803. The subdivisions of Bharuch and Vágrá thus came back under British rule, and with Ankleshvar and Hánsot, ceded by the treaty, transferred from Surat in 1805, formed the charge of Bharuch till 1817, when it reached its present dimensions in consequence of the Treaty of Poona concluded with the Peshva.

During the first eleven years of British administration, viz. from 1772 to 1783, the system of collecting the land revenue is thus described in Forbes's "Oriental Memoirs":—"In each village the headman distributes plots of land among the cultivators, who, with their own cattle and implements of husbandry, cultivate the soil at their own cost. At the close of the harvest the whole of the crops are brought into the village farmyard, where is the common threshing-floor and pits for storing cotton. Here the produce is examined by the Revenue Superintendent, or Desai, who fixes the amount due to Government. The head of the village then takes from the stores of the different peasants the share required to meet the Government demand, and to pay for the allowances to the police and other servants of the village." Under this vague description it is possible to recognise no more than that the revenue settlement was annually made with the Patels (headmen) of villages on a general estimate of the out-turn

of their crops, and that from each cultivator was levied a share of his actual produce sufficient to meet the Government demand fixed by the Desái. That the headman, as if there were only one Patel or sharer in each village, should have annually distributed plots of land among the cultivators, is so contrary to the universal custom of the country, according to which each cultivator clings to the lands his forefathers have tilled before him, that we may look on the entire description as untrustworthy, and written under an entire misconception of the information that may have been given to its author. Two things only appear to be established from the writings that have come down to us from this period, viz. that the hereditary district officers, as in Surat, by lending money to the ryots at exorbitant rates of interest, and by other means, acquired a pernicious influence in the administration of the revenue, and that the ryots were also much oppressed by the exactions of blackmail by the Grássias, mention of whom has already been made in the introductory chapter.

When the charge of the district was resumed, in 1803, it was at first placed under the management of the Resident at Baroda. An offer by the Desái and Muzmoondar (hereditary district accountant) to farm the whole revenue for Rs. 9,40,000, minus Rs. 1,75,000 for expenses of management, was rejected, information having been given that in 1802-3 the district had yielded Sindia Rs. 11,50,000. A native Agent was sent to manage it under the superintendence of the Assistant Resident, Mr. Steadman. In 1805 the latter was appointed Collector, and Mr. Prendergast Judge and Magistrate, and the two jointly Commissioners for the settlement of the Revenue. They reported the revenues as follows:—

	Land Revenue.	Cesses.	Total.
	Rs.	Rs.	Rs.
1803-4 . .	6,32,250	1,25,135	8,17,385
1804-5 . .	6,75,318	2,21,735	8,97,053

A sum of Rs. 2,53,556 of miscellaneous receipts brought the total to Rs. 11,50,609, almost the exact sum reported by the informer as having been realised by Sindia. The subdivisions of Ankleshvar and Hánsot, transferred from Surat in the latter year, yielded as follows:—

	1804-5. Rs.	1805-6. Rs.
Ankleshvar	1,47,491	1,57,596
Hānsot	1,21,590	1,30,880
	<u>2,69,081</u>	<u>2,88,476</u>

In the following year (1805-6), although the land revenue and cesses were settled at Rs. 8,82,363, the total, in consequence of the abolition of certain obnoxious cesses, decreased to Rs. 11,26,997. In 1808-9 it was Rs. 12,74,010. This rapid and constant rate of increase was reported to be due to the abuses of the farming system having been done away with since the appointment of the two Commissioners, and contrasted favourably with the average of Rs. 8,35,105 arrived at during Sindia's administration.

On the 31st May 1807* the Commissioners reported on the general revenue system of Bharuch substantially to the same effect as the description in Forbes's "Oriental Memoirs" quoted above.

The abolition of the farming system in 1805 necessitated an annual settlement of the revenue of each village. The method adopted for this differed from that in every other Collectorate, and must evidently have tended to maintain, on the one hand, the influence of the hereditary district officers, which on the other had been diminished by the check placed upon their usurious dealings with the ryots. Advances of money for agricultural purposes, made at reasonable rates of interest by the Collector, interfered with the thriving business done by this class up to this time, while their profits were further diminished by the legal rate of interest—hitherto often as high as 45 per cent.—being fixed at 12. The settlement was thus made:—

When the rice-crops were approaching ripeness in October and November, a statement of the area in cultivation under each kind of crop in each village was prepared by the village accountant. This was either handed over to the hereditary district officers, as a basis on which to frame an estimate of the produce of the village, or they themselves were directed to form an independent

* Diary, 2nd February 1808, folio 363.

estimate. On this estimate the value of the State share of the produce was as a rule taken at one-half, and the Collector, taking into account the current prices and the average rents the village had hitherto paid, fixed what was called the *dāngar tāvji* or rice-crop instalment of the rental for the year. This appears to have amounted in the different subdivisions to from one-sixth to one-half of the total demand for the year, which was finally settled at the regular *jamābandi* (annual settlement) after similar inquiries in the spring.

The annual settlement once made, all subsidiary arrangements were left to the heads of villages. In a *bhāgdāri* (coparcenary) village the quota of payment falling on each share was the fractional amount—two or four or six annas in the rupee (two-sixteenths, four-sixteenths, or six-sixteenths)—of the revenue of the whole village represented by the particular principal share or sub-share (*mukh* or *petā bhāg*). Arrangements with the individual tenants within each share were decided as a matter of contract between them and their landlords, and in villages not held in partnership the payments of tenants were settled by the headmen, any unfairness on the part of the latter in apportionment being checked by the liability of their decisions to appeal to the Collector. All crops when reaped were bound to be brought into the common village grain-store (*khali*), and were allowed to be removed when satisfactory arrangements were made to meet the revenue instalments as they fell due.

It requires no lengthy arguments to prove how defective this system was. Estimates of the value of standing crops made by the most trustworthy appraisers must always be liable to considerable errors, and, when made by native officers apt to be swayed by interested or corrupt motives to favour particular villages or individual tenants more than others, formed a most unreliable basis for assessment, which no vigilance on the part of the Collector, and no guidance he could avail himself of in the incidence of previous payments, could really counteract. Such was the method of assessment, however, carried out in the Collectorate till about the year 1837, and it is a matter of surprise how the district flourished as it did notwithstanding the existence of such an impediment to progress.

In his Minute on the Collectorate, dated 15th August 1821, the system is generally described by the Hon. Mountstuart Elphinstone as follows:—The assessment was made entirely by villages, without inquiry into the circumstances of individuals. One of the hereditary district officers was sent to inspect the crops of each harvest, and make out a statement of the quantity of land cultivated by each ryot under each kind of produce, with a calculation of the quantity in each field. The produce of each village was arrived at by adding together that of the several fields. The Collector compared this with that of the previous year, as well as the prices of the two years, and, if he found the crops more abundant or the prices higher, added on a proportionate sum, or *vice versa*, on the principle of taking one-half for the State and leaving one-half to the cultivator. These calculations were made at the second harvest. A considerable part of the first harvest consisted of rice-crops, in making the estimate for which a rate Rs. 20 per *bigha* was usually charged, whatever might be the state of the crops. This was double the rate of assessment of the best rice lands, and a deduction to the amount of half the sum collected on this account was made from the Government claim on the second harvest, the only object appearing to be to secure a large portion of the revenue in the early part of the year. The first payment was called the *dāngar lāuji*. If the Patel consented to the sum fixed by the Collector, the settlement was completed, and the Collector did not interfere in the assessment of the ryots, although their names were written in the estimates to mark each man's fields. The Patel fixed what each had to pay, being guided by the previous year's payments, to which a proportional amount was added if the general rental of the village was increased. The collections were made by the Tulātee, who collected all crops in the village *khalī*, where they remained till the revenue was paid. *Khātībāndī* (lump payments on holdings) and *gunwāl* (leases) were also in use, as in Kaira, but *vets* (a mixture of highly and lowly assessed lands in the same holding) was confined to a few villages. Both were liable to increase if the assessment was generally increased, but not otherwise. In *bhāgdāri* (co-shared) villages the increase was first apportioned on the shares; then by the *Bhāgdārs* on their

sub-sharers, and by these on the ryots. At one time there appeared to have been a general rate of Rs. 4 the *bigha*, except on sandy soil near the sea, which paid Rs. 3½, and *bhátá* (alluvial) lands, which were assessed at from Rs. 6 to Rs. 12, but these rates were no longer acted on. Rates on the *bigha* varied according to crops, their condition and market prices, and were liable to frequent change. At that time more than three-fourths of the villages in the subdivisions of Bharuch, Jambúsar, and Ámod were held on the Bhágdári tenure, the majority of the cultivators being inferior Pátidars (sub-sharers). After going on to describe the evils of the system, Mr. Elphinstone wrote that he would not propose a general lightening of assessment, but would instruct the Collector to report where it was too high, too low, or unequal. In such cases revision might be carried out by Pancháyats (juries of experts), superintended by an officer of Government, whose rates should be liable to revision by other Pancháyats. Wherever the assessment appeared tolerably reasonable and equally levied, nothing should be done except to record details, so that although the annual settlements should still be entered into with the Patels, the Collector or Civil Court might be able to redress grievances, as the rights of each ryot would be known and fixed. These remarks applied to *senja* (non-shared) villages. In *bhágdári* villages it would be difficult to introduce the proposed equality of assessment, but as it was usual for flourishing Bhágdárs to take on themselves some of the burdens of their poorer brethren, and there were instances of Government making a new division to equalize the assessment, something might be done even in them. Ryots, it was recommended, should be allowed to remove their crops on providing the security of respectable people of their own class.

In a despatch dated 4th May, 1825, the Court of Directors approved of Mr. Elphinstone's proposals, and trusted attention would be directed to the reforms indicated by him.

With a view to provide the Collector with reliable data on which to fix the assessments as independently as possible of the district officers, it was determined in 1811 to make a survey of the subdivisions of Bharuch, Ankleshvar and Hánsot. It was subsequently extended to Jambúsar, Ámod and Dhej. It was carried

out under the superintendence of Colonel Monier Williams, and was concluded in 1820. It had for its objects to fix a standard land measure, to ascertain the area of land in each village, and of this how much was cultivated, how much arable and unarable waste, how much of the arable was fitted for dry-crop, garden, and rice cultivation respectively, and what area was in the year of survey under grain, tobacco, cotton, sugar-cane, &c. It was to fix the village boundaries, but no attempt was to be made to divide the land into fields or to classify and assess those fields, it being better to leave details of this description, in the opinion of the authorities of those days, in the hands of the village communities, who were the best judges of the advantages and disadvantages under which each man tilled his lands. It had, however, to inquire into the titles under which land claiming to be held wholly or partially exempt from the payment of land revenue under various names and tenures was enjoyed. In this respect, especially, it carried out a very useful work, and before its close brought under partial or full assessment a considerable area, thenceforward yielding a large revenue. It would be a question more of antiquarian than of practical interest to follow in detail the correspondence that took place in the earlier days of British rule with reference to the right of the State to tax or increase existing taxation on the lands held by Grásias in Bharuch and other parts of Gujarát. A good deal of confusion was imported into the question by all land held by Rajpoots, or so-called Grásias, being considered in the same light, whereas the origin of what was the property of semi-independent chiefs in Káthiá-vád, of Vántá, land divided off to old proprietors of villages by the Mahomedans on assuming direct revenue management of the country, and of Grás, land extorted from villages in Bharuch and Surat as blackmail by Rajpoots from the Rájpiplá and other neighbouring territories, was entirely distinct. The manner in which land in the first of these categories has been dealt with has been noticed in the history of the Ahmadábád Collectorate. Of the other two descriptions of lands some was partially or entirely resumed under the operation of the Survey in Bharuch, and both were finally included among the tenures which were to exempt their holders from the payment of public revenue, and

came under the provisions of the Summary Settlement described under the Surat Collectorate.

In 1823 the Collector of Bharuch reported that all assessments imposed by the Survey on alienated lands had been realised (N.B.—This was found subsequently not to have been entirely the case, owing, probably, to the connivance of the officials), and no evil results had ensued except from the occasional turbulence of some of the Grássias. The principles on which *vechán* (sold) and *valatdáníá* lands (mortgage with possession pending payment of a certain sum) were dealt with was the payment of half the value of three years' produce calculated at Rs. $3\frac{1}{2}$ the *bigha*, the land generally having been sold or transferred at Rs. 9 or 10, the *bigha*. *Geraniá* (mortgaged) lands were redeemed by payment of the sum for which they had been mortgaged, with 9 per cent. interest after deduction of the income intermediately derived from them. *Pasúitá* lands, where held for service, were continued, and where no service either to the State or village communities was rendered, resumed and assessed to the public revenue. *Háriá* (curiously enough misprinted as *Báriá* in the Appendix to Reg. XVII. 1827), or bone-land, i.e. land given as compensation to relatives of a man who had lost his life in defending the village rights, was generally resumed. Arrangements were made, as in Surat, that *torá-grás* (blackmail in cash) claimed by Grássias from villages, should be paid from the Government treasury, instead of being allowed to be levied from the villages directly by them. The levy of half a rupee per *bigha* from all *vántá* (divided) land as a quit-rent was also proposed.

In 1817 orders were issued by the Court of Directors that, in place of the ryots' contributions being regulated by the computed value of a certain proportion of each crop, the average quantity of the produce for a term of years should be made the standard of the share of the State, and the money value of this the maximum Government demand per *bigha*. It was also ordered that any increase in the value of the ryots' produce, from whatever cause arising, should be considered their exclusive property, subject to the repayment of money advanced for digging wells or other improvements. All Collectors were directed to act upon these instructions, which marked the inauguration of that just and

liberal policy which now encourages the investment of capital in, and the application of labour to, the soil for the sole benefit of the investor, and is daily increasing the marketable value of land in the Bombay Presidency.

In the same year Bharuch was separated from Surat and made a Collectorate by itself, and both Collectors were relieved of the superintendence of the department of Customs by the appointment of a separate Collector of Customs for Gujarát.

In the following year (1818), the revenue survey of the subdivisions of Ankleshvar and Hánsot was reported to have been completed. An attempt to introduce settlements of ryots' holdings for five years on the average payments of the preceding ten failed, in consequence of the ryots not agreeing to them. The rate of two rupees the *bigha*, which had been fixed for *bír* (grass preserve) lands in the Collectorate at Col. Monier Williams's suggestion, was lowered to R. 1 4a. and R. 1. All *pasárá* land held by non-residents was ordered to be resumed, unless the holders returned to their villages and entered on the performance of their customary services.

In 1819, on a proposal made by one of the Collectors to force the holders of alienated land to contribute to the revenue by applying for permission to reap and remove their crops, on a stamped paper of the value of four annas, being circulated for opinion, some of the officers consulted favoured and others objected to the plan; whilst the Commissioner in the Deccan, Mr. Chaplin, suggested the imposition of a succession-duty instead. Government finally ordered that, where the measure would not cause discontent, and the lands were not protected by the provisions of Reg. III. of 1814 (prescribing rules for inquiry into the titles to alienated lands), a direct assessment might be imposed on them in place of the proposed indirect tax.

In 1821 the gradual abolition of the system of retaining crops in the village crop-store until the revenue was paid was directed, with a view to save the expense of watchera, as well as to relieve the ryots of unnecessary and vexatious restrictions; and in order to encourage the building of houses and the sinking of wells by the people, the following rules were passed:—The builder of a stone, or mud, or brick-walled house, or of one with a tiled roof,

to have one *bigha* of land rent-free for twenty-five years. Except in the Surat Collectorate, and then only to a limited extent, this permission never seems to have been taken advantage of. For a masonry-lined well two *bighas* were to be granted for the same period; if it cost more than Rs. 400, the area of the land was to be increased to three *bighas*; and for a well costing over Rs. 800 four *bighas* were to be given. Any work constructed at a greater cost than this was to be referred to Government for the decision of the amount of land to be given, and on the expiration of the free time the land was not to be subject to a higher rate of assessment than other land in the neighbourhood.

This, which met with the approval of the Court of Directors, was a further development of the liberal policy described above, by which it was proposed to attract capital to the soil. This liberality does not appear to have met with the approval of all the Revenue officers of the day, however, for the Collector of Kaira was of opinion that after the man who built a well had enjoyed it for a sufficient time to recoup him its cost, the assessment on his land should be increased so as to leave half the value of his produce to him and half to the State.

In the season of 1821-22 a large decrease in the area of cultivation occurred in consequence of the failure of the monsoon, and the revenue of the Collectorate fell nearly $4\frac{1}{2}$ lakhs. It was brought to notice by the Collector that what was supposed to be a favourable revision of assessment had been introduced some years previously in Ankleshvar, but had had to be realised by the sale of agricultural stock. The grant of leases for three or four years was suggested with a view to improve the condition of the people.

In the Bharuch subdivision also a large area of land appears to have been thrown out of cultivation, partly in consequence of the lawless habits of the Grássias, and partly from the injudicious enforcement of the claims of the Commercial Resident for repayment of advances made to the ryots in 1820-21 and 1821-22, the pressure on the latter having been greatly increased by the raising of the assessment in the former year by Rs. 71,638 above the highest sum levied in the previous fifteen years. The orders of Government on this were that the Grássias' disturbances were

to be suppressed, if necessary, by the sequestration of the property of those who might withdraw to foreign territory or send threatening letters; that the forbearance in recovering the claims on account of advances injudiciously made by the Native Agent proposed by the Assistant Collector should be observed; and that the injudicious zeal of the Assistant in putting on an extra assessment when he was only temporarily in charge of the Collectorate was reprehensible.

The question of the advisability of fixed rates of assessment in place of the existing system of making annual settlements was alluded to in the same letter, after giving a description of Colonel Monier Williams's Survey of Bharuch. That officer, with a view to show that the latter system was not incompatible with progress, pointed out that the revenue of the Collectorate, which in 1803 had been Rs. 8,38,138, had risen in 1820-21 to Rs. 12,59,575, and had never fallen below 10 lakhs since 1812-13. Hānsot, too, he remarked, which had been ceded as of the value of Rs. 88,000, now yielded Rs. 1,99,475, and Ankleshvar, ceded at Rs. 78,000, was now worth Rs. 2,29,833, the collections in both cases being made with ease and economy, as the following figures proved:—

	Ra.
The Bharuch subdivision from 1803-4 to 1820-21	
was assessed at	1,82,81,526
The Hānsot subdivision for 16 years was assessed at	21,59,528
The Ankleshvar subdivision for 16 years was assessed at	<u>26,45,290</u>
Total demands	2,30,86,344
Collections	<u>2,29,93,221</u>
Left outstanding	93,123

No change in the general system of assessing the land revenue of the Collectorate was made until 1828, although no doubt the measurement of the land by Colonel Monier Williams's Survey had in the meanwhile furnished the Collector with more accurate data for fixing it than he had previously been in possession of. In a Report on the Settlement of 1828-29, by the Collector, there is an account of the system in force at that time substantially the same as that already described as existing in 1817. There were

no proper village accounts, and village accountants were only employed for eight months in the year. The few accounts they kept were looked at only when they were required to substantiate or refute any complaint that might be made. The village revenue peons (*havalddár* and *mál-japti*) had only small cash pay, but received perquisites from the ryots' grain heaps. In the village expenses account (*gám-kharch*) entries were permitted for provisions supplied to religious mendicants, Government servants, Grássias and their Telotes or agents, and miscellaneous expenses, such as donations to the same classes on leaving the village, apparently without any check or supervision. In 1828 substantial reform was inaugurated by the appointment of men brought down from Northern Gujarát as village accountants on annual cash salaries, and of village revenue peons similarly paid and forbidden to levy anything from the ryots. The hereditary district officers and Grássias, who had been in the habit of levying their dues direct from the villagers, were paid from the Treasury, and thus deprived of their opportunities for harassing the ryots. All village records were examined under the superintendence of the hereditary district officers, to ascertain the custom of each village. Where there was no register of land, or where accounts were withheld, a survey was made of them. The village accountants were directed to prepare regularly numbered field registers (*numbervár khardá*), and open an account with each ryot showing the demands of Government against him, and his payments: other accounts were ordered to be prepared containing all village information useful for revenue purposes. This was carried out in spite of the efforts made by interested parties to thwart the inquiries. Reform was introduced in the *dángar távji* assessment, already described, by the settlement being made according to area of cultivation instead of the old estimates of crop produce; and although some inequality of assessment still remained in consequence of the uncertain value of produce, the ryots were well satisfied with the change. The allowance for village expenses (*gám-kharch*) was also settled, only really necessary items being contained, and *mál-japtis* (peons to watch grain-stores) gradually got rid of by the abolition of the *khali* system of storing crops till the revenue was paid, as the ryots began to understand the

advantage to themselves of being able to sell their crops in the best market to suit their own convenience. Lastly, *cowls* (agreements for terms of years under conditions as to moderate rent) were granted in such terms as not to lead to the abandonment of old for new cultivation.

To show what extraordinary notions were still prevalent, even among European officers, as to the most advisable system of revenue management to be adopted, a proposal made in all solemnity by certain gentlemen who were about this time engaged as a Committee to revise the laws of the Presidency may be quoted. This was that at the commencement of every cultivating season the Collectors should be authorized to take their lands from the previous occupants (in the case of a farm for a period of years having been granted, at the termination of the lease), and give them to any person who would pay a higher rent for them. This need not always be done, they said, but the Collectors should have the option of making use of the power, not to encourage speculators, but as a perfectly fair resource in case of unreasonable proposals on the part of the cultivators. If a decision as to the assessment was not come to before cultivation commenced, and a dispute arose between the Collector and the ryot, arbitration might be resorted to. This did not succeed. The Committee had no great hope that it would. To avoid arbitrary decision the disputed revenue should be farmed out to the highest bidder. Arbitrary assessment, it was admitted, was an evil, but there were such things as necessary evils, and this outline of a system for determining what a fair assessment would be was put forward for the purpose of eliciting information which might decide whether, in the present case, the evil was necessary or not.

The Government of the day wisely rejected the proposal, as it would have left the ryot no escape from undue assessment but by the abandonment of his land.

The season of 1824-25 seems to have been very unfavourable, as nearly one-third of the land revenue of Bharuch had to be remitted. A good deal of correspondence took place at this period on the subject of village leases, which the Governor

proposed, in a Minute dated 7th September 1825, should be granted freely to heads of villages, with all due safeguards to protect the ryots against over-exaction. After reference for opinion to several of the Collectors, orders were issued in 1826 for the grant of leases of both villages and holdings. In the latter case they were to be given to those having the highest right under Government, whether individual ryots or coparcenary bodies. As the lessees' profits would mostly be derived from improvements to the soil, and not from extension of cultivation, the periods of the leases were to be increased from seven to nine years, and even more in cases in which it might be considered expedient; and as a rule their amount was to be fixed at the average of ten years' previous collections on ordinary crops, to the exclusion of more valuable produce grown in garden lands.

Attention was also drawn to a Circular Order issued in 1820 enjoining great care in fixing periods for the payment of instalments in such a way as to leave the ryots time for the sale of their crops, so that they might not have to resort to bankers to borrow money to meet the demands of Government. It was laid down that the dates need not be the same for a whole district, but might vary according to the circumstances of different villages. The taking of security for crops was to be done away with as far as possible, and only to be resorted to in poor villages where the collections were uncertain, and where the proper fixing of the instalments might not have the desired effect.

In a general description of the revenue systems in force in the different parts of the Presidency submitted to Government in 1828, that of Bharuch is described as essentially the same as that already given above. The *dángar-tárji* (rice settlement) in the different subdivisions bore the following proportions to the total settlements for the year in each:—

Bharuch . .	One-fourth.	Jambúsar	} One-half.
Ankleshvar	} One-sixth.	Amod	
Hánsot			Dhej . . .

The proportion of *bhāgdāri* (coparcenary) to *bighoti* (fixed rates per *bigha*) villages was at that time as follows:—

Bharuch . . .	{ 129 <i>bhāgdāri</i> .	Kmod . . .	{ 36 <i>bhāgdāri</i> .
	{ 32 <i>bighoti</i> .		{ 6 <i>bighoti</i> .
Jambúsar . . .	{ 61 <i>bhāgdāri</i> .	Hánsot . . .	{ 28 <i>bhāgdāri</i> .
	{ 21 <i>bighoti</i> .		{ 25 <i>bighoti</i> .
Ankleshvar . . .	{ 23 <i>bhāgdāri</i> .	Dhej . . .	{ 7 <i>bhāgdāri</i> .
	{ 20 <i>bighoti</i> .		{ 10 <i>bighoti</i> .

Various rates of assessment were in force, not varying according to crop, from Rs. 3½ in the villages near the coast, the soil of which was a good deal impregnated with salt, to Rs. 15 on the rich alluvial soil near the banks of the river Taptee.

In 1829 there was a considerable decrease of revenue in the Collectorate, partly owing to the low price of grain and partial failure of the monsoon, and partly in consequence of the Patels and Taláti having, through the negligent supervision of the higher revenue officers, been able to exact more than the regular rate per *bigha* from the ryots on pretence of its being required for village expenses or on some other pretext. This was especially the case in Ankleshvar and Hánsot, where agreements had been made to cultivate at a fixed sum per *bigha*, but where double or more had been levied. Orders were now issued for all cesses leviable to be shown distinctly in each man's account, to prevent over-exaction, and to grant leases for stated periods (*istáwá káwá*) in order to encourage cultivation in villages in depressed circumstances. Small sums were authorized to be set aside at the annual settlements for the repair of village wells, if the villagers contributed towards it either in money or labour, and the sinking of wells by rich people was to be stimulated by the grant of favourable leases or gifts of rent-free land, as customary in Native States.

The question of levying a *masazáras* or succession duty on alienated lands in the Presidency was settled this year, after a correspondence which elicited various opinions, *pro* and *con.*, from the Collectors, by the Government of India leaving the matter to the discretion of the local Government. The course to be pursued with reference to the large *jigír* estates in the Southern Mahratta country, will be described in the history of Belgám, &c.

Various orders had been issued from time to time to abolish the *khali* (village grain-store) system, and in this year definite instructions were given to try the effect of the following rules in ten or twelve *bhágdári* villages, as it appeared to Government to be of no advantage for the realisation of the State dues, and to be a cause of loss and annoyance to the ryots. It had, however, continued so long in force, and was esteemed such a good security for the collections, that its too sudden abolition might be attended with inconvenience.

1. At the time of settlement notice was to be given to the Patels, and placarded up in each village, that ryots were to be at liberty to dispose of their crops without taking them to the *khali*. It would be to their own interest to arrange to pay their instalments punctually.

2. Security might be taken or not at the Collector's discretion. Where payments were regularly made it would be unnecessary to take it, and where it was taken the security should be the usual *jhánkli-band* (chain) of one cultivator for another.

3. Care must be taken to appoint efficient Talátis and village Haváldars (revenue peons).

4. Payments might be postponed till after the instalments were due, if the delay promised to provide a better market for the ryots' produce.

5. Extra Haváldars were not to be entertained in villages in which the *khali* system was superseded. The annual revenue settlement was also directed to be made at as early a date as possible.

In 1830 it was reported that this system was being experimentally tried in a few villages; that the system of levying more in the *dúngar távjí* than could be covered by the sale of the ryots' crops had been abolished, and care taken to make an equitable assessment according to the area under cultivation. Relief had accordingly been experienced from money not having had to be borrowed from bankers, and a good deal more land had been cultivated in consequence, to the value of nearly one and a half lakh of rupees. The collection of *bábtí* (grain cesses), for which an abatement was made from the gross revenue, was also abolished; and the improved system of appointing village accountants per-

manently for the whole year, in place of temporarily for the season, was to be gradually introduced.

In an important Minute on the Revenue Systems of Gujarát, recorded this year by Sir John Malcolm, the Governor, after describing the state of affairs in the first years of British rule, said that within the last ten years considerable improvement had taken place. The revenue settlements had been made with moderation, and the country, freed from the exactions and violence of the Grássias, was becoming tranquil. Waste land was being brought into cultivation, and a regular system of accounts introduced by the village accountants brought down from the northern part of the Province. He approved of the *bhágdári* tenure in Bharuch, if the rent were moderately fixed: the gradual subdivision of the shares through the laws of inheritance would gradually change into a *rayatvári* system in the best sense of the word, and eventually lead to a kind of permanent settlement. He had few suggestions to make, but that the leases of villages might be extended to ten or twelve years with the sanction of Government, with a view to attract capital to the soil. Although some difficulty had arisen in consequence of the fall in the value of agricultural produce, no general reduction of assessment appeared necessary, but it might be authorized in individual cases, on the expiration of leases.

In 1831 and 1832 nothing special was reported from Bharuch, except that endeavours were being made to re-establish *bhágdári* villages in which the coparcenary system had fallen through, by giving leases of the waste lands at low rates. The abolition of the *khali* system was said to be working well, and to lead to no hindrance in making the collections. In settling the annual revenue the old system of fixing it according to the price of grain was adhered to, but checked to some extent by comparison with what the usual village *bigoti* rates would yield. In the year 1834-35 nearly five lakhs of rupees had to be remitted in this Collectorate in consequence of damage to the crops by frost.

In 1836 a wish for permanent settlements expressed by the Court of Directors was interpreted to mean the extension of the leasing system to periods not exceeding thirty years, and orders were issued to Bharuch accordingly. It was, however, never

carried into effect to any great extent until the introduction of the regular Survey assessment in 1870: in all six villages were leased for fifteen years, four for eleven, two for ten, and three for nine years, the rentals being fixed at about the average revenue for the preceding ten years.

In 1837 a revision of the assessment generally was commenced in the Jambúsar subdivision. All lands were reclassified by Committees of exports (moonsiffs) according to their productive value, and new rates proposed. These, on being submitted for sanction to the Collector, were found to be too high to be paid except in good years. The rental of the whole subdivision was fixed at Rs. 3,86,000, in addition to Rs. 19,007 on account of exchange on Dhoopsy Rupees, in which it had hitherto been paid, the average for the ten previous years having been Rs. 3,58,356. Leases in *bhágdári* villages were given for five years, and in *bighoti* villages the assessment was to be open to revision in three. Special reductions were made in impoverished villages for a few years. The people were reported to be satisfied with the new rates.

In 1838 the appointment of a Second Revenue Commissioner was proposed, the Presidency being divided into two divisions, the Northern and the Southern, the former comprising the Province of Gujarát, the Northern Koukan, inclusive of Kolábá, and Khándesh, and the latter the Deccan and Southern Mahratta country, Sattára and Ratnágiri.

Nothing especial occurred in Bharuch in this or the following year, except that the entertainment of village Haváldars for the whole instead of part of the year was sanctioned. The Collector reported that the system of several and joint responsibility for the revenue on the part of the Bhágdárs had not been enforced in the *bhágdári* villages since 1828-29, and that the cause of balances remaining outstanding was mainly traceable to the relaxation of the custom.

In 1840 the revision of assessment by Moonsiffs was ordered to be extended to the subdivisions of Vágrá and Dheji, to do away with the objectionable system of determining the annual revenue by estimates of produce. The abolition of the *khali* system was directed to be persevered in. In 1841 the state of the

collections appears to have been unsatisfactory in consequence of the low price of cotton, especially in Ankleshvar, where the rentals were high, and, with a view not still more to lower prices, Government consented, in order to relieve their tenants, to the unusual proposal to warehouse their cotton rather than force on its sale for the recovery of the revenue. What was the result of this proceeding does not seem to have been reported. In the following year, however, the condition of the leased villages seems to have improved. The rentals had been lowered by the Sub-collector on a consideration of the low price of cotton and its having led to the neglect of a proper system of rotation. The Principal Collector of Surat was of opinion that revenue had been needlessly sacrificed, but the Sub-collector was supported by the Revenue Commissioner.

In 1844 (29th May) Government laid down a clear rule that any ryot taking a lease of his land for thirty years should pay only dry-drop rates, although he might improve it with money advanced by the State by constructing a well, and in the same year sanctioned rules issued by the Revenue Commissioner of the Northern Division for the encouragement of improvements, to the effect that a lease for thirty years should be given to anyone building a well; that advances at 5 per cent. interest should be made at the Collector's discretion, on good security, for such purpose, to be repaid in not more than five years from the time of the land under the well yielding extra returns, but should not be made to people having capital of their own unless security were given for a contribution of one-half the cost in money, labour or materials. Advances for the repair of old wells might be made without interest. The wisdom of this policy, for the preservation of ancient works of utility, is self-evident.

In 1845 it was reported that new rates, settled on the same principles as in Jambúsar, had been in force since the previous year in Amod, Ankleshvar and Hánsot, and that the then Collector had adopted in Dhej rates already fixed by his predecessor. The Collector also hoped to have Vágrá settled within the year. As sufficient data were not given in the Report to enable Government to judge of the appropriateness or otherwise of the rates, it was left to the judgment of the Collector to introduce them.

The process by which the rates were fixed is thus described in Reports from the Collector in 1848 and 1849 :—

“In the year 1837 an important change was introduced in the system of revenue management, under which the Government no longer left to the head of the village the power of fixing the share of the total demand which each cultivator was to pay ; but, instead, levied on the holding of each cultivator a sum fixed according to the character of the soil and other considerations of local value. This change is said to have been introduced with the double object of helping the cultivator, by fixing a fair average rate upon his fields, and of benefiting Government by the increased area of land which the change was calculated to bring under cultivation. The experiment was first commenced in 1837–38, and by 1843–44 all the villages of the district had undergone the projected reform. No fresh measurement of the lands was found necessary, as the result of Colonel Williams’s survey was found to be sufficiently lucid and to be depended upon. The steps taken to classify and record the different kinds of soil were throughout of one uniform character. A committee of experienced district and village officers was appointed at a rate of stipend sufficient to cover their actual expenses, and by these committees the whole of the lands were inspected and registered. Rates were thus recommended, proportioned to the apparent class to which the land belonged, controlled in some degree by those local circumstances which must ever intervene to modify mere intrinsic value. The proceedings of these committees were then submitted to the Collector as presiding officer, and it was found that the rates recommended by the committee were, as a rule, reduced by the Collector. As a whole, it would seem that the new system of assessment was not altogether a success. The error of the new settlement lay in the imposition of too high a standard assessment ; but this, again, was attributable to undue enhancements of the general share taken by the Government in the years immediately antecedent to the introduction of the new measure. An analysis of the latter clearly proves, either that the new rates entailed a serious increase of taxation upon the land, or, where founded on the actual realisation of past years, that those years were in themselves exceptions to the general character

of the village settlements. The result of the introduction of the system of payment by the acre (? *bigha*) was to increase the State demand by no less than 24 per cent. The average settlement of the nine years ending with 1834-35 was Rs. 14,50,740, as compared with Rs. 19,14,118, the average assessment during the term of the nine years ending with 1843-44."

This account of the result of the revision, however, is not borne out by the Reports made at the time on Bharuch, Vágrá, and Dhej. The general decrease on the average revenue of the previous ten years of Rs. 8,49,021 was Rs. 96,304, or 11½ per cent. In 10 out of 163 villages there was an increase of from ½ to 17½ per cent., averaging 3½ on the whole; on the other hand, in the remaining 153 there was a decrease of from 1½ to 52 per cent., or an average of 14½. The average rate per *bigha* came down from Rs. 2 11s. 1p. to Rs. 2 4s. 11p., and the decrease on the average cultivation for ten years was Rs. 1,20,985. These reductions were, however, considered hardly sufficient to meet the fall in the value of cotton, which from Rs. 48 per *bhár* in 1815 was now reduced to Rs. 26, and to allow for the change from the system of annual settlements, which were adjusted to the circumstances of each season. This revision was sanctioned by Government for a period of five years.

Together with this revision an improvement in the position of the village accountants was made by their pay being allowed to be calculated on the gross in place of on the nett revenue, and, when one man had charge of more than one village, by its being reckoned on each village separately instead of on their amalgamated proceeds.

It is curious to note that even at this late period (1846) the influence of the Grássias was so great that it was considered unadvisable to carry out the revision in four of the Vágrá villages, for fear they should be able to prevent other people from cultivating the lands. In consequence of the fixing of rates on the land, the rentals of *bhígáiri* villages were to be determined by the aggregate assessment on the whole of the lands, apportioned in shares according to the usual custom, for the guidance of the Collector, but no interference was to be permitted between the sharers and their tenants, and the principle of several and joint

responsibility of the former for payment of the revenue was directed to be strictly enforced.

In the following year doubts seem to have arisen as to the suitability of the new rates, as the collections were unsatisfactory notwithstanding large remissions rendered necessary by the badness of the season of 1845-46. Orders were issued that any increase that had been put on on account of the late rise in the price of cotton should be at once taken off. There also appeared to have been a mistake made in the settlement in the inclusion in it of waste land unfit for cultivation in *bhágdári* villages; all that the *Bhágdárs* could not pay for should accordingly be deducted from their rentals. The new Collector, Mr. J. M. Davies, who had already carried out revisions of assessment in other parts of the country, was ordered to make careful inquiries into the state of affairs.

The first revision undertaken by Mr. Davies was in the subdivisions of Ankleshvar and Hásot. The classification of soils by the Pancháyats or committees of experts was not interfered with, and the changes introduced only amounted to a grouping of the villages into classes for new rates of assessment, and a considerable lowering of existing rates. The general results in the two subdivisions contrasted as follows:—

	<i>Bighas.</i>	<i>Rs.</i>
Under old system before revision by		
Pancháyat	1,08,900	3,04,957
Under the Pancháyat revision	1,36,764	2,98,725
Under Mr. Davis's revision	1,40,885	2,74,614

This shows a reduction of Rs. 30,333 below the original assessments, or rather under 10 per cent.

This was followed soon afterwards by the revision, on the same lines, of the assessments in Jambúsar and Ámod, with the following results:—

Jambúsar:	<i>Rs.</i>
Average realisations from 1838-39 to 1846-47	4,02,261
According to old rates for 1846-47	4,27,890
According to revised rates	3,50,340

Amod:	Rs.
Average realisations from 1838-39 to 1846-47	1,25,987
According to old rates for 1846-47	1,42,424
According to revised rates	1,09,898

The former revisions by the Pancháyats had come to 13 per cent. above the ten previous years' realisations (16 per cent. if the very favourable year of 1835-36 had been excluded), and in the meanwhile cotton, the staple product, had fallen from Rs. 50 to Rs. 28 per *bhár*. The reduction of 19·3 per cent. on the two subdivisions was thus probably not more than sufficient to meet the circumstances of the case. It had been reported that leases had been abandoned, large balances remained outstanding, and the people had become impoverished and discontented.

These were followed, in 1850, by the revision of the Vágrá and Bharuch subdivisions, with results as follows:—

	Bharuch. Rs.	Vágrá. Rs.
Average of ten years from 1833-34 to 1842-43	4,78,785	4,50,131
Average of five years from 1843-44 to 1847-48	3,80,824	3,37,208
Assessment of 1846-47 at old rates	8,06,217	
" " new rates	7,16,528	

Showing a reduction of 89,689 or 11·1 p. c.

In this case also there was no revision of the classification of soils made by the Pancháyats. In passing orders on this last revision, the Government concurred with the Collector's opinion on the inadvisability of foregoing the assessment in any year in which land might be left fallow, and levying it when the land was cropped in addition to the year's assessment; nor would they leave the question as a matter of remission to be decided annually by the officer settling the revenue, but, strange to say, gave no definite orders on the subject. Their reason probably was that they were perfectly aware the only remedy for such a state of affairs was the imposition of light rates payable under all circumstances, for which they had no satisfactory data to go upon until the operations of the Revenue Survey and Assessment Depart-

ment, already at work in the Deccan and elsewhere, could be extended to Gujarát. In the end of the following year, 1851, a commencement in this direction, the particulars of which have been given in treating of the Ahmadábád Collectorate, was made; but it was not till 1872 that any portion of Bharuch came under revision, and until that year no great change took place in the general revenue system of the Collectorate. Occasional slight changes seem, however, to have been made, as, for instance, an alteration, in 1867, in the dates for payment of instalments in the sea-coast villages, which produce little but wheat, to the 10th of April and 10th of May, so as to allow time for the crops to be sold before the time for payment arrived.

BHARUCH.

In 1872 the revision of assessment according to the principles of the Bombay Revenue Survey was commenced in the subdivision of Bharuch, in which the head-quarters station of the Collectorate is situated. It contained, according to the Survey computation, 111 villages, of which nine were alienated, into which the Survey rates were not introduced. Of the 102 villages, 78 were *bhágdári* and 24 *rayatvári*. The subdivision is very favourably situated, both as regards communications and markets. Bharuch itself is a port of considerable commercial importance on the river Ner-budda. The tide rises beyond the town, and the river affords easy means of communication with Bombay, and thence to foreign countries, for cotton and other bulky exportable products. The Bombay, Baroda, and Central India Railway, which runs through the subdivision, has three stations within its limits. Being thus open to numerous markets both to the north and south, Bharuch is, as the nearest sea-port to which sea-going coasting craft can come, a great entrepôt for all heavy exportable produce from Northern Gujarát. Its favourable position has also been taken advantage of for the establishment of numerous cotton-cleaning and spinning factories under European, as well as Native, superintendence.

The ryots of Bharuch are above the average of Indian agriculturists in skill, the bulk of them belonging to the Wohra caste, Shiah Mussulmans. They profited greatly by the high prices obtained for their staple product, cotton, during the American War, and, although to some extent still hampered by debt, are as a rule men of substance, who live in good houses and are well-off. The soil is mostly the *regar*, or black cotton soil, with the light-coloured *goráru* common to Gujarát (here called *gorát*) in the easterly and some other villages, and some rich alluvial deposits on the banks of the Nerbudda.

It was divided for maximum rates of dry-crop assessment into four groups, the first consisting of the six hamlets really comprised in Bharuch itself, and mostly included within the municipal limits of the town.

The second group consisted of thirty-six villages, all within eight to ten miles of the stations of Bharuch and Chamárgám.

The third group contained forty-six villages beyond this range, but still within comparatively easy reach of the railway: it contained the whole northern portion of the subdivision and a few villages on the eastern frontier and towards the west.

The last, or fourth, was a compact group of thirteen villages in the west of the subdivision, not so well suited as the rest for the production of cotton, in consequence of a greater admixture of salt in its soil.

The maximum dry-crop rates adopted for the four groups were respectively Rs. 7, 6½, 6 and 5½. A comparison of the result of the adoption of these rates in five of the six villages in the first group shows an increase from an average under the old system of Rs. 4 8a. 1p. to one of Rs. 6 0a. 4p. under the new. The average dry-crop classification was thus nearly fourteen out of sixteen annas, and proves the richness of the soil. With the exception of what was grown as a dry-crop, the rice in the subdivision was very trifling in extent, and had water rates of from Rs. 4½ to Rs. 5½ imposed on it. The *dhátá* or alluvial soil, which is of very rich quality, found in thirteen villages along the river, was assessed at maximum rates of from Rs. 9½ to Rs. 15 according to position. To give an idea of the richness of this soil, it may be mentioned that in some of the villages the common *javári* of the country

(*Holcus* *sorghum*) is far above the head of a man on horseback. The classification had to be given a range of twenty-four in place of the usual sixteen annas, to admit of a fair relative value being given to the best soils.

A diagram of the area and assessment of Government land in the subdivision for the twenty years previous to the new settlement, from 1850-51 to 1870-71, sent with the Superintendent's Report, shows that from a remission of about Rs. 18,000 given on account of fallow in 1850-51, such remission dwindled away in 1863-64 to a nominal sum, and the average realisations in twenty and ten years were respectively Rs. 4,37,888 and Rs. 4,55,405. The revenue in 1870-71 was Rs. 4,65,245. An experimental revised settlement had been introduced in the year preceding the regular settlement, but as the difference between the two was trifling, it will be sufficient to give the general result on the revenue of the rates finally adopted as a whole.

No. of Villages.	Average Realisations for Twenty Years.	Average Realisations for Ten Years.	Revenue according to Old Rates.	Survey Assessment.	Increase per cent.	
					Over Old Rates for Year of Settlement.	Over Ten Years' Average.
6	Rs. —	Rs. —	Rs. 7,222	Rs. 9,934	37·5	—
36	—	—	1,80,286	2,15,172	19·3	—
46	—	—	2,34,257	2,70,733	15·5	—
14	—	—	46,617	56,295	20·7	—
102	4,37,888	4,55,405	4,68,382	5,52,134	17·8	21·4
	According to rates finally adopted			5,54,455	18·3	21·7

In revising these proposals when sanctioning the rates Government noted that according to the then ruling price of cotton (in 1873), 6½ per lb., the average dry-crop assessment per acre appeared to amount to the value of between one-seventh and one-eighth of a fair crop, and that as the result was to raise the assessment on dry-crop lands about 12 or 13 per cent. above Mr. Davies's assessment of 1849-50, since which time the prices of

agricultural produce had risen greatly, the proposed assessment was certainly moderate: A considerable proportion of the increase had arisen from the large extra area included in and assessed as alluvial soil at high rates. A single year's experience had shown that this land was very liable to be swept away by floods in the river, and orders were accordingly given that when any such land was thrown up in consequence of deterioration from such a cause it should not be permanently re-assessed, but be sold annually by auction. The rates were guaranteed for the usual period of thirty years.

ANKLESHVAR.

The subdivision of Ankleshvar, inclusive of the Mahál of Hánsot, next came under revision. Lying on the south bank of the Nerbudda opposite the Bharuch subdivision, and having the B. B. & C. I. Railway, with two stations, running through a good many of its more easterly villages, a good guide for the rates of assessment to be adopted in it was afforded by those sanctioned for Bharuch, some of the villages belonging to which lie on the same side of the river. It contained 105 villages, of which three were alienated and not included in assessment. Of the 102 villages seventy-three were *rayatvári* and twenty-nine *bhágdári*. With the exception of a strip of country extending two or three miles from the bank of the river, which is *gorát* merging into the rich alluvial called *bhítí*, and was probably formed in what was once the bed of the Nerbudda, the soil is the ordinary black cotton soil. The agriculture of the subdivision is on the whole not so good as that of Bharuch, as there is a greater number of Kolis and Bhils, who are inferior agriculturists. The census taken in 1873, when compared with that taken under Col. Monier Williams's survey in 1816, showed an increase of 54 per cent. in population, 83 per cent. in houses, 54 per cent. in cattle, and 49 per cent. in ploughs. These returns, when compared with those for Bharuch, and for the Olpád subdivision of the Surat

Collectorate adjoining Ankleshvar on the south, showed that the general condition of the latter was about on a par with that of the former two. In the twenty years preceding the new settlement the occupied area of Government land had increased by about 13 per cent.; the increase does not appear great, but there was in reality little waste land available, there being only 7·60 of the arable area still unoccupied. Collections had in the same period risen from Rs. 3,07,597 to Rs. 3,74,289 on Government land, and from Rs. 22,389 to Rs. 38,458 on alienated, the former being $21\frac{3}{4}$ and the latter $71\frac{3}{4}$ per cent.

For maximum dry-crop rates the subdivision was divided into four groups. The first consisted of Ankleshvar itself and thirteen other villages, the nearest to the railway and the market of Bharuch, and containing a large proportion of the fertile *bhátá* soil. The second consisted of six, two of which were railway stations, and one the second largest town in the subdivision, Hásot, and the three others favourably situated with regard to communications. The third had thirty-three villages not quite so well situated, and the fourth the remaining forty-nine villages not so near the railway, in the south and west of the subdivision, with a few of generally inferior soil on the eastern frontier, bordering on the Rájpipla territory. The maximum dry-crop rates fixed were in each case half a rupee less than in the corresponding groups in Bharuch, ranging from Rs. $6\frac{1}{2}$ to Rs. 5. The rate for the last group corresponding with that of Olpád in Surat. Rates for water used for irrigating rice were fixed from Rs. 9 12a. in the first group to Rs. $7\frac{1}{4}$ in the fourth; to this lowering of maximum rate the Revenue Commissioner objected as unnecessary, as distance from market had already been taken into consideration in fixing the dry-crop rates, and lowering for the same reason in the rates for water would give a second remission on the same account. They were, however, sanctioned by Government on the consideration that they resulted in an average assessment of about double the dry-crop rates. There was apparently some confusion in reporting what was to be the maximum rate for garden lands, but as the average was nearly the same as that for rice the proposals were sanctioned. The general result of the revision in the matter of average rates was as follows :—

Group	Dry Crop.			Rice.			Garden.			On the Whole.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
1 . . .	5	7	9	9	10	11	8	8	5	5	14	8.
2 . . .	4	10	8	9	13	11	8	11	11	4	11	2.
3 . . .	3	14	6	8	9	9	7	10	3	4	0	3
4 . . .	3	14	2	7	13	2	7	8	3	3	15	10
Total .	4	1	9	8	5	5	8	7	4	4	4	2

The general averages on the different descriptions of soil compare with those under Mr. Davies's settlement as shown below :—

	Old Rates.			Survey Rates.		
	Rs.	a.	p.	Rs.	a.	p.
Dry crop	3	9	7	4	1	9
Rice	8	12	3	8	5	5
Garden	10	14	0	8	7.	5*
Mean average	3	11	11.	4	4	2

The general result in the several groups as compared with previous assessments is seen in the table subjoined :—

No. of Villages.	10 Years' Average Collections.	Collections of 1870-71.	Survey Assessment.	Per-centage Increase over	
				10 Years.	1870-71.
14	Rs. 55,805	Rs. 54,337	Rs. 60,449	8½	11½
6	38,489	38,773	44,297	15	14½
33	1,05,068	1,04,740	1,30,086	23½	24½
49	1,75,002	1,69,929	1,89,948	8½	11½
102	3,74,364	3,67,779	4,24,780	13½	15½

The proposed rates were guaranteed for thirty years.

* A much larger area was put under garden in the New Settlement.

VAGRA.

Experimental rates were introduced into the subdivision of Vágrá (or Amlesar, as it was at one time called) in 1873, and reported for sanction in the following year. It lies along the river and between the subdivision of Bharuch and the Gulf of Cambay on the west. It contained sixty-eight Government and one alienated villages; the latter is not included in the settlement. With the exception of a few villages at the mouth of the Nerbudda, in which the light-coloured *gorát* prevails, it is one plain of black soil, more and more impregnated with salt, and on which cotton gives way to wheat and *javári* as the Gulf of Cambay is approached. Near the sea large tracts are entirely unarable in consequence of the salt in the soil, and for the same reason the whole tract suffers greatly for want of drinking-water; little but what is caught in tanks in the rains is potable. The river is of no use as a means of communication, as all produce finds its way by land to Bharuch as the nearest market, the old port of Dhej being unused.

On the whole, therefore, the subdivision is far inferior in rent-paying capacity to Bharuch. Out of an arable area of nearly 97,000 acres only 314 are rice lands, and these are scattered in small portions over eighteen villages. About 41,840 acres are alienated, either rent-free or only partially assessed.

The market for the whole of the subdivision being the town of Bharuch, the grouping of villages for maximum rates of dry-crop assessment was by zones from east to west, consisting respectively of ten, eleven, ten, and thirty-four villages, the soil of the lowest being much impregnated with salt. The maximum rates proposed for these were severally Rs. $5\frac{1}{2}$, 5, $4\frac{1}{2}$, and 4. For rice a water rate of one rupee less than the maximum dry-crop rate was proposed to be levied in addition to the latter. The combined dry-crop and water rates in the several groups thus came to Rs. 10, 9, 8, and 7. The area of garden was only about eighty-two acres, on which it was proposed merely to impose the highest dry-crop rates. Of the total number of wells (218), 60 were out of repair, and only 20 were used for irrigation.

A brief account of the revision of assessment carried out under

Mr. J. M. Davies, by which the existing assessment was lowered about 11 per cent. in Bharuch and Vágrá, has been given above. The Reports with which the proposals were forwarded give no details of the revenue realised in the period between Mr. Davies's and the Survey settlement, but it was found that, in consequence of the general rise in prices of agricultural produce that had taken place, and the improvement of communications resulting from the opening of the railway, a moderate increase of assessment was quite feasible. The general result of the new rates was accordingly to raise the rental of the subdivision on the Government lands, exclusive of *ugária* and *ráhat vánta*, which will be noticed presently, by about 14½ per cent. beyond the old rental of 1872-73.

No. of Villages.	Old System.		According to Survey Rates on Cultivation of 1872-73.	Per-centage Increase on 1872-73.
	1872-73.	Ten Years' Average.		
1.—13	Rs. 68,717	Rs. 67,301	Rs. 79,554	18½
2.—11	38,868	37,850	43,937	16
3.—10	37,116	36,695	43,464	17½
4.—34	1,03,144	98,140	1,07,625	9½
	2,47,845	2,39,986	2,74,580	14½

NOTE.—No comparison is here made with the ten years' average, because this includes the assessment on alienated land.

The average rates in the different groups, according to the old and new systems, compared as follows:—

Group.	Old			New.		
	Rs.	a.	p.	Rs.	a.	p.
1	4	0	8	4	11	3
2	3	2	2	3	9	6
3	2	13	10	3	5	6
4	2	12	6	3	0	3
Total	3	2	0	3	8	5

It was estimated that the average of the new assessments was equal to a grain-rent of one-fifth in the first three groups and of

one-sixth in the last group. The pressure of assessment on the subdivision as a whole, as compared with Bharuch and Ankleshvar, was as follows:—

	Vágrá.			Bharuch.			Ankleshvar.		
	Rs.	s.	p.	Rs.	s.	p.	Rs.	s.	p.
Per acre . . .	3	8	3	5	3	10	4	4	2

In reporting on the alienated lands in this subdivision, the Superintendent of Survey reported that for the lands in question assessment was paid in lump sums by the Thákors of *Amod* and *Kerváda*, and, considering them to be held on a somewhat similar tenure to that of the *Tálukdári* estates in the *Ahmadábád* Collectorate, the Revenue Commissioner had in 1864 directed that the lands should not be brought under the Summary Settlement like other alienated lands, and that the rental they were to pay in future should be considered at the time of introducing the Survey rates. There were also about 876 acres of land in two villages recorded in the books as *ugária vánta*, held nominally on the payment of a rupee a *bigha* less than the full assessment under the old system. In reality, however, it paid in the two villages the sum of Rs. 2,396 10a. 4p. out of an assessment of Rs. 3,547 2a. 8p., or about 67·4 per cent. The tenure, however, appeared to be personal to Rajpoot Grássias only, and it was therefore proposed to grant an annual remission of two rupees an acre (in round numbers one rupee a *bigha*) as long as the land continued to be so held, and to assess it fully when held by others. In sanctioning this proposal Government directed that there should be put before the holders the alternative of receiving as an annual cash payment the value of the remission, and entering the lands in the records on the heritable and transferable Survey tenure, which would enable them to dispose of it as private property. With regard to a third class of alienation in five villages, termed *ráhat vánta*, for which fluctuating sums in the lump were paid, as in the *Tálukdári* villages of *Ahmadábád*, by the Thákors of *Dhej* and *Janiádra*, it was decided that leases for thirty years should be granted on the same principles as in *Ahmadábád*, after taking into consideration the actual rent derivable by the Thákors, that is, exclusive of alienations made by them for family and religious and charitable purposes, the latter being admitted to the benefits

BHARUCH.

of the Summary Settlement. In the case of the lump on the first of the three descriptions of alienations those lump rentals were continued as heretofore. Such arrangements were made with regard to excess in these lands discovered on measurement.

JAMBUSAR.

In 1876 Jambúsar (Jumboosar), the most northerly subdivision in the Collectorate, came under revision. Bounded on the north by the river Máhi, and on the west by the Gulf of Cambay, the soil on the coast is, like the whole tract of country on the east of the Gulf, more or less impregnated with salt, owing to its comparatively recent recovery from the sea; whilst passing from this tract eastward are to be found both the alluvial deposits of the black cotton-soil and the light-coloured *gorát* or *márová*. It contains eighty-seven villages, two of which are alienated. Although it has no made roads within its limits, country tracks for conveyance of produce inland and to its two ports of export, Tankária and Degám, are practicable and open except in the monsoon months; and the line of the B. B. & C. I. Railway runs not far from its eastern boundary. The nearest station in British territory is that of Pálej, with which, as the intermediate Dhádar river has been bridged, communication is easy. Its inhabitants, especially in the east and north-east, are as skilful agriculturists as any in Gujarát, and, as a general rule, very well-to-do. Cotton-cleaning factories have been established at Jambúsar and Kávi, and the consumption of a large proportion of the locally produced cotton in these, and probably its conveyance to some extent by rail to Bombay, account in a great measure for the late falling-off of the trade at the two ports mentioned. It was, of course, greatly affected also by the commerce of Málwá and North-East Gujarát, which, before the line was made, came to Tankária as the nearest sea-port, having been turned aside and borne to and from Bombay directly by the railway. Jambúsar itself affords a good market, as well as some of the rich and populous villages in the north

and east. The revision of assessment in this subdivision by Mr. J. M. Davies has already been noticed. There had been a considerable increase in cultivation since that event, the area having since 1855 increased from 79,614 to 89,126 acres, and the revenue from Rs. 2,28,740 to Rs. 3,70,114, or 61½ per cent., while the only remissions occasionally given were on account of destruction of crops by locusts in the coast villages. Population and houses had increased by 27 and 23 per cent. respectively, but agricultural cattle and carts had decreased. For this fact, unless the enumeration by the Survey Department was defective (there is a possibility of this, as milch kine are said to have diminished by 64 per cent.), there is no other way of accounting except by supposing that the falling-off in the traffic to and from the ports of Tankária and Degám had rendered the keeping of large numbers of draft cattle unnecessary.

For maximum rates of dry-crop assessment four groups of villages were proposed, the first consisting only of the town of Jambúsar and one adjacent village. The second contained forty-two villages, comprising almost the whole east and north of the subdivision, in which the rich light-coloured soil prevailed. The nominal maximum rates in these two groups were Rs. 5½ and Rs. 5; but as the *gorát* or *márvá* was classed up to twenty-four instead of sixteen annas in consequence of its superior fertility, a possible maximum of Rs. 8¼ and Rs. 7½ respectively was provided. The third group consisted of twenty-eight black-soil villages in the centre of the subdivision bordering on the salt tracts near the Gulf of Cambay, with four of the white-soil villages in the extreme north-east distant from markets; for this group a maximum of Rs. 4½ was proposed. Tankária and the neighbouring village of Islámpur were placed in this group, though properly belonging to the fourth, on account of the port at the former affording a good market for their produce. The fourth group consisted of the nine villages in the salt tract in the south-west of the subdivision, along the Gulf of Cambay and the Dhádar river, the maximum rate proposed for which was Rs. 4. The rice grown in embanked ground was not of superior quality. The rate for water proposed was a rupee less than the maximum dry-crop rate in the several groups in addition to the latter rate. This

gave an average of Rs. 6 0a. 8p. as against one of Rs. 5 10a. 8p. under the old assessment. 867 acres more were classed as rice land than previously. The average rate on garden or irrigated land was about Rs. 10 per acre, and according to the new proposals came to Rs. 7½; 860 acres in excess of that under the prevailing system were classed under this head. The general result of the revision was as follows:—

No. of Villages.	Old System.		Survey Assessment.				Increase per cent.
	10 Years' Average.	Revenue of 1873-4.	Dry Crop.	Garden.	Rice.	Total.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
9	21,607	22,002	18,375	611	10,080	29,046	32
42	1,96,686	2,01,204	2,25,440	4,784	5,553	2,35,777	17
82	1,03,857	1,04,405	1,10,900	1,152	4,475	1,16,527	11½
9	42,799	42,793	42,811	40	—	42,851	8
Total	3,64,899	3,70,404	3,97,526	6,587	20,088	4,24,201	14½

The cause of the comparatively large increase in the first group was the discovery by the Survey measurement of 827 acres of land not assessed under the previous system; if this were excluded, the increase would only have been 8½ per cent. It was anticipated that all the unreserved waste land, amounting to about 3,500 acres, would be taken up at once, as, considering the recent great rise in prices, it was evident that the assessment, supposed to equal about one-sixth of the value of the produce, but really probably much less, was very moderate.

In the course of the correspondence on the subject of the Jambúsar revision it was brought to notice that the Bhágdárs of that place and of Kávi had from time to time obtained from *jápti-kharats* (tenants of permanent occupancy) agreements agreeing to pay more than the rents payable according to the customs of their villages, and it was therefore doubtful whether such tenants could be recorded in the settlement papers as Survey occupants. A compromise was proposed by which the Bhágdárs agreed not to levy more than the Survey rates, but proposed to limit the transfer of the right to cases of inheritance only. For this concession it was proposed that a certain portion of the Government rental should be foregone. The compromise and

proposed remission were sanctioned by Government in confirming the settlement, on condition that an agreement to this effect should be drawn up in due legal form, with the condition that in case of its being broken at any time the *bhagdári* tenure should be dissolved. The lands held by such tenants were to be clearly defined and recorded, to prevent future disputes.

AMOD.

The revision of the remaining subdivision of Amod was carried out in 1877. Amod lies between Jambúsar and Vágrá. Its climate and soil are similar to those of the adjoining subdivisions already mentioned, and all its eastern villages are conveniently situated for access to the Pálej stations of the B. B. & C. I. Railway. Since Mr. J. M. Davies's revision in 1848 it had thriven under the low assessment then imposed and the higher prices of agricultural produce that had lately ruled. The majority of the cultivators, as in Jambúsar, are skilled agriculturists, and were, at the time of settlement, in good circumstances. For maximum rates of dry-crop assessment the fifty-three villages in Amod were thrown into three groups, the first of the forty composing the bulk of the subdivision, and the other two of six and seven villages respectively, lying more towards the west, where the soil becomes impregnated with salt as the Gulf of Cambay is approached. The maximum rates were Rs. 5½, Rs. 5, and Rs. 4 respectively. Rice is produced to a considerable extent in this tract of country, but mostly in dry-crop black soil, so that only about seventy-six acres came under assessment as embanked rice land. These were assessed, as elsewhere, at a maximum of the dry-crop rate of the particular village group, in addition to a water rate of a rupee less; the nominal maximum for both soil and water of Rs. 10 gave an average of Rs. 5½. *Bhátá*, or alluvial soil, was only found in three villages of the first group, and was assessed at a maximum of Rs. 12 in two and of Rs. 9 in the third; these rates gave averages of Rs. 9 10a. 10p. and Rs. 6 2a. 10p. These lands were sublet to market gardeners at

rom Rs. 15 to 25 an acre, the lessor ploughing and preparing the ground for sowing.

There were only seventy-three wells in the subdivision, and about half of these held only brackish water; the plan adopted for assessing the land under these was to add from one-eighth to one-fourth on to the soil classification, and add no water assessment. The maximum rate did not exceed Rs. 7½ (that under Mr. Davies's settlement having been Rs. 8 throughout), which gave an average in the three groups of Rs. 6 5a. 4p., Rs. 5 6a. 6p., and Rs. 5 6a. 1p. respectively. The general result of the revision will be seen from the following statement:—

No. of Villages.	Old System.		Survey Assessment.				Increase per cent.	
	10 Years' Average.	Revenue of 1874-5.	Dry Crop.	Garden.	Rice.	Total.	10 yrs.	1874-75.
40	Rs. 1,77,081	Rs. 1,77,620	Rs. 2,17,198	Rs. 5,481	Rs. 85	Rs. 2,22,714	17½	17½
6	18,709	18,604	22,106	13	—	22,119	18½	19
7	21,545	21,745	22,248	67	296	22,611	5	4
Total	2,17,328	2,17,969	2,61,552	5,561	331	2,67,444	16	15½
			Deduct on account of alienations - - -			15,188		
						2,52,256		

The average rates, according to Mr. Davies's and the Survey rates, as far as can be calculated, were as follows:—

	Old.	New.
	Rs. a. p.	Rs. a. p.
Dry-crop . . .	3 12 8	4 8 10
Rice . . .	5 14 10	5 12 1
Garden. . .	9 12 5	6 12 8
Mean average	8 12 10	4 9 4

After the occupancy right of 1,331 acres of waste lands was sold by auction at the settlement, only 456 acres of unreserved land remained unoccupied in the whole subdivision.

SURAT.

THE Collectorate of Surat lies to the south of Bharuch, partly along the east coast of the Gulf of Cambay, between $20^{\circ} 15'$ and $21^{\circ} 28'$ N. Lat. and $72^{\circ} 38'$ and $73^{\circ} 30' 30''$ E. Long. It contains an area of about 1,670 square miles, and has a population of 368 to the square mile. It is subdivided into eight Tálukas, as follows, viz. Olpád (Oolpár), Mándri, Chorási (in which Surat is situated), Bárdoli, Jalálpur, Chikhli, Valsád (Bulsár), and Párdi. Its extreme length is about eighty miles, but its breadth varies from fifteen to sixty, the two Tálukas of Mándvi and Bárdoli being separated from Olpád and Chorási by strips of H. H. the Gaikvár's territory, which also intervenes between Bárdoli and Chorási and extends down to the sea-coast. It is the most southerly of the Collectorates in which the vernacular language is Gujaráti.

The connection of the British with Surat commenced as early as A.D. 1608, but although in the 18th century they had in their employ military and naval forces, and made use of them from time to time in their political connections with both European and Native Powers for the purposes of their trade, it was not till A.D. 1759, when they captured that town, that they acquired any territorial footing in the Province. From that year up to A.D. 1800 they became virtual masters of the town and castle, and of a certain extent of territory in its immediate neighbourhood. During this period the revenues derived from the land, from land and sea customs and from town dues, were shared by the Naváb

of Surat, the Mahrattas, and the English. There is no authentic information as to the system under which the land revenue was administered at this time, nor as to the degree of control the British exercised over its details. That control, if any, could have been little more than nominal, as it is on record that except in the subdivisions of Vasrávi and Olpád, where the Naváb's officer collected his share, the revenue in the Peshvá's districts was levied by the Peshvá's agent, and the Naváb's share handed over to his representative, and that in the Gaikvar's districts was collected by the Naváb's officer, partly at the villages and partly on the produce of the villages when brought into town. (Campbell's "Gazette of Surat.")

In A.D. 1800 advantage was taken of the failure of direct heirs to the Naváb to assume undivided management of Surat, and Regulation I. of 1800 was accordingly passed by the Government of Bombay. The main provisions of this Regulation, as far as the land revenue was concerned, were the appointment of a Collector to let by auction all the cesses, to take charge of the general treasury, and to supervise the customs. It applied to the City of Surat and its dependencies, which included the town of Ránder, a little above Surat on the opposite bank of the Tápti river, and a share (estimated at Rs. 2,10,630 a year) in the territorial revenues of the districts formerly subordinate to the Moghul Governor of Surat.

Temporary arrangements for the management of the land revenue were probably made until Regulation XIII. of 1802 was passed prescribing the duties of the Collector. Among these there is no mention made of any power to assess land to the land revenue, but, on the contrary, a distinct provision in Section xxi. lays down that in the collection (and presumably the assessment also) of it the established practice was to be adhered to. The Regulation also contains provisions for the collection of revenue by the Kumávishdárs (Mámlatdárs), by placing watchmen over and not allowing the crops to be reaped or carried away till security for payment was provided, by quartering foot or horse-men on the defaulter at regular wages to be paid by him, or by forwarding him to the Collector to be imprisoned in the civil jail if the demand were not met by the end of the Hindoo month,

but, curiously enough, nothing under which the crops themselves could be seized and sold. The defaulter's interest in the land was not in these early days considered a proprietary right, and was naturally not mentioned as an available security.

Sec. vi. cl. 6 of this Regulation refers to the territories ceded by the Gaikvár and included in the charge of the Collector of Surat in the same year. These cessions consisted of the subdivision of Chorási in the immediate neighbourhood of Surat, of the Gaikvar's share in the revenues of the town made in 1801, and of the subdivision of Chikhli in the south of the Collectorate, ceded in 1802. On the 31st December of the same year the treaty of Bassein was agreed to by the Peshvá, and the cessions granted by that treaty brought up the charge to its present area, with the exception of the most easterly and southerly portions. The remaining portions followed in A.D. 1816 and 1817, and the Pargannah of Mándvi, with the fort of Párdi (Báldá Párdi) and five other villages in the neighbourhood, was finally annexed as an escheat on the death of the Chief without heirs in 1839. From the latter year the area of Surat, with occasional changes in consequence of transfers of the Southern Pargannahs of Bharuch (south of the Nerbudda river) when the latter was at different times formed into a Sub-collectorate, has remained what it now is, about 1,670 square miles.

On the introduction of the British administration it was found that the management of the land revenue was almost entirely in the hands of the Desáis, cultivating Brahmins, whose original position as that of servants of the State, to whom was entrusted the collection of the revenue, in receipt of per-centage allowances as remuneration for their services, had gradually changed to that of contractors for the revenue. So firmly was their influence in this character established that the members of a family were able sometimes to portion out among themselves the villages comprised in large areas of country, and, by combining together to keep the Collector in the dark as to the actual state of affairs, to make their own terms as to the amount they would pay for their farms, and defraud the Government, while they kept the ryots in complete subjection to themselves. They found a particular facility for this action in the character of the lower classes of

cultivators in the eastern and southerly parts of the country. The latter were a rude, thriftless, and utterly uneducated race, whom the Desáís had in many cases reduced to a condition of actual slavery, and who, it is hardly too much to say, only emerged from that condition on the advent of the Bombay and Baroda Railway and the introduction of the Revenue Survey Settlement.

For many years after our acquisition of the country, accordingly, the Collector was forced to enter into annual settlements with the Desáís, and make as good a bargain with them as he could. These settlements were generally made in April for the ensuing revenue year, as far as two-thirds of the sum contracted for were concerned, the remaining one-third being fixed after the Collector had moved about during the cool season of the year of settlement, to examine such accounts as were procurable and compare them with the probable produce of the season. The Desáís were, as a rule, punctual in their payments, and, being mutually responsible for each other, security for the revenue was rarely demanded from them.

At this period, i.e. from 1800 to about 1816, the revenue authorities had no direct accounts with individual cultivators, and the settlements were made for whole villages. In some of these there were *júpti* or permanent holders, whose payments the contractors did not interfere with. In other villages, held in shares (*bhāgdári*), the managers, whether Desáís or Patels, held the land between them, arranged with the cultivators, and were jointly and severally answerable for the revenue. In others, again, of which the cultivators mostly resided elsewhere (*sparvária*) and formed a fluctuating population, the Desáís made their own bargains with their tenants, whose payments never seem to have been on the division-of-produce system (*bhāgvatsi*) as in Northern Gujarát, but to have been made in cash according to the crop grown on each *bigha* of land (*jinasvár bighoti*). It seems doubtful whether in the villages of which the Desáís settled for the revenue there were ever any Patels (headmen) distinct from them. If such ever existed, they had been so completely ousted from their position and influence that the Collector had no option in the matter of the settlements as long as the

system of the responsibility of the cultivators directly to the officers of Government was not introduced. The Reports of the period abound in proof that every endeavour to lessen the influence of the Desáís, and induce the ryots to place confidence in the new system of administration by bringing them into personal communication with European officers, was made in pursuance of orders from Bombay as well as from the Court of Directors of the East India Company; but so great seems to have been the hold the Desáís had obtained in the management of the revenue that it was not till A.D. 1818 that positive orders were given to supersede them, and not till two years after this even that the order was carried into effect. It is probable, however, that after 1817-18, when the system of levying revenue directly from the ryots by means of village accountants was brought into force, the Desáís had not been so much contractors for revenue as officers of the State paid by a per-centage on the revenue; but so thorough was the influence they originally obtained that up to the present day there are few villages in the southern districts of the Collectorate in which the stipendiary (there are no hereditary Patelships recognized there) Patels are not descendants of the old Desáís.

By the year A.D. 1821 settlements had come to be made directly with the ryots on what were termed the *khátúbandi* and *hundábandi* tenures. The words are derived from *khátá*, {"a holding," and *hundá*, "a holding in the lump," and *bandi*, a word of Persian origin signifying "a binding or tying together," and imply that lands included in the holdings were paid for as a whole, whether they were cultivated or waste. In addition to these holdings, which were presumed to be of a quasi-permanent nature, other tenants, called *ganvatiú* (from *ganvat*, "a lease"), held on a non-permanent tenure, and cultivated or threw up land as it suited their convenience. In a few of the less settled villages in the east a plough-tax in lieu of a rent according to area, or an *udhar phálá* (a uniform rate per *bigha*), was levied. The considerations on which the rates of assessment had been fixed were various, the area under cultivation (such area being sometimes roughly measured and sometimes merely estimated) being the chief one; others were the nature of the soil, roughly

classified as of first, second, or third quality; the kind of crop grown; and the caste of the cultivator, some castes being supposed to have more agricultural skill than others. The nature of the tenure on which the land was held was also taken into consideration under the *khátábandi* and *hundábandi* systems (described above), and land free of rent for purposes of fallow, or lands for grazing or as grass preserves, were given in as a make-weight against the somewhat heavier assessments leviable on the land under constant tillage. A curious confirmation of the want of detailed information at that time is derived from the forms of land registers laid down in the appendix to Regulation II. of 1814, to be kept by village accountants, whose position was formally legalized by the same Regulation. Form No. 1 was as follows:—

Cultivated.	Arable.					Occupied by Houses.	Rivers.	Tanks.	Wells or Springs.	Waste.				Grand Total.
	Uncultivated.	Gardens.	Established Village Pasture.	Total Beegas.						Jungul.	In Hill producing Pasture.	Books.	Total.	

Statement 4, a statement of the gross produce, and of the share accruing to Government from lands paying revenue in kind, was as follows:—

TALPOT OR SIRKAR'S LAND.												SIRKAR'S SHARE.				
Cultivators' Names.	No. of Beegas.	Wheat.	Jowarree.	Redjute.	Cotton.	Toor.	Mitt.	Moong.	Barley.	Total of Gross Produce.	Sundry Items deducted.	Balance deducting Items.	Rate of Division.	Amount of Sirkar's Share.	Total Sirkar's Share, including Items deducted from Gross Produce.	Remarks.
													Maunds.			

Statement 6, a statement of land paying money rent, is as follows:—

Names of Fields.	Cultivators' Names.	Beegas.	Crop.	Description of Land.	Rate per Beega.	Amount.

There was also a statement similar to Nos. 4 and 6, for garden lands.

It will be observed in these that although in two forms there is a heading "Cultivators' Names," and in one "Names of Fields," in none of the three is there the heading, so necessary to a field register containing the whole area of lands under a village, "Consecutive Numbers of Fields." This omission was rectified in the field registers of later years, and the boundaries of each field recorded as well; so that, even without a field map, such as the Revenue Survey now provides, concealed and unassessed cultivation could be traced and brought to account.

By the same Regulation a per-centage scale of pay for village accountants was fixed, but this provision was repealed by Reg. II. of 1816, and since that time these officers have been remunerated according to orders passed from time to time by the Executive Government.

In addition to lands liable to pay full revenue to the State there were found in the whole of the Province of Gujarát large quantities of land that had become what is locally termed "alienated," and paid either no assessment at all or only a quit-rent. This had been brought about in various ways, some legitimate and others not so. Of the former were lands held for the performance of service to the State or to the villagers, or as religious or charitable endowments to institutions or individuals. In this class might also be reckoned *vántá*, or divided lands (called *Wántá* in the old Regulations), which were probably that portion of the lands of villages which was left to the original Rajpoot or Grássia proprietors, either entirely or partially rent-free, when the Mussulmans took possession of the country, and assessed the remainder to the land revenue. Among the latter were lands originally given as blackmail, to purchase exemption from plunder by freebooters for the villagers, or that had been sold or mortgaged by headmen or shareholders of villages for various village purposes, especially to raise money for payment of the exorbitant demands of the farmers of revenue under the Mah-ratta system. Lands of these descriptions were found in Surat, as elsewhere, in larger or smaller areas in almost every village, and in the aggregate caused a serious diminution of the resources

of the State. It will be seen hereafter that various devices were resorted to, to draw an indirect as well as a direct revenue from those lands, and laws were passed at different times laying down what tenures should be held to exempt lands from the payment of public revenue. *Vechánia* and *geránia*, the sold and mortgaged lands mentioned above, were for many years excluded from these tenures, their alienation not being considered legitimate, but so long a time had been allowed to pass without any formal inquiry being instituted into titles that even these were eventually acknowledged as "exemption" tenures. But the consideration of the propriety of exempting these lands bears so slightly on the general question of land revenue administration that it may be as well to state at once how it has been finally disposed of. With the exception of the *vántá* lands, those held under these tenures were individually of small area, and thus only worth considering as a whole. Detailed inquiry into their titles, however, would have been as tedious and expensive a process as if each had constituted a large and valuable estate; and any extensive resumption and assessment of them to the public revenue would have created discontent among such large classes of the community, that it was thought advisable to apply what has been termed a "summary settlement" to them. This has been carried out under laws specially passed for the disposal of the question, and all holders who have agreed, on the serving of formal notices, to pay quit-rents varying in amount according to the tenure of their lands, have had their titles confirmed under new deeds issued by the British Government. The solution is commendable from an economical as well as from a politic point of view.

A system of direct settlement with individual cultivators having been adopted, as already noted, shortly before 1821, its effects are thus described in a Minute by Mountstuart Elphinstone, dated on the 6th May of that year.

"By the present mode of assessment every ryot attends at the Camavisdar's kutcherry (office). His land and rent for the preceding year are ascertained in his presence from the Tullatee's books. If he should wish to take up more land, or to throw up part of what he already has, or if it should be necessary to increase or diminish the rent of any portion of his lands, which he

may have changed from common lands to garden lands, or *vice versa*, the requisite alterations are made and agreed to. If none of these things are required, he holds the same lands on the same rent as the year before. In either case he receives a *pottah* (agreement to rent) under the hand of the Camavisdar: a paper specifying the lands and rent of each ryot in the village is also signed by the Collector and deposited with the Tullatee. Each ryot then becomes security for his neighbour's payment of the revenue, but this ceremony is reckoned nearly nugatory. The Patell also furnishes security (generally that of another Patell) for his not embezzling the collections. There is then no more to do till the revenue comes to be paid. Formerly two-thirds of the revenue was paid before the crops were ripe, and the money must have been borrowed at heavy interest by the ryots; but now no demand is made till the crops are cut; one-half is then paid before the grain can be removed, the rest is paid after the sale of the whole or part of the produce. When any failure has taken place, a remission is made to the individual sufferer after an examination of his field by a Government officer.

"This system was first introduced in 1817-18. There are several Purgunnahs to which it was only extended during the last revenue year, and in some it has not yet been completed. Each man's land was measured, and his rent fixed at the sum which he had paid in the preceding year. The great advantage of the plan is the clear view it gives the Collector of the real state of his district, thus enabling him to adapt any increase or remission of the revenue to the actual circumstances of each individual, and also putting it in his power to detect and check any undue exaction which may be practised upon the ryot."

After a few remarks on the comparative advantages of the *ryatvári* and village systems of settlement, the Minute goes on to say that nothing could be more complete than the state of the Tulátis' books, which contained every information contemplated by the Regulations; that although the writer did not consider the general condition of the people prosperous, he did not in any way ascribe it to the new system, but was persuaded that the measures in progress would go far to relieve the Government from the system inherited from their predecessors. "The great ob-

stacle will be the heaviness, and perhaps the inequality, of the assessment. Mr. Morison (the Collector) has endeavoured to correct this by reducing the revenue in some cases where it appeared to weigh with particular severity. In other places he has promised to lower the assessment if the inhabitants will promise to protect Government from loss by the cultivation of additional lands. I doubt, however, whether these palliations will be sufficient; and if I were not aware of the extreme difficulty of lowering the revenue when it is once raised (N.B.—From what follows, Mr. Elphinstone would appear to have meant the exact opposite to this), I should be induced to recommend some more extensive measure of that nature. I would not, however, wish for a general remission, but for a reduction in the particular cases where there appeared to be a particular pressure. As the cultivation has greatly increased since we got the country, it is probable some parts even now are lightly assessed, whilst others must be too heavily, as the *bigotee* (rate per *bigħa*) doubles that of Broach; and as the Government share appears by the Tullatees' books greatly to exceed one-half of the produce, I have applied to the Collector for some information regarding the general rates of assessment, on receiving which I may probably resume the subject. In the mean time it is satisfactory to say that no increase has been put upon the district since the introduction of the ryotwar system, and that in no instance has it been found necessary to send a ryot to prison, or to sell his house or cattle for arrears of revenue."

Another abuse which, in addition to the excessive influence of the Desáís, greatly affected the prosperity of almost the whole of the province in the early days of British rule, was the forcible levy of what is termed *torá-girás* from the villagers by Grássias mostly living in Native territories in the neighbourhood, such as Rájpiplá and Dharampur. Long controversies have passed as to the origin of these levies and the derivation of the term, but the decision in them is one of historical rather than practical interest. There can be no doubt that these demands for money payments were of the nature of blackmail, and, whether they involved a counter-claim on the part of the villagers for protection against similar demands by others or not, their levy by violent means was

in full exercise when British rule was introduced, and tended greatly to harass the villagers and thus retard the progress of the country. They could, no doubt, have been put a stop to by armed force, but it was deemed more politic to get rid of the risk of disturbance by persuading the claimants to accept payment of what had become their established dues from the Government treasuries in place of directly from the villagers, a process that frequently gave rise to scenes of violence. A mistake was made in thinking that these demands were really a claim upon the villagers over and above the assessment on the land; and so far has this idea prevailed that, on the introduction of revised settlements, it has been formally declared that such revision having fixed rates on the land exclusively of such demands, the Grássias had no further claim on the villages. An examination of old *jamábandi chitthis* (annual settlement agreements) has amply proved the fact that nothing extra to the regular assessment on the land was ever levied from the cultivators on account of these demands, but that, on the contrary, an allowance was made to the farmers of revenue, Patels and others, for such payments as part of the village expenses before the annual revenue payable to the State was fixed. It is thus clear that *torá-girás* was from the first a demand on the public treasury, and not on the villagers, although the Grássias exercised personal pressure on the latter to obtain it. The result has been to burden the Treasury permanently with the payment of large allowances, which have by recent legislation become heritable and transferable property, so that the purchase of peace in the early days of British rule in the province, by concession in place of firmness, was in reality an expensive matter. The cost of the subsequent litigation over the question, carried up to the Privy Council, and it is believed decided wrongly by the highest court in the realm in consequence of imperfect information, would have covered over and over again the expense of resisting the Grássias' demands by armed force at the time.

As already mentioned, measurement of the land had been occasionally resorted to for the purpose of assessment by the Collector. The necessity for such a step is proved by the recorded fact that the estimated *bigha*, on measurement, varied in different parts of the Collectorate from three-quarters of an

acre to an acre and a half, a difference which must have told greatly in some parts in favour of the ryot and in others in favour of the State. No professional survey appears to have been undertaken till 1823, when the larger portion of the charge was measured under the superintendence of Captain Newport. This was followed by similar operations under a surveyor attached to the Collector's office, although opposed by the Collector in 1825 as a useless expense on account of the long fallows necessary in some parts of the country. The rates of assessment were nominally a good deal higher than those of the present day, but their incidence was modified by the practice, alluded to above, of throwing in lands for fallow, or nominally for pasture, free of rent together with the rent-paying area of holdings. Opinions appear to have been divided as to whether on the whole the rates were too high or not, and no decisive steps towards a general revision were taken until a great fall in the value of agricultural produce about 1833 rendered such a measure necessary, although a reduction of 10 per cent. in the Chorási subdivision and of 5 per cent. in Olpád, with smaller reductions in Párchol and elsewhere, were authorized in 1825. In that year the Collector reported that, the leases in the Párchol subdivision having expired, he had directed new ones to be made out according to the Survey measurements, and that an increase of Ra. 11,247 had accrued from the increase in area ascertained by those measurements. In settling the new rentals it was discovered that the Maxmundars and Talátis had been in the habit of increasing or lowering the rates of assessment even on *jupti* (permanent tenants), provided the total village revenue was kept up. In the revision that the Collector accordingly undertook, the land was assessed in parcels supposed to be of a similar quality without reference to fields, no separate assessment being put on different fields of the same class. Two *Asudábandi* villages were left alone, to secure the goodwill of the *Bhátelás* (to which caste most of the *Desáis* belonged) in approving the rest of the settlement.*

* Some of the reasons given for change of rates in this revision are worth quoting, to show the haphazard way in which such revisions were carried out in these early days. In the village of *Abráma* a reduction of four annas per *bigha* was made in 220 *bighas* of *gorát* (yellow) land, and the assessment

The prevalent rates, with the exception of those of inferior dry-crop soils, were reduced, but to what extent is not apparent. The ryots are reported to have been satisfied. The inferior dry-crop soils were not reduced because they were cultivated intermittently by Uparvárias (cultivators resident out of the village), and were let for what they would fetch.

In 1826, after the opinions of the Collectors had been obtained on the subject of giving leases of the revenues of villages, the following general instructions were issued:—

1. Leases were to be granted to whole village communities wherever they would undertake the responsibility.

2. Where this was not found practicable, leases were to be granted to the Patels, and in preference to Muttádárs, *i.e.* those who had the right to the *muttá* or signature on village papers.

3. Where no substantial Patel was forthcoming, the lease might be given to a stranger of character and substance, care being taken to exclude needy adventurers.

4. Before any lease was granted, the rights of Government were to be clearly ascertained, as the State could of course only transfer its own rights.

5. Any private rights of individuals or special tenures in existence must be specified in the lease.

6. All collections from alienated lands resumed and made liable to the payment of land revenue after the grant of a lease to be handed over by the farmer in addition to the amount of his lease.

7. Collections were to be made according to *dhára*, or written record of village usage, which must specify all rates of assessment.

8. The amount of the lease was to be fixed on an average of former collections, excluding unusually good or bad years.

equalized to that of 551 *bighas* near the former at Rs. 6 1qr. 50r., contrary to Capt. Newport's opinion, because the Patels insisted that the cultivators of *gorát* land would be dissatisfied if they did not get a reduction when those of other dry-crop land got it. The Collector conceded a trifle to their plausible expectations, although at the expense of true equality on this as on some other occasions, as after all the estimation of the farmer of land, as of the purchaser of a commodity, is a criterion of its value that must meet with attention from those that have to treat with him.

9. Great moderation was to be shown in fixing these amounts, in order to admit of the farmer granting remissions to individuals out of his profits.

10. The farmer was to enjoy the benefit of all improvements made by himself, and future improvements in general were, as a rule, not to be taken into account in fixing the amounts.

11. In backward villages where an immediate increase of revenue might be anticipated, leases with gradually increasing rentals (*istívá* and *chadtá patá*) might be granted.

12. The duration of the leases might vary, according to circumstances, from three to ten years. The usual average for villages in fair condition might be seven years.

13. Leases were only to be granted in such numbers as to admit of the Collector and his assistants personally reporting on the condition of the villages on their expiration.

14. On expiration of its lease a village might be held under direct management for a time.

15. Ryots were to be at liberty to leave any village, subject to the ordinary custom as to ownership of houses and lands being relinquished.

16. Disputes between farmers and tenants were to be settled by arbitrators (Pancháyats) nominated by the parties, or, if arbitrators were not appointed, by the Collector. Awards made by Pancháyat and confirmed by the Collector were to be binding, but appealable to the Civil Courts.

17. The farmer was to be bound to resign his lease if arbitrators declared his management injurious to the interests of Government and the ryots.

18. The farmer was to be bound to pay two years' rent as a fine if he threw up his lease before its expiration.

19. In case of over-exaction he was to pay treble the amount levied. This fine was to be realised as any other revenue demand.

20. The village officers were to be maintained, and all fees, emoluments of holders of lands, &c. continued.

21. The assignment of Patels' *vatas* (hereditary remuneration in cash, rent-free land, &c.), usually made to the officiating Patel, was to be made to the farmer, the other Patels receiving only non-officiators' shares.

An additional order was issued to the Collector of Surat that farmers were to be prohibited from drawing away cultivators from other Government villages. Moderation in fixing the leases was enjoined, in order that the farmers might not be driven by fear of loss to press hardly on the ryots, but have a reasonable return for their time and capital. About the same time the Collectors were directed to discontinue the practice of requiring security for the value of crops before removal, and to fix the instalments according to prevalent crops in such a way as to allow the cultivators time to dispose of their produce: these need not be fixed for the whole of a district, but the circumstances of each village taken into consideration.

This system of leasing was not necessarily to be confined to whole villages: individual cultivators were to be granted leases of their holdings, and on the Court of Directors appearing inclined to prefer these to village leases, on account of the undue influence the latter might give the Patels who obtained them, the local Government combated the idea, on the grounds that such leases to Patels would not only preserve the legitimate influence of the latter, but also indirectly guarantee against increase of his own assessment any ryot who might not have taken a lease of his holding. Patels, after the passing of Regulation XVII. of 1827, had no further control over the assessment or cultivation of land.

After some further correspondence on the subject of granting leases to the Patels in the Olpád subdivision, the Collector had to report, in 1827, that the negotiations had failed owing to there being generally two factions in the villages; each was afraid that the other would not cultivate, and might thus cause loss to the farmers. On receipt of this Report Government ordered that as the grant of leases was meant to benefit the people themselves, the matter need not proceed if they would not agree to take them. Some of the leases were, however, subsequently agreed to on somewhat modified terms. About this time there had also arisen a question as to the advisability of maintaining the right on the part of Government of property in the houses occupied in villages by its tenants, a right fully recognized by the custom of the country, and still upheld in many villages in the Province not

under direct State management. Taking a negative view of the question, Government had authorized the issue of a proclamation surrendering the right. The Collector of Surat, however, remonstrated, on the grounds that it would be useless to surrender the houses to the tenants for their creditors immediately to seize, and that it was as well to have houses which could be given to immigrants from foreign territory. On this the issue of the proclamation was suspended.

In 1828 it was reported by the Collector of Surat that, notwithstanding repeated orders from the Court of Directors that in revising assessments lands should be rated on an estimate of their general value in place of allowing the rate to fluctuate according to the description of crops raised, that system had not been adopted in his Collectorate. It came to light also that in the southern portion all land not in actual cultivation had been appropriated rent-free (probably by the Desáís and their caste-fellows, the Bhátelás) as *vádú* (grass preserves), and was not allowed to be cultivated. In sanctioning the introduction of leases this was all directed to be thrown into the common stock, and as a general rule only from a half to one *bigla* allowed to each cultivator. In the Chikhli subdivision 10 per cent. of such land was allowed to be retained. The *khajúr* (date-palm trees, from which the liquor misnamed toddy was extracted) in each man's holding were to be considered his own property, and only those in waste land handed over to the farmer.

The method of revenue settlement is thus described in a Report of the period:—The tenures were still the *kháitábandi* and *áundábandi* already described, and the *sparrávia*, the last being no real tenure, but merely an annual settlement with cultivators holding lands outside the villages in which they lived. Payment was made in money in all but four villages, where rice was still divided into the proportion of one-half to Government and one-half to the ryot. When the crops had been nearly all removed from the ground, about April, the *Mámálatdár* or *Kumávisdár* (chief Revenue Officer of a subdivision) proceeded in person and assembled the people in each village, with the *Taláti* and *Tálukdar*, the village accountant, and the Revenue Patel. Each man's holding was then examined, and if no objection was raised, it was

renewed on existing terms; a writing to that effect was given and a counter-agreement taken. The ryot was allowed to increase or decrease his holding, but in the latter case the land to be relinquished must be a fair average sample, and not inferior land only. If this was not agreed to, the whole holding was transferred to someone else willing to take it. When this had been done, *patás* (rent agreements) were prepared for the Collector's signature. In some parts the annual settlements were commenced much later, in consequence of the ryots refusing to sign for their holdings until the rain fell in June. The result had been inconvenient, as ryots only cultivated the best lands, and would not sign for their holdings unless waste was excluded, although it was understood that the good and bad land in a holding could not be separated without the *Mámlatdár's* permission, the ryot being responsible for the whole unless that permission was obtained. After this nothing was done until the crops were nearly ripe, when the ryot either paid the first instalment or gave security; on this permission to reap was given. The system, at the root of which was, of course, over-assessment, was acknowledged to be objectionable, but had been continued because the revenue had been found to suffer when it was relaxed. Mr. Morison, in 1820, had stated that no village was honest enough to pay up without it, and his successor had been directed to try six villages on a more liberal system, but the result had been unfavourable to Government.

The fact of the general heaviness of the assessment in his charge was brought prominently to the notice of Government by the Collector of Surat in 1829. He pointed out that, whereas the average produce of *javári* in two *bighas* of land rated at Rs. 21 and Rs. 4 (the maximum and minimum rates) was about 76 maunds, the value at existing prices was only Rs. 36, out of which the revenue demand would be Rs. 25, and that consequently land was going out of cultivation. Orders were accordingly issued that a revision might be commenced on the basis of the demand not exceeding the value of half the gross produce, and measures might be taken to bring the waste lands into cultivation by letting them out at low rates, but not so low as to induce the ryots to abandon their old cultivation for new. Any detailed

information beyond what was contained in the records of the Survey already carried out did not appear necessary to enable people of experience to judge of what would be fair rates of assessment. The Collector having recommended a general reduction of 25 per cent. on garden and $12\frac{1}{2}$ per cent. on dry-crop lands, it was directed that the abatements to be made were to be local and specific. A per-centage reduction might be carried out in a single village or group of villages, but could seldom be applied even to a whole subdivision without causing an unfair inequality of assessment.

Particular inquiries into the necessity for reducing the assessments were directed to be made in the Olpád subdivision, where some of the leases already mentioned as having been granted had been given out without a proper explanation of their terms to the lessees, and it was clear that the rents were in some instances heavier than the people could afford to pay. In the levy of these, unusually harsh measures, such as the sending of the lessees to jail—measures that should never be resorted to, except in cases where payments were evaded on frivolous pretences, or where farmers had realised their rents and not paid them themselves—had been made use of. A further Report, in 1830, showed the failure of these leases to be due partly to the fall in the prices of grain and land being thrown out of cultivation, to people of inferior rank to the Patels having been admitted to hold the leases, which led to misunderstandings as to the payment of shares, and to disputes with the Mámíatdar. The Desáís at this time were in favour of the abolition of the leasing system, and of a survey to ascertain the actual state of cultivation with a view to the levy of assessment accordingly.

It was in this year that the office of Revenue Commissioner was created, under Reg. IV. of 1830. His duties were prescribed to be the general superintendence of the proceedings and arrangements of the Collectors and subordinate Revenue authorities, and to suggest improvements; to prevent the infringement of established rights and customs, whether real or conventional, and receive appeals against acts of the Collectors; to fix, under the orders of Government, the periods for annual revenue settlements, and forward the Reports of the Collectors on these and other

subjects; to advise the Collectors in matters of difficulty; generally to promote economy in establishments, and to visit the whole of his charge once a year, if possible. It may be mentioned here that in 1830 a second Revenue Commissioner was appointed, and in about 1880 the number was increased to three, in charge respectively of the Northern, Central, and Southern Divisions of the Presidency.

One of the first noteworthy proceedings of the Revenue Commissioner with regard to Surat was to object to a proclamation the Collector proposed to issue requiring security for the revenues of their villages from the Patels, and threatening the attachment of crops if it were not given. Various suggestions were made for the more effectual security of the collections, such as that each ryot's holding should be clearly ascertained at the annual revenue settlement; that the instalments should be fixed according to the seasons when different crops ripened; that the Taláti and Patels should be made responsible for pointing out which of the holders could be relied on to pay up, and in what cases it would be advisable to take security, or adopt other precautionary measures for realising the revenue. The suggestions were approved by Government, but further instructions given, which would have led to mischievous consequences if strictly carried out, to the effect that a ryot's payments in place of being credited in his current year's accounts, should be used in the first instance to wipe off arrears of previous years.

A Minute by Sir John Malcolm, dated 11th November 1830, did not give a favourable account of the condition of Surat. It stated that the influence of the Desáís in the early days of British rule had destroyed the authority of the Patels and prevented the benefits that would otherwise have arisen from the introduction of village accountants. A succession of expedients to improve matters had been tried, and the system of direct settlements with the ryots (*rayatvári*) introduced; but nothing could, in his opinion, succeed as long as the village communal system remained disorganized, and Patels were mere nominees of the Collector in place of being hereditary. The instance of the subdivision of Olpád was given as one of a district formerly lightly assessed and well governed by the Chief of Vinchur, but now in such bad condition

that the attempt to give village leases to the Patels had failed. At this time some idea seems to have been entertained of carrying out a permanent settlement of the revenue, for in the reply of Government to the Revenue Commissioner's Circuit Report of the year it is stated that the attention of the Collector of Surat had been called to previous orders laying down that *khátábandi* settlements should be made in surveyed villages every year when the circumstances appeared favourable, with a view to permanent settlements as soon as the area and value of land had been sufficiently accurately ascertained to admit of a moderate fixed assessment being determined. Fortunately for Government and the ryots, the idea proceeded no farther.

On the Collector in 1831 proposing a general reduction of three annas in the rupee on account of the fall in prices, the Revenue Commissioner was directed to visit Surat and make personal inquiries. His Report after doing so is worth quoting to show on what crude data the existing assessments were made. In Olpád, notwithstanding a survey made for the Chief of Vinchur when he held the subdivision, when the total rental of a village had once been fixed it was levied irrespectively of any increase or decrease of cultivated area. In the settlement made by Mr. Morison in Chorási the rent entered in the village books in *ásrá* or estimated *bighas* was divided by that area, and the quotient thus obtained simply applied to the area ascertained by measurement. Thus, if a field of four estimated *bighas* was entered at a rental of sixteen rupees, the rate per *bigha* (four rupees) was retained; and if by measurement the field contained five *bighas*, its new rent was put down as twenty rupees; or if it measured only three *bighas*, at twelve rupees. In Supá and Párchol the same method of re-assessment was adopted. In the wilder districts of Karod, Sarbhán, Válod, Buhári, &c., the old system of looking to previous years' collections was still continued. The Revenue Commissioner recommended the substitution for this of the *kuadibandi* system (payment in the lump on the holding inclusive of lands left fallow or waste), or, if a more detailed settlement at fixed rates per *bigha* should be considered necessary, that all lands should be re-classified with the assistance of experts from Northern Gujarát. For the present he recom-

mended a general reduction in the rates of *javári* and sugar-cane of one to two annas in the rupee, of rice of two to three annas, and of *bájri* of three to four annas. These proposals were only meant as a general guide, and the suggested reductions were not to be rigidly adhered to, as ryots seldom cultivated only one kind of crop. The general reduction proposed, inclusive of remissions for land rendered unarable by salt efflorescence, or washed away, or overgrown with noxious grasses, came to rather over one and a half *lakh* of rupees out of about fifteen *lakhs*, and was sanctioned. Instructions were issued that leases were not to be granted pending the revision of assessment, except in case of deserted villages which it was desired to re-establish.

In the course of the inquiries necessary for this revision it was found that, in consequence of the practice of keeping up cultivation sometimes by a reduction of rents and sometimes by letting out lands at lump rentals, the numbers of fields were not traceable in the village accounts. Orders were accordingly issued that the numbers were to be strictly adhered to, and a revision of holdings undertaken with the assistance of respectable people. For the current year (1832) the revenue collections were to be suspended in *Olpád* up to one and a half anna in the rupee, and in the remainder of the Collectorate up to two annas.

In 1833, Rs. 2,16,227 outstanding as balances against the ryots were written off the accounts in this Collectorate. The numbers of fields in the village registers were reported to have been restored and the accounts generally to be better kept. Some difficulty at first experienced in re-introducing the *kundábandi* system into *Bagváda*, in consequence of the ryots not being willing to give up rice lands of which they had become possessed from other cultivators having died or absconded, was at last solved by the people themselves agreeing that each man should retain the rice land in his own possession, and have included with it in his *kundú* as large a proportion of dry-crop land as the village area would admit of being allotted to him. A temporary revision was also carried out in *Chikhli* and *Válod*, while in the remainder of the Collectorate leases on the *khátúbandi* and *kundábandi* systems were given for five years. These revisions caused a considerable decrease in the land revenue, as in *Supá* from an

average of Rs. 1,26,826 for the last ten years to rentals rising from Rs. 85,388 to Rs. 89,882; in Párchol from an average of Rs. 1,61,047 to Rs. 1,16,808-1,17,055; and in Sarbhán from an average of Rs. 80,947 to Rs. 54,404-56,349.

A Report from Mr. Chambers, Assistant Collector, submitted in this year, gives a detailed and interesting account of the revenue history of Valsád from before the introduction of British rule, but is too long for quotation. A similar account of Supá shows that the condition of that subdivision was very depressed, that prices had fallen by fully two-fifths, and the area under the plough decreased by 6,000 *bighas* in five years, and, had it not been for the revision, a fourth of the people would probably have emigrated into the neighbouring Gaikvári territory. It was evident that of late years the revenues had been only paid out of the proceeds of surreptitious cultivation. Mr. Chambers has also left on record an account of the way in which the pernicious effects of the exorbitant rents charged in 1827-28 in the leases of the Olpád subdivision, which have been several times alluded to, resulted. The first year passed without any material breach of the conditions of the leases, except in six villages, but their management left the lessees very small profits, if it did not involve them in actual losses, and it became evident at the close of the year that many of them were on the verge of ruin. In the next year commenced a series of annual remissions, which had a demoralising effect on the cultivators, and led, after some of the farmers had been imprisoned and some of the leases cancelled, to these being broken up and a *khátibandi* settlement being made. The remissions were as follows:—

	Gross Rental.	Remissions.
	Rs.	Rs.
1828-29	5,72,446	2,06,447
1829-30	5,76,373	91,389
1830-31	5,48,383	29,225
1831-32	5,31,690	85,403
1832-33	5,76,136	1,42,521

Even when the new settlement was put in force, however, a reduction of rates of assessment, which had been authorized by Government, does not appear to have been carried out.

In a Report made by the Collector in 1835 on the revision in the Chikhli subdivision, the following account of its revenue management is given:—From 1801–2, when it came into the possession of the East India Company, the farming system was continued for eight years. At that time the Collector fixed the total rental of the subdivision with reference to the general condition of the season and ruling prices of produce, and the Kumávisdar distributed the rental, with the assistance of the Desáis, on the several villages. In 1809–10 the whole was leased to the Desáis for three years. Up to 1812–13 no general re-measurement of the lands had been made, but only partial ones when disputes had arisen among the Desáis. From 1813–14 to 1815–16 fifty-eight villages were let to Desáis, and of the rest some to permanent tenants and others to *uparváriás*. In 1816–17 the Desáis and Tálukdárs (Desái Patels) had leases of thirty-five; in twenty-one *khátábandi* settlements were carried out, and in the remaining twelve the old rentals were continued. From 1817–18 to 1831–32 triennial *khátábandi* settlements had been made. The average revenue of the whole subdivision for the fifty years from 1781–82 to 1831–32 had been Rs. 1,32,887; the years 1817–18 had the highest revenue, Rs. 1,90,405; and 1790–91, a year of famine, the lowest, Rs. 41,357. No records of the old assessment rates were forthcoming. The Desáis produced some old papers, from which it appeared that good rice was moderately assessed at Rs. 8 or 9 the *bigha*, and common rice at Rs. 5 to 6; but 25 per cent. was always added on to these, and the per-centage was afterwards doubled. *Káli paraj* (low caste or black tenants) generally paid a fourth less than *ujli paraj* (high-caste or white tenants). After the introduction of British rule no change was made in the rates till 1816–17, when Mr. Morison revised them preparatory to applying the *khátábandi* system. At this time the highest rates the Desáis had ever paid were assumed as the basis, and rates for sugar-cane were doubled, the relative proportion between *káli* and *ujli paraj* being preserved. The rates were subsequently lowered at various times, and in 1833 the Collector decreased them from one to five annas in the rupee. These reductions gave general satisfaction, but the distribution of assessment still remained very uneven. In Mr. Morison's

revision a certain amount of classification of different soils was carried out, and a more minute subdivision in the more recent revision. Rates were raised to what was considered a proper standard, except in some cases where the cultivators were in a state of great poverty. Some of the *ujli paraj* were found to be assessed at *káli paraj* rates, and their assessments were revised accordingly. It was proposed, with regard to the former class, to fix rates to be generally levied on dry-crop lands in place of rates varying with the crop, with a view to make the revenue less fluctuating, to give the ryots more independence in the disposal of their lands, and to simplify the village accounts. A general re-measurement of land by native measurers (*mooniffs*) was advocated with a view to *vádá* (pasturage and grass) lands being fairly distributed, and to bring to account the various changes that had taken place since 1825-26, the date of the last measurement. For this purpose all holdings had been renewed for one year only. These proposals met with the approval of Government.

From these details it is clear that a glimmering of light had begun to dawn upon the minds of the authorities in Bombay that the state of revenue matters in Gujarát was unsatisfactory. It will be seen hereafter that in the Deccan and those parts nearer the head-quarters of Government a rather earlier awakening had taken place, but even there the steps taken towards reform were for some time like those of men groping their way in the dark. It seems strange that it should not have been sooner perceived that nothing could be more calculated to retard the progress of the country than uncertainty of tenure of land, uncertainty of assessment owing to absence of information as to area of fields and quality of soil, and discouragement to the investment of capital and labour in improvements by the levy of heavier crop-rates on superior than on ordinary produce. But that at the bottom there was a real desire not to oppress the people is shown by the fact just recorded that at the revision of assessment poor tenants were let off more cheaply than rich, although this was at the expense of the principle that the area and natural qualities of soil alone can be the basis of equitable assessment. One cause at about this period probably led specially more than others towards the introduction of salutary reforms of different kinds: this was

the appointment of a Revenue Commissioner, whose duty it was to go about to the different Collectorates and see things for himself. To this may be traced an order to Surat, confirmed by Government, that village accountants' salaries should be regularly paid; that the practice of employing Mohsuls (men sent to live upon a village) by way of enforcing revenue demands should be sparingly resorted to; that the *khali* system, by which all crops were obliged to be brought to and kept in the public crop-store of the village until the revenue was paid, should be gradually abolished, an experimental trial of the effect of this being at once ordered for a few villages; that receipts to ryots should be given at once in place of when an answer acknowledging a remittance of money had been obtained from the subdivisional officer; that the proper rate of exchange should be given to a ryot paying in money in any currency that suited his convenience, and that an account current should not be opened with a banker for the payment of village revenues. In the sister Presidencies the duties of the Bombay Revenue Commissioners are performed by stationary Revenue Boards, but the supervision of details by the latter cannot possibly be so close or efficient as those of the former. A Collector may report as much or as little as he thinks proper, and in many instances a Revenue Board would be none the wiser if he omitted to furnish information on really essential details of system. He might even win their approbation if he did not trouble them with any details, as long as he showed a fairly flourishing revenue balance-sheet. Not one of the particulars just mentioned would probably have been reported to a Board, all essential as their correction was to a proper administration of the revenue; they owed their discovery and immediate rectification to the visit of a Commissioner who went through each of his subordinate Collectorates with his eyes and ears open. It may be said that there is no reason why the members of a Board should not go on tour, or pay occasional visits to districts where their presence might be particularly required, but there can be no doubt that the prospect of the annual arrival of a supervising authority must tend to keep local subordinate officers up to the mark, and prevent them falling into slovenly or detrimental methods of conducting affairs.

The revision of assessments in 1835, confirmed by Government in 1836, led, on the whole, to an increase of nearly 3½ lakhs of rupees, in consequence, probably, of their more equitable distribution. Although, however, an advance in principle was made in the revision of Chikhli by fixing general rates to be levied on dry-crop lands irrespectively of crops, differential assessments according to the caste of the cultivators were still continued; Kunbies, Kolis, Bhátelás and others of the superior castes were charged 25 per cent. more than Dhondias and Dublas, and the benefit of the lower scale was extended to the Desáis. Special rates were fixed on rice lands after inspection by experts, and resulted in an increase in some cases where land had been under-assessed without adequate reasons. *Hundá* settlements for five years were, however, only carried out in thirty-three villages, the cultivators in the remainder, probably persuaded by the Desáis, having refused such settlements.

In 1836-37 a continuous improvement of over Rs. 30,000 in revenue in consequence of the revision of assessment was reported, and in the following year various taxes, such as one levied before leave to cut crops could be obtained, objectionable in their nature, to the amount of over Rs. 10,000, were abolished; a grazing tax on professional shepherds, although not done away with, was ordered to be regulated by the numbers of their flocks and herds, &c.

In 1838-39 there was, on the whole, a decrease in revenue, but the collections were satisfactory, and outstanding balances were realised in the revised districts. It was reported that immigration from neighbouring foreign territory was taking place, and that a good many old wells had been repaired and new wells built. Remissions to the amount of nearly five lakhs of rupees had, however, to be given on account of the failure of the monsoon.

For the next three years, up to 1841-43, no great change was made in this Collectorate. Revision of assessments proceeded on the same lines as those already inaugurated, and the leasing system adopted appears to have proved satisfactory. In 1843 the Collector proposed the imposition of a light assessment on the extra land that had been thrown in rent-free into holdings to

allow for fallowing (*badlán*), and the Revenue Commissioner suggested that the same course should be followed with regard to lands appropriated for pasture, disapproving of a proposal that such lands should be put up annually for sale by auction, as the custom of allowing land rent-free for such purposes was very ancient. The Government directed that all land taken up for pasturage purposes, beyond what was usually allowed rent-free, must be paid for at full rates.

In 1844 it was reported that there were still forty-five villages in Bagvádá and twenty-five in Valsád in which revised leases had not been granted. In fifteen of these, in which a classification of rice and garden lands had been made by juries (*Pancháyats*) under the supervision of the Collector, sanction to the proposed rates was given. With regard to {revision in dry-crop lands and the difficulty arising from fallow and pasturage lands being thrown in free of rent, two methods of settlement appear to have been adopted, one to place a reduced general rate on the whole, and the other to give each cultivator a certain area of land rent-free in proportion to his cultivation: the former of these was carried out in the majority of cases. Nothing remarkable appears to have taken place in 1845, except that Government, on the recommendation of the Collector and Revenue Commissioner, gave permission for ryots to extirpate liquor-producing trees from their cultivated lands, the value of the trees being deducted from the toddy-farmer's lease. A farm of the right to collect dung from the encampments of wandering Brinjarries in the Collectorate, hitherto sold by auction, was also abolished. In 1847 a question arose as to the propriety of remitting for a year the assessment on waste lands brought into cultivation: the Collector in the first instance had discontinued the practice, but subsequently allowed it if the land had been waste for three years or more. The Revenue Commissioner proposed to limit the rent-free tenure to cases in which the land was in such a state as to require extra labour to bring it again into cultivation, and Government directed that caution should be exercised in interfering with the existing custom.

In 1849 a revision of assessment was proposed for the Olpád subdivision. When detailed field-registers were first introduced

here, the separate fields had to be measured in detail by the village accountants, the measurements of the Survey having been confined to that of large blocks; assessment had been imposed on the fields without any regular classification of soils. For the purpose of revision, juries had gone through the lands field by field, supervised as far as possible by the Mámílatdár. The statements made out by them were forwarded to the Collector, who assembled the ryots, and after hearing any objections they had to make, passed final orders. The financial result in twenty villages reported as settled on this plan was slightly to increase the assessment, the average assessment for ten years having been Rs. 47,106, and that under the new rates for 1846-47 Rs. 48,830. With these twenty villages were included five revised by the Collector in 1842 at one general rate of Rs. 4½ per *bigha*, but subsequently modified into three rates of Rs. 3½, 3, and 2½. The proposals were sanctioned by Government, who ordered the revision of the remainder of the subdivision to be proceeded with on the same method.

In 1581 the revision of twenty-six more villages in Olpád and Kursad, carried out in the usual manner by means of juries, was sanctioned, as well as that of sixty-one villages in Valsád, Bagvádá, Párnera and Párchol, apparently revised under the old system without such aid.

For the next few years no revisions of assessment were carried out in this Collectorate. The results of the revision in Olpád and Kursad continued to be favourably reported on up to 1853. The operation of revising the assessments on all lands in the Province according to the principles of the Bombay Revenue Survey having been commenced in the Ahmadábád Collectorate in 1851, and the new system, which will be described in detail hereafter in dealing with the Deccan, having been successfully introduced into several subdivisions, the new measurement was extended in 1857 to the Surat Collectorate in the subdivisions of Válod, Sarbhán, and Karod, and gradually extended to the remainder; but it was not till 1866 that any actual revision of rates was carried out. In the meanwhile the revenue administration was carried on almost entirely on the existing system, it being considered unadvisable to attempt to amend matters here and there by carrying out

temporary revisions, when measures for a complete reform throughout the Province had actually been undertaken.

It will be appropriate, before entering upon the period relating especially to the most recently introduced and existing system of revenue management of the district, to show the manner in which the land has developed under British rule.

A.D. 1800 to 1808, no returns available. In the Bombay Revenue Diary of the 2nd of February 1808 the receipts in Surat are said to have increased from Rs. 6,24,463 to Rs. 7,28,122 in four years, but to which four years this entry refers is not quite clear. That of 1800-1 is given at Rs. 4,04,583, which is probably exclusive of Chorási, ceded in 1801. The subsequent large increase was due to the cessions under the treaty of Bassein on the 31st of December 1802. From 1808-9 up to the date of the new survey the land revenue has been as follows:—

	Rs.		Rs.		Rs.
1808-9	9,17,820	1827-28	18,76,522	1847-48	16,25,000
1809-10	9,13,111	1828-29	22,59,432	1848-49	14,15,020
1810-11	8,88,336	1829-30	15,03,661	1849-50	15,15,000
1811-12	9,11,124	1830-31	14,18,970	1850-51	16,56,440
1812-13	9,18,359	1831-32	11,77,300	1851-52	16,56,440
1813-14	9,81,448	1832-33	10,77,890	1852-53	16,93,500
1814-15	10,24,958	1833-34	14,39,180	1853-54	17,00,000
1815-16	10,47,369	1834-35	15,08,450	1854-55	17,16,710
1816-17	11,22,105	1835-36	15,09,400	1855-56	16,93,910
1817-18	15,85,233	1836-37	15,15,800	1856-57	20,20,490
1818-19	16,40,186	1837-38	15,18,820	1857-58	20,73,770
1819-20	15,63,799	1838-39	14,78,880	1858-59	21,14,260
1820-21	15,05,273	1839-40	15,14,070	1859-60	21,57,980
1821-22	14,79,529	1840-41	15,35,450	1860-61	21,52,480
1822-23	12,65,014	1841-42	15,62,520	1861-62	22,45,370
1823-24	14,08,827	1842-43	15,93,200	1862-63	23,64,430
1824-25	10,90,411	1843-44	16,16,670	1863-64	24,09,380
1825-26	14,02,902	1844-45	15,95,850	1864-65	23,93,930
1826-27	18,92,580	1845-46	15,03,490	1865-66	25,22,110
		1846-47	16,24,620		

Apart from increases consequent on cessions of fresh territory, as those in 1817-18 and 1818-19, the great fluctuations observable in some years have been owing to large remissions having had to be given on account of bad seasons, as in 1824-25 and 1828-29. On the whole, there can be no doubt that the return speaks favourably for the general system of British administration,

which had led to the great extension of cultivation to which the large increase of land revenue was mainly due.

BARDOLI.

In 1866 the first Revenue Survey settlement was introduced into the Bårdoli subdivision, which comprised the old subdivisions of Karod, Sarbhán, and Válod, to the east of Surat. It is bounded on the north by the Taptee river, which flows between it and the Mándvi subdivision. It touches the Jalálpur subdivision on the south-west, but with this exception is surrounded by Gaikvár's territory. The western and south-western portions, in addition to possessing the most fertile soil and the densest as well as the most industrious and skilful agricultural population, has a great advantage over the eastern portion, mostly comprised in the old subdivision of Válod, in being much nearer to the markets of Surat and Nausári. In Sarbhán the pressure of population was 398 to the square mile (that of Belgium being about 380), in Karod 317, with an average of 19 and 17 acres to the plough respectively; whilst in Válod population was 218 to the square mile, and there were 30 acres to each plough. The proposals first sent in by the Superintendent of Survey threw the subdivision for maximum dry-crop rates into no less than fourteen groups, often of one and two villages only, fixed as much on consideration of the former low assessments paid by *kili paraj* (literally, "black subjects") or inferior cultivators as on accessibility to markets. After consultation with the Revenue Commissioner, however, the groups were reduced to seven. There were 138 *kádes* or directly-managed Government villages; and there being but little difference in climate and rainfall throughout them, except that the more easterly Válod villages were somewhat more feverish than the western portion, the grouping was made dependent on the distance of the several villages from Nausári and Surat, the two nearest markets and railway stations on the B. B. & C. I. Railway. There was no made road in the subdivision, cleared tracks, but little better, from being more direct,

than the old country cart tracks, being the only means of communication with the markets. The poorer classes took their produce mostly to the local markets of Bârdoli, Karod, Motâ, Vânkâner, and Buhârí; but with this exception three-quarters of the produce found its way to Surat. Some of the black soil was superior, and the *besar*, a kind of mixture of black and *gorâru* (white) of which most of the rice lands were composed, was almost all capable of producing second crops of castor-oil. There was but little alluvial soil (*bhâtâ*). The assessment had pressed hitherto very unequally, in consequence of far larger quantities of *vádâ* (grass-preserve land) having been allowed rent-free in some than in other villages, and in some places having been monopolized by the headmen of villages, Desâís, and others to the exclusion of the poorer classes. In 1839 the occupied area, inclusive of *vádâ*, had been (according to estimated *bighas*) 61,564 acres, and in 1865-66 this had increased to 89,188, an increase of 45 per cent. in twenty-five years. In the same period the collections had risen from Rs. 2,63,823 to Rs. 2,95,797, or 10 per cent., remissions having averaged only Rs. 58,10a. 2p. on Rs. 2,52,490. The prices of some of the principal grains had risen as follows:—

	1832-33. Sears per Rupee.	1864-65. Sears per Rupee.
<i>Javâri</i>	50	26½
<i>Bâjri</i>	48	29
Grain	64½	17½
Rice { <i>Sukhvel</i>	65½	17½
{ <i>Karâ</i>	80	30½

The ryots were said to be out of debt, and to reap all the profits of agriculture themselves. Great fault was found by the Revenue Commissioner with the way in which waste land had been thrown in by the Survey measurers to make up Survey numbers of a theoretically correct size. This had been done to the extent of 37,730 acres, at least Rs. 30,000 of which were ordered to be thrown out and made into separate numbers, to be taken up or not at the option of the people.

Under the revised grouping the comparative assessment in the

different groups before the deduction of waste which was ordered stood as follows :—

Class.	Villages.	Assessment of 1863-64.	Assessment of 1865-66.	Increase. Rs.
		Old. Rs.	New. Rs.	
1	15	68,458	74,555	6,102
2	19	41,663	48,007	6,344
3	22	49,328	59,271	9,943
4	20	57,800	61,432	4,132
5	27	54,500	58,678	4,178
6	28	37,970	46,790	8,820
7	7	15,515	16,742	1,227
	<u>138</u>	<u>3,24,734</u>	<u>3,65,475</u>	<u>40,746</u>

After the deduction of the Rs. 30,000 on account of waste, there would be an increase in assessment of only Rs. 10,750 or 3·3 per cent. There was rice land in only forty-three villages. The maximum water rates were fixed according to the situation, the general fertility, and area under cultivation, at rates varying from Rs. 15 on a 24-anna classification down to Rs. 2, as follows :—

	Average. Rs. a. p.		Average. Rs. a. p.
1st class . .	11 5 7	6th class . .	5 9 11
2nd „ . .	9 8 0	7th „ . .	5 4 3
3rd „ . .	8 6 10	8th „ . .	4 13 0
4th „ . .	6 11 11	9th „ . .	4 11 5
5th „ . .	6 9 3		

There was in thirteen villages what was called natural garden land, i.e. land where water was procurable so near the surface as to be always available for garden crops by merely digging a pit. On this a maximum rate was fixed, on a 24-anna classification, of Rs. 17 4a., which gave an average of Rs. 12 0a. 1p. There was also a little land watered by lift from streams. On this a maximum of from R. 1 to Rs. 2 per acre was fixed; and in the Sarbhán and Karod villages, on land watered from wells, rates per water-bag varying from Rs. 21 for sweet down to Rs. 5½ for brackish water. On the whole, the new average rate per acre was Rs. 4 1a., as compared with Rs. 3 10a. 3p. under the existing

system. The general result will be seen from the following statement:—

Area of cultivation, 89,185 acres; ten years' collections, Rs. 2,52,490; assessment at old rates in 1863-64, Rs. 2,91,622; on cultivation in 1864-65 at old rates, Rs. 3,24,730; new system on the same area, Rs. 3,62,440; on waste, Rs. 36,745.

Of this the dry-crop assessment was Rs. 2,61,541, average Rs. 2 14a. 3p.; rice ditto, Rs. 1,13,348, average Rs. 8 11a. 9p.; garden ditto, Rs. 25,282, average Rs. 10 10a. 7p.

With regard to *káchá*, or enclosed land round houses or home-steads, the following rules were passed:—

In village sites, up to an acre to be allowed rent free. Out in the fields, if round inhabited houses, the same allowance to be made; this would apply to huts occupied by the *Hális*, or servants of *Desáis* and superior holders. In other cases, where such enclosures were used for cattle, farm-servants, &c., the area not generally under tillage was to be deducted as unarable from the number in which the enclosure was situated, and the rest assessed.

It amounted to 3,704 *bighas*. It will be seen that there was still waste of the value of Rs. 36,745 that would help, when cultivated, in raising the assessment.

JALALPUR.

Jalálpur, comprising the two old subdivisions of *Súpá* and *Párchol*, had revised rates sanctioned for it in July 1869. It lies on each side of the B. B. & C. I. Railway southwards from the *Nausári* station as far as the *Ambika* river, extending on the west to the sea. When it came into British possession by the treaty of *Bassein*, on Dec. 31, 1802, both the *Súpá* and *Párchol* portions were in fair condition, the former being then valued at an annual revenue of Rs. 51,000, and the latter at one of Rs. 1,07,000. The chief land tenure was the *kundúbandi*, a lump assessment on holdings. In the early years of British rule little was done to change the system of revenue administration; but although the farming of villages was continued, the farms were gradually taken

out of the hands of the Desáís, whose influence, as shown above, was too great. In 1817, when Mr. Morison introduced triennial *ryatvári* settlements, a rough measurement was undertaken, but the basis of the revision was an estimate of the crop-produce of fields, from which average rates per *bigha* were deduced. The measurement brought a large excess of unrecorded and unassessed land to light, and the crop estimates doubled the rice rates and increased those on dry crop 50 per cent. beyond what they had been in the time of the Mahrattas. Hence the prosperity of the district declined. The more scientific measurements carried out subsequently by Capt. Newport's survey were of little use, as no boundary marks were erected. The pressure of assessment in 1817 was in Súpá Rs. 10 13a. 11p., and in Párchol Rs. 14 1a. 7p., or, including rent-free *vádá* (grass preserves) amounting to 14,510 acres, Rs. 7 10a. 9p. These heavy rates, levied notwithstanding falling prices, amounting to two-fifths in the ten years before the crisis, necessitated the grant of large annual remissions. The instalments at this time were levied before the crops were sold, or in some cases even before they ripened. This system was changed in 1831, and the security of Patels in place of money-lenders was ordered to be taken for payment of revenue. In 1822-23 the average rate per acre had risen to Rs. 7 14a. 9p., but this was reduced by Mr. Chambers's revision in 1833 to Rs. 5 7a. 4p. The result of this, in 1838, was found to be that the outstanding balance of Rs. 79,689 had been paid off, and the cultivated area had increased by 10,000 *bighas*. Meanwhile irrigation had risen from 708 *bighas* in 1833 to 1,634 in 1838, and 107 new wells had been built. There were also 250 new houses, and 124 families had immigrated into the subdivision.

By Mr. Liddell's revision in 1837-38, the average rate, inclusive of *widi*, fell further to Rs. 4 7a. 6p. In 1844-45 the rates in Párchol were supposed to be lowered 25 per cent., but the average rate came to Rs. 5 13a. 5p., and the average on the whole subdivision rose to Rs. 4 15a. 9p. From this time up to 1861 annual settlements were made on the Talátís' (village accountants') reports of new land taken up, the assessment on the old remaining as before. By the Survey measurements an increase of 4 per cent. in the cultivated area over that recorded for 1866-67 was brought

to light, and 28 per cent. in *vádá*. The villages were grouped for maximum dry-crop rates in five classes, as follows:—

	Villages.	Situation.	Maximum. Ra. a.
First . . .	5	Near two railway stations . . .	6 4
Second . . .	5	In the neighbourhood of these	6 0
Third . . .	22	Farther from railway . . .	5 8
Fourth . . .	24	Still farther	5 0*
Fifth . . .	28	Farthest from railway . . .	4 8*

The average assessments for twenty years had been Rs. 2,31,003, and the realisations Rs. 2,29,125; so that the remissions had been nominal ($2\frac{1}{2}$ pies per rupee). The average acre rate by the Survey came to Rs. 5 0a. 9p., which compared with other settled subdivisions as follows:—

	Rs. a. p.
Borsad (Kheda)	4 14 2
Nadiád do.	4 4 6
Chorási (Surat)	5 13 6
Chikhli do.	2 8 2
Bárdoli do.	3 10 3

Rice water rates were fixed at from Rs. $17\frac{1}{2}$ to Rs. 12, in addition to the soil rates. There was natural garden, as explained above, in forty-seven villages, for which maximum rates of from Rs. $22\frac{1}{2}$ to Rs. 14 on a 24-anna classification were fixed, the averages coming to Rs. 7 0a. 7p., Rs. 25, Rs. 21 6a. 2p., Rs. 26 5a. 7p., down to Rs. 4 13a. 2p. in different classes. The average maximum on well-watered land came to Rs. $7\frac{1}{2}$. The general result was as follows:—

	First Class. Ra.	Second Class. Ra.	Third Class. Ra.	Fourth Class. Ra.	Fifth Class. Ra.
10 years' average	28,723	21,899	71,272	60,808	42,715
Assessment of 1867-68	28,907	23,115	75,316	67,252	50,703
By Survey	32,615	25,913	91,633	86,049	65,699
	19 years. Ra.	1867-68. Ra.	Survey. Ra.	Increase over 1867-68. Ra.	
Total	2,25,417	2,45,393	3,01,526	22.9 p. c.	

N.B.—The real total is Rs. 3,01,909, but Ra. 283 have to be

* The soil in these was a good deal impregnated with salt.

deducted for fractions thrown out in the settlement of three Narvá villages, and on account of favourable leases for wells that had not expired.

The increase is almost entirely accounted for by lands found in excess of the recorded area, of the assessed value of Rs. 20,100, and Rs. 86,123, the difference between Rs. 9,856 paid for *vádá*, and Rs. 45,979, its full assessment: this gives a total of Rs. 56,223, whereas the total increase by the Survey over the rental of 1867-68 was Rs. 56,233.

Notwithstanding the excessive assessments described, the subdivision had made great strides since the introduction of British rule. In 1823 the population had numbered only 173 to the square mile; in 1867 it was 332. Houses had risen 68 per cent., cattle 55 per cent., ploughs 26 per cent., carts 22 per cent., and wells had increased by 1,799, of which 932 were permanent and 867 temporary. There were at the time of settlement only 1,766 acres of assessed arable waste, all of which had since been taken up.

PÁRDI.

The subdivision of Párdi, comprising the old divisions of Bálda Párdi, and Bagvádá, the most southerly portion of the Collectorate, was revised in 1871. It was bounded on the north by Valsád and Chikhli, on the east by Dharampur territory, on the south by the Portuguese territory of Daman (Damaun) and the Tháná Collectorate, and on the west by Daman and the sea. It was traversed from south to north by the B. B. & C. I. Railway, which had two stations within its limits, viz. at Párdi and Vápi, or Damaun Road. Its chief markets were at Párdi and Valsád, and timber from the Dharampur forests and firewood were exported from the harbour of Kolak to Bhaunagar and Bombay. It was the connecting link between the Province of Gujarát on the north and the Konkan on the south, and its soil partook of the nature of that of both provinces, merging to the south of the Kolak river into the shallow trap soil of Sanján in Tháná. The dry-crop soils, probably more on account of the scantiness of the

population than the poverty of the soil, had constant fallows given them. In the rice lands two crops were generally taken, and no fallows were allowed. There was plenty of sweet water available from temporary wells within easy distance of the surface, but the majority of the agriculturists being Dhondias, Dublas, and Naiks, who were unskilful and otherwise wanting in energy and agricultural capital, this natural resource was made very little use of. The Bhátelá Brahmins and other higher castes preferred a life of ease and cultivating by means of Hális (hereditary servants or dependants) to tilling their lands themselves.

The subdivision was ceded, with other territory, by the Peshvá in 1817, and included five villages shared with the Rájá of Mándvi from 1810, which finally lapsed in 1841. Before British rule a crop-rate per *bigha* had been established in 1738-39, in which that for rice was nominally Rs. 2½ per *bigha*, but this rate was really nominal, as three *bighas* of dry-crop were thrown in gratis for every one of rice. In 1819-20 a rough survey was carried out by native measurers, and a *khátábandi* (lump assessment on the holdings) introduced into some villages, and crop-rates into others. In 1827-28 a new rough survey was made preparatory to the introduction of a *hundábandi* (lump assessment), but as the *bigha* varied greatly, from the theoretical four-sevenths of an acre to 1½ acres, matters were not much improved. In 1841, again, the Collector's surveyor measured seventeen villages, in which dry-crop rates were fixed on an average of the previous ten years' realisations, and 1½ acres of *badlán* (exchange land for fallow) was given in with each holding, and Rs. 10 were ordered to be levied for every 100 liquor-producing trees.

In 1832-33 the *hundábandi* system was restored as far as possible, but was found impracticable in many cases, as the redistribution of land to form the *hundás* would have deprived many of the ryots of their rice lands. There were at that time one *hundábandi* village, thirty-six mixed *hundábandi* and *khátábandi*, and seventeen entirely *khátábandi* villages.

Between 1835 and 1843 several of the Collectors introduced settlements on *bigha* rates in thirty-six villages, but forty-four were continued on the old systems. In all of these a deduction

of 10 per cent. was made in the rates for *káli paraj*, or low caste cultivators, and this distinction was preserved till 1862. In 1863 *bigha* rates were introduced into forty-two villages based on average past realisations, but no allowance was made in the assessment of the *káli paraj*, the consequence being that a great deal of land was left waste, and Rs. 5,000 of remission had to be given.

Notwithstanding these patchwork revisions of assessment, the country progressed of late years notably on account of the advent of the railway; and whereas the cultivation in 1849-50 had been 50,906 acres, assessed at Rs. 82,301, in 1868-69 they had severally risen to 62,274 acres and Rs. 1,08,115. The average of twenty years' cultivation had been 58,490 acres, on which Rs. 95,398 had been collected; and for ten years the area had been 61,378 acres and the realisations Rs. 1,08,384.

Párdi was thrown, for maximum dry-crop rates, into five groups. The first of these contained only Párdi itself, which had a station, with a maximum of Rs. 2. The second consisted of Vápi, in which the other station was, and nineteen other villages nearest the Párdi station, with a maximum of R. 1 12a. The third had a maximum of R. 1 8a., and contained twenty-nine villages about equidistant from the two stations. The fourth and fifth, with maximum rates of R. 1 4a. and R. 1, contained seventeen and thirteen villages respectively, and lay to the east, comparatively distant from both railway stations.

There was a little alluvial soil (*bháidá*) on which inferior sugarcane could be grown without irrigation. For this it was proposed to treble the dry-crop rate, in addition to levying an extra rate if a temporary well was made use of. For lands watered by lift from streams an extra rate of from Rs. 6 to Rs. 4 was to be levied according to the nature of the water, some of which was brackish. In lands under permanent wells, Rs. 26 per water-bag, or about Rs. 7 per acre was to be levied. This it was proposed to levy over and above the rice water-rate on rice lands, but on the Revenue Commissioner's recommendation the proposal was negatived.

According to old averages deduced from the accounts of forty-five villages, the new rates compared with the old as follows:—

		OLD.			NEW.											
Dry Crop.		Rice.	Garden.		Dry Crop.	Rice.	Garden.									
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.									
1	4	3	14	0	4	13	5	0	13	10	5	13	6	4	11	4

The general result will be seen in the annexed table :—

	1st Class. Acres.	2nd Class. Acres.	3rd Class. Acres.	4th Class. Acres.	5th Class. Acres.	Total Acres.
Survey settlement	4,758	32,602	40,796	80,188	16,644	1,24,984
Ten years' average	Rs. 3,296	Rs. 25,572	Rs. 35,878	Rs. 25,094	Rs. 13,548	Rs. 1,03,384
Revenue of 1868-69	Rs. 3,637	Rs. 26,786	Rs. 36,818	Rs. 26,768	Rs. 14,107	Rs. 1,08,116

The Survey settlement on cultivation, inclusive of waste in Survey fields, was Rs. 1,24,984, or 16 per cent. above the assessment on the old system of 1869-70, and 20 per cent. beyond the average of ten years' realisations. At the settlement the whole of the old assessed land was taken up.

A difficulty connected with this settlement arose from the question of the treatment of liquor-producing trees. The trees had been counted in 1828-29, and assessed at the rate of Rs. 10 for every hundred trees. The assessment had not since been reduced, unless the trees then assessed in a holding had all died; nor had it been raised, although there had in the meantime been a very great increase in their number, viz. from 93,530 to 2,42,650. This assessment had hitherto been credited to "Land Revenue." The Superintendent of Survey proposed to assess the trees at Rs. 6 per hundred, according to the system that had been adopted in Sanján (Tháná), but Government in their Resolution directed that, as a special inquiry was being made into the *ábkarí* or liquor-taxing system, matters should remain as they were until a decision had been come to on that inquiry.

MANDVI.

The subdivision of Mándvi was revised in 1872. It had lapsed, and been annexed to British territory by Act X. of 1848 in consequence of the death of the last Rájá without heirs. It is situated in the north-east of the Collectorate; and although the revenue had risen from Rs. 64,742 in 1856-57 to Rs. 1,32,555 in

1866-67, it was at the time of settlement the most backward and jungly portion of the Collectorate. An exception must be made to this in the case of the western portion and a few villages towards the Bárdoli subdivision to the south of the Taptee river. It was surrounded on the west, north, and east by Gaikvár's territory. During the time of the Rájá's management the farming system had mostly prevailed, but since the introduction of British rule the systems of *bigha* rates or plough tax or crop-rate levies had been gradually substituted on no fixed rules. At the time of settlement the population only amounted to 169 to the square mile, and to the same area there were only 36 houses, 68 farm cattle, 22 ploughs, and 9 carts, showing a great want of agricultural capital and stock. There had never been a survey carried out in the subdivision, so that the statistics of revenue, &c., based on the village accounts, were not to be relied on. There were nominally 154 Government villages to be assessed, but six of these were in the jungle, and their sites were not traceable. For maximum rates of dry-crop assessment they were divided into five groups, as follows:—

First.—Thirteen villages. These included Bodhán and four villages immediately round it. The rest were also in the west, in the least wooded part of the country, and nearest the B. B. & C. I. Railway.

Second.—Eight villages, on the south bank of the Taptee, adjoining the villages of the Bárdoli subdivision, and having their chief market at Surat.

Third.—Thirty-seven villages. This included the remaining villages in the neighbourhood of Bodhán, Mándvi itself, with all the rest of the villages in the west and south, except the eight of the second group.

Fourth.—Thirty-nine villages. The whole of the villages to the north and east of the third group, except those of the fifth group.

Fifth.—Fifty-seven villages. The whole of the east and north-east of the subdivision, mostly covered with jungle, with bad water, and sickly.

The maximum rate proposed in the first instance for Bodhán and the first group was Rs. 3½, but in deference to the Revenue

Commissioner's opinion an exceptional maximum of Rs. 4½ was subsequently proposed; finally, however, the original rate was sanctioned by Government, as the extra prosperity of the group had been created by the industry of the people themselves. For the second group the maximum was Rs. 3½, and for the third Rs. 2¾, descending by differences of 12 annas each in the two last groups to Rs. 2 and R. 1½ on account of the jungly character and unhealthiness of the region. Maximum water rates were proposed for the several groups at Rs. 5 4a. and Rs. 4 14a. for the first two groups, at Rs. 3 for the second two, and at only Rs. 1½ for the last jungly group.

The general result was as follows:—

Group.	10 Years' Average.	Last Year's Collections.	New Settlement.	De-crease.	In-crease.	Waste included in Fields.	Total, inclusive of Waste.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	90,731	34,182	28,250	5,932	—	2,716	30,966
2	9,276	10,352	10,941	—	589	1,515	12,456
3	44,290	48,332	53,726	—	5,394	11,716	65,442
4	28,670	30,329	32,155	—	1,826	10,846	43,001
5	5,288	5,388	5,505	—	117	6,072	11,577
	1,18,255	1,28,588	1,30,577	5,932	7,926	32,865	1,63,442
				1,994			

The increases on the average of ten years and on the revenue of the year preceding the settlement were thus, if the waste thrown in to form Survey fields is excluded, only 14·7 and 5·5 per cent. respectively. From the returns of 1872-73 the following particulars have been ascertained:—

	1871-72.	1872-73.
	Rs.	Rs.
Gross revenue . . .	1,48,729	1,41,735
Remissions . . .	25,822	2,154
For collection . . .	1,22,907	1,39,581

There was a decrease of 6,099 acres from numbers in which waste had been included being thrown up, as might have been expected in a jungly tract of country.

agricultural stock and capital. On the whole there was a plough to every twenty acres of land at the time of settlement.

From 1756, when the country fell into the hands of the Peshvá, the farming system with all its evils prevailed. The revenues were collected on the crop-rate system (*tulvâr-bighoti*), until it was set aside under Mr. Chambers's settlement in 1836. In this, the system of what were called the Bamania and Doría rates, i.e. double and 50 per cent. less, the proportion being roughly as four to three, the former on *ujli-paraj* and the latter on *káli-paraj* cultivators, was substituted for crop-rates, and continued in force till the Survey settlement. After 1802, when Chikhli was presented by Anandrao Gaikvár to the East India Company, the revenue increased rapidly, in consequence of the abolition of the farming system. From Rs. 90,000, at which it had been farmed out, it rose in two years to Rs. 1,12,993, and in two years more to Rs. 1,47,001. In 1809-10 the whole of the villages were leased for three years to the Desáis, and on the expiration of the lease a general measurement was carried out by Mr. Morison, the Collector, preparatory to the introduction of a *ryatvâr-khátábandi* system, which was brought into force three years afterwards in twenty-one villages, and in the next year into the whole subdivision. The settlements were at first triennial, but from 1832-33 became annual. These measures proved fatal to the influence of the Desáis, and their share in the revenue management became thenceforward nominal. Various modifications of rates were made, and by Mr. Morison's revision in 1816-17 the revenue rose to Rs. 1,90,405. In 1833 a partial revision by Mr. Stubbs, and another in 1834 by Mr. Law, were followed in 1836 by that of Mr. Chambers, the principal features of which were the abolition of crop-rates and the measurement and adjustment of the *vádá* or *badlán* lands ("grass preserves" and "exchange" for fallow). Two sets of rates were fixed in dry-crop soils for *ujli* and *káli paraj* respectively, but rice lands were re-classified and assessed at different rates according to quality. The *vádá* lands were settled on the principle of giving *hundá* (lump) settlements of their holdings to ryots for five years, by which they were authorised to retain in their possession varying quantities of waste in proportion to the cultivated area in each man's

holding. As a rule from one to three *bighas* were allowed. In about half the villages, however, this was objected to at the instigation of the Desáís, and the old system was allowed to continue.

Since 1836 partial *hundábandi* settlements had been introduced into almost all the villages of the subdivision, and, with partial modifications, the same system was maintained in force till the Survey revision. From the unequal way in which *vádá* lands were held in different villages, owing to the influence of the Desáís, it would be impossible to arrive at a fair estimate of the average pressure of the old assessment, but it may be stated, for what it is worth, that for the ten years preceding the Survey the cultivation, &c., had been as follows in 64 out of the 68 villages:—

	<i>Bighas</i> of Government Land.	Collections in- clusive of Cesses. Rs.	Remissions. Rs.
1854-55	102,909	167,864	—
1855-56	100,900	166,632	—
1856-57	101,213	168,306	84
1857-58	102,299	170,402	90
1858-59	104,811	173,193	7
1859-60	106,470	173,869	—
1860-61	108,457	178,370	—
1861-62	110,357	181,137	—
1862-63	110,594	183,068	—
1863-64	110,543	184,294	—

At the Survey settlement a maximum dry-crop rate of Rs. 5 for the best villages was at first proposed, but after introduction it was found that this would be too heavy, and one of Rs. 3 8a. was substituted. This was finally changed by Government to one of Rs. 3 12a. for a group of five villages close to the Bília-mora railway station. The rate of Rs. 3 8a. was confirmed for nineteen villages lying in the west of the subdivision near the railway, inclusive of three the maximum for which the Superintendent proposed at Rs. 3 4a. (N.B.—The Government Resolution is ambiguous on this point.) The other groups were retained, as the Superintendent proposed, at rates from Rs. 3 to Rs. 1 8a., mostly on account of unhealthiness of climate and distance from markets, and partly for such unusual reasons as

that the soil was inferior (which the classification should have provided for), or that the assessment of the villages would be too suddenly raised; a certain amount of discretion being left to the Revenue Commissioner, who had objected to some of the grouping, to re-arrange it with the Superintendent. The rates were to be considered experimental for a year, at the expiration of which they were to be confirmed for the usual period of thirty years if favourably reported on. With these several changes it is impossible to trace from the Settlement papers what the actual result of the revision was, but according to the Superintendent's proposals, partially sanctioned by Government, the assessments were as follows :—

—	Total Acres.	Old System. 1864-65.			New System. 1864-65.			In-crease per cent.
		Dry Crop.	Rice and Garden.	Total.	Dry Crop.	Rice and Garden.	Total.	
1st class	27,724	Rs. 39,417	Rs. 48,480	Rs. 87,897	Rs. 46,105	Rs. 51,138	Rs. 97,243	10·6
2nd "	1,948	3,148	1,975	5,123	3,785	1,773	5,558	8·4
3rd "	7,413	10,203	8,082	18,285	11,617	8,535	20,152	10·2
4th "	10,202	10,773	10,550	21,323	14,319	12,828	27,147	27·8
5th "	14,674	16,471	18,518	34,989	17,970	20,166	38,136	8·9
6th "	6,784	6,888	6,051	12,939	8,472	6,668	15,140	17·0
7th "	11,756	9,270	16,615	25,885	12,610	15,690	28,300	9·8
8th "	1,382	1,273	1,069	2,342	1,474	993	2,467	5·8
9th "	3,245	1,933	2,880	4,813	2,391	3,794	6,185	28·5
Total	85,078	99,376	1,14,220	2,13,596	1,18,743	1,21,585	2,40,328	12·4

Water rates for rice were fixed at a maximum of Rs.12 in addition to the dry-crop rate, making the highest rate in a first-class village Rs.15 12a. This was applied in only twenty-six villages; in other groups of nine, seventeen, and eleven villages the maximum rates were respectively, exclusive of dry-crop rates, Rs.11 10a., Rs.11 4a., and Rs.10 8a., and in three separate villages Rs.10 2a., Rs.9 4a., and Rs.9. In lands capable of being watered from temporary wells, where water was procurable within a short distance of the surface, various rates, ranging from Rs. 24 to Rs. 1 8a., were imposed. For water raised by lift from streams which were stated not to have shifting beds a maximum of Rs.6 per acre was fixed, and graded downwards according to the facility of obtaining the water under different circumstances.

On the whole, the average new rate on all lands, inclusive of waste land thrown in to make up Survey fields, was according to the new rates Rs. 2 12a. 7p., whereas the old rate on cultivation was Rs. 2 8a. 2p. The assessment on this included waste was Rs. 8,885 on the whole subdivision, and the area 3,846 acres, the average being 1a. 8p. per cultivated acre, so that the real average increase was 2a. 9p. an acre.

CHORASI.

The assessment of the Chorási subdivision was revised in 1867, having been sanctioned by Government and the usual guarantee for thirty years given in May of that year. It is that in which Surat itself is situated, and has the further advantage of being traversed almost through its centre by the B. B. & C. I. Railway, of which there is one station within its limits, and a second in the territory of Sachín close to some of its villages. With the exception of two villages on the edge of the Olpád subdivision on the opposite bank, it is bounded on the north by the river Tapti, and on all other sides by Gaikvári and other foreign territory. It contains both black cotton soil (*regar*) and *goráru* (here called *gabáru*) of good quality, and alluvial soil (*bhátá*) of such a superior kind in five villages in a loop of the river as to require a special adjustment of the classification to meet its requirements in determining its value relatively to that of other soils. Surat is one of the most flourishing markets in Gujarát, and of the greatest advantage to the ryots in disposing of their produce. The average number of people to the square mile, 335 exclusively of Surat itself, may be taken at about 400, almost all the cultivators of the surrounding villages living within its walls. There were at the Settlement twenty-three carts, twenty-seven ploughs, and 162 cattle of all sorts to the same area, but these have no doubt since increased largely. The population of the subdivision outside Surat is entirely agricultural: their houses are as a rule substantial, and they present the appearance of being well-to-do. For some time after the introduction of British rule the farming system which had prevailed was continued, but was

gradually superseded by that of direct dealing with each ryot (*rayatwári*), in the first instance in an imperfect and objectionable form, the rates being fixed by dividing the amounts realised under the farming system by the area of cultivation; these rates apparently came to as much as Rs. 12 to 14 per acre all round. In 1815-16 a survey, which was never applied to revenue purposes, was commenced, but gave way to that of Captain Newport in 1823-24. His measurements were adopted in 1827, and formed the basis of settlement until the introduction of the Revenue Survey. In 1833-34 the soil was classified by Pancháyats, and on the basis of this classification considerable reductions of assessment were made, and new settlements continued to be made in the same manner as leases of villages, to the number of twenty, fell in, up to as late as 1858. The assessment of the subdivision as a whole was thus left very uneven and inequitable, and could only have been borne in many cases through the alleviations afforded by grass lands (*vádá*) having been held at low rates with cultivated lands, thus allowing the ryots to profit by the high rates they could obtain for grass sold in the town, by fruit and liquor-producing trees having been enjoyed without extra taxation beyond the assessment of the land, and by the great facilities for procuring manure, in addition to the unusual natural fertility of the soil. By the census returns of the Survey of 1823-24, for fifty-eight of the sixty-three villages of the subdivision compared with that taken at the Settlement, there had been an increase of 36 per cent. among males and of 41 per cent. among females, a decided proof, in India, of advancing prosperity. In 1824 there were not fifteen women to twenty men, whereas in 1864 the population had become twenty-four of the former to twenty-six of the latter. There had been an increase of 34 per cent. in ploughs, of 68 per cent. in carts, and of 18 per cent. in agricultural cattle. The area of Government land in cultivation had also risen 35 per cent., and the collections from Rs. 87,345 to Rs. 1,11,190, or 26 per cent., between 1845-46 and 1864-65. The proportion of cultivated land to the whole arable area was the high per-centage of 95, and remissions for twenty years had only averaged about $3\frac{1}{4}$ pies in the rupee, whilst the average realisations had been Rs. 7 la. per acre. Making allowance, however, for *vádá* lands

held at low rates, this would be reduced to Rs. 5 13a. This was higher by Rs. 1 8a. 6p. than the average collections in Nadiád, the highest hitherto found in the whole Province of Gujarát. The grouping proposed for maximum rates of dry-crop assessment was as follows:—

First.—Eighteen villages within two miles of Surat, inclusive of deserted villages, the cultivators of which were inhabitants of the town.

Second.—Twenty-four villages within four miles of Surat, and two miles of the Sachín railway station.

Third.—Fourteen villages within six miles of Surat and four miles of Sachín.

Fourth.—Seven villages isolated in the midst of foreign territory in the south-east, with Rundh and Magdala, at some distance down the river.

The maximum dry-crop rates proposed for the several groups were Rs. 7, 6½, 6, and 5½. For rice the water-rate was fixed at one rupee less than the soil rate in the several villages, and for alluvial soil, which was very valuable, and was classed up to 24 in place of 16 annas, rates of Rs. 12 and Rs. 10 were proposed. For garden lands under wells rates of Rs. 33 12a. in black and Rs. 27 in light soil per water-bag were proposed: this, on the calculation that a bag worked for nine hours would irrigate about 4½ acres in black and 3½ in *goráru*, would give a maximum of Rs. 7 8a. per acre. For the small area of land watered by lift from the beds of streams an extra rate of Rs. 3 per acre in addition to the dry-crop rates was proposed. The general result was as follows:—

Class.	Villages.	Old System.			Survey.			
		10 Years' Average.	Year before Settlement.	Old Average Rate.	Occupied Land.	Waste.	Total.	New Average Rate.
1	18	Ra. 39,643	Ra. 44,181	R. a. p. 3 0 1	Ra. 43,367	Ra. 1,740	Ra. 45,107	R. a. p. 8 3 3
2	24	44,360	53,505	5 11 3	56,368	1,770	58,338	5 13 6
3	14	20,346	26,663	5 7 10	26,465	748	27,213	5 7 7
4	7	9,005	10,664	4 6 3	9,730	341	10,061	3 15 3
	63	1,13,354	1,35,013	6 1 4	1,36,120	4,599	1,40,719	6 1 8

The total culturable area was 23,544 acres, the total Survey assessment Rs. 1,40,719, and the average per acre Rs. 5 15a. 8p. A general cess of Rs. 33 6a. 2p. on shepherds was to be abolished, and *káchá*, or enclosures round houses, were to be given rent-free up to one acre. In guaranteeing the rates for thirty years Government directed, as proposed by the Revenue Commissioner, that no extra assessment should be levied on any land in which liquor-producing trees were grown, reserving the right to assess separately the liquor when drawn for fermentation or distillation as *úbkári* revenue.

OLPÁD (OOLPAR).

The subdivision of Oolpar (properly Olpád) came under British rule in 1817, on the Peshvá's final overthrow. The two Tálukas of Kursád and Olpád were formerly united, but the latter was amalgamated with Tadkesar in 1833-34. On Tadkesar being put into the Mándvi subdivision in 1861-62, Kursád reverted to Olpád. One or two other changes took place, and at the time of settlement in 1870, the total number of villages was 146; of these 133 were *rayatvári*, 2 *bhágdári* (held in shares), 7 *hundábándi* (lump assessment), and 4 alienated.

Olpád is bounded on the north by the river Kím, on the west by the Gulf of Cambay, on the south by the Tapti, and on the east by Vasrávi and Galá, belonging to the Gaikvár. On the west it contained a large area of salt, unarable land, hardly reclaimed from the sea, which bore a proportion of almost half to the arable land. The soil was black and *besar*, an inferior description of black. It had also some *gorát*, which varied from a light sandy soil to *gabhán*, a rich kind of *gorúru*, the white soil of Gujarát. Its chief products are cotton, *javári*, and *bájri*. The B. B. & C. L. Railway runs along the eastern boundary of the subdivision, and has three stations, viz., Amroli, Sáen, and Kím. A bridge over the Kím gave communication with the Hánsot subdivision of Bharuch, and railway feeders connected Olpád with Sáen and Vadoli with Kím. The railway, however, did not carry much of the exportable produce of the district, which was mostly taken to the great market of Surat and the neighbouring town of Ránder on the Tapti.

A year or two before the survey of the Collectorate was made by Capt. Newport, in 1823-24, the old *rayatvāri* settlement, which had been previously in existence, the system of cash assessments having been introduced in 1803-4, was changed, and one of triennial settlements with the ryots themselves substituted, the ryots' security for each other's payments being accepted. A reduction of 5 per cent. in the assessments had lately been made, and, together with a further reduction, the plan of giving *vádá* (grass preserve) at low rates with every holding was adopted. In 1827-28 and 1832-33 further reductions were made, the *vádá* system being still continued. Between 1845 and 1850 the assessments were again revised with the aid of Pancháyats, and the *vádá* lands were classified with the rest of the lands and assessed, but the assessments were not to be levied as long as the *vádá* remained uncultivated. A settlement by holdings (*khátibāndi*) was then fixed for five years, during which time the *vádá* lands were to be allowed rent free, the result being that a great impulse was given to cultivation; and since 1857-58, when prices began to rise, the increase had been rapid. No remissions had been found necessary since 1860-61. The average rates of assessment for the twenty years before 1868, when the Survey settlement was introduced experimentally, had been as follows:—

	Acres.	Assessment.	Average per acre.		
		Rs.	Rs.	a.	p.
On cultivated land	87,000	4,47,473	5	2	4
On <i>vádá</i>	12,393	25,143	1	15	2
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	99,393	4,72,616	4	11	11

The same maximum rate for dry-crop, Rs. 7, was adopted as in Chorási, and the villages were grouped in five classes, in gradations of half a rupee for each group, down to Rs. 5.

First group.—Twenty-six villages near Surat and Rānder, and within two miles of Surat and Amroli railway stations.

Second group.—Twenty-six villages near the Sáyen and Kím stations.

Third group.—Forty-two villages farther from the Surat market, and some near Olpád itself, which had an inferior market; also near the port of Bhagrá, from which grain was exported to Bombay and Bhaunagar.

Fourth group.—Thirty-four villages on the coast, far from markets, and with soil more or less impregnated with salt.

Fifth group.—Fourteen villages ditto.

There was but little garden land, which was irrigated from wells. A maximum of Rs. 10 was proposed for this; and in *bhátá* (alluvial), as in Chorási, one of Rs. 12. For rice water the plan of fixing it at a rupee less than the dry-crop rate, in addition to the latter, was adopted. The area was small. The general result of the revision will be seen from the following statement:—

Class.	Vil- lages.	Cultivation of 1868-69.			Per- centage Increase.
		By Old Rates.		By New Rates.	
		Area.	Assessment.		
1	26	Acres. 16,972	Rs. 1,08,639	1,23,274	13·4
2	26	20,313	90,107	1,10,692	22·8
3	42	25,998	1,16,838	1,40,851	20·5
4	34	27,301	1,18,247	1,34,610	13·8
5	14	9,402	37,299	38,202	2·4
	142	99,986	4,71,130	5,47,629	16·2

About half of this increase was due to the full in place of the partial assessment of *vádá* lands. The old average rate having, as shown above, been Rs. 5 2a. 4p., exclusive of *vádá*, the new average of Rs. 5 7a. 7p., inclusive of it, must be considered very moderate, when the enhancement of prices, the construction of the railway, and other circumstances are taken into consideration, together with the improvement in the material resources of the subdivision shown in the following statement for 140 villages.

	Popula- tion.	Houses.	Agricul- tural Cattle.	Other Cattle.	Ploughs.	Carts.
At the Survey of 1823-24	47,519	10,592	12,827	16,652	4,889	2,718
At the New Survey	57,396	15,370	13,775	26,798	6,400	3,996
Increase per cent.	20·7	35·6	9	60·9	30·9	47

There were thus only 15·6 acres to each plough, and a pair of bullocks to every 3½ acres of arable land, proving a very high state of cultivation of the soil.

VALSAD (BULSAR).

Experimental revised assessments were introduced into the subdivision of Valsád (Bulsar), including Párnera, in 1868, and finally guaranteed for thirty years by Government in 1870. It is separated from Gaikvári territory and the Súpá subdivision on the north by the river Káveri; Chikhli lies to the north-east and east, and Dharampur territory to the east of the Párnera portion; the Pár river separates it from Párdi on the south, and on the west is the sea. It contained at the time of settlement ninety-five villages, and two already settled had been transferred from Chikhli. The Káveri, Aurangá, and Pár rivers, which with the Vánki and Bám traverse it from east to west in their course to the sea, always contain water all the year round, but the last two only after heavy monsoons. The country is level except where seven small trap hills have been thrown up near the Dungri railway station, and the hill of Párnera in the south rises rather abruptly 625 feet above the level of the sea. The soil is good on the banks of the rivers, but in the south deteriorates where trap comes to the surface. This part is chiefly inhabited by Dhondias and Dublas, probably the aborigines of the country, who are very poor cultivators. In the more northern part the agriculture of the Bhátela Brahmins and Talabdá Kolis is of a far more skilled character. Frequent fallowing was said to be required in consequence of the presence of iron in the soil.

The average fall of rain for ten years has been 71 inches. Of the 1,362 wells in the subdivision in working order 205 were used for drinking purposes; 165 were used for ordinary irrigation in land in which water was not always procurable near the surface, and were to be separately assessed; and the assessment of the remaining 252 would be included in the land rates in what was termed natural garden land. A circumstance of vital importance to the welfare of the subdivision was brought to notice by the Superintendent with a view to engineering measures being taken to mitigate its effects. This was that the sea was gradually widening, by the erosion of the tides, the mouths of the rivers and creeks, and allowing salt water to penetrate farther and

farther inland, so as to render brackish or salt the water of many wells used until lately for the raising of superior crops. One village was instanced that had already been broken up into five islands: there remedial measures would of course be too late, but they were advisable elsewhere to prevent the mischief going farther. There were no made roads in the subdivision, but several cleared roads that were useful. The chief means of communication was the B. B. & C. I. Railway, which passed through it from south to north, and had the Bulsar and Doongree stations within its limits, with that of BÍlímora just outside. The chief market was Valsád (Bulsar), a sea-port town, from which chiefly timber and bamboos, brought from Dharampur and the Dáng jungles, were exported to Káthiávád. The Gaikvár's town of Gandevi was also within reach of the northern villages. There was a large area of land in which water was so near the surface as to enable crops of superior descriptions to be raised with ease. In this natural garden land there were 2,420 acres of sugar-cane, 12,251 of rice, and 11,104 of *kodra*. More sugar was exported than even from Súpá. The grass land, 43,227 acres, was also as valuable as much of that on which cereal crops were raised, the grass being sent to Surat and elsewhere at a large profit. The rise in prices of late years had been considerable; they had been in 1857-58 and 1866-67 respectively as follows:—

		Seers per Rupee.			
		Bájri.	Javári.	Kamad Rice.	Cotton.
1857-58	. . .	50	60	60	80
1866-67	. . .	32	32	30	40

Prices of other products had also advanced in proportion.

Of the total area 29,063 acres were unarable, and of the arable 98,233 were occupied, and only 7,945 waste. Of the waste 1,698 were in Valsád and 6,247 in Párnera, corresponding to the two classes of good and inferior cultivators (*ujli* and *káli paraj*, already described). In the former the population, exclusive of the town, numbered about 400 to the square mile, and in the latter 224. The latter were mostly improvident, ill-fed, badly clothed, and much given to drunkenness, and lived in detached huts in their fields. No statistics from the time of the old survey of the Province were to be found. From those collected by the present

survey it appeared that there were 6,636 ploughs, giving an average of 83 to the square mile, with 15 acres of cultivation to each, and showing a high state of tillage. In respect to the number of carts, cattle, population, and houses (with the single exception of houses in Chorási), the subdivision showed a higher degree of prosperity than any of the subdivisions of Chikhli, Bardoli, Súpá, and Chorási. There were no manufactures of importance, but many of the inhabitants earned a good living by fishing in addition to agriculture, and bricks and tiles were made to some extent for export to Bombay. Valsád came into British possession twice for three years at a time in 1774 and 1781, but was given up again, and did not become British territory permanently till 1803 by the Treaty of Bassein. A crop-rate system had been introduced in 1738 by Sambaji Pant, the Peshvá's Subahdár, and the farming system common elsewhere was never introduced. On the accession of British rule the whole of the villages were *rayatvári*, but for four years were farmed out to the Desáis at the following sums :—

	Rs.
1804	1,22,352
1805	1,28,071
1806	1,36,002
1807	1,38,001

The same system was continued till 1814, when, owing to quarrels amongst the Desáis, the Collector discovered that they, although bound to levy only 25 per cent. in excess of the crop rates, had been taking much more, and appointed Talátis (village accountants), adding 50 per cent. on to an assessment called a *ghánim* (or ancient) *bigoti* fixed by Anandrao Bhikháji in 1784. This broke down the influence of the Desáis. Two years later the lands were measured, and new rates fixed as far as possible at what had been taken by the Desáis, and, where this was not traceable, at 25 per cent. above Anandrao's rates. On these *Mitábandi* (lump holding) settlements were made with individual cultivators, and the villages being farmed out with these settlements the revenue rose from Rs. 1,45,812 to Rs. 1,53,630. This system was finally abandoned when Captain Newport's survey

was made in 1823, at which time the cultivation and revenue stood as follows:—

	Acres.	Rs.	Average.	
			Rs. s. p.	
Valsád . . .	77,095	1,47,764	1	14 8
Párnera . . .	25,849	40,965	1	9 4
	<hr/>	<hr/>	<hr/>	<hr/>
	1,02,944	1,88,729	1	13 4

Annual settlements were then made with individual ryots till 1833, when a new arrangement was made by Mr. Chambers. He took the average of the old crop rates for his new assessment, and allowed *vádá* (or *badlán*, allowed for fallow) to be apportioned to each holding at the rate of $2\frac{1}{2}$ *bighas* for every *bigha* of cultivation. On these terms lump settlements on holdings (*hundábandi*) were fixed for from five to ten years in all but four villages of Valsád, the whole of Párnera being continued on the old system.

The plan did not succeed, and in eleven years there was an increase of only Rs. 4,996 in the revenue: it was said that the assessments were only paid by the ryots out of profits arising from the sale of timber brought from Dharampur. After this partial revisions were made from time to time by the aid of Paucháyats, who classified the soil roughly as of the first, second, and third classes (*aval, döem, soëm*), still allowing from $1\frac{1}{2}$ to $2\frac{1}{2}$ *bighas* of *badlán* for fallow in each holding. This fallow land became in course of time so mixed up with land paying regular assessment that the two could not be separated, and it had become customary in some cases not to allot the former separately, but to charge a proportionately lower average *bigha* rate on the entire holding. At the time of settlement, accordingly, it was found that to 74,685 acres of cultivation there were held rent-free 19,818 acres of *badlán* and 24,702 of average rate land: this was equal to 61 per cent. of the culturable area held on this unusual tenure. That the plan was not successful was proved by the increase of revenue in the last ten years previous to the settlement having only been Rs. 3,470, notwithstanding the great rise in prices of agricultural produce, and by Rs. 1,460 on an average having had to be remitted. The average occupied area having been 90,392 acres, assessed at Rs. 219,611, the average assessment had been Rs. 2 6s. 10p., under which the district would probably have

advanced rapidly had it not been for the drunken habits of the Dhondia and Dubla portion of the inhabitants. That drinking must have been carried to excess in Valsád is shown by the revenue derived from the sale of spirituous liquors in it, in comparison with the neighbouring subdivision of Súpá, in the year previous to the settlement, as seen in the following table:—

	Population.	A'bhári revenue.
Súpá	55,412	59,058
Valsád	72,355	78,119

For maximum rates of dry-crop assessment the subdivision was thrown into six groups, as follows. The rates were calculated in consultation with the Revenue Commissioner; so as to leave the assessment on dry-crop land nearly at the same level as before.

Class 1, 3 villages, maximum rate Rs. 8 12a.—Including only Valsád and two adjacent villages, in the best position, having both a railway station and a sea-port for the disposal of produce.

Class 2, 20 villages, maximum rate Rs. 3 8a.—Four of these were near the market of Gandevi, and the Bilmora railway station, and the rest not far from Valsád.

Class 3, 34 villages, maximum rate Rs. 3.—Not so conveniently situated for markets.

Class 4, 19 villages, maximum rate Rs. 2 8a.—The most southerly of Valsád and northerly of Párnera, with soil inferior from being near the trap formation.

Class 5, 5 villages, maximum rate Rs. 2.—More towards the trap and at a distance from markets.

Class 6, 13 villages, maximum rate Rs. 1 8a.—A group in the south-east corner of Párnera, with inferior soil and inhabited by a poor set of unskilful agriculturists.

For rice water the Súpá rates of from Rs. 11½ to Rs. 9½ were adopted, as the land in both was of similar quality; and for natural garden, much of which was recent alluvial, from Rs. 15 to Rs. 10. The average rate on the whole arable area was Rs. 3 14a. the acre.

The general effect on the revenue from dry-crop land of the

two portions of the subdivision as compared with that under the old system is shown in the following statement :—

Number of Villages.	Old System.		Survey System.						Increase per cent.	
			Occupied Land.		Waste.		Total.			
	Area.	Rupees.	Area.	Rupees.	Area.	Rs.	Area.	Rupees.		
Valsad . 59	49,748	1,56,752	49,748	1,66,535	361	783	59,109	1,67,318	6.2	
Parnara . 36	37,658	64,197	37,658	69,905	668	634	38,327	70,539	8.8	
	95	87,406	2,20,949	87,406	2,36,440	1,030	1,417	98,436	2,37,857	7.0

The difference in the average rates, according to the two systems, taking in both cases the area as ascertained by the survey measurement, was 2s. 10p. the acre. The rates were sanctioned by Government, and their duration guaranteed for thirty years in a Resolution dated 4th July 1870.

The thirty years for which the Survey settlements were guaranteed not having expired, no revision has as yet taken place in any of the Gujarát Collectrates but that of Ahmadábád.

THÁNÁ (TANNA).

THE district of Tháná, or, as it is sometimes called, the Northern Konkan, lies along the Indian Ocean to the south of the Province of Gujarát, between 18° 42" and 20° 20" N. Lat., and 72° 45" and 73° 45" E. Long. Its extreme length is about 105 miles, and its breadth varies from 65 to 37 miles. With the exception of the Native State of Jawár, it includes the whole belt of land between the Sahyádrí range, the Western Gháts, and the sea. It has an area of about 4,250 square miles, and has a population of about 900,000 souls, or 212 to the square mile. Its language is Mahratti, although many people along the coast still speak Gujaráti. It contains the subdivisions of Dhánu, Máhim, Vádá, Bassein (Vasáí), Bhiundi, Sháhpur, Sashti (Salsette), Kalyán, Murbád, Panvel, and Karjat. Bordering on the Western Gháts all the inland portions are hilly and rugged, and a good deal intersected by small rivers, which run a short course from the hills. Its rainfall as a general rule is abundant for the growth of rice, which is its chief crop.

The island of Salsette, in which the town of Tháná (Tanna) is situated, came into possession of the British by conquest from the Mahrattas in A.D. 1774, together with Hog Island, Elephanta, Karanja, and Khanderi (commonly called Kennery), a small island just outside the harbour of Bombay. Bassein, which was taken about the same time, was soon afterwards restored. It was, however, again taken in 1780, and remained in our possession until the Treaty of Sálbai of 1782 restored it to the Peshvá. In 1817,

by the Treaty of Poona, the remainder of the present district was ceded. In 1820 the southern portion, now included in Kolábá, was added to the Ratnágíri Collectorate, formerly known as the South Konkan; but in 1830 the three subdivisions of Sánkasi, Ráj-puri, and Ráígad, north of the Bánkot creek, were transferred thence to Tháná as a Sub-collectorate. In 1833 Tháná and Ratnágíri were formed into two Collectorates again. In 1853 the three subdivisions mentioned, together with the Agency of Angria's Kolábá, once more became a Sub-collectorate, and finally, in 1869, Kolábá became a full Collectorate. Meanwhile sundry changes in the area and names of the various subdivisions took place, which it is unnecessary to specify more in detail.

In the Revenue Diaries of the Bombay Government, from which most of the following notes have been taken, there are returns of the revenues of Salsette and Karanja from the year 1808-9, but no account of the system of revenue administration.

The revenues of the North Konkan appear separately for the first time, in 1817-18, at Rs. 11,64,271, and in the following year, in which Salsette is included in the Collectorate, at Rs. 13,47,871. After the latter year no separate revenue is recorded for Karanja, so that its revenues were probably administered from that time with those of the rest of the Northern Konkan.

The first notice of the existing revenue system appears in a despatch to the Court of Directors of the 19th April 1820. In this the Collector of the Northern Konkan is reported to have proposed to abolish the Mahratta system and substitute one more consonant with British ideas. He desired to get rid of all cesses, and put a rate of assessment on the land itself. He favoured the *samíndári* system, because in the *rayatvári* all the surplus produce was taken by the State, and no margin was left to provide for improvements. The proportion of the Government demand should, he thought, be fixed at one-third of the produce in good, and at less in inferior, lands, so as to leave a surplus beyond what would suffice for the support of the cultivator and the maintenance of cultivation. This surplus would form a rent, and the cultivators would find that they could maintain other cultivators instead of working for themselves. The properties of several individuals would thus gradually fall into the hands of a few, who would

become landholders. No rent was to be levied in kind, but a commuted money payment was to be fixed for six years, with a liability to revision every twelve. Rights of mortgage and transfer by sale were to be acknowledged. This programme, which was much in advance of the general ideas of the day, had been authorised in 1818; but the operation of the order was soon afterwards suspended, the Collector being directed, however, to commute all oppressive cesses into a fixed assessment on the land.

In a despatch to the Court of Directors of the 27th of November 1822, a description of the land tenures of the North Konkan by the Collector is quoted. In this the right of property in the soil is said undoubtedly to vest in Government, but the right of transfer subject to payment of the dues of the State, which are liable to increase to any extent, is conceded. Under what were called the *chickul* and *doolundee* (*chikhal* and *dulandi*) tenures land was taken up for cultivation from the waste at low rents from year to year. *Sootes* (*suti*) or *wuttun* (*vatan*) was described as the same as the *mirás* or hereditary cultivating tenure, which will be mentioned more in detail under the Deccan Collectories. The Portuguese system, which still prevailed to a certain extent, was to leave large estates to proprietors called *Fazendars*, who only paid a quit-rent of from 4 to 10 per cent. They lived on their estates in fine mansions, and the country apparently prospered under them. When the country was taken from the Portuguese by the Mahrattas, these *Fazendars* left it, and the full in place of only a quit-rent was levied, so that the country became impoverished as cess upon cess was added. Bassein only escaped in consequence of its valuable sugar-cane production. This even was found to have been brought about by fraudulent collusion between the ryots and officers of Government. The methods of assessment were the *bigowase*, or rate per *bigha*; *dāemp*, or lump grain payment on a definite piece of land, which was not measured, a system established by the Portuguese; *mogam*, which was much the same as *dāemp*; *ardhel*, or levy of half the produce of grain, and fluctuating accordingly, mostly prevailing in the salt rice lands near the sea; *nāngar* and *koila koorád* (plough and sickle and pickaxe), in the shape of cesses paid by individuals, only prevailing in jungly parts of the country. The

Collector was in favour of the first of these, but this could not be satisfactorily carried out without a survey. A survey had been made in the time of Náná Faduavis, about thirty years previously, but it had only been acted on for about ten years when the farming system was introduced: this had so changed the state of affairs that the measurements could no longer be acted on. He proposed to carry out a new survey, under which rice lands should be divided into four classes, to be assessed at one-third of the gross produce, as in Náná Faduavis's time, and that in garden lands there should be a fixed rate per *bigha*, irrespective of crop raised, so that the ryots might grow what they thought best, in addition to a tree tax. From this he would deduct 12 per cent. on account of the poverty of the country, and make a settlement for six years. On this Report information was called for as to the supervision to be exercised in carrying out the operation, and whether in what had been already done in the way of classing land according to its fertility the distance of fields from their villages and other circumstances had been taken into consideration; whether a division into four classes of soil was sufficiently minute; by what process the gross produce in each class was ascertained; whether in the commutation of grain rents into money payments present prices only had been considered or those for a series of years had been taken as an average; how the prices at different periods had been ascertained; whether the assessments were fixed by the surveyors or by Pancháyats of experts; and how the amount of former payments by villages had been traced. The Collector replied that the agency employed had been too large, and the survey too quickly carried out, to admit of thorough supervision. He was of opinion that one subdivision should be taken at a time, and the opinions of the people themselves taken as to the rates. Government directed that this course should be followed, so that he might personally superintend the operations, and in the meanwhile test villages in other parts by measurements taken by people who were not supplied with data from the former survey. The people should be consulted as to the classification of soils, and Pancháyats of experts employed in its revision. After this had been done, Government would be in a position to give orders. In the meanwhile they doubted the

necessity for giving the 12 per cent. reduction proposed, as no further remission should be made than was requisite to remove inequalities of assessment, the assessments of Sir T. Munro in Madras, in which only from $\frac{1}{4}$ to $1\frac{1}{4}$ per cent. was reduced, being indicated as a guide. These proceedings of Government were approved by the Court of Directors.

It is clear from the inquiries made by Government on this occasion that the futility of endeavouring to arrive at an equitable assessment by ascertaining, or trying to ascertain, the produce of individual fields was understood. This makes it the more astonishing that within a very few years, as will be seen in the history of the Puna Collectorate, the revision of assessment by Mr. Pringle upon this very principle should have been sanctioned and carried out. It is remarkable that in the early Report on tenures quoted above no mention should have been made of a question that was debated for many years in the Collectorate, and was finally settled only on the introduction of the Survey settlements. This is the claim of the Pándharpeshas, privileged cultivators of different castes, to hold land at lower rates of assessment than ordinary ryots. They laid claim to these rates as being the descendants of those who had originally reclaimed the village lands from waste, the name being probably derived from *pándhar*, a Mahratta term for a village community, and *peshas*, a Persian word meaning profession or occupation. They did not cultivate the land with their own hands, but by means of hired labour, and on this account claimed to hold it at specially easy rates. The claim was allowed by Government in 1820, and subsequently conceded, and the concession again withdrawn at various times, according to the opinions of different officers. The privilege was continued only to a limited extent in the Survey settlement, and finally ceases on the revision of those settlements which is now in progress.

There are twelve villages called *sharikati*, or shared, the revenues of which are divided between Government and private individuals, the latter in some cases holding their shares on service tenure.

Inifat villages, of which there were found to be 124 on the first introduction of British rule, were held on service tenure by hereditary district officers, chiefly *deshmukhs* and *deshpindis*. They

were, in the first instance, resumed and managed by Government, as the duties of these officers had become useless during the continuance of the Mahratta farming system. In 1831, on the Collector's recommendation, they were ordered to be restored, but the original holders in most cases refused to resume charge of them, and the number of the villages in 1856 had fallen to sixteen. In 1859 it was decided that the villages were liable to pay full Survey assessment, and in 1861 that, as the holders derived no benefit in villages in which the lands had been let to tenants at full Survey rates, the former might be allowed a deduction of 10 per cent. to cover the expense of management. Some difference of opinion appears to have arisen as to the applicability to those villages of the terms of the settlement, by which the services of the hereditary district officers were to be dispensed with and a proportionate deduction made from their emoluments of every description; but the point was decided in favour of the holders, and no deduction made on account of the settlement. The villages are thus all now held on the Survey tenure.

Reclamations of land along the sea-coast and salt-water creeks in the Tháná Collectorate are occasionally carried out by private individuals at their own expense, or by associations of ryots, on special terms made with Government, the former being termed *shilotri* and the latter *kularg*. In the former case the whole appears in the revenue records as the holding of the Shilotar, who is responsible for the repairs of the necessary embankments and makes his own terms with the tenants; and in the latter the tenants carry them out jointly, each having a share of the land and assessment recorded against his name. The term *khot* has been wrongly applied to the holders of fifty-three villages in Salsette, which have all been granted on various considerations by the British Government, some in exchange for land in Bombay required for public purposes in the end of the last and commencement of the present century, and others to encourage the investment of capital in land and the growth of valuable crops. Some of these are now held in fee simple, but in all cases the rights of the actual cultivators had been protected. Owing to the great value of grass and firewood in Bombay, the object with which the latter were granted has not been attained, as those

natural products pay the holders better than the growth of superior crops. The real *khoti* tenure will be described in treating of the Ratnágiri Collectorate.

Alienations of Government land, such as there were in Gujarát were not found to be so numerous in this Collectorate; the larger proportion consisted of grants for religious and charitable purposes. These have all been settled, as elsewhere, by the process of summary settlement and the issue of new title-deeds on payment of quit-rents, as described elsewhere.

The survey suggested by the Collector in 1822 seems to have been persevered in for a time, but owing to the measurements being found to be untrustworthy, the attempt to carry out a settlement based upon them was abandoned. With the exception of granting a few leases on favourable terms for bringing waste lands into cultivation, nothing further seems to have been done to improve matters, and it appears doubtful whether at the end of the first ten years of British rule the area under the plough had not actually fallen off.

Talátis, or village accountants, had been appointed, as in other places, and when their accounts for the year had been made up and examined by the Kumávisdár (chief subdivisional revenue officer), the annual settlement was made by the Daftardár, the head native revenue official under the Collector. There appears to have been very little regularity in the system: a ryot generally paid what he had paid in the previous year, with some remission for land left fallow, and an addition of one-third of the estimated yield, commuted into a money rent, of any waste land he might have taken up. The collections were made in three instalments, the first between the beginning of December and the middle of January, the second between the latter time and the end of February, and the third between the beginning of March and middle of April. The plan of taking the security of villagers for the payment of the demands of Government on each other, formerly in force, had by this time been given up, but there appears to have been no difficulty in realising the revenue.

In 1830 Tháná was constituted a principal Collectorate, including the three most northern subdivisions of the southern portion, and the five remaining in that portion were attached to

Ratnágíri. In the same year the Collector urged the granting of village leases on favourable terms, in order to attract capital to the soil, which the poverty of the ryots prevented all hope of their improving. With the sanction of Government a few such leases were granted in Salsette, but the system was not extended. In consequence of the Collector's again urging, in 1833, the necessity for some change, inquiries were set on foot by the Revenue Commissioner, who recommended that a revision should at once be carried out in the subdivisions of Kalyán, Panvel, and Nasrápur, which he was convinced, from the proportion the rent bore to the produce in consequence of the late fall in prices, from the yearly remissions that had to be given and the accumulated balances, from the large area lying waste and the wretched state of the bulk of the people, greatly required relief.

The work of revision was, by order of Government, entrusted to Mr. J. M. Davies, who attributed the state of affairs to the following causes. Before the overthrow of the Peshvá's power, the produce of the country immediately below the Western Gháts was in great demand in Puna for the large bodies of troops concentrated there, and consequently commanded high prices. In the eighteen years of peace that had followed that event the demand from that quarter had ceased, and Bombay itself, which had become the nearest market, was not only reached with difficulty, in consequence of the badness of the roads, but was well supplied by sea communication with the Malabar coast. In addition to this, the transit duties that had to be paid left the ryot but little or no profit. Accepting the measurements made by Sadásiv Kesav in the time of Mádhavráo Náráyen Peshvá, he accordingly proposed a considerable reduction in the rates of assessment paid by all classes, including the Pándharpeshas and the Thákurs and others who paid plough, bill-hook, or pickaxe cesses, together with the abolition of the transit duties. This led to a reduction of about one-fifth of the land revenue.

These proposals were sanctioned, and in 1836-37 the revision of Panvel and Murbád was taken in hand. Similar reductions were proposed and approved for these, and the levy of transit duties, which had been one of the causes that told most heavily against the ryots, was abolished throughout the Presidency. In

the same year the rates of garden lands in Bassein (Vasáí) were, on examination by the Revenue Commissioner, found excessively heavy, and were revised, together with those of Máhim, by the Collector and his assistant. A general reduction of rates, without further inquiry, was, in 1837-38, made in Kalyán and Bhiundi, and revised in 1840. The general result was a lowering of the Government demand from Rs. 29,64,000 in 1833-34 to Rs. 17,04,000 in 1837-38. Good effects, however, followed at once. In Murbád the increase in cultivation in five years more than made up for the sacrifice of revenue, and a corresponding rise took place in the other revised subdivisions. While this went on, however, in the south of the Collectorate, the old state of affairs was allowed to continue in the north.

In the latter the systems of revenue management were the *lundábandi* and *mudábandi*, or *dhemp*, already described, the plough-tax (*nángarbandi*), and the *bigha* rate (*bighoti*). The first two differed from each other only in the former being a lump assessment on a measured, or at all events an estimated, area of land, and the latter the same on an unmeasured plot of land supposed to yield a certain quantity of produce. These definitions were, however, more theoretical than real; for, from the absence of records, and the manner in which all regular system had been set aside in the time of the Mahrattas, the measure of a *mudá*, or what land should represent a *mudá*, had been entirely lost sight of, and the *dhemp* assessments merely represented customary and established payments. There could be no doubt that reform was urgently needed, but an insuperable difficulty in the way of carrying out a survey and revision of assessment lay in the want of officers qualified to carry them out.

No permanent step in this direction was made until 1854, but minor attempts at reform were in the meanwhile not neglected. In 1829, for instance, leases of villages were ordered to be given to Pándharpeshas and other respectable persons on favourable terms, but with clauses inserted to protect the interests of the cultivators and prevent injury being done to the villages. As it was proposed to fix a gradually-increasing rental on land that had lain waste for some time, and an opportunity for fraud would thus be afforded, Government were of opinion that the amount of the

leases should be fixed beforehand on a consideration of former realisations, to prevent such fraud and encourage the investment of capital in improvements by which the lessees would benefit. No guarantee, however, was to be given for the continuation of leases after their expiration. Orders were issued to prevent ryots being harassed by the collection from them of their dues directly by the hereditary revenue officers, and the payment of such dues from the Treasury. This was found, however, impracticable to some extent, as many of these dues consisted of the levy of such things as goats, eggs, and fowls. These levies, already once forbidden in 1826-27, were put a stop to in 1837.

In 1835 a petty tax levied on wood used for propping up plantains and pán trees, and later on, in 1838, a petty tax called *sheru*, yielding only about Rs. 35, and other objectionable taxes, were ordered to be abolished. The system of giving farms of trees separately from the land in which they were situated was in 1836 ordered to be discontinued. In 1837 a rough revision in a portion of the Sanján subdivision was sanctioned; in this it was proposed that three *bighas* of *varkas* (waste hill land) should be given rent free to each *bigha* of rice-cultivation, to provide grass and brushwood to burn on the latter by way of ash-manure. With this revision the cultivators were reported to be well satisfied.

On a Report submitted in 1838 of the apparently miserable condition of the cultivators in Karanja, who were said to grub all day long at a piece of ground and not to get a meal off it, Government remarked that they were no worse off than other people in the Konkan, with whom the usual terms of rent were the payment of half produce, and declined to have permanent cash rates fixed, saying that the real remedy for the condition of the people lay in the settlement of fair commutation rates every year: a small portion of garden land, however, had its assessment lowered from Rs. 12 to Rs. 6 per *bigha*, although one of the usual signs of over-assessment, viz. land lying waste, was absent. In this year the garden rates of Máhim were revised, at a reduction of over Rs. 3,000; here also Government observed that the usual signs of over-assessment were absent, but sanctioned the revision in obedience to the orders of the Court of Directors that for the existing system one in which the assessment should be calculated on the

productive qualities of the soil should be substituted. The rates proposed compared favourably with those lately sanctioned for Bassein for ten years, which had led to the whole of the garden lands being taken up.

In 1839 a considerable increase in cultivation was reported in Nasrápur in consequence of the revision. The custom of adding to a ryot's *suti*, or permanent holding, any land he cultivated for over a year was directed to be inquired into and reported on by the Revenue Commissioner. In 1840 the good effects of the abolition of transit duties was perceptible in the eagerness of the people to take advantage of the best markets for the sale of their produce, and in the increase of the number of carts, by which means they were becoming independent of money-lenders. It was stated that there was great abuse practised in the grant of *istávd* (gradually increasing) leases for the cultivation of waste lands, and that it was not uncommon for officials or broken-down farmers to obtain such leases for twenty or thirty years, and immediately to sublet them at a profit to tenants. The Collector accordingly proposed to substitute for this system one of offering waste lands for public competition, and the sanction of Government was given to the proposal. They also approved of the plan of giving relief to ryots in places where a revision could not at once be carried out, by commuting their grain into cash payments at rates below those ruling in the market. In 1842 the revenue of the Kolábá State, lately brought under the direct management of the Agent, was first shown separately in the revenue accounts of the Collectorate. In this State a number of objectionable taxes to the value of over Rs. 35,000 were abolished during the year, and the system of accounts was improved by clearing out of them large sums hitherto shown in them on account of fictitious exchange.

In 1842 orders were issued for a continuation of the rough revisions of assessment in other subdivisions that had been made in Nasrápur, Murbád, &c., with a success proved by the fact of land having acquired a saleable value; such revisions would at a trifling sacrifice of revenue prepare the way for the general revision, which it was hoped might soon be undertaken, at a small expense, by making use of measurements already made, supplementing their deficiencies, and having a rough classification of

lands into three or four classes made by Pancháyats. Instructions were given in every case to keep the land assessed on liquor-producing trees distinct from any excise levied on the liquor; it appeared that in Bassein, notwithstanding the existence of farms of the excise, *buddena* (a direct levy on trees, which included the right of selling the liquor) was levied as a tax on the land containing the trees rather than as an excise levy; yet the toddy-drawers were allowed to sell liquor as they pleased. Before allowing an extension of this system, which was demoralizing the people in Salsette, Government desired to know how it was working in practice.

In January 1843 the appointment of a second Revenue Commissioner was notified. The Northern Division was to comprise all the Gujarát Collectorates, Tháná, and Khándesh, and the Southern Puna, Ahmadnagar, including Násik, Sholápur, Belgám Dhárvád and Ratnágírf. In this year the Sub-collector of Kolábá was reprimanded for giving remissions without sanction to holders of *khoti* villages in Sánkasi and Panvel to induce them to give the same to their sub-tenants; Government declared they were no more entitled to remissions than Khotis in Ratnágírf. On account of the abuse of the system, *kauls* (leases for the cultivation of waste) were ordered only to be given by the Collector and his assistants. In 1845 the substitution of *bigha* rates for *dhemp* in three villages of Bhiundi received the sanction of Government as moderate. In 1846 the principal revenue measures carried out were revisions in a portion of the Bhiundi and Sánkasi sub-divisions, with a reduction of the rates on *varkas* (hill lands) in Kalyán. Instalments for the collection of revenue were fixed at three annas in the rupee in December, five each in January and February, and the remaining three in March. In 1847 orders were issued by Government, with a view to preservation of forests, to prevent the indiscriminate lopping of trees for ash-manure that had till then been permitted, and prohibit the cutting as regards eight of the most valuable kinds of timber trees; if this gave rise to any great inconvenience, four descriptions, at all events, were to be strictly preserved. This was justified by the fact that in other districts the burning of grass and shrubs was found to be sufficient for the purpose.

From this time orders were issued that no revisions of assessment should be undertaken pending the introduction of the Revenue Survey, except in cases of urgent necessity. The grain commutation rates in Karanj were accordingly in 1853 ordered to be continued at the same amount as that at which they had been fixed for the ten years ending with 1851-52, and the guarantee for the rates in garden lands in Bassein, which had been sanctioned for a period of twenty years from 1836-37, was similarly prolonged.

NASRAPUR (*Mahálkari's Division*).

In 1852 arrangements were completed for introducing the Survey settlement into the Tháná Collectorate. Nasrápur, in the extreme south, was the first subdivision commenced upon, and a revision first made in Khálápur, the portion under the Mahálkari's charge. The operation proved to be much more tedious than in the Deccan, in consequence of the large proportion of rice cultivation, which is necessarily in small plots. This and the land in which cold-weather crops were regularly grown were measured in detail in section numbers, subordinately to which the fields belonging to individual holdings were separately marked off. Grass and hill lands were measured in large blocks, the area of which was calculated from village maps plotted from a circuit survey. Till late in the 18th century the assessment of the rice had been fixed on the *dhemp* system, described above. In 1771-72 it was measured into *biglas*, and re-measured in 1778-79 and divided by Sadásiv Kesav into three classes, assessed respectively at Rs. 5, Rs. 4, and Rs. 3. Under the farming system the Government demand was raised uniformly to Rs. 5½, and continued the same till Mr. Davies's revision in 1835-36. Under his settlement the measurements were accepted as correct; the former first and second classes were made into one class at Rs. 4½, and the third class was raised to Rs. 3½. The privilege of lower rates was still continued to the Pándharpeshas at a uniform rate of Rs. 3½. These rates were really lighter than they appeared to be, as the *bigla*, which was nominally three-quarters of an acre, was found on measurement to be about nineteen-twentieths of an acre. The area

under cold-weather crops was only forty-four acres, assessed at a little over R. 1 an acre. Under Mr. Davies's settlement fallowed hill land paid no rent, and every holder of rice was allowed a certain proportion of this hill land (*varkas*) for *ráb* or ash manure. When *varkas* was cultivated it paid crop rates, and in some places Káthkaris (hill-men) were assessed at 12 annas the bill-hook (*koitá*). The effect of the revision was to reduce the assessment by 20 per cent. (from Rs. 47,000 to Rs. 37,000). Transit duties were abolished about the same time, and further relief was obtained by the writing off of large outstanding balances. Under these circumstances the condition of the tract of country rapidly improved, till in 1853-54 the rental had reached its former level of Rs. 47,000, and only about 1,000 acres of arable land remained waste. Remissions also had fallen to an almost nominal amount. Under these circumstances, and inasmuch as access to the markets of Bombay, Panvel, Pen, and Kalyán was comparatively easy, any great reduction of assessment did not appear necessary. The rates proposed for rice, from Rs. 4½ to Rs. 2 2a., gave an average of Rs. 3½, and a maximum of Rs. 1½ on the small area of dry crop an average of about R. 1. These rates were subsequently somewhat raised. It was proposed to attach a certain portion of *varkas* to each rice holding, and charge for it whether it was cultivated or not. The villages were divided into four classes, and the assessments raised according to the proportion the *varkas* bore to the rice land. In four villages in which the proportion of the former was unusually large it was proposed to continue the *nángarbandi* or plough-tax system. This was to be done also in the case of *varkas* taken up for cultivation by ryots not holding rice land, and the bill-hook tax was to be continued; while with regard to the privileged class of Pándharpeshas a maximum rate was to be fixed, and the difference between that and the actual assessment remitted, the privilege ceasing on the death of the present holders of lands. The effect of these proposals would be to lower the Government demand from Rs. 50,740 to Rs. 46,620, a reduction of about 8½ per cent.

The Superintendent, the Collector, and the Revenue Commissioner did not agree with regard to some of these proposals, and Government in 1856 sanctioned only an experimental settlement.

They were not satisfied that the reduction proposed was necessary, nor did they approve of the amalgamation of the rice and *varkas* rates. They were of opinion that *varkas* holdings should be marked by outside boundary marks, and a list of the fields made, so that a regular assessment might be fixed, leviable whether the lands were cultivated or not. This experimental settlement applied to 116 Government villages.

NASRAPUR (*Mámlatdár's Division*).

The portion of Nasrápur under the Mámlatdár's direct charge, and containing 177 villages, next came under revision; 164 of these were under direct Government management. These had been partly measured under the Native Government, and the heavy rates imposed under Bájiráo's farming system continued until Mr. Davies's revision in 1835-36. His revision had reduced the assessment between 18 and 20 per cent., and further relief, as in Khálápur, had been afforded by the abolition of transit duties and the remission of outstanding balances. The result had been a rise in the cultivated area from 13,000 to 19,000 acres, and an increase of revenue from Rs. 41,000 to Rs. 64,000 in 1854-55, by which year only about 2,000 acres of arable land remained waste. The revenue was collected without difficulty, and the people were tolerably free from debt. The railway between Kalyán and Puna was soon to be opened, and Nasrápur was connected with the former by road, so that there appeared no necessity for lowering the assessment. The Superintendent of Survey proposed to throw the villages into six classes, with maximum rates varying from Rs. 3 to Rs. 4½; the small area of land producing *rabi* (spring) crops—about 1,200 acres—was to have a maximum of R. 1½. For *varkas* he divided the villages into five classes, according to the proportion in which it was held conjointly with rice. Where the proportion was from 8 to 10 acres to 1 of rice, the rate was to be 8 annas; from 5 to 6, 6 annas; from 1½ to 2, 2 annas; and where less than an acre was held with each acre of rice no charge was to be made. The

maximum rate for rice, inclusive of *varkas*, he proposed should be Rs. 5. Twenty villages close to the Sahyádrí hills he thought should be still administered under the plough-tax system. The general result of the proposals, if sanctioned, would reduce the rental from Rs. 69,310 to 66,600, or about 4 per cent. With regard to the Pándharpeshas's claims to pay a lower rent, he would make the remission personal to the present incumbents, as in Khálápur.

Of the 177 villages, 7 were held rent free, 6 were held on service tenure (*izáfat*), and 1 was a *khoti* village. In the course of the survey the *izáfat* and *khoti* villages were measured and assessed. With regard to the former the Collector proposed that they should be leased to the holders at the Survey rental, and with regard to the latter that the tenure should be abolished. The privilege claimed by the Pándharpeshas he thought should not be allowed. Government gave their sanction to the Superintendent's proposals as a temporary measure.

PANVEL.

An experimental settlement was next introduced, with the Revenue Commissioner's sanction, into the Panvel subdivision in 1856-57. The subdivision contained 229 villages, of which 36 were alienated, 7 were *izáfat*, and 186 directly under Government. A portion had been under British management since the fall of the Peshvá, and the remainder since 1840 on the lapse of the Kolábá State. In the latter the assessment had never been revised, but in the former Mr. Davies's revision had reduced the Government demand by about 25 per cent., from Rs. 99,180 to Rs. 74,280. Cultivation had subsequently risen by 1855-56 from 19,000 to 24,000 acres, and revenue from Rs. 74,000 to Rs. 82,000. The condition of the people had very greatly improved since the revision, and they were, from the advantage the proximity of the Bombay market gave for the disposal of fodder as well as rice, in thriving circumstances.

The rice lands here, as elsewhere along the coast, were of two

descriptions, the salt and the sweet, the former having been lately reclaimed from the sea, and varying in fertility from almost barren land to that which by constant annual inundation with fresh water had become almost as productive as the sweet rice land. A different system of classification from that in use in the sweet lands had to be adopted, the relative value being determined by the smaller or greater admixture of salt found in the soil. They were further classified according to their nearness to the sea, those at a distance being safe from flooding and being accordingly relatively more valuable. The classification of the sweet rice lands depended chiefly on their fitness for the production of the more or less valuable descriptions of rice. The villages were divided into seven classes, with rates varying from a maximum of Rs. 6 to one of Rs. 4 for sweet rice, and from Rs. 4 to Rs. $4\frac{1}{2}$ in salt; by modification, in consequence of its producing only inferior kinds of rice, the latter were reduced in some cases to R. 1. The adoption of these rates would result in the Mámátdár's charge in an increase of about $3\frac{1}{2}$ per cent., and in the Mahálkari's in a decrease of about 19 per cent. Taking the two together, the new rates showed a total increase of Rs. 6,240 over the average collections of the ten previous years. Garden and dry-crop lands, of which the area was small, had rates varying from R. $1\frac{1}{2}$ to Rs. $2\frac{1}{2}$.

The area of *varkas* was for the most part calculated from the village maps, that which was held together with rice being kept separate from that which was not so held. The rates proposed were four annas on the coast and three annas inland. The total assessment would be Rs. 1,700 in excess of the average proceeds of ten years. It was proposed to treat the *úifal* villages in the same way as elsewhere.

With regard to lands reclaimed from the sea, it was proposed to continue the existing practice in cases in which the land was held by one or more private individuals, that is, in the former for the owner to make a special grain levy and be responsible for the repair of the embankments, and in the latter for the repairs to be carried out by mutual arrangement among the body of holders. In the case of Government reclamations it was proposed to levy a repairing fee of eight annas an acre; the repairs would be made by the villagers, and paid for by the assistant collectors. These

proposals, being approved by the Revenue Commissioner, were sanctioned by Government in 1859. It having been brought to the notice of Government that the result of a Resolution passed in 1856, that no Pándharpesha should pay more for a field under the Survey assessment than he had before the settlement, had been that Pándharpeshas paid less assessment at the introduction of the settlement than previously, another Resolution was now issued that though the former Resolution was not to be modified in districts that had been already settled, in future the same proportion of increase due to the Survey settlement levied from ordinary ryots must be levied from Pándharpeshas as well.

KALYAN.

Kalyán was the next subdivision settled: this was also in 1859. Of the 165 villages in it, 147 were Government, 3 *izáfat*, and 2 partially and 13 wholly alienated; all but these 13 were brought under settlement. Its means of communication, partly by navigable rivers, were fairly good, but some of the inland villages were difficult of access for carts. From Kalyán itself the G. I. P. Railway divided into its south-eastern and north-eastern branches, and almost all the rice produced in the district was exported thence to Bombay. No measurement appears to have accompanied the partial revision of assessment made in this subdivision in 1837-38, but the effect of the revision had been favourable to the revenue, which rose from an average of Rs. 59,000 in the five years previous to the revision to Rs. 77,000 in the ten years ending in 1857-58. The cultivators had also recovered from their extreme state of poverty and were fairly well off. The new rates introduced in 1858-59 were based chiefly on the standard of Nasrápur, allowance being made in Kalyán for its great superiority over Nasrápur in the matter of railway communication and markets, the rainfall in both being about on a par. The maximum rate for rice lands in the first class of villages, which included Kalyán itself and twelve others within three miles of it, was fixed at Rs. 6, with an addition of from Rs. 1½ to Rs. 2 on

lands within the limits of the former that produced a second crop of vegetables. The second class, of forty-five villages, lay close to the first, and stretched from near the Badlápúr station in the south to that of Titvála in the north. The maximum in these was Rs. 5½. The third group, of ninety-one villages, farther removed from the Kalyán market, had a maximum of Rs. 5, and the last group, of three villages, lying near Murbád, one of Rs. 4½ on account of their distance from market and somewhat unhealthy climate. Land fit for *rabi* dry-crop cultivation, the area of which was 1,775 acres, was assessed at a maximum of Rs. 1½, and all the *varkas* was divided into Survey numbers with a maximum of four annas. The general result is shown in the following statement:—

	Former System.	Survey System.		
	Collections in 1857-58.	On Cultivation in 1857-58.	On Waste.	Total.
	Rs.	Rs.	Rs.	Rs.
Rice . . .	71,392	70,763	4,875	75,638
Rabi . . .	1,841	1,304	840	2,144
Garden . . .	—	391	165	556
Varkas . . .	4,718	7,783	3,928	11,711
Total . . .	77,951	80,241	9,808	90,049

TALOJA.

In the same year the subdivision of Talojá was revised: it contained 150 villages, of which 148 were under direct Government management, one was alienated, and one *sharikati* (shared), paying half its assessed rental to Government. The communications of this tract were not good, for Talojá itself was the only available port for boats on the Kalyán creek, and the Tháná creek was only of use to the few villages in the narrow belt between it and the Peraik hills, these hills being impassable for bullocks or carts.

The railway passed through its southern portion, but there was no station within its limits. The rice grown in the subdivision reached the Bombay market through Kalyán and Panvel, and partly by water by the creeks mentioned.

Before Mr. Davies's revision in 1835-36 the revenue had been levied by grain rents commuted into cash payments. He introduced into most of the best villages a uniform rate of Rs. 3 per *bigha*, which lowered the assessment about 25 per cent. The average collections for the three years preceding the revision had been Rs. 76,840, and had risen in 1857-58, notwithstanding the reduction, to Rs. 82,000, the area under tillage having increased by about 5,000 acres. It was divided for assessment into three groups with maximum rates of Rs. 6, $5\frac{1}{2}$, and 5, and seven villages under the Chanderi hills at a distance from markets were reduced to Rs. 5. Some salt rice lands, inferior to those in Panvel, were rated at Rs. 4, and a small quantity of garden land at Rs. 3; land suited for cold-weather (*rabi*) crops were assessed at a maximum of Rs. $1\frac{1}{2}$. The *varkas* lands were valuable on account of the cheap rate at which grass could be carried by water to Bombay, and some portion of the lands producing it was accordingly reserved for annual sale by auction; the remainder were charged the usual rate of four annas the acre. The general result of the revision was as follows:—

	Former System.	Survey System.		
	Collections in 1857-58.	On Cultivation in 1857-58.	On Waste.	Total.
	Rs.	Rs.	Rs.	Rs.
Rice . . .	76,392	95,181	6,007	1,01,188
Rabi . . .	4,095	3,968	1,412	5,380
Garden . . .	—	28	9	37
Varkas . . .	1,598	3,720	4,021	7,741
Total . . .	82,085	1,02,897	11,449	1,14,346

The general increase was thus one of about 25 per cent., and a further rise of about 15 per cent. might be expected when the waste arable land was brought under cultivation.

MURBAD.

The subdivision of Murbád, the most easterly portion of the Collectorate, and lying near the Sahyádri range of hills, next came under revision in 1859-60. It was, on the whole, distant from markets and badly off for communications. Most of the country was too rough for carts, and almost all the rice was conveyed to Kalyán on pack-bullocks. Of the 252 villages in it 243 were Government and 5 *isáfat*, 4 being alienated. The first of the groups into which the villages were divided for maximum rice rates consisted of sixty-seven, lying on the west, on the borders of Kalyán, with a few beyond Murbád and others near the railway station of Váind; all these had a cart-road either to Kalyán or Váind, and for them a maximum of Rs. $4\frac{1}{2}$ was proposed. The next class, of 115 villages, with a maximum of Rs. 4, lay immediately to the east of the first, and included some of the wilder villages on the borders of Kalyán. Three other classes, with maximum rates from Rs. 2 to Rs. $3\frac{1}{2}$, were grouped according to distance from markets and accessibility. The lowest was in the rough country under the Sahyádri range, bordering on Kolvan in the north-east, and its inhabitants were all Kolis. The area fit for *rabi* cultivation was insignificant. The *varkas* was almost entirely used for *riib*, or ash-manure, as Bombay was too distant for it to pay to take grass so far. Some portion of it fit for the growth of coarse hill grains was assessed at four annas, and the remainder at three annas per acre. The general result was as follows:—

VILLAGES, 243.

Average collections, 1849-50 to 1858-59, Rs. 1,28,243.

Settlement of 1859-60.—*Old Rates*, Rice, Rs. 1,17,790; Varkas, Rs. 16,569; Total, Rs. 1,34,359. *Survey Rates*, Rice, Rs. 1,13,350; Varkas, Rs. 15,830; Total, Rs. 1,29,180. Waste, Rs. 9,801; Total, Rs. 1,38,981.

This shows an increase of 3·8 over the assessment of the year of settlement according to the old system, and a small increase of only Rs. 937 over the previous average collections of ten years.

BHIUNDI.

The subdivision of Bhiundi next came under revision in 1860. Of its 205 villages, 199 came into the settlement, viz., 180 Government, 5 *isáfat*, and 5 *sharákati* (shared). The remaining six were alienated villages. Communications generally were good. Bhiundi was a fair local market, and Bombay was easily accessible by water except to the villages in the north-east near the Máhuli hills, which were wild, thinly peopled, inaccessible to carts, and generally distant from markets.

The assessment had been revised in 1840-41 by the Collector; and although there was at first a decrease of revenue, it had risen by 1859-60 to Rs. 1,17,860 from Rs. 93,800 in 1843-44. The rise in the last five years was partly due to the high price of grain, which had increased by about 60 per cent. The 199 villages were brought under seven classes for maximum rates of rice assessment, varying from Rs. 3 to Rs. 6, only Bhiundi itself and five neighbouring villages being in the first. The remainder were grouped in belts of country about five miles in width, according to distance from the market of Bhiundi, while, with regard to salt rice, the rates were regulated by distance from salt creeks and their greater or less exposure to the influence of the tide. The area under *rabi* cultivation was small, and its maximum rate was fixed at Rs. 1½. No change was made in the current rate of Rs. 3 for garden cultivation by irrigation from rivers, wells, and tanks during the fair season. Lands in which vegetables were raised as a second crop were dealt with, as in Kalyán, by the imposition of an extra water-rate, the total rate not exceeding Rs. 7½. *Varkas* lands were also assessed at three and four annas the acre. The general result was as follows:—

VILLAGES, 199.

1850-51 to 1859-60, Rs. 1,13,843. *Old Rates*, Rice, Rs. 1,06,470; Rabi and Garden, Rs. 3,891; *Varkas*, Rs. 7,353; Total, Rs. 1,17,714. *New Rates*, Rice, Rs. 1,15,666; Rabi and Garden, Rs. 3,995; *Varkas*, Rs. 7,659; Total, Rs. 1,27,320. Waste, Rs. 7,610; Total, Rs. 1,34,930.

This shows an increase of 8·16 over the revenue of the year of settlement, and of 11·8 over the average of ten years previous to it.

SASHTI (SALSETTE).

When Salsette was settled in 1861, it included the island of Karanja or Uran, but the soils of the latter were not classified, and only the fifty-three villages of the former were settled. These villages were grouped according to their accessibility from Bombay and Tháná. The rates for sweet rice lands varied from Rs. 6 to Rs. 10, inclusive of water rates for lands capable of bearing a second crop. The salt rice rates were from Rs. 4 to Rs. 6. In garden lands bearing the cocoa palm and mango trees, a new method of assessment was adopted, and the rate varied from Rs. 3 to Rs. 15, according to the number of trees to the acre, the full rates being imposed only where there were sixty or more trees to the acre. From their nearness to Bombay the *varkas* lands were particularly valuable, so much so that it was worth the people's while to pay the lower rice rates and keep the land for grass. These lands were assessed at from 8a. to Rs. 3, according to situation. The rates for *rabi* lands varied from Rs. 1½ to Rs. 3. The comparative figures of the old and new systems were as follows:—

—	Collections.			Survey System.		
	1840-60.	1850-60.	1859-60.	Cultivated.	Waste.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Rice	63,600	65,290	53,241	61,466	2,535	64,001
Garden			7,209	9,923	289	10,212
Varkas			3,648	10,099	1,818	11,917
Total	63,600	65,290	64,098	81,488	4,642	86,130

This shows an increase of 24·8 over the average collections of the ten years previous to the settlement, and of 27·1 over the current assessment of 1859-60.

VASAI (BASSEIN).

The subdivision of Bassein (Vasái) was settled in 1862. It lies along the sea-coast between the Bassein creek and the Vaitarna river, and differs considerably in soil from the subdivisions to the south. Of 104 villages contained in it, all but four alienated villages were surveyed and assessed. Its communications were good, as well as its markets, the Bombay and Baroda Railway affording the means of easy access to Bombay. It has already been stated that the garden rates were revised by Mr. Williamson, the Revenue Commissioner, in 1836-37. The reduction had been by about one-half, but had had the desired effect of bringing the whole of the garden lands—which at the time were mostly lying waste in consequence of the assessment under the *dhemp* system having become oppressive—into cultivation, and restoring the people, mostly Native Christians, to a prosperous condition. The villages containing the garden lands were arranged into three groups, according to proximity to the market of Bassein and general productive powers, with rates varying from Rs. 6 to Rs. 8, the greatest increase being in the second and third groups, in which at the former revision the assessment had been put very low, to induce people to cultivate the lands then waste. A small area of *rabi*-producing land had a maximum of Rs. $1\frac{1}{2}$, and *varkas*, as elsewhere, one of three or four annas. The general result was as stated below:—

VILLAGES, 100.

Old Rates—Old average, 1851-52 to 1860-61, Rs. 97,230; on cultivation of 1860-61, Rs. 1,06,440. *New System*—Rice, Rs. 84,917; Garden, Rs. 29,879; Varkas and Rabi, Rs. 3,851; Total, Rs. 1,18,647. Waste, Rs. 8,296; Total, Rs. 1,26,943.

This shows an increase of 11·4 over the total assessment according to the existing system, and of 22·2 over the average collections of the previous ten years. The increase was largely due to the enhanced garden rates, which the improvement in the condition of the people fully justified.

MAHIM.

The subdivision of Máhim, which is on the coast to the north of Bassein, was next undertaken, and settled in 1863. With the exception of the Bombay and Baroda Railway, which ran through it, its communications were not good, as they were much interrupted by salt-water creeks. There were a few fair local markets, and wood and rice were exported by sea to Bombay, Surat, and Tháná. 165 villages were brought under settlement, of which all but one, a *sharákati* or shared village, were under direct Government management. There had been no regular revision of assessment with the exception of that of the garden rates in eight villages in 1863, and the rates were very unequal. The 165 villages were divided into four classes, with maximum rates from Rs. 2½ to Rs. 5½. The first consisted of 65 villages along the coast and the Vaitarna river, the second of 43 near these and within a few miles of water-carriage, the third of 54 villages away from the river and chiefly among the hills to the east, and the fourth of only 8 villages at the foot of Takmak and surrounded by hills. The rates fixed on the garden lands showed a considerable increase over those current, but were justified by the high value of produce and the facility of transit afforded by the railway. There was but little *rabi* land, and this was assessed at a maximum of Rs. 1½, as in Bassein. In most parts, except in the hills, which were distant from markets, the grass was coarse, and *varkas* land was accordingly assessed at three annas near the coast, and two annas in the interior. The following statement shows the general result of the Survey settlement:—

NO. OF VILLAGES, 165.

Old rates on cultivation of 1861-62, Rs. 91,886.

Survey Settlement:—On Cultivated Area, Rice, Rs. 87,613; Garden, Rs. 8,486; Varkas and Rabi, Rs. 2,908. Waste, Rs. 7,629. Total, Rs. 106,636.

The increase on the current assessment of 1861-62 was thus 77 per cent.

UMARGAON.

Umargáon, a petty division of Sanján, the most northerly subdivision of the Collectorate, also lay along the sea-coast, and adjoined Surat. It contained sixty-nine Government villages, all of which were settled in 1864. It possessed several harbours for the export of its produce, as well as the Bombay and Baroda Railway; but the inland villages were unhealthy, and there was little trade. The prevailing tenure of land was the *hundúbandi*, the holdings paying lump assessments never having been measured. The result of the Survey measurements was consequently to show a great inequality of assessments, and in some cases to raise the payments on individual holdings and villages very considerably. In four villages, for instance, they rose from Rs. 633 to Rs. 2,039, or over 222 per cent. The settlement, nevertheless, quite satisfied the people.

The villages were grouped for maximum rates of assessment from Rs. 2 to Rs. 6 into five groups, the first of which was on the coast, and the remainder less heavily assessed, as they were situated inland. Those on the coast were well suited to the growth of garden crops and cocoa palms, but there were only ten acres under garden tillage. The maximum rate was fixed at Rs. 6, and in some of the inland villages, where vegetables were raised from unbuilt temporary wells in the fair season, at Rs. 3. The *varkas* had here changed its character and become assimilated to that in the south of Surat, being well suited to the growth of the castor-oil plant. It was said to require a three years' fallow after two or three years' cropping, and an average rate of ten annas was accordingly imposed, payable annually, whether a crop was raised or not. The settlement results were as seen in the following statement:—

NO. OF VILLAGES, 69.

Former Rates:—Collections 1844-45 to 1863-64, Rs. 42,038; 1854-55 to 1863-64, Rs. 44,786; 1862-63, Rs. 47,792.

Survey Settlement:—Rice, Rs. 54,135; Varkas and Dry Crop, Rs. 10,761; Garden and Rabi, Rs. 1,759; Waste, Rs. 4121; Total, 1863-64, Rs. 70,776.

Two small cesses yielding Rs. 688 were at the same time abolished. Exclusive of the assessment on waste, the settlement thus caused an increase of 89.2 per cent. over the current revenue.

KOLVAN.

The inland subdivision of Kolvan came next under settlement in 1865. It lay between Máhim and the Sahyádrí hills, and for the most part was wild and broken. It contained the petty divisions of Mokháda and Váda, and the Mahálkari's charge of Talásri in the north-west, almost separated from the rest of the subdivision by a part of the Native State of Javár. In the north of Mokháda and in Talásri the country was impassable even for laden beasts, and, with the exception of the small portion of the north-eastern branch of the G. I. P. Railway between Sháhpur and the reversing station on the Thal Ghát, there were no roads but the rudest cart tracks. The tenures peculiar to it were the *nángarbandi* or plough-tax system of assessment, under which the holder cultivated as much as he could in any position that suited him best, and paid a certain sum on his plough, and the *khásbandi*. Under the latter a certain undefined quantity of rice held together with an equally uncertain area of *varkas* constituted a man's *khás* (equivalent to "holding"), and paid a lump sum on the whole. At the Survey the two were roughly measured and thrown together into one Survey field, which was henceforward to be held as a whole, and no portion to be relinquished unless the whole was given up. The remainder of the *varkas* was measured into large numbers of from fifteen to thirty acres, to be taken up, on application, at the Survey rates of assessment. Where the *nángarbandi* system prevailed, the rice land was made into regular numbers, as elsewhere, and entered in the names of the holders, and the *varkas* attached to it measured into one large number with a lump assessment placed upon it, to be paid jointly by all the ryots, whose shares of payment were to be apportioned according to the number of ploughs held by each. These terms were accepted in some cases, and, where they were not, the people were informed that the lump

assessment would be levied from those who cultivated the *varkas*, whether they were few or many.

The settlement was introduced into all but ten of the 335 villages in the subdivision, but was only sanctioned for ten instead of the usual thirty years, so as to expire at the same time as the Bhiundi settlement. The maximum rice rates were, for the more open parts of the country, from Rs. 3 to Rs. 5, and in Mokháda and Talásri Rs. 2 and Rs. 2½. The *varkas* rates varied from one to four annas, and the best *rabi* land was assessed at Rs. 1½. In a few villages on the sides of the Sahyádris and in Talásri blocks of land were marked off for *dali* cultivation by means of wood-ash manure. The average collections for the twenty years ending in 1863-64 had amounted to Rs. 59,830, and in the last ten of these to Rs. 64,090. The collections had gradually risen to Rs. 70,960 in 1863-64, and the Survey rental, as shown below, exceeded this by about 42 per cent. Of this Rs. 23,980 were on account of occupied, and Rs. 5,870 on account of assessed arable waste:—

Nature of Land.	Area. Acrea.	Assessment.		
		Occupied. Ra.	Waste. Ra.	Total. Ra.
Rice . .	32,493	72,748	3,354	76,602
Rabi . .	300	523	38	561
Varkas .	185,500	21,419	1,836	23,255
Dali . .	6,100	249	138	387
Total .	224,393	94,939	5,866	1,00,805

DHÁNU.

The subdivision of Sanján or Dhánu, of which Umargáon formed a portion, was settled in 1866-67. The part of the country lying along the coast was open, with fine rice lands and good communications by sea and railroad, while the interior was rough and wild, with no roads. The two groups of villages, 32 in number, on the coast, had a population of 166 to the square mile, and the remaining 140, more inland, had only 60. The tenures of land were the plough-tax and *kandubandi*, or lump payment on the

holding, and the *mudibandi*, which was much the same as the latter only that the lump assessment in the latter was a commuted grain payment. The villages were put into five groups for assessment, with maximum rates from Rs. 2 to Rs. 6. They were arranged according to proximity to the sea-coast and the railway. Cocoa-palm garden lands in the villages of Chinchni and Dhánu had a maximum rate of Rs. 6. The rates for *rabi* and *varkas* were the usual cases of Rs. 1½ for the former, and four, three, and two annas for the latter; four annas on the coast, and the lower rates in the inland villages. Rates on liquor-yielding palms were from four annas on the coast to three annas inland, and on date-palms a uniform rate of one anna a year. The general result of the settlement was as follows:—

NO. OF VILLAGES, 172.

Averages—1846 to 1865, Rs. 31,037; 1856 to 1865, Rs. 34,360. *Assessment of 1864-65*, Rs. 45,577. *Survey Settlement*—Rice, Rs. 49,142; Rabi, Rs. 43; Garden, Rs. 1,248; Varkas, Rs. 9,156; Total, Rs. 59,589.

The increase in the year of settlement was thus 30·7, and over the average of twenty years 91·9. This was heavy as compared with other districts, but the old assessments were very irregular and so imperfect as not to afford any fair criterion of what could be imposed without causing distress to the people.

KARANJA.

Finally, the small division of Karanja or Uran, in the harbour opposite to Bombay, was settled in 1866. It included the Island of Elephanta and Hog Island, and consisted of nineteen villages. The cultivation consisted mostly of sweet and salt rice lands, assessed at maximum rates varying from Rs. 4 to Rs. 8. The maximum for the small area of garden land, which mostly produced vegetables, was Rs. 5, and for gardens in which coconuts and more valuable products were raised, Rs. 10. The *varkas* lands, from their convenient situation as regards Bombay, were

assessed at a maximum of Rs. 2 an acre. The effect of this settlement was to raise the revenue from Rs. 22,120 to Rs. 29,790, or about 35 per cent. above the previous year's payments.

The following statement shows at a glance the general effect of the Survey settlement in the whole Collectorate:—

Subdivision.	Old Settlement. Rs.	New Settlement. Rs.	Increase per cent.	Decrease per cent.
Khálápur .	50,745	46,624	—	8·12
Nasrápur .	69,308	66,597	—	3·91
Panvel . .	102,422	108,664	6·09	—
Kalyán . .	77,951	80,241	2·93	—
Talojá . .	82,085	102,897	25·35	—
Murbád . .	128,243	129,180	0·73	—
Bhiundi . .	113,843	127,320	11·83	—
Salsette . .	65,290	81,488	24·80	—
Bassein . .	97,230	118,647	22·02	—
Máhim . .	91,886	99,007	7·74	—
Umargáon .	44,786	66,655	48·83	—
Kolvan . .	64,091	94,939	48·13	—
Sanján . .	34,360	59,589	73·42	—
Uran . .	22,120	29,790	34·67	—
Total .	10,44,360	12,11,638	16·01	—

The assessment of Government occupied land in 1854-55, when the Survey settlement was first introduced into 114 villages was Rs. 9,58,270, out of which Rs. 9,48,346 were collected. The settlement was completed in 1865-66, when the revenue had risen to Rs. 12,76,677, of which Rs. 12,74,305 were realised. In 1877-78, twelve years subsequently, the revenue had risen to Rs. 12,84,479, of which Rs. 12,84,207 were collected. To this last figure Rs. 37,079, derived from quit-rents on alienated lands, and Rs. 6,422 from grazing fees and waste lands, may be added, making a total of Rs. 13,27,708. In 1881-82 it had risen to Rs. 13,93,627, so that the effect of the settlements has clearly not been transient.

MOKHÁDA.

The sub-district (*mahál*) of Mokháda is the most remote and inaccessible in the Tháná district, and has until now been the only portion of the Collectorate into which any regular revenue settlement has not been introduced. It lies inland at the foot and along the slopes of the Sahyádrí range, and is accounted unhealthy except in the hot season. Of the eighty-seven villages originally contained in it seventeen have been transferred to the Vádá Táluka, thirteen have been absorbed in forest, and only fifty-nine, inclusive of two which are partially alienated, have been brought under the rough settlement described below.

The systems of revenue management in force previous to 1865 were the *khásbandi* and *nángarbandi*. The former consisted of a lump assessment placed on the rice land in each man's holding, supposed to cover as well the Government demand on a certain portion of land (*varkas* or *sindad*) from which the rice was supplied with *riib* (burnt wood and leaves for potash manure) necessary for it. The *nángarbandi* was the levy of a simple plough-tax without reference to any particular land in the occupancy of the person assessed to it. In that year the rice and portion of *sindad* appertaining to it was roughly measured off as held by each individual, and the rest of the *varkas* was divided off into large Survey fields, to be taken up for cultivation as required. No prohibition against the cultivation of the associated portions of *varkas* appears to have been given, although the arrangement was meant to put a stop to further encroachment on *varkas* outside them for *riib* purposes, and the result has been that the portions of land allotted for it are no longer used to procure the necessary manure, and Government forest and *varkas* lands are resorted to. In the *nángarbandi* or plough-tax villages contracts were made with the headmen for the payment of fixed sums for their villages, and the distribution of these sums on the ploughs of individual cultivators was left to the mutual agreement of the people. The contracts with the headmen were called *mil-maktá*. The arrangement, as was to be expected, was unsatisfactory, but, with some modifications made to meet difficulties that arose from time to time, remained in force up to 1890.

Progress towards a more settled system of cultivation has been very small, and the Survey and ordinary Revenue Officers are of opinion that the condition of the country is as yet too backward to admit of the introduction of a regular Survey settlement. The general rise in the value of agricultural produce in other parts of the country has not affected Mokháda, for the wild tribes who constitute the bulk of its population do not sell, but barter the grain they produce, and the salt and salt fish which they mostly receive in exchange have risen in price equally with the grain. Under these circumstances only a partial revision of the arrangements made in 1865 has been carried out. The assessment placed on rice lands remains as it was, such portions of the land as have been allowed to relapse into jungle having been divided off and excluded. The settlement thus becomes one of *varkas* lands only. From the fluctuating character of cultivation in these lands it has been found impossible to ascertain the exact area in occupation, and the incidence of the rates proposed can therefore be calculated only very approximately. It has been measured out into regular Survey fields, of sizes varying from ten to twenty acres in level land near the villages to thirty to fifty in jungly lands near the Gháts or large hills. These have been subdivided according to present occupancy, or what is claimed by the people, and the remainder of the land recorded as Government waste, available for cultivation. That portion of it which has a good depth of soil, is capable of cultivation regularly every year, and produces good crops of pulse, has been assessed at maximum rates of five or six annas per acre, and the inferior descriptions, which require more or less fallow, have been similarly assessed at four annas. The general financial result is, that whereas under the previous settlement 78,531 acres were recorded as assessed at Rs. 7,679, the arable area is now shown as 79,045 acres, assessed at Rs. 13,131, an average of 2a. 8p. per acre. The increase of 71 per cent. thus arrived at is, of course, nominal, and there can be no doubt of the extreme moderation of the assessment. The climate is extremely well suited to the crops grown, some of which are the best in quality of the whole of the Konkan, and are exported to the estimated value of Rs. 14,500. There is never any failure of rain such as to cause distress, and to this it may

be added that, owing to the large area of waste, there is ample room for fallow when required, and every facility for procuring ash-manure.

Statistics prepared by the Revenue Department, which are not entirely reliable, show that since 1864-65 the number of houses has increased from 11 tiled to 72, and from 2,238 thatched to 4,924. Agricultural cattle, it is estimated, have more than doubled, and there is a considerable number of milch cattle and their young. Ploughs have increased from 1,001 to 1,653, this being the only trustworthy item in the statistical returns. Population, according to the village records of 1864-65, amounted to 11,060 souls, and by a Revenue Census in 1894-95 to 25,155, a rate of increase that can hardly be believed in. The present backward state of the whole tract of country may be judged of by the fact that there are no roads in it and no carts, traffic being carried on by means of pack-bullocks on beaten tracks. This settlement has not been guaranteed for the usual period of thirty years, but is to last until 1894-95, when the adjacent Tálukas of Váda and Sháhpur will come under revision.

The thirty years for which the Survey settlements were guaranteed not having expired, those settlements have not come under revision in any part of the Collectorate.

KOLÁBÁ.

THE district of Kolábá lies to the south of Bombay, between the Indian Ocean and the Sahyádrí range, and, with the exception of where the State of Bhor, belonging to the Pant Sachín, intervenes, occupies the whole belt of country between $17^{\circ} 50'$ and $18^{\circ} 50'$ N. lat. and $72^{\circ} 55'$ and $73^{\circ} 43'$ E. long. Its area is about 1,500 square miles, and the density of its population 254 to the square mile. It is bounded on the north by Bombay Harbour and by the Tháná Collectorate, and on the south by the State of Jinjíra or Habsán and the district of Ratnágírf, with which it forms what is known as the Southern Konkan. It contains the following five subdivisions, viz. Alibágh, Pen, Rohá, Mángaon, and Máhád. It is about seventy miles in length from north to south, and from fifteen to thirty miles in width.

Two villages in the present subdivision of Máhád, together with Bánkot, or Fort Victoria, as it was for many years called, were ceded by the Peshvá to the British in 1756. On the overthrow of the Peshvá in 1818 the old subdivisions of Sánkai, Rájpurí, and Raigad, included in the present Pen, Mángaon, and Máhád, also came into British possession; and finally in 1840 the Kolábá State, or Angria's Kolábá, as it was termed, lapsed on the death without heirs of Rághoji Angria. To this were added the subdivision of Alibágh and part of Rohá, with some villages in Panvel and Karjat, now belonging to the Tháná Collectorate. For some time after 1818 Sánkai, Rájpurí, and Raigad formed the northern portion of the Ratnágírf Collectorate, but were

KOLA'BA'.

transferred to Tháná when the latter was made a Principal Collectorate in 1830. After 1840 Kolábá was for some time under a Political Superintendent, and in 1844 was embodied in British territory and brought under the Regulations. In 1853 the Kolábá Agency and the other subdivisions were combined as the Kolábá Sub-collectorate, which in 1869 became a full Collectorate, as it now is.

Of the 1,064 villages in the Collectorate, 79 are alienated, 500 are directly managed by Government officers, and 485 through the medium of Khots, or hereditary revenue farmers, whose origin is more particularly described under the Ratnágiri Collectorate; 7 of the 485 are under *isáfat* Khots, originally holding on service tenure as hereditary district officers, and the remainder under ordinary Khots. Reclamation of land from the sea is carried out to a considerable extent in this part of the country, the right of the *shilotrí* levy, or special fees exacted for the purpose of keeping the necessary embankments in repair, being sometimes held by private individuals and sometimes under the *kulárgi* system, that is, by associations of holders. Where the right belongs to Government the value of the fees to be exacted for the purpose has been merged in the assessment of the land, and the repairs are carried out under the supervision of Government officers.

For several years from 1800 the revenues of Port Victoria or Bánkot were separately reported to the Court of Directors in the Bombay Revenue despatches as follows:—

	Ru.		Ru.
1800-1	11,844	1813-14	14,531
1808-9	11,408	1814-15	14,298
1809-10	11,463	1815-16	13,787
1810-11	11,585	1816-17	12,908
1811-12	13,569	1817-18	38,134*
1812-13	14,495	1818-19	818,624*

After the latter year the separate revenues of Fort Victoria disappear from the accounts, being merged in those of the Southern Konkan.

* The increase was due to accession of territory from the Peshvá's cessions, † transfer from the North Konkan.

As in Tháná and Ratnágíri, the rates and system of collecting the revenue prevalent under Native rule remained unaltered, except that in 1824 and the succeeding years Talátis, or village accountants, were appointed to the directly managed Government villages. Owing to the inefficiency of the village headmen, who were mere ciphers, the whole of the administration fell into the hands of the Talátis, and the interests of the State suffered to some extent on account of their dishonesty. Another cause for the depressed condition of these villages was the difficulty of procuring tenants, who preferred to hold land in *khoti* villages because in them they were assisted by advances of seed and money for agricultural purposes, which were not given by Government. To remedy this state of affairs the plan of letting out villages on lease for several years on gradually increasing rentals was, on the recommendation of the Collector of Tháná, Mr. Reid, introduced and extended, so that by 1836 over a hundred villages were so farmed out.

With regard to *khoti* villages, Government had in 1825 come to the conclusion that, whatever may have been their origin, their hereditary rights had been so long acknowledged that it would be impolitic to interfere with them, and that it would be advisable, without disturbing these, as far as possible to secure the rights of other classes. If it could be established that in the time of Náná Fadnavis the Dhárákari, or tenants of permanent occupancy, paid at a certain rate, the Khot should be called on to prove his right to any extra levy he might claim to make. If no regular rate of payment could be ascertained, all that could be done for the present would be to prevent the Khot from levying more than he had for the last few years; and in case of a Dhárákari claiming a greater indulgence, to direct him also to prove his right. Where agreements between the parties were in existence, as they appeared to be in Severndroog (Ratnágíri Collectorate), they must be acted up to, and a system of registration adopted with a view to prevent further encroachments on either side. If any reduction were given to a Dhárákari, a similar allowance must be made in the Khot's payment to Government. In the case of Upris or Ardhelis (tenants from other villages or tenants at will paying 50 per cent. grain rents) there did not

seem to be any usufructuary right, and it was unnecessary to interfere in their favour. If favourable terms were granted them in *kulárgi* (directly managed) villages, the Khots would be forced to offer equal advantages for fear of losing them as tenants. It was desirable that the Khots should commute their rights to demand labour from their tenants into money payments, but this was not a matter that pressed at present, as neither Khots nor tenants appeared to desire it. Matters would be improved by the appointment of village accountants paid from the Treasury, and the gradual introduction of a survey. The appointment of Patels or headmen in *kulárgi* villages was also approved, but not in those under Khots.

No systematic revision of assessment was attempted in this part of the country until 1836-37, when the matter was entrusted to Mr. J. M. Davies, who had already been engaged in such operations in the subdivision of Murbád. At this period, of the 167 villages in the subdivision 70 were managed directly by Government officers, 57½ were held by Khots, and 20½ were leased for short periods. There were two kinds of *bigla* in use, the larger, of twenty-five *pands*, equivalent to about an acre, in alienated and cash-rent villages, and the smaller, of twenty *pands*, or four-fifths of an acre, in *kulárgi* and leased villages. The cash rates were moderate, but the grain levies heavy. Mr. Davies found that the assessments were on the whole heavier in Sánkai than in the other two subdivisions of Rájpurí and Raigad. The Dhárákari, or permanent occupancy tenants, were taxed heavily, and the condition of the yearly tenants, both of the Khots and the Dhárákari, was still worse. They seldom received more than two-fifths of the crop, even in fields which they themselves had converted from dry-crop into rice lands. Khots were in the habit of demanding an extra share of grain instead of the unpaid labour they could exact, and charged 25 per cent. interest on money loans and 50 per cent. on advances of grain. In the other two subdivisions, although the assessment was heavy, more land appeared to be held than was charged for, and the tax was thus lightened; in this, however, the Collector did not concur. The pressure of population on the soil was the real explanation of the excessive assessment being borne. He proposed that a regular survey should

be introduced, the rates reduced, and the numerous cesses, which amounted in Sánkasi to Rs. 23,180, in Rájपुरi to Rs. 27,632, and in Raigad to Rs. 26,984, should be abolished. In handing on the correspondence to Government the Revenue Commissioner supported the proposal for a survey and settlement, on the introduction of which the unpaid labour tax might be abolished. Of the other cesses those unconnected with land might be abolished at once, but the remainder must remain until the settlement. On these reports the commencement of a survey in Sánkasi was sanctioned, but was not carried out, and only a revision of assessment was made.

These proceedings of Mr. Davies appear to have been carried on from 1838-39 to 1840-41 without any sanction from Government, and were, to a certain extent, disapproved both by the Collector and the Revenue Commissioner. The latter reported that the old assessments were very complicated, some being levied in money and some in kind, and it was difficult to ascertain to which of the two any particular land was subject. They were heavy and oppressive, and the condition of the people was bad. The system adopted in the revision had been to assess villages in groups at the same rates, instead of assessing the lands of villages according to the capability of the soil at different rates, as should have been done, for the soil in the Konkan was as variable as it was elsewhere. It was true that the general weight of assessment had been lightened, but it had not been equalized, and the poorest ryots had to pay the same rates as the wealthiest, who possessed the best lands. The reduction made was one of 33 per cent., and the cultivation of the small area that was still waste would not make up the deficiency in the revenue. The assessment, according to Mr. Davies's proposals, would amount to Rs. 38,471 on the average area under cultivation, whereas the current grain rents at the average commutation rates for ten years would bring in Rs. 53,977. Even with the heavy reduction proposed there was no certainty that further remissions would not be asked for. For the sweet rice lands of Sánkasi one uniform rate of Rs. 4 *la*. per *bigha* was proposed, whereas, according to the average commutation rates, they had paid from Rs. 6 to Rs. 9 *9a*. The Pándharpeahas even had paid Rs. 5. The land bore two crops, and the

markets for disposal of produce were good. There would be an additional burden on the revenue from Government having to pay the claims of hereditary officers, to meet which a separate levy had hitherto been made. The Collector also objected to the proposed rates as being too low; and on all these considerations the Revenue Commissioner hesitated to recommend the proposals for sanction, but was met by the difficulty that the rates had already been in force for three years. In reply Government pronounced Mr. Davies's proceedings most unjustifiable, and, concurring with the Revenue Commissioner that there was no occasion for the proposed reductions, only sanctioned them as far as the past was concerned, and directed that the old rates should be reverted to.

In 1843 a few villages in this subdivision were selected by the Revenue Commissioner for revision of assessment by means of Pancháyats. This resulted in higher rates than Mr. Davies's being proposed in rich villages, and lower in poor ones; all the proposals were below the ten years' average rates. The rates varied from Rs. 4 to Rs. 5½ for sweet rice lands, and for salt rice from Rs. 3 in the second class to Rs. 3 2a. and Rs. 3 10a. in the first. Revision, in the remainder of the villages, it was thought, might be carried out by the Mámlatdar under the supervision of the Assistant Collector. These proposals were sanctioned by Government.

No attempt was made to revise the assessments in the Rájpurí and Raigad subdivisions until the regular Survey revision was introduced in 1854.

In 1841, the year after the lapse of the Kolábá State, the system of levying assessments in kind in Alibágh and other territories that had belonged to it was put a stop to, and the grain rents were commuted into cash payments, to be fixed annually according to the market prices ruling in January and February. Various cesses, of the value of about Rs. 35,000, were also by degrees abolished, but otherwise no change in the system of revenue management was made for several years.

In 1843 the system of levying Rs. 3 a head on Thákurs cultivating *varkas* by *dali* (wood-ash manure) cultivation within the limits of their own villages, and Rs. 2 outside those limits in the

Nágothána (Nágotna) division of Sánkai, was changed to a general levy of Rs. 3, as it was found that they generally resided in hamlets near the limits of several villages, and did much damage to the forests. At the same time Government ordered that remissions should not be granted to the Khots in Sánkai and elsewhere in the Tháná Collectorate, as they were not given in Batnágíri, and disapproved of the Collector having lowered the commutation rate by Rs. 3 below the current market value with a view to induce them and the Dhárákaris to give remissions to their sub-tenants.

With the exception of a revision of rates in a small area of garden lands in Revdanda, in the Alibágh subdivision, carried out with the aid of Pancháyats by the Political Agent in 1851, and in the following year in the salt rice lands of the same subdivision on the left bank of the Nágothána creek, the land revenue administration was carried on on the old Native system until the introduction of the regular Survey settlement between 1854 and 1866; and for the years 1837-38 to 1852-53 the revenue averaged Rs. 4,06,190. The rice lands were divided into four classes. The first in soil not liable to be flooded by salt water, and having a considerable depth of sweet land fitted to produce sweet rice; the second in soil liable to be flooded and with a salt subsoil near the surface, growing for the most part salt rice, but occasionally sweet; the third in land liable to be constantly flooded, and growing salt rice only; and the fourth in salt soil that had never been cultivated. The fifty-six villages in this tract were divided into four groups, according to their productiveness as ascertained from the average of the ten previous years, distance from market having apparently not entered into the calculation. These rates of assessment per *bigha* varied from R. 1 to Rs. 3. These rates on the whole appear to have worked well, and the people were reported by the Collector in 1856 to be in such thriving condition as to prefer to pay their whole rent at once instead of by instalments. In these villages the custom of the villagers turning out in a body to repair the rice embankments when endangered by floods, and being rewarded with a drink of liquor, was continued by order of Government, on the recommendation of the Political Agent. The cost of making the ordinary repairs was defrayed

from the levy of a maund of rice per *bigha*, received by Government in cases in which the reclamation was made by the State, and by Shilotridárs, or private owners of reclamations, when the reclamation was private property.

In 1852 the Kolábá Agency was abolished, and the four subdivisions of Alibágh, Sánksi, Rájpuri, and Raigad were formed into the Sub-collectorate of Kolábá. Nothing was done to ameliorate the condition of the tenants in the *khoti* villages, who were reported in 1856 to have been reduced to the most abject dependence and poverty. In this year the revision of assessment according to the Survey system was commenced in the Alibágh subdivision, which was then divided into Underi in the north and Revdanda in the south, of which the latter was first revised. It contained seventy-seven villages, of which three were alienated. In these the unarable exceeded the arable land by about 5,000 acres. The assessment under the old system was based on a grain rent, commuted into a cash payment every year according to the prices ruling in January and February. A maximum rate in rice of Rs. 7 was adopted on the standard of ten maunds an acre, this being estimated to be about one-fifth of the yield; and it was converted into a money rate at Rs. 14 the *khandi* (candy of twenty maunds), the average for the past ten years having been about Rs. 13. Lands yielding two crops were assessed at three annas an acre extra. In seven outlying villages the maximum was reduced to Rs. 6. For salt rice the highest rates were Rs. 4½ and Rs. 5. Dry-crop land producing *rabi* crops was assessed as in Panvel and Nasrápur at a maximum of Rs. 1½; garden lands producing the cocoa-palm were assessed, according to quality, from Rs. 8 to Rs. 12, and those trees in them that were used for tapping it was proposed should pay an extra rate of Rs. 2 per tree.

In 1855-56 the revenue from garden lands had amounted to Rs. 16,350, of which Rs. 2,040 were credited to excise and the rest to land revenue. Under the Survey settlement the tree cess alone almost came up to this amount. The *varkas* lands were of small extent, and were assessed at from one and a half to four annas an acre. The general result of the settlement was as follows:—

Revenue under Old System:—Twenty-one years, Rs. 78,110;
Ten years, Rs. 75,740; 1855-56, Rs. 92,110.

Survey System:—Cultivated, Rs. 77,174; Waste, Rs. 2,862; Liquor trees, Rs. 16,234; Total, Rs. 96,270.

The total increase was thus $4\frac{1}{2}$ per cent. above the revenue of 1855-56, 27 per cent. above the ten years', and 23 per cent. above the twenty-one years' average revenue.

ALIBÁGH.

The Underi subdivision of Alibágh was next revised. It contained 130 villages, of which two were wholly and two partially alienated. Of the 124 left, 57 were the salt rice villages on the Nágothána creek which had been settled in 1852-53, and the lease of twenty years in which was still running. They were, however, re-measured, and the large blocks into which they had been divided were cut up into ordinary Survey fields. The existing assessments in the remaining villages were based on a survey of Angria's; but this was found to be very incorrect, as the 7,786 nominal *bighas* of 34,844 square feet were found to measure 9,273 acres of 43,560 square feet. The existing rates were also very uneven, and in some cases excessively heavy. The commuted grain rents ranged from a value of Rs. 4 to Rs. 12 3a. The villages were now grouped for maximum rates of rice assessment into four classes. The first was one of twelve rich villages in the north of the subdivision, well known for the productive qualities of their lands, and possessing easy means of communication with Bombay through the ports of Revas and Mándva. The maximum in these, inclusive of second crop rate, was fixed at Rs. 7 $\frac{1}{2}$. The second group, not quite so favourably situated, consisted of forty-three villages, and had a maximum of Rs. 7. In the third were eight villages near the Ságargad hills, inconveniently situated for water-carriage, with a maximum of Rs. 6; and the lowest, with one of Rs. 5, comprised the remaining six, lying among the spurs of the Ságargad hills, and most of them unreachable by carts. The area of garden land was small, and the gardens not being so productive nor so well stocked as those of Revdanda, the maximum rate proposed was rather

lower than that in the latter, viz. at Rs. 10 instead of Rs. 12. As in Revdanda, trees that were tapped were to pay Rs. 2 extra. The general result of the revision will be seen from the following statement:—

Old System:—Ten years' average (1847–57), Rs. 54,062; 1857, Rs. 66,441.

Survey System:—Rice, Rs. 56,815; Rabi, Rs. 967; Garden, Rs. 3,425; Varkas, Rs. 8,254; Total, Rs. 68,961.

This was less than the revenue of 1857 under the old system by Rs. 2,480, or 3·7 per cent., but exceeded ten years' average by Rs. 9,899, or 18·3 per cent.

When the remaining rates were approved by Government, sanction was not given to the proposal with regard to trees tapped for juice pending further report by the Sub-collector. The system of an extra tax to be paid on each tree tapped in addition to the land rate was in force in Revdanda fort, and carried with it the right to distil the liquor and sell it in certain places. The Sub-collector proposed a tax of R. 1 in place of Rs. 2, for fear of reducing the Bhandáris (professional toddy-drawers) to destitution, each drawer in addition to take out a license for distilling. The Superintendent of Survey accordingly substituted three rates of R. 1½, 1¼, and 1 for his former proposal of Rs. 2. Under this proposal each person engaging to pay for trees to be tapped would have to take out a license for the whole number of trees he engaged for, but no license would be given for less than fifteen trees. They would have a right to sell the liquor in the garden villages, but not in the rest of the subdivision, where there would be separate farms. The surplus liquor of the gardens would be taken by the farmers at a fixed rate of a rupee for 25 *seers*. The proposals would enhance the revenue of 1856–57 by about Rs. 13,000. The Sub-collector's proposals were not sanctioned, and those of the Superintendent, as supported by the Revenue Commissioner, were ordered to be tried as an experiment for three years.

PEN.

Sánksi, the present Pen and Nágothána, came under revision in 1858. It contained 198 villages, of which 20 were alienated. Of the Government villages 55 produced only salt rice. In Nágothána the assessment of the sweet-rice lands was a grain rent, annually commuted into a money payment; but in the remainder of the subdivision money rents had been introduced, with a few exceptions, before the commencement of British rule. The revision carried out in 1843-44 in a few villages by the Revenue Commissioner's order had been found to necessitate the granting of considerable remissions on account of the uncertain nature of salt rice cultivation, but the rates were said not to be too heavy. The people were found to be generally well off, except in some of the *khoti* villages, partly owing to the employment the ryots found in the large salt-works at Pen when they had no field-work to do. A good deal of the land was in the hands of Brahmins and money-lenders, who cultivated them by means of sub-tenants. On the whole, accordingly, the Superintendent did not consider the assessment required to be lowered. Excluding the fifty-five salt rice villages, in which the maximum rates were Rs. 4 and Rs. 4½, about 8 per cent. higher than the realisations of the previous ten years, the 123 Government villages were divided into five groups. The first of these, with a maximum rate of Rs. 7, consisted of thirty-eight villages within easy reach of Nágothána. The second, the maximum in which was Rs. 6, included forty-nine villages, some round the town of Pen and others near the Ápta creek. The rate of the third group, of six villages on the borders of Panvel, was placed at Rs. 5, as in that subdivision. A maximum of Rs. 4½ was given to a group of twenty-three villages from fifteen to eighteen miles to the north-east of Pen, and one of Rs. 4 to the remaining nine wild villages separated from the rest of the subdivision by a belt of the Pant Sachir's territory. *Rabi* crops were only grown in a small area of 223 acres, which were assessed at a maximum of R. 1½. There were only five or six acres of garden land, assessed at a maximum

of Rs. 3. The *varkas* was all measured and classified and assessed at three and four annas. The general result will be seen below:—

Old System:—Ten years (1847–57), Rs. 1,21,411; 1856–57, Rs. 1,85,954.

Survey System:—Rice, Rs. 125,936; Rabi, Rs. 184; Garden, Rs. 10; Varkas, Rs. 6,320; Total, Rs. 1,82,450.

This gave an increase over the revenue of 1856–57 under the existing system of 2·8 per cent., and over the average of the previous ten years of 8·8 per cent. At the time of settlement there were only 284 acres of Government rice land lying waste.

The fifty-four *khoti* villages were included in this settlement. In these the Khots were to continue as superior holders, and pay as their rent the full Survey assessment of their villages. The rights of Dhárákaris were, of course, fully secured to them in these villages, and the Khots were forbidden to levy from their sub-tenants more than 50 per cent. above the Survey assessment of their holdings. Two-thirds of this amount were to be commuted into grain rents at the rate of one maund of rice for every rupee of the Survey assessment, and the remaining one-third was to be paid in cash. One of their number was to be appointed by the Khots as manager every year, and to furnish security for the payment of the rental. The whole number were to serve as managers by turns. The Khots, being frequently in the habit of making large advances to their sub-tenants for food, clothing, and other necessaries, such as the performance of caste ceremonies, very naturally objected to the limit of 50 per cent. beyond the Survey assessment that they were to be allowed to levy from them; but Government refused to give assistance in the levy of any higher rate. This was part of the system of interference between landlord and tenant sanctioned by Government which led to the prolonged sufferings of the people under the litigation, only finally ended by the passing of the Khoti Act of 1880.

Some of the Khots in Nágothána in the first instance refused to sign the leases offered to them, but finally agreed on certain modifications being made in some of the conditions. It had been at first provided that the existing terms should be adhered to if the Khots and their tenants consented. If this had been continued, much of the subsequent trouble would have been avoided;

but it was modified into the 50 per cent. beyond the Survey rents mentioned above. For *ardhel* or *tirdhel* tenants, who ordinarily paid one-half or one-third of the gross produce, it was proposed that for the future 33 and 25 per cent. respectively beyond the Survey rent should be paid. With this arrangement the Khots were said to be contented, but the ryots were not. Consequently no record of future payments was made and the Khots were left to make their own arrangements, themselves paying the full Survey rental. The Government Resolution in which these proposals were reviewed stated that the Khots had a hereditary right to realise the revenues of their villages, and manage them. They were consequently the Survey occupants, but Government had the power to make periodical surveys and revise the terms on which the Khots were to hold the villages. In default of passing the usual annual agreement the Khots would lose their management, and were thus dependent on the liberality of Government, as their rents might be raised so as to leave the Khots nothing. No legislation was therefore required to enable Government to carry out a settlement which should be fair to both sides. In case of a Khot not agreeing to the proposed settlement the Collector should attach his village, and under his management it could be seen whether the proposed terms were fair or not, and if they were found not to be so they could be modified. If it was found that any rights of the tenants which could be established in a civil court would be interfered with by the proposed rate of 50 per cent. beyond the Survey rental as the limit of the Khot's demands, the Government demand should be lowered rather than the long-enjoyed privileges of the tenants should be encroached upon. With regard to the proposed increase of 50 per cent. it was understood that the Survey assessment was about one-fifth or six-thirtieths of the gross produce, an increase of 50 per cent. on which would bring the tenants' payments up to nine-thirtieths, or nearly one-third of the gross produce, whilst an increase of 33 per cent. would raise them to eight-thirtieths, which would leave 5 per cent. more of the gross produce to the tenants. The difference was trifling, and the restriction of the Khots' demands to 50 per cent. beyond the Survey rental was so advantageous to the ryots that Govern-

ment were unwilling to risk the success of the settlement by withholding that limit. The Resolution went on to state that the question of one rate of limitation or the other need, however, not be decided for all cases, but might be fixed at the settlement on a consideration of the rates in force and the profits realised in the past by the Khots. The ryots need not be told what rate of increase had been allowed or what the Survey rates were; only the maximum leviable by the Khot need be communicated to them, and the lump rentals payable by the Khots might be reduced to save them from loss. This Resolution has been quoted, not on account of any practical advantage to be derived from the discussion of the question in the present day, but to show in what complications Government became involved by interfering in the arrangements *inter se* of landlords and tenants.

It was decided in another Government Resolution in the same year, that if during the Collector's charge of a *khoti* village continuous mismanagement on the part of the Khot should be proved, the village need not be restored to the latter. The interim profits belonged to the State, and not to the Khot; they should be credited to Government. It would rest with Government, after taking all the circumstances into consideration, to decide whether the profits should be forfeited or the management restored, as when the Khot's possession had once been interrupted, the State, from which the Khot derived his right, might make what arrangement for future management it might consider best. In order still further to emphasize the position taken up, that a Khot is a hereditary farmer during the pleasure of Government, a definition somewhat contradictory in terms, another Resolution (No. 4,171, of the 23rd November, 1863) laid down that no Khot could force Government to acknowledge as a Khot any person to whom he chose to alienate his farm, and that on a Khot dying without heirs, a mortgagee of his farm would have no claim on it, and it might be resumed by Government. Orders were issued that if this was disputed the matter might be tried in the courts of law. On a representation from the Revenue Commissioner that such transfers had been recognized for half a century, this had to be modified in 1865.

RAJPURI.

Rájpuri, corresponding to the present subdivision of Roha and part of Mángáon, was settled in 1862-63. Of its 238 villages six were wholly and one partly alienated; and of the remainder the greater proportion were held on the *khoti* tenure. The villages of the petty division of Nizámpur in its eastern part were not included in the above. The general revenue system was that of grain rents commuted yearly into cash payments according to prevailing prices. The rice lands were noted for their fertility; and in addition to the town of Roha, whence rice was exported to Bombay and the Ratnágiri ports, there were ports at Mándád and Goregáon. Twelve villages grew only salt rice, which was assessed at maximum rates of Rs. 5 and Rs. $4\frac{1}{2}$. The lands of three other villages were submerged, so that for the sweet rice settlement only 217 were left. For thirty villages of unusual fertility, and within five miles of Roha, a maximum rate of Rs. $7\frac{1}{2}$ was proposed, the villages constituting the first group for assessment. The second group, of sixty-four villages, with a maximum of Rs. 7, lay some of them between six and ten miles of Roha; and others round the town of Talá, a Mahálkari's station, and along the Revdanda and Jinjíra creeks. The third group of eighty-one villages, mostly in the centre of the subdivision, had rates of Rs. $6\frac{1}{2}$ and Rs. 6. The remaining forty-two were in two groups of forty and two villages respectively, with maximum rates of Rs. $5\frac{1}{2}$, 5, and 4, and lay in a wild part of the country near Nízámpur, distant from markets, and were not easy of access. For *rabi* lands a maximum rate of one rupee was proposed, and others of four and three annas for *varkas*, according to situation. The grass grown in the latter had no good market. All these rice rates were subsequently raised by two annas in the rupee. The general result of the settlement is exhibited in the subjoined statement.

Average under Old System:—Twenty years, Rs. 1,33,000; Ten years, Rs. 1,50,000; Collections of 1861-62, Rs. 1,69,196.

Survey Assessment:—Cultivation—Rice, Rs. 1,42,233; *Rabi*, Rs. 857; *Varkas*, Rs. 11,348; Total, Rs. 1,54,438. Waste, Rs. 3,958; Total, Rs. 1,58,396.

On the revenue of 1861-62 the settlement showed a reduction of 8·7 per cent., and on the averages of ten and twenty years increases respectively of 2·8, and 13·8.

In 1861-62 the remaining portion of Rájपुरi, that included in the petty division of Nizámpur, came under revision. Of the eighty-nine villages one whole one and half the revenues of seven others were alienated. Its communications were inferior, the road from Nágothána to Mahábleshwar, which passed through some of the western villages, being the only cart-road within its limits. Most of the produce found its way to Goregáon, Mahád, and Poona on pack bullocks. The fluctuations in its revenue had been great, in consequence of changes in the annual grain commutation rates. For instance, in 1852-53, when the rate was Rs. 8, the revenue was Rs. 24,680; and in 1859-60, when it had risen to Rs. 22, about the same area of cultivation yielded Rs. 47,830. No revision of assessment had been made since the district came under British rule. The measurements shown in the accounts were those of a survey said to have been made by a Mámlatdar of Rájपुरi in 1784-85. According to this the area of rice under cultivation had largely increased. The grouping into classes for maximum rates of assessment was determined by distance from markets. Nizámpur itself, with a few villages round it, and others on the Mahábleshwar road, formed the first class with a maximum of Rs. 6. The next two groups, bordering on this, and lying towards the Sahyádrí range, were assessed at Rs. 5 and Rs. 4; and the fourth, lying near that range, in a wild country in which crops were exposed to damage by pigs and other wild animals, had a maximum of only Rs. 3. The area in which dry crops could be grown was small, and the soil poor. Its highest rate was a rupee the acre. The *warbas* was extensive, but as there was no market for grass, was only used for the cultivation of inferior hill grains. Its general maximum was four annas, but in three villages, of which the lands were productive, it was raised to six annas.

The general result of the revision was as follows:—

Old System:—'Twenty years' average, 1841-43 to 1860-61, Rs. 38,500; Ten years' average, 1851-52 to 1860-61, Rs. 40,564; 1860-61, Rs. 47,783.

Revision Rates:—Rice, Rs. 31,470; Rabi, Rs. 632; Varkas, Rs. 4,408; Total, Rs. 36,510; Waste, Rs. 6,309.

This showed a decrease of rather over 5 per cent. on the average of twenty years, of not quite 10 per cent. on that of ten years, and of 23·6 on the revenue of 1860–61 under the old system. In the *khoti* villages of Nizámpur the rents of the Khots' tenants were, at the request of both Khots and tenants, fixed in cash instead of in grain. In place of the uniform allowance of 50 per cent. above the Survey rates as the limit of the Khots' extra demands fixed in Nágothána, that rate was fixed here on rice only, and one of 33 per cent. on *varkas*.

RAIGAD.

The subdivision of Raigad—the present Mahád and part of Mángaon, was revised in 1865–66. It contained 314 villages, of which 10 were *sharákati* or shared, 6 *izáfat* or for service, 218 *khoti*, 75 *dhárákari*, held by peasant proprietors, and 1 alienated. Of the 310 into which the settlement was introduced, 3 had no rice lands, and the remaining 307 were divided into seven classes. The first consisted of six villages with rich rice lands, close to Mahád and Dásgaon, both ports of export; the highest rate proposed was Rs. 9. The second group, of thirty-three villages, with soil not quite so rich, but with favourable communications, near Mahád, Dásgaon, and Goregáon, and not far from the Sávitri or Bánkot river; its highest rate was Rs. 8. The remaining five groups were classified according to the superiority of their communications, with maximum rates descending from Rs. 7 in the third to Rs. 3 in the seventh, and consisted respectively of fifty-nine, forty-eight, forty-nine, seventy-six, and thirty-six villages. A small quantity of garden land producing betel-nuts, plantains, &c., in six villages, had maximum rates varying from Rs. 10 to Rs. 6, and land producing good cold-weather crops along the river at Mahád and Dásgáon rates of from R. 1 to Rs. 2. For *varkas* maximum rates of four and five annas were adopted. The Revenue Commissioner considered the assessment on the

whole too low, but his opinion was overruled by Government. The subjoined statement shows the general result of the settlement:—

Old System:—Average of ten years (1855–65), Rs. 1,78,571; Revenue of 1865, Rs. 209,004.

Survey Assessment:—Cultivation: Rice, Rs. 1,67,056; Rabi, Rs. 3,008; Garden, Rs. 49; Varkas, Rs. 30,316; Total, Rs. 200,424. Waste, Rs. 781. Total, Rs. 201,205.

This shows an increase above the average of ten years of Rs. 21,853, or 12·2 per cent., and a decrease below the revenue of 1865 of Rs. 8,580, or 4·1 per cent.

ALIBAGH.

In 1872, in consequence of the expiration of the leases given in the salt rice villages of Alibagh under the settlement of 1852–53, the assessment was revised according to the system of classification of similar lands in Tháná. The villages had in the meanwhile thriven under the rise in prices that had taken place. Population had increased 33 per cent., and live stock from 446 to 2,390. Remissions had also fallen to an almost nominal amount. The villages were now grouped for maximum rates of assessment of Rs. 5, 4½, and 4 for three groups according to their liability to flooding by salt water, and were based on those found appropriate in Uran in the Tháná Collectorate, of which the soil and other advantages were very similar to those of this tract of country. The result was as follows:—

Year.	Cultivation.		Waste.		Total.		Average per Acre.
	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.	
1852-53 . . .	12,130	Rs. 27,650	12,130	Rs. 27,650	Rs. 2 4 5
1872-73 . . .	14,322	38,418	186	237	12,538	38,655	3 1 5
Increase . . .	2,222	10,768	186	237	408	11,015	—

In the average rate the increase was thus 35 per cent., and in the general revenue not quite 40 per cent., which was fully justified by the increase of prices.

Between 1856-57, when the revision of Revdanda took place, and 1877-78, the assessment of the Sub-collectorate had risen from Rs. 5,71,329 to Rs. 6,99,325, and remissions diminished from Rs. 10,798 to Rs. 639. In the same period the assessment on land still lying waste had fallen from Rs. 13,443 to Rs. 6582. What was left untilled was land of the poorest description, hardly fit for cultivation at all.

KHÁNDESH (CANDEISH).

THE Collectorate of Khándesh is the most northerly in the Presidency above the Western Gháts. It lies between $20^{\circ} 8'$ and $22^{\circ} 7'$ N. lat., and $73^{\circ} 42'$ and $76^{\circ} 28'$ E. long., and has a total area of 10,431 square miles. Its population is on the whole sparse, being only 98 to the square mile, but some portions are much more densely peopled than others, there being large areas of unarable land in the hilly parts of Pimpalner, Nizámpur, and Nandurbár in the west. The river Taptée runs through it from east to west before passing through Surat and emptying itself into the Gulf of Cambay. It contains the following subdivisions:—

Amalner	Dhulia	Nasirábád	Shádá
Bhusával	Erandol	Páchora	Shirpur
Chálísagáon	Jámner	Pimpalner	Taloda
Chopda	Nandurbár	Sáoda	Virdal

Its length from east to west is about 160 miles, and its breadth varies from 70 to 90. Its vernacular language is Mahratti.

✧ When the greater portion of what is now the Khándesh Collectorate came into British possession in 1818, the country was, from various causes, in the most miserable condition. The deprivations of the Pindháris, the losses caused by its having been frequently the seat of war between the contending Máhratta powers, Holkar, Sindia and the Peshvá, crowned by the ruinous

farming system under which the revenues were collected in the end of the 18th and commencement of the present century, had brought about a condition of affairs the consequences of which it took many years of British rule to counteract. It was ceded by Holkar by the Treaty of Mandisur in 1817, but it was not till July 1818 that most of the Province was completely subdued. In 1820 the present north-eastern subdivisions of Páchora, Yával, Chopda and Lohará were made over by Sindia to clear off a debt owing for the maintenance of a body of horse, and to meet future charges on the same account. The Bhlís in the Sátapura hills and in the western and north-western subdivisions for some years gave much trouble, but were finally brought to order in 1825 by conciliatory measures and the formation of a Bhl Corps under Lieutenant Outram.

Captain Briggs, the first Political Agent, to whom the settlement of the Province was entrusted, wrote in the end of 1818:—"The remainder of the Province, and that part of Gungterry under my authority, appears to have been surveyed in the time of Mullick Umber, the founder of Aurungábád, and the successor to the Government of the last of the Nizam-Shahy Princes. The assessments were pretty much the same as Acbar's, but the nature of the landed tenures was essentially different: Acbar considered the land to be the property of the Government, whilst Mullick Umber made a considerable portion of it private property and confirmed the right of cultivating certain fields to the ryots. Village lands were considered the joint property of the township; the fallow land was common for the pasturage of its cattle. His principle was to attach the cultivators to their own soil, and make over to them in perpetuity what was only useful to Government as long as they continued to remain on it. Meerasee ryots, or Wuttundars, held their land of right, and it was heritable, transferable, and saleable. Alienation out of the ryot's family was by deed of sale, witnessed by the village authorities and the Deshmookh, as well as Patails of neighbouring villages. The assessments on such lands were clearly a land tax, whilst those on Ooprees (cultivators from other villages) were both a land tax and ground-rent."

In a subsequent letter in 1819 Captain Briggs modified his

opinion as to Mirás land being saleable : it was so only in certain districts, but as long as a farmer paid rent for his land it was considered unjust to deprive him of it.

The first separate report of a revenue from Khándesh occurs in a despatch to the Court of Directors dated 27th November 1822. It is there given for a part of 1819-20 as Rs. 12,40,974, and for the whole of 1820-21 as Rs. 14,18,361. Some kind of revision of assessments seems to have been entered on at once by Captain Briggs, for he is said to have had the depth of soil in each field ascertained, and proposed to fix rates in conjunction with the ryots themselves, so as to form a basis for the next year's settlement, especially equalizing the rates on lands irrigated from canals, so that any crops they preferred might be raised, as they were in the habit of growing inferior crops in place of sugar-cane, turmeric, &c. on account of the heavy rates on the latter. In the first year he had, by taking into account the average payments made for twenty-five years under the Native Government, and actual measurement of the lands, been able to increase the revenue by Rs. 5,27,500 ; but as the accuracy of the measurements was doubtful, and it was not considered advisable to undertake a settlement based on the comparative values of land without several years' experience, Government disapproved of his proceedings, and directed a settlement to be made in the first instance by simply taking the average payments of each cultivation for the past ten years, and preventing the levy by the village officers on account of their dues of more than 10 per cent. of the gross produce of grain.

As the words *kasmál* and *tankhá* were constantly used as revenue terms in these early days, it is as well to note that the Commissioner in the Deccan, Mr. Chaplin, in 1823 explained the former to mean the full and complete assessment assumed at various periods in different parts of the country, and the latter to be a standard rent-roll of villages, probably including *mohtarfá* (trade cesses) and other taxes, introduced by Todar Mull in Akbar's time ; this varied annually, but little was known of it.

In order to encourage the investment of capital in the improvement of the soil, Mr. Chaplin in this year proposed the following terms to be granted to those who dug wells :—

	Rs.	Rs.			
Wells costing from	25 to	250 to	to pay dry-crop rates for 6 years.		
"	"	250 to	350	"	"
"	"	350 to	500	"	"
"	"	500 to	750	"	"
"	"	750 to	1,500	to have $\frac{1}{4}$ of the area of the land in free gift.	
				above 1,500 to have $\frac{1}{3}$ of the area in free gift.	

It was quite evident, from reports received from different parts of the country, and the information acquired by the Governor, Mr. Elphinstone, at this time, that no thorough reform of the land revenue administration could be carried out without a regular survey, and the gradual introduction of such a measure was authorized. It became, then, a question whether the settlements of the future should be made with the ryots themselves or with the heads of villages. The arguments for and against the alternative plans were stated by the Governor in a Minute recorded after a tour in the Deccan and Southern Mahratta country. The advantages of the latter were that it preserved the system of village government, excluded the interference of strangers, and, as it left less detail to be looked after by the officers of Government, was less liable to derangement in case of the Collector being inefficient. Those of the former were that it checked the tyranny of the village magistrate, made communication between Government and the people more direct, and afforded the best security against the mistakes of bad Collectors by the opportunities it gave for acquiring accurate information and by the responsibility it imposed. He thought that by a slight modification the advantages of both systems might be gained. After a survey had fixed the rights and payments of each ryot, the villages might be farmed to their headmen for a term of years, the Collector retaining full control over the Kulkarni's (hereditary village accountant's) accounts, and being entitled to interfere whenever the rights of the ryots were encroached upon. The assessments should be so moderate as to leave a profit to the leasees even when remissions had to be granted, and they should enjoy the full benefit of bringing waste under cultivation during their leases, the profit from improving his own land going to the ryot.

At the end of a lease the *rayatvâri* system should be again adopted for a year or two, with a view to abuses being detected before another lease was granted on the same principles. There was, however, one objection to this in the probability that it might give rise to enmity between Patels and ryots, as it would be to the interest of the former that new land should be cultivated, and to that of the latter that old land should be improved.

Rules for the conduct of the Survey were drawn up at this time by the Deccan Commissioner, and approved by Government, but, as many of his suggestions were subsequently adopted in the regular Survey, it will be as well to reserve further notice of the rules until the details of that measure come under discussion.

In 1823 the Collector of Khândesh proposed the extension of the system of granting *istâvâ* or gradually increasing rental leases to capitalists or the heads of villages, with a view to getting some of the numerous deserted villages populated. Government sanctioned the proposal under restrictions proposed by the Commissioner in the Deccan, to the effect that only waste was to be given on lease to capitalists with the previous permission of the Collector. X All leases were to show in detail old cultivated land and waste newly given out, in order to ensure protection to the ryots against over-exaction, as, if the extra land brought into cultivation in any year were insufficient to meet the increase in assessment, the farmer might be disposed to add on to the assessment of the old land. All *patâs* or annual agreements given to ryots were to contain a full detail of names of new fields and their progressive rents, as well as of old fully-assessed land, with a view to prevent irregularities and fraud, and afford Government the means of knowing, on the expiration of leases, how far they might participate in the improvement resulting from such leases. *Mirâs* land, on which the rent was fixed, was to be excluded, and the practice of holding *istâvâ* land only as long as its rent was low, and then throwing it up in order to take up new, was to be guarded against.

(The season of 1822-23 having been unfavourable, an order was issued, by way of encouragement to the people, that no extra assessment would be levied on lands in which wells had been dug until the expense of their construction had been repaid. X

In the next year the grant of *istává* leases in the subdivision of Chálísgáon was authorized with several stringent provisions. No ryots were to be brought in from other villages but by the permission of the authorities; if such were brought in without leave, the revenue paid by them was to be added to the rental plus 50 per cent. of the rent paid in their own villages. Any unwarranted cess or rent levied was to be paid three times over in addition to the *istává* rental. Land taken up by a ryot at favourable rates for a term of years was, at the expiration of the term, to form part of his permanent holding, and he was to be responsible for it until it was transferred to someone else. If the revenue fell off in the year after the expiration of the term of *istává*, the farmer was to pay the difference. All deficiencies during its term were to be made good, and all profits to go to the farmer, who was to have the benefit of the proceeds of all alienated land, and of all land of which the mortgage might expire, during its currency. If instalments of revenue were not punctually paid, satisfactory security was to be given.

† In 1826 Government, on the recommendation of the Collector, authorized the levy for twenty years of all assessments on lands held by Bháls at half rates, in order to encourage that unruly class to take to cultivation. On the 28th October in this year the office of Commissioner in the Deccan was abolished, and the Collectors placed in direct communication with Government.

In 1827 further encouragement to re-establish deserted villages was given by giving a rent-free period of two years instead of one, as had heretofore been allowed, and by the grant of larger cash advances. The *istává* farm system was reported to have been unsuccessful in the subdivisions of Málegáon, Dhulia, and Nandurbár, as well as in Navápura, where the plough-tax system, for which a *bigha* rate had only been substituted a few years, was also proposed for renewal at Rs. 11 a plough, as more suited to the Bháls, who were becoming more civilized and settling down to agriculture.

In 1828 the price of grain was reported to have fallen so much that the ryots were in great distress and living from hand to mouth. *Javári*, which had been 16 seers the rupee when the settlement was made in 1819, had fallen to 52 seers, and some-

thing must be done to improve the state of affairs. The Collector's proposal to abolish transit duties on grain had been rejected, and he now proposed it should, at all events, be done away with on the transport of grain from one subdivision to another. Not only had grain become much more cheap, but the resource the ryots had in former days in the frauds by which the real rent on land was concealed by areas being wrongly given was no longer available, as those areas were now well known. There were several alternative modes of giving relief. One was that the rates should be lowered on condition that the ryots took up enough land under the lower rates to make up for the deficiency in revenue, and another that a certain amount of rent-free land should be given in to each man's holding, in order to reduce the average rent. Or the *mundābandi* system of payments in the lump might be re-introduced, to prevent the necessity for measurement, which the ryots were particularly averse to. He also suggested a reduction in the rates of garden lands on the banks of the Taptee from Rs. 7 to Rs. 5 the *bigha*, and allowing Brahmins and others who did not themselves cultivate to hold lands at a reduction of one-third from the assessment, in order that they might get them tilled by hired labour. ~~X~~ *Istivā* leases not having answered, on their expiration leases on fixed and not increasing rentals should be given only to Patels who were men of substance. In reply to these proposals Government issued instructions to the Collector that until a regular survey could be introduced he should confine himself, in revising assessments, to particular cases in which revision was urgently required. No general reduction of garden rates could be sanctioned. The proposal to let out lands to Brahmins and others at lower rates was allowed, but care was to be taken that the privilege was not abused. *Istivā* leases might be continued or not at the Collector's discretion, and leases at Rs. 2 the *bigha* in Sultānpur might be granted to the Bhīls, who were said to have given up plundering and to be improving under proper treatment.

The annual revenue settlement at this period was thus described by the Collector. The Patels, Kulkarnis, Shekhdar Patels (equivalent to Amīns in Gujarāt, and having charge of from forty to fifty villages, with a revenue of from Rs. 5,000 to Rs. 15,000, called

a *tapá* or *taraf*), went out into the fields with the hereditary district officers. They prepared what was called a *kulghadni jarif*, showing the numbers and area of each man's holding, and a *kulghadni dar*, which contained what each had paid in the previous year. From these a *goshvárá* was made up; this was a general account of the cultivation, showing increase and decrease of each holding. Measurements were commenced by the *Mámlatdars* on circulars issued by the Collector in the beginning of October, and when these were nearly finished the Collector and his assistants went out to inspect them. The alterations found necessary having been made in the *goshváras*, the annual *tharáoband*, containing all particulars of area, rental, &c., was made out and given to the Patels, whose duty it was to make out the details of each ryot's holding, or *kulpatá*, to be delivered by the *Mámlatdar* to each man. Payments were fixed at the commencement of British rule as far as possible according to the *mámul*, or prevailing usage.

✕ In 1819, the first year of British rule, the average of ten previous years' revenue was taken as nearly as possible, divided on the area stated to be under cultivation, and subdivided according to the nature of the soil. A measurement was then carried out, and a settlement made on this and former receipts; but this was found in 1820 to be too high, as the area of the land held by Zamindars had been stated too low. The depth of soil in each field was ascertained by digging, a classification of soils made, and all soils of similar quality assessed at the same rate. This method was, however, found to be too arbitrary, as the distance of fields from their villages and other circumstances were not taken into consideration, and the plan was accordingly given up. For the present, until a survey could be carried out, rates, varying according to nature of soil and distance from village, were equalized as far as possible with those of other lands in the same neighbourhood.

In 1829 the proposal of a Deshmukh to farm the subdivision of Amalner for four years at an advance of Rs. 2,000 in each year of the lease, provided he was allowed to make the annual settlement himself and oust any ryot who would not agree to his terms, was sanctioned. This unusual measure seems to have been adopted

because the revenue had been declining ever since the third year of British rule.

With regard to the garden lands on the banks of the Taptee watered from wells, for which the Collector had proposed a lowering of rate from Rs. 7 to Rs. 5, he was directed to use his own discretion, and assess according to local circumstances, and generally to make such reductions as might give practical encouragement to garden cultivation. X Where wells were out of repair, land might be granted rent free for such period as would leave one or two years' clear profit to the cultivators beyond the expense of putting them in order. Advances might be given for building wells to respectable persons. Land assessed at garden rates, but not growing garden crops, should have its rates revised. This should also be done, where it was considered advisable, in the case of ryots throwing up dry-crop lands. If an abatement of 12 per cent. should not be found sufficient to induce people to take up leases of sixteen *bighas* of land or more, 15 or 20 per cent. might be given for such terms of years as they would agree to. In the case of farms of whole villages Patels were to be preferred as farmers, but farms might be given to other respectable persons, provided the cultivators' rights were adequately secured. The rentals were to be fixed beforehand for the whole proposed term, so that the farmers might derive full benefit from the reclamation of waste lands. Leases might as a rule be granted for from five to ten years, reference being made for orders to Government when longer terms were required. Rates should be so arranged as not to lead to abandonment of old for new lands or induce indolent habits. The re-introduction of the *mundibandi* system, which would secure the ryots the benefits of their own improvements, and fix them permanently in their own localities, might be tried with caution where the people appeared to approve of it. The subject of the transit duties was to be further reported on.

X In 1831 land was reported to be going out of cultivation, in consequence of the lowness of prices, and neither the *istia* leases nor the offer of 15 to 20 per cent. reduction to those who would take land on the *mundibandi* tenure proved attractive to the people, the conditions of their *bials* or leases having been fulfilled in only thirty-eight out of about 1,200 cases. The Revenue

Commissioner did not approve of the Collector's proposal to allow land to be taken at dry-crop rates for irrigated crops with a view to lower the assessment, as it would tend to force cultivation; he preferred the lowering of the assessments at once.

In 1832 Government replied to a proposal of the Collector to give a general reduction of 20 per cent. to holders of *mundá* holdings, and 15 per cent. to those cultivating outside the limits of their own villages, on account of the lowness of prices, that such per-centage reductions should only be given in places where the assessment appeared to bear equally heavily on all classes, and the usual remissions in other cases after careful inquiries had been made. *Istáwá kául*s might be given as usual with due caution. In the next year they gave it as their opinion that any general reduction of rates would only tend to increase the area under cultivation, and bring about a still larger supply of grain and a further lowering of prices. On this ground they would place more reliance on the cultivation of more valuable descriptions of produce to improve the condition of the people. The Government of 1832 had evidently not studied the law of supply and demand on a large scale.

In 1833, in consequence of the bad season and the lowness of prices, leave was given to the ryots to grow fodder for their cattle and vegetables for themselves without paying any assessment on their land.

In 1835 the Collector reported that collusion existed between capitalists and the Brinjarries (*Vanjára*), the owners of pack-bullocks by means of which grain was usually transported, to refuse the hire of carriage in order that the ryots might not be able to avail themselves of the favourable market of Bombay. He proposed accordingly that he should be allowed to accept produce in place of cash in payment of rent. The Revenue Commissioner in forwarding the proposal supported it, stating that in the case of cotton Government had already authorized its purchase up to a value of Rs. 50,000, but only a single bale had had to be bought to produce the desired effect of raising the price to a fair standard by encouraging competition. If merchants of their own accord offered a remunerative price to producers, there would be no necessity for the interference of Government. He

see p. 286
286

continued that the Collector could always procure carriage through his local influence, and that he only recommended the Collector's proposal in case of necessity. In their reply Government very properly refused to sanction the proposal, and the mischievous consequences which would assuredly have followed on official interference with the natural course of trade were not experienced.

In 1836 the levy of a few bundles of *javári* straw as a grain cess in the Táluka of Sáodá was abolished. In this year the reported failure of the system of *mundábandi* leases was attributed to the rates being too high and the periods for which they were to be granted too short. It was stated also that the ryots would not accept them if a clause was inserted that remissions would only be given in famine years. The Collector was of opinion that it would come to much the same thing if the clause was put in or not, as practically remissions would be given when necessary. Sanction was given to the extension of the leases from five to eight years. ✕ Rents were to be lowered to what could be paid in fair average years, and leave granted for remissions to be made generally in unfavourable seasons and for losses arising from unavoidable causes. An idea, which has been revived of late years, was also broached, that it might be possible to encourage thrift among the ryots by the offer of a discount on payments of revenue made in advance in good years for possible future bad ones. A proposal to give gradually increasing leases for the conversion of dry-crop into garden land where the water lay deep, in addition to the remissions ordinarily given on such accounts, was also approved. It was argued that as soon as the rent became too heavy the land would be thrown up, and the rent of the previous year might then safely be adopted as the rate on the land.

✕ In 1837 and 1839 the reduced rates on garden and other lands were stated to be working satisfactorily, and in the former case to have led to eighty-five wells being repaired. In 1840 the Revenue Commissioner reported that the increase of land under irrigation was satisfactory, that the village accounts were in creditable order, and that the conversion of crop rates into fixed *biyá* rates was proceeding by means of Pancháyats. He did not concur with the Collector in opinion that the better kinds of soil

were not over-assessed, but left out of cultivation because inferior descriptions were rated too lightly, and it was therefore more profitable to cultivate the latter.

In 1845 a revision of rates on garden lands under wells in the subdivision of Sáodá was sanctioned. The revenue for the year was diminished by Rs. 6,100, but the settlement showed an increase of Rs. 3,934 on the previous year. In the following year five villages in Amalner were revised, at an average reduction of 19 per cent. below that of the preceding twenty-five years. Only about one-half of the land capable of being irrigated was reported to be so. The former of these two years was one of extensive failure of crops, and the increase in the area of cultivation notwithstanding the unfavourable season was noted as a symptom of progress. As the early introduction of the Survey was in contemplation, instructions were issued in 1849 that no reductions of assessment were to be made except on the strongest grounds of necessity, and then only under the superintendence of European officers. In order to discourage cultivation by pauper ryots, it was ordered that remissions should not be given them unless they consented to give up their lands.

It was reported in 1851 that when the subdivision of Chopda was handed over to Sindia he reduced the rates of assessment, but when it was restored in 1844 they were injudiciously reimposed. This had led to an immediate falling-off in the cultivation and revenue.

A proposal in 1852 to levy no water-rates for water used for raising New Orleans cotton from May till October, and one to levy half assessment on water used for cotton crops in general until the introduction of the Survey, were sanctioned. Up to this late period even the system of trying to promote the cultivation of particular descriptions of produce by fiscal measures, in place of leaving the law of supply and demand to operate, seems to have found favour with the authorities.

Up to 1833 the results of the land revenue administration of the Collectorate had not, in a financial point of view, been satisfactory, for the realisable revenue had fallen from Rs. 11,86,960 in 1818 to Rs. 8,43,600 in the former year; but much had been gained in the way of getting the people, and especially the Bhils,

to settle down to agricultural pursuits, the area under tillage having risen in the same period from 603,192 to 760,200 *bighas*. From 1833 to 1852, the year when the first steps were taken towards introducing the regular Survey assessments, progress was much more satisfactory. Assessments had been reduced, and the prices of produce were on the whole higher. The cultivated area accordingly increased from 888,750 *bighas* to 1,436,000 *bighas* in 1851-52, and the collections from Rs. 12,14,630 to Rs. 17,88,040. Compared with other parts of the Presidency, however, the country was still very backward, with a sparse population and large tracts of arable land still lying waste. Captain Wingate, who had for many years been engaged in perfecting the survey system in the Deccan and Southern Mahratta country, was accordingly deputed in the latter year to report on the most suitable plan for introducing it into Khândesh. He reported that the rates were as a whole higher than could have been paid elsewhere, but the soil was rich, the produce raised was mostly of a kind that could be exported, and the cultivators had the advantage of large tracts of waste ground on which to graze their cattle. He was of opinion that for probably a century population would not increase sufficiently to occupy the 5,300,000 acres of arable land still lying waste, but with lighter and more equable rates progress would still be sufficiently rapid to justify the survey of a certain portion of waste sufficient to allow for a considerable expansion of cultivation. In passing orders on this Report Government laid down the following rules:—

see his
report
dated
1852.

1. Measurement and division into Survey fields with boundary marks were to be confined to the actual cultivated land of a village and a certain portion of arable waste sufficient to meet the probable expansion of cultivation for several years.

2. The boundaries of villages were to be completely surveyed and marked off on the ground.

3. The area of land not included in the first class was to be calculated in the lump.

4. Only the land divided into Survey fields was to be classified and assessed.

5. The assessment of undivided land was to be calculated on the average of the surrounding lands.

6. No field survey was to be made of villages lying totally waste. X

According to the universal principle under the Survey management, each field marked off under a separate number and assessed was to be taken as a whole, and no room was left for fraud on the part of the village officers, as there would no longer be any annual measurements. A quantity of arable land having been measured off into numbers under the first rule quoted above, when that was exhausted and more land required for the extension of cultivation the arable waste on which no assessment had been placed was to be broken up into numbers, and, in order to encourage cultivation, given out at a uniform rate of half a rupee an acre. Considerable reductions were also to be made, with the same object, in lands irrigated or capable of irrigation from canals and wells.

Notwithstanding the great advantages the well-informed classes of the people knew would be conferred by the new system, considerable opposition was made to the commencement of the measurements in Sádá and elsewhere. There is little doubt that this was secretly fomented by the hereditary district officers, who saw that with everything regularly ordered and all assessments fixed by the Survey Department their own influence and power of enriching themselves by illicit means would disappear, and worked on the credulity of the ryots by spreading the most absurd stories of the intentions of Government. One of these it will be worth while to relate, to show how far ignorant ryots could be imposed upon. The cross-staves that were in use at the time were made of brass in the shape of a cup, in which slits were cut for taking perpendiculars to the corners of fields and other off-sets. The people were persuaded that these cups were for the purpose of measuring the women's breasts, according to size of which a new tax was to be levied. Prompt measures were, however, taken to suppress, with the aid of the military, any organized obstruction or opposition, which ended as soon as the people saw that Government were really in earnest and intended to carry the matter through. The operations of the Survey extended from first to last over a period of nearly eighteen years, and on the whole increased the revenue of the Collectorate up to 1877-78

by 11½ lakhs of rupees. The details of this will be given as the gradual progress of the measure is narrated.

DHULIA.

In 1863 proposals were submitted for the revision of assessments in the subdivisions of Dhulia and Chálísagón. The former of these had on its north Virdel and Amalner, which had already been settled, on its east Bhargón, on its south Chálísagón and Málegón, and on its west Pimpalner. Chálísagón had Dhulia on the north, Bhargón and Málegón on the east and west respectively, and the Nizam's territory on the south. Dhulia is composed of two distinct valleys, separated by a lofty but broken and irregular range of hills, running from south-west to north-east. Numerous spurs from this range extend for some distance into the two valleys, those of the Pánjrá and Bori. The soil, being of trap origin, is as a rule of an inferior description, a few patches of good black soil here and there forming the only exceptions. On the former river, of which the stream is perennial, there were several dams in fair working order. Cultivation was not careful, the land being carelessly ploughed and allowed to get choked with weeds, and manure, although available, not applied for years. There were no manufactures of any importance, and the agricultural population only averaged 102 per square mile on the arable area. Excluding the large town of Dhulia, the average was only 78. Dhulia itself is at some distance from the railway, but the Bombay and Agra road runs through it from north to south, and there were several other fair high roads at the time of settlement, and Dhulia has since been connected by a good road with the railway station at Chálísagón. It contained 227 villages, of which 69, belonging to the Songír petty division, had already been settled, as well as five formerly belonging to Amalner, so that only 153 came under settlement. No authentic records of its condition in Mussulman or Mahratta times were procurable. In the latter land was generally let out on the *ukti* (lump-rental) or *dotbandi* (plough tax) systems, but the farmers to whom the

revenues were farmed out had full authority to squeeze the ryots after the manner already described, and this resulted, as usual, in the most cruel oppression, which impoverished the country rapidly. From the date of British occupation, 1818-19, the *bighoti* (payment by *bigha*) system was introduced, and the land under cultivation was annually measured. Under this system, which with some modifications still continued in force at the time of settlement, the area of cultivation had rapidly risen in 1861-62 from 16,002 acres to 69,619, or more than fourfold. In the second year of British rule an attempt was made to raise the already heavy assessment, but it was soon abandoned, and successive lowerings took place till 1847-48. After this, in 1852-53, a light rate of eight annas per acre was ordered to be levied on land that had lain waste for some years. This gave a great impulse to cultivation, which rose rapidly from that year. In three years, 1824-25, 1832-33, and 1838-39, remissions of from one-third to one-half the assessment had to be given, on account of severe droughts. For the first twenty or thirty years the fluctuations of revenue were great, until a suitable rate of assessment was found, but after this was attained it followed the course of cultivation more closely. That notwithstanding this the area of tillage should have increased so greatly was an evident sign of the growing prosperity and the ready resources of the agricultural population. X On the whole it was not considered necessary to lower the rates more than sufficed to equalize the existing arbitrary assessment. Excluding thirty villages, of which the classification had not been completed at the time, the Superintendent accordingly proposed to divide the remaining 122 villages into three groups with maximum rates of dry-crop assessment of Rs. 2 6a., Rs. 2 2a., and Rs. 1 14a., as follows:—

First.—Twenty-four villages in the immediate neighbourhood of market towns, or lying along the Pánjrá river, and having the best climate.

Second.—Sixty-nine villages similarly situated with regard to markets, but having an inferior climate or being less favoured in other respects; also villages lying along the principal high roads, but at some distance from markets and the market towns on the Bori river.

Third.—Twenty-nine villages more unfavourably situated than the last, or lying in the Bori valley, and those among the rocky ranges dividing the two valleys.

The rates were two annas the acre higher than those sanctioned for the Songir petty division, the people on the whole being in better condition, and having the advantage of the best market in the Collectorate. The increase in cultivation had, moreover, been much greater in proportion in Dhulia than in Songir. Land irrigated from wells was of the area of 2,011 acres, for which the same maximum rate, Rs. 3, as that sanctioned for Songir was proposed. A good many of the wells not having been in use fifteen years, the land under them had no extra assessment placed on it. For channel-watered lands, the area of which was 1,700 acres, and which had in 1861-62 yielded a revenue of Rs. 16,439, no proposals were submitted pending the decision of Government on a separate report that was already before them. The general result is shown in the following statement:—

Class.	Villages.	Old Assessment.		New Proposed Rates.					
		Average of 44 Years.		Cultivation of 1861-62.			Government Arable Land.		
		Area.	Rupces.	Acres.	Assessment.	Average. R. a. p.	Acres.	Rupces.	Average. R. a. p.
1	24	11,337	17,530	19,711	25,225	1 4 6	45,997	43,484	0 15 3
2	69	17,370	19,440	31,185	31,389	1 0 1	1,11,028	74,339	0 10 6
3	29	4,933	4,379	8,558	7,017	0 13 1	31,967	18,300	0 9 1
Total	122	33,639	41,349	59,454	63,631	1 1 2	1,88,992	1,36,023	0 11 6

The proposed rates applied to the cultivated area of 1861-62 gave an approximate revenue of Rs. 60,730, or a reduction of about 4.5 per cent., which appeared sufficiently liberal for a prosperous district like Dhulia.

The system of assessment for *pitasthal* or channel-watered lands was finally settled by Government in 1868 on proposals submitted by Mr. Pedder after personal and careful examination. Having ascertained the various rotations of crops commonly carried out under the several dams, which of course varied with the quantity of water available and other facilities for irrigation, he first determined the relative values of the dams on a general consideration

of their circumstances. Then, having decided on maximum rates for the crops raised in the several rotations of two, three, four, or five years, he determined the money assessment of each dam according to the average fixed for the crops of each rotation. For instance, a three years' rotation under a particular dam was rice, sugar-cane, and wheat. The rates of these three being Rs. 15, 40, and $7\frac{1}{2}$, the total for three years was Rs. 62 $\frac{1}{2}$, giving an annual average rate of rather over Rs. 20 $\frac{1}{2}$. That rate per acre was fixed for every dam having the same rotation of crops. The result was as follows:—

	Ra.
Existing <i>pátasthal</i> revenue	25,197
By the new proposals	18,669
	6,528

or a reduction of nearly 26 per cent. A special cess was also imposed to provide funds for keeping the dams in repair.

✓ CHALISGAON.

Chálísgáon at the time of settlement consisted of 166 villages, 25 of which were alienated, but as the Jágírdar of one of these desired to have the assessment introduced into his village, the number to be settled came to 142. The classification of 11 not having been completed, proposals were only submitted for 131. X Most of the villages formerly belonged to the Province (*subah*) of Dáolatábád in the Nizám's dominions, but after the battle of Karda in the Deccan in 1795 they fell into the possession of the Peshvá, who retained them till 1818, when they came under British rule. Under the Mahratta rule the country was reduced to such extremities as to bring about a general famine in 1807, but after this the people appear to have been left undisturbed till 1818. The average assessment appears at that time not to have exceeded Rs. 2 2a. the acre. As cultivation gradually pro-

gressed, this could not have been unsupportable, but the two severe droughts which occurred evidently exhausted the ryots' means, so that by 1834-35 there was a perceptible falling-off in cultivation. Great reductions were then made, so that in three years the revenue fell to nearly one-half of what it had been. Still further reductions were however made, and the average rate per acre was brought down to a good deal below a rupee an acre. Rapid increase of cultivation, especially in the ten years preceding the settlement, was the result. The condition of the people had become highly prosperous, and was likely to improve greatly in consequence of the opening of the railway. X In consultation with the Revenue Commissioner, accordingly, the following groups for maximum rates of dry-crop assessment, the latter being somewhat higher than those of Dhulia on account of Chálísgáon having the advantage of the railway, were determined on:—

First group.—Maximum, Rs. 2 8a., twenty-five villages most advantageously situated with regard to markets, the market towns themselves, and a few villages in the more fertile portion of the Girna valley, and having the best climate.

Second.—Maximum, Rs. 2 4a., forty-four villages less favourably situated than the last, but lying along the banks of the Girna or the high road to Chálísgáon; and the smaller bazaar towns.

Third.—Maximum, Rs. 2, thirty-one villages less advantageously situated than the above with respect to markets and climate.

Fourth.—Maximum rates of twenty-six villages Rs. 1 12a, and of four Rs. 1 10a. The former were villages on the table-land, having a scarcity of water, and inconveniently situated with regard to the railway and markets, although possessing an excellent climate and good soil. The latter were villages entirely or nearly deserted among the Sátmalá hills, exposed to the ravages of wild animals, and having the worst climate.

(N.B.—These are the reasons for grouping given, but as no coloured map of the groups was forwarded, it is impossible to judge of its correctness.)

For garden land under wells the same maximum rate, Rs. 3, was proposed as in Dhulia. There were eighty-nine acres of channel-watered land in one village, but, as in Dhulia, rates of assessment

were not submitted for it. The general result of the revision will be seen from the following statement:—

Class.	Villages.	According to Old Rates.		According to Proposed Rates.					
		Average of 44 Years.		Cultivation of 1861-62.			Total Government Arable Land.		
		Acres.	Assessment.	Acres.	Assessment.	Average. E. a. p.	Acres.	Assessment.	Average. E. a. p.
1	25	10,809	13,901	17,835	20,095	1 2 0	44,688	45,405	1 0 3
2	44	11,840	12,251	23,689	21,372	0 14 5	78,109	61,117	0 12 8
3	31	6,286	5,113	12,583	9,869	0 12 8	49,504	30,408	0 9 10
4	28	5,956	6,284	8,290	6,524	1 0 5	35,067	23,919	0 10 11
	4	411	182	555	299	0 8 7	8,521	3,360	0 8 4
Total	180	35,292	37,731	62,952	60,259	0 15 4	215,889	1,64,299	0 12 2

The assessment on the cultivated area of 1861-62 according to the new rates was Rs. 61,490, which was less than Rs. 62,952 by 2·3 per cent., a very small increase when the prosperity of the subdivision generally was considered. The increase in some villages was large, but it was only on account of their having been assessed below their proper proportion under the old system. The proposals for both subdivisions were sanctioned by Government, and guaranteed for the usual period of thirty years, in April 1863.

VARANGAON.

X Rates of assessment were proposed for the subdivisions of Lohará and Varangáon in 1865, and sanctioned in 1866. X They were sent up with such scanty information on some points that the Revenue Commissioner hesitated to recommend them without further inquiry; but it appears that the grouping and rates had been arranged emi-officially between the Survey Superintendent and the late Revenue Commissioner. The reasons for this had not been left on record by the latter for his successor, who had thus been left in the dark. Such a practice is, to say the least of it, inconvenient in the interests of the public service.

Varangáon lies on the eastern boundary of the Khándesh Col-lectorate, and is bounded on the north by Sáodá and Ráver, from

which it is separated by the Taptee, on the east and north-east by the Provinces of Nímár and Western Berar, and on the south and west by the subdivisions of Jámner and Nasirábád. It contained two *maháls* or subdivisions, viz. Varangáon and Edlábád, and comprised 182 villages, seven of which were alienated. The face of the country is level, mostly of fine black soil producing superior crops. Along the southern portion, however, the surface undulates, and some of the hills rise from 150 to 300 feet in height. Much of this part of the country is covered with loose stones and boulders, which greatly impede wheeled traffic. Some of the hollows contain good soil, but the tract generally is barren. On the north of that portion of the subdivision on the north bank of the Purna stretching eastwards a bold range of mountains separates it from Nímár. In addition to the Taptee, Purna, and other rivers, it has numerous small streams which in ordinary seasons retain water all the year round. The north-eastern branch of the G. I. P. Railway runs through the subdivision from a little west of the junction station of Bhusával, and the south-eastern or Nágpur line has also the station of Varangáon within its limits. A metalled and bridged road from Asirgád and Burhánpur towards the Nágám station in Jámner gives the inhabitants along its line the benefit of easy communication with the railway. There are weekly markets held at Bhusával, Edlábád, Varangáon, and other places. At the time of settlement there were 73,015 acres of arable waste land and 1,06,677 of cultivation. As the waste lands in the southern portion of the subdivision were of a very poor description, extension of cultivation was looked for along the banks of the Taptee and Purna, where the best soil was found. The chief crops were *javíri* and cotton, there being 31 per cent. of the former and 25 per cent. of the latter. ~~X~~No reliable information was procurable as to the previous assessment of this tract of country. Pieces of land were apparently assessed in the lump at so many rupees, but nothing was traceable in the records as to the area of such lands. The revenue was farmed out as in the remainder of the Peshvá's territories, but the Survey Reports of this time are so singularly devoid of the information usually contained in them that little more can be done than state the rates of assessment proposed, which were as follows:—

Class 1st, of fifty villages, at Rs. 3½ and Rs. 3 an acre, with a few annas added for such villages as were immediately contiguous to railway stations.

Class 2nd, thirty-one villages, maximum rate Rs. 2 12a.

Class 3rd, thirty-five villages, maximum rate Rs. 2 8a.

Class 4th, forty-three villages, maximum rate Rs. 2 4a. ; twenty villages, maximum rate Rs. 1 12a.

For this grouping no reason whatever was given but that it had been arranged in consultation with Mr. Ellis, the former Revenue Commissioner. A remark has been made above on this unusual method of carrying out settlement operations. The following meagre details of the result of the proposed assessments are gathered from the figured statements that accompanied the Superintendent's Report:—

Class.	Villages.	Average for Three Years.		Area and Revenue of 1863-64.		Area of 1864-65 according to Three Years' Average and Survey Rates.			Increase per cent.
		Acres.	Rs.	Area.	Rs.	Area.	Old Rates.	Survey Rates.	
1	{ 7	4,572	12,600	5,161	13,503	9,157	14,928	14,470	17.0
	{ 43	29,469	38,186	31,065	40,857	35,437	45,129	56,073	24.2
2	81	10,041	19,233	10,718	20,540	22,293	22,832	29,019	26.8
3	35	9,634	14,506	11,551	17,264	20,070	21,063	26,570	26.1
4	{ 43	6,830	7,552	7,558	9,199	17,312	12,878	16,017	24.2
	{ 20	898	867	1,001	1,046	2,408	1,892	1,937	2.9
	179	60,939	92,944	67,054	1,02,409	1,06,677	1,18,772	1,47,086	23.5

If any judgment can be formed from a statement of this incomplete nature, the waste lands must have been of the area of 73,015 acres, as the total Survey acres are returned as 106,677; but as the latter figure evidently includes unarable land, no trustworthy inference can be drawn from a comparison of the two as to the condition of the country. The total Survey assessment is given at Rs. 147,086, and if from this is deducted the assessment on cultivation in 1864-65, Rs. 1,18,772, a balance of attainable revenue to the extent of Rs. 78,921 remained, so that it may be estimated that about 40 per cent. of the arable area still remained unoccupied. No details of the area of land under irrigation were given in the Report, but it was simply stated that an extra assess-

ment of 4 annas per acre was placed on the irrigable area without the revenue derived from this source being given.

LOHARA.

X Equally unsatisfactory were the returns relating to Lohará. The Superintendent appears to have been satisfied, as an argument for the suitability of his proposals, with stating that he had the great advantage of a consultation with Mr. Ellis, the Revenue Commissioner, and although Mr. Ellis's successor prayed for delay in order that the matter might be thoroughly inquired into, the Government, of which Mr. Ellis had become a member, did not accede to his request, and confirmed the proposed rates. X The subdivision of Lohará was originally formed in 1861-62 out of villages taken from Bhargáon, Jámner and Erandol. At the time of settlement it contained 164 villages, of which 2 were wholly and 23 partially alienated, leaving 139 Government villages. X In the year 1818, when the Peshvá's power was overthrown, a portion only came under British rule, and two years later the remainder, but all excepting the first portion were given back to Sindia in 1838-39, to whom they had been given by the Peshvá in part payment of a debt; it was again resumed in 1844-45. The general aspect of the country is flat, excepting near an irregular and broken line of low rocky hills in the centre and north of the subdivision, where there was at the settlement much waste land covered with low jungle. It is well supplied with water, especially the villages on the Girná river, which partly forms its boundary on the north-west. X The southern portion is especially well supplied; the numerous streams that take their rise in the Sátmalá range, and flow in a north-westerly course until they eventually fall into the Girná, have many large and deep pools lasting all the year round, and amply supply the wells near them by percolation. The prevailing soil is the regur, or black cotton soil, of medium quality, and is especially good on the banks of the Girná. X The chief crops are *javári* and cotton, occupying, with *bijri*, 80 per cent. of the cultivated area. There were no metalled roads within the limits of the subdivision at the

time of settlement, but the G. I. P. Railway traversed the whole of the western portion and had three stations, viz. Páchora, Máhíjí, and Mhasávad. Weekly bazaars were held at ten places within the subdivision, and the fair at Máhíjí, taking place once a year for about two months, was of great benefit to all the surrounding country. The railway, however, has so increased facilities for the disposal of produce that this fair has since been abolished. According to the returns of former assessments given in the Superintendent's Report the average area under tillage for forty-six years had been 50,637 acres, and the collections upon it Rs. 69,146, or on an average Rs. 1 5a. 10p. The Superintendent considered the assessment had been too low, but neither quoted prices nor gave any other reason for his opinion, except that they were lower, considering the nature of the soil, than in most parts of the country where revised rates had been introduced. He accordingly proposed three groups for maximum rates of dry-crop assessment of eighty-six, thirty-two, and thirty-three villages, with an addition of eight annas for villages near railway stations. There were in reality four groups, for the detailed statement accompanying the Report showed thirteen out of the eighty-six of the first assessed at Rs. 3 8a. (probably those near railway stations), and the remaining seventy-three at Rs. 3. The second group was one of thirty-two villages at a maximum of Rs. 2 $\frac{3}{4}$, and the third one of thirty-three at a maximum of Rs. 2 4a. The irrigated area, of which no details were given, was assessed, as in Varangáon, at four annas an acre extra. The average assessments on the whole cultivated area under the old and new rates were respectively Rs. 1 5a. 10p. and Rs. 1 5a. 9p. The general result on the several groups will be seen from the following statement:—

Class.	Villages.	46 years' Average.			Area and Revenue of 1863-64.		Area and Revenue of 1864-65 according to Old and New Rates.			Average.
		Area.	Rs.	Rs. a. p.	Area.	Rs.	Area.	Old Rates.	New Rates.	
1	13	5,055	9,450	1 13 10	8,857	14,353	10,811	15,974	20,562	1 14 11
2	32	24,406	33,676	1 6 1	30,787	60,556	66,105	71,951	96,682	1 7 10
3	33	17,146	23,670	1 5 1	35,663	39,992	47,573	48,302	64,368	1 5 7
	33	4,080	3,350	13 3	16,871	12,874	25,715	18,169	21,291	13 2
	151	50,637	70,146	1 5 10	1,12,118	1,27,377	1,30,204	1,54,125	2,04,963	1 5 9

The total assessment on the entire area of the subdivision was given as Rs. 2,30,995, so that on the cultivated area of 1864-65 being Rs. 2,04,958, there was a balance of attainable revenue, if all the arable waste was brought into cultivation, of Rs. 26,042; it may thus be estimated that about 11 per cent. of the arable area still remained unoccupied. As stated above under Varangón, no nearer estimate can be made than this, owing to the imperfect nature of the returns sent in to Government.

At the same time with the reports on the assessment of Lohará and Varangón a statement was forwarded containing proposals for the assessment of nine villages in the Chálísgáon subdivision, merely mentioning their names and proposed maximum rate of dry-crop assessment. This was forwarded by the Revenue Commissioner without comment, on the ground that his records contained no information with regard to them, and no statistical returns had been sent in by the Survey. The proposals with regard to these were sanctioned by Government without any reasons being assigned but that the rates were based on those fixed for the rest of the subdivision.

ERANDOL.

A revised assessment was introduced into the Erandol subdivision in 1858-59 in anticipation of the sanction of Government, and sanctioned for the usual term of thirty years in 1860. It contained 232 villages, of which 227 were brought under settlement. It lay immediately to the west of Amalner, on the south bank of the Taptee, and was very similar to that subdivision in respect to the condition of the people, description of crops, their method of husbandry, &c. Its best soil was in the north and east, on the Taptee and Girná rivers, and deteriorated towards the south, especially towards the south-east, where there were low hills; even there, however, there was good soil in patches among the bad. Some of the minor streams, as well as the two large rivers, held water all the year round, but it was not made use of for irrigation. It had no metalled roads, that from Bombay to Asirgád, which passed by Erandol and Páldi to Jalgáon, being

merely a cleared track in the black soil. Along this there was considerable traffic during the fair season. There were other cleared roads, but they were rough and uneven. There was no market town of any importance, but weekly bazaars were held at Erandol, Dharangáon (the head-quarters of the Bhl Corps), and a few other places, and the site of the Máhjí Fair was close to some of the southern villages. The population, almost entirely agricultural, numbered 146 to the square mile. A little weaving was done at Erandol and Dharangáon, but there were no manufactures of any importance. The indigenous cattle of the country were of a very poor description.

In grouping for maximum rates of dry-crop assessment, the villages on the north of the subdivision near the Taptee, where the best soil was, were placed in the first class. In the second class were almost all the central villages to the south of the first, and some towards the east on the Girná, where the soil was good, and which were near the locality of the annual Máhjí Fair. The third class contained villages not so favourably situated as these; and the fourth contained the remainder, which were all more or less poor and barren, on the south-eastern border, and also on the south-west near the hills. The circumstances of the subdivision being very similar to those of Amalner, the same maximum rates of Rs. 2 4a., Rs. 2 2a., Rs. 2 0a., and R. 1 14a. were proposed. These rates had the effect of equalizing rather than lowering the assessment in the greater portion of the subdivision. In 1845 there had been a revision made of the dry-crop rates in fifty-one villages. The original rates had varied from Rs. 2 10a. to R. 1 6a., and those substituted for them and sanctioned by Government in 1846, with the assent of the cultivators, were from Rs. 2 0a. to R. 1 8a. Most of the remaining villages were revised in 1848-49 under Captain Wingate's advice, preparatory to the Survey settlement. In the subdivisions of Chopda and Amalner, already revised, the reductions of assessment had amounted to 33 and 19 per cent. respectively, and it was anticipated that the proposed rates in Erandol would lead to a reduction of about 13 per cent., but it was expected that in the first year 20,000 acres of waste would be taken up to make up the immediate loss of revenue. There was only a little irrigation from wells, and

for this a maximum rate of Rs. 8 an acre, as in Amalner, was proposed. In the past the area of cultivation had risen from 58,880 acres in 1818-19 to 97,604, or 83·1 per cent., in 1857-58, and the collections in the same period from Rs. 1,37,858 to Rs. 1,58,185, or only 14·7 per cent., owing to the reduction of assessments in 1848-49. Remissions had averaged Rs. 9,087. It was thus evident that there had been no over-assessment, and Government, although sanctioning the proposed rates, were of opinion that one or two annas in the rupee could easily have been borne. They for the first time, however, directed the imposition of an anna in the rupee of the assessment to form a local fund for local improvement and educational purposes, and ordered the same to be done in all future assessments. The general result of the new assessment, exclusive of the one anna for local funds, was as follows :—

Class.	Villages.	Average of past Collections.	Revenue of 1857-58.	Assessment on Cultivation by		Average New Rate.	Per-centage Increase.
				Old Rates.	New Rates.		
		Rs.	Rs.	Rs.	Rs.	Ra. a. p.	
1	86	72,987	1,02,488	1,10,793	96,894	1 5 8	12·9
2	84	27,674	38,041	41,995	36,910	15 7	12·1
3	30	6,748	9,995	11,476	9,740	18 3	15 1
4	27	4,022	5,852	6,508	5,280	10 6	18·8
	227	1,11,429	1,56,326	1,70,772	1,46,324	1 1 6	13·1

The realisations in the first year of the settlement were thus Rs. 26,895 in excess of the average for forty years, and Rs. 8,002 below that of 1857-58, the difference between the old and new assessments on the cultivated area of 1858-59 being Rs. 22,448.

NASIRABAD.

In 1860 the revision of the subdivision of Nasirábád was undertaken. It was situated on the south bank of the Taptee and had the Girná as its western boundary; on the south was the subdivision of Jámner, and on the east Sindia's territory. It con-

tained 123 villages, 30 of which were uninhabited; 65 were under the charge of a *Mámlatdár*, and 28 of a *Mahálkari*. Its area was $350\frac{1}{2}$ square miles, and its population numbered 149 to the square mile. Its physical features were similar to those of Erandol, its soil being best in the northern portion bordering on the Taptee, and inferior where it was rocky in the south-east; but it was on the whole superior in this respect both to Erandol and Amalner. As in Erandol, the Bombay and Asirgad road, a cleared track, passed through it, but there were no metalled roads. It had the great advantage over Erandol of proximity to the G. I. P. Railway, which, entering in the south, passed northwards as far as the village of Pimprála, and thence turned eastwards by Jalgaon to the Bhusaval Junction. There were weekly bazaars at Nasrábád, Jalgaon, and five other places, but the chief market for exportable produce was the railway station at Jalgaon, which had of late years become the most important commercial centre in Khán-desh, one at which many Bombay firms had established their own agencies. The crops and husbandry of Nasrábád resembled those of the neighbouring subdivisions, and its manufactures were equally unimportant, as its population, numbering 52,338, was almost entirely agricultural. Its horned cattle were about 40,900 in number: this was 26,000 fewer than in Erandol, probably on account of its smaller area of pasturage ground, which towards the north led the people to send their cattle to graze in the monsoon in the Sát-pura hills. The people on the whole were in prosperous condition, and lived in good houses. The existing assessment had evidently, at all events in the northern villages, not been onerous. The highest rate had been Ra. 2 6a. 9p. the *bigha*, or Rs. 3 3a. 8p. the acre, but went as low as 7a. 6p. the *bigha*. In the southern villages the highest rate had been 15a. the *bigha*, or R. 1 4a. the acre in dry-crop lands, and in garden lands Rs. 2 14a. 3p. the *bigha*, or Ra. 3 13a. 8p. the acre. For maximum rates of dry-crop assessment the villages were thrown into three groups, the first and largest consisting of fifty-two in the northern portion towards the Taptee, with the best soil. Out of 75,786 arable acres in this group 56,980, or over 75 per cent., were cultivated in 1858-59; the remaining unoccupied land was full of ravines and much broken up. It was considered that in

consequence of the convenience of the railway and the importance of Jalgaon as a market, these villages would easily bear a considerable increase over the rates fixed for Erandol and Amalner, and a maximum of Rs. 3 in place of Rs. 2½ was proposed for this group. For the second group, of twenty-five villages, which were near the Girná and a few beyond the Vagúr, the same maximum rate of Rs. 2 2a. as that of the neighbouring Erandol villages was determined on. The remainder of the villages, forty-six in number, twenty-one of which were uninhabited and which had the poorest soil in the south of the subdivision, had a maximum rate given them of Rs. 1 12a. It was estimated that there would be a reduction of about 25 per cent. in the second and third groups from these rates. There was only one permanent dam with three acres watered from it; the old average on this land had been Rs. 2 14a. 3p., and a maximum of Rs. 5 was proposed. The lands under temporary mud dams, made annually, were to be assessed at Rs. 8 8a. the acre, and 1,470 acres under wells at maximum rates of Rs. 3½ and Rs. 3. Under the old rates of assessment the area under cultivation had risen from 43,834 acres in 1818-19 to 90,774 in 1858-59, and realisations, with average remissions of Rs. 12,834 a year, from Rs. 1,28,999 to Rs. 1,78,126. As in Erandol, the lowest revenue was that of 1832-33, a year of famine, and after that the rise had been continuous and steady in all but a few exceptional years. The assessment had thus evidently not been oppressive. X

The general result of the new assessment, which was guaranteed for the usual period of thirty years, will be seen from the sub-joined statement:—

Cham.	Villages	Average Cul- tivation for 40 Years.		Cultivation of 1858-59.		By New Rates.	Per- centage Decrease
		Acres.	Ra.	Acres.	Ra.		
1	53	75,786	87,537	56,980	1,36,149	1,15,381	15.2
2	26	26,792	11,562	12,665	16,739	13,186	21.2
3	46	61,870	12,976	21,126	23,010	15,602	29.1
	125	1,63,948	1,12,075	90,771	1,74,891	1,44,169	17.6

It was anticipated that the revenue in the first year of the settlement would probably be about Rs. 1,80,000, which would

more than make up for the deficit of Rs. 30,722 in the year in which the rates were introduced.

VIRDAL.

X In 1861 it was decided to form a new subdivision, to be called Virdal, out of ninety-three villages, seventy-six of which were inhabited and seventeen deserted, belonging originally to the Nandurbár and Dhulia Tálukas. This tract of country had the Taptee on the north, Amalner, which had been already settled, on the east, Dhulia on the south, and Nandurbár and Pimpalner on the west. The Survey settlement was introduced into it on its first formation, and sanctioned by Government for thirty years in July 1861. X Its physical features were very similar to those of Amalner and other subdivisions on the south bank of the Taptee. The best soil was near the bank of the river, and it became poorer towards the south, where the surface became uneven, until it passed into hills of an irregular form, in the neighbourhood of which was the poorest soil. It was indifferently watered except near the Taptee, the other two rivers in it, the Umrávati and Burai, not containing water for the whole year. There were 428 wells in the whole district, many of which were from thirty-six to fifty feet in depth from the surface. The road from Málegáon to Surat passed through it; it was, however, only a fair-weather track, and bore but little traffic. There were no manufactures, but a little dyeing, and in one village cart-making, were carried on. There were weekly bazaars at Virdal, Sindkheda, and three other places, but no large market-town. The husbandry did not differ in any respect from that of the neighbouring subdivisions. Some cattle were bred in the southern villages, where there was much waste land. Population numbered 104 to the square mile.

Under the current system of assessment there had been in the northern villages only one uniform rate of Rs. 2 1a. per *bigha*, or Rs. 2 12a. per acre. Going towards the south the rates were more irregular, ranging from R. 1 9a. to R. 1 4a. the *bigha*, but varied

greatly even in adjacent villages of equal fertility. Farther southward still, among the hill villages, the rates were excessive for soil of the character they possessed. The Collector had temporarily reduced the rates in the northern villages in 1853, but they were on the whole too heavy to encourage cultivation. The maximum rate for the whole subdivision would appropriately have been Rs. 2 4a., the same as that sanctioned for the neighbouring subdivision of Amalner; but taking into consideration the rise in prices that had taken place since that rate was sanctioned, and the subsequent completion of the railway, the Superintendent proposed to raise this by four annas. Accordingly a maximum rate of Rs. 2 8a. was fixed for the first group of forty-eight villages in the north near the Taptee and Burai rivers as far as Sindkheda. The area of this group was 59,625 acres, and its total assessment came at this rate to Rs. 70,177, a reduction from the current revenue of about Rs. 20,000: but as the cultivated area was 37,822 acres, and the waste 21,803, it was hoped the deficit would soon be made up.

In the second group, of nineteen villages immediately to the south of the first, with an inferior soil and an indifferent water-supply, the same maximum of Rs. 2 3a. as that sanctioned for the second-class villages of Amalner was proposed. In this group, out of a total of 25,824 acres, 10,538 were in cultivation, and 15,286 waste, or about three-fifths of the arable area.

For the third group, of thirteen villages, of such poor soil that only inferior kinds of crops could be raised, a maximum rate of Rs. 1 12a. was proposed; and for the fourth, one of R. 1 8a.

The last group, consisted also of thirteen villages, which lay among the hills, and not only had very poor soil, but were very liable to have their crops destroyed by wild pigs. There were only about 1,000 acres of irrigated land, of which twenty-three acres were under two temporary dams, the proposal of new rates for which was postponed pending the settlement of the general question of the assessment of such lands. Under 368 wells there were 1,035 acres irrigated, and for these the rate of Rs. 3 sanctioned for Nasirábád was proposed. The old rates had been Rs. 4 2a. 8p. and Rs. 3 12a. 8p. per acre. The general result of the revision is exhibited in the following tabular statement:—

Class.	Villages.	Total arable Area in 1859-60.	Cultivation of 1859-60.	Waste of 1859-60.	Collections of 1859 at Old Rates.	At New Rates on Cultivation of 1859-60.	Percentage Decrease.
1	48	Acres. 59,625	Acres. 37,822	Acres. 21,803	Rs. 90,211	Rs. 70,177	22.2
2	19	25,824	10,588	15,286	15,810	12,423	21.4
3	18	23,454	9,135	14,319	8,914	6,946	22.0
4	13	21,233	3,303	17,930	3,118	1,545	50.4
	93	1,80,136	60,798	69,338	1,18,053	91,091	22.8

Of the waste area, nearly 22,000 acres were, it will be seen, in the best villages. At the accession of British rule only 33,000 acres had been in cultivation, and the revenue was Rs. 32,594. In 1859-60 these had severally risen to Rs. 60,798 and Rs. 1,18,053; but there had been great fluctuations, and in 1832-33, a bad year, the revenue had fallen as low as Rs. 35,456. Government were of opinion that a greater rise in the assessment would have been justifiable, but as the Revenue Commissioner, Mr. Mansfield, had already sanctioned the proposed rates, would not interfere; he was, however, desired in future not to sanction new rates without reference to Government.

The population of Virdal was returned at 30,341 souls: agricultural cattle at 9,024; other draught cattle at 2,299; cows, &c. at 21,700; carts at 2,673; and ploughs at, 4,044. This gives only fifteen acres to a plough, showing, if the figures can be trusted, a high state of cultivation. The number of acres to each pair of bullocks, however, about $13\frac{1}{2}$, bears this out.

SONGIR PETA.

The assessment of the petty division of Songir, in the Dhulia subdivision, was revised in 1862. It had Virdal on the west, Amalner and its petty division Betavad on the north, and Dhulia on its south and east. It contained sixty-nine villages, of which

one was alienated and not included in the settlement. Its soil in the south-east and on the Pánjra river was, like that of Betávad, black and of fair quality, but not equal to that of the Taptee valley. Going towards the north and west, hills of trap rock were met with leading on to a higher range, which, entering from the Pimpalner subdivision, divide Songír into two valleys, of which the western was the poorer. In the neighbourhood of the trap rock all the soil was shallow and of an inferior quality. The whole area was about 235 square miles, of which 107,600 acres were arable and 42,695 unarable. The population of 19,811 gave about eighty-four to the square mile. They were entirely engaged in agriculture, and for the most part deeply in debt. The black soil was ploughed every second year, and the lighter every year. The latter was then generally cropped, being manured every three or four years where possible, and then left fallow for two. Fifty per cent. of the land was cropped with *bájri*, 16 with oil-seed (*til*), 12 with cotton, and the same with *kulthi*. The water-supply was insufficient, but that it could be much improved by dams across the numerous small streams was proved by the remains of many of them erected in the time of the Moguls. At the settlement there were only six, of which four were of masonry. There were 220 wells in use for irrigation, watering 1,172 acres, and 537 exempt from assessment from being unserviceable. There were plenty of working cattle, a weekly market for which was held at Songír. This was the only market of any importance, but there were also two other unimportant ones. The people as a rule did not take their produce to these, but it was bought up at the villages by dealers.

The metalled road from Bombay to Agra ran through Songír, and the cross road, unmetalled, from Dhulia to Surat, met it there. The traffic on the former had diminished greatly of late years, in consequence of the railway drawing it away towards Chálisgáon.

X When the country came into British possession in 1818, Captain Briggs, the Collector, fixed a rate per *bigla* calculated on the past ten years' average rates, with a Haváldári cess at 5 per cent., which was included in the assessment of 1823-24. The average rate in 1818 had been about Rs. 2 per acre, but, as this was found

to be too heavy, it was revised five years afterwards, and the system of giving *istává*, or gradually-increasing leases, introduced. This was only discontinued in 1836-37.

In the great drought of 1824-25 half the revenue had to be remitted; but even this was found insufficient to keep up tillage, for large cash advances had to be given to the ryots. From this time till 1832-33, when another great drought occurred, tillage slowly increased. In that year and the following one Rs. 7,677 had to be remitted, and cultivation gradually increased till 1837-38, when the rates were reduced to about a rupee an acre. Rs. 14,828 had to be remitted in 1838-39, in consequence of a bad monsoon, and a gradual rise took place till 1846-47, since which time the revenue had remained stationary. From these circumstances the Superintendent was of opinion that the assessment as a whole had been too heavy. For maximum rates of dry-crop assessment he proposed three groups of nine, thirty, and twenty villages, ten villages transferred from Amalner having already been settled. The first group, of nine, for which a rate of Rs. 2 was fixed, had the best soil, and were either themselves market towns or were close to them. The thirty villages of the second group, with a maximum of R. 1 13a., were less favourably situated, and had many ravines and a great deal of rocky ground. The third group, of twenty villages, was still more full of ravines than the second, and lay in the extreme west, on the border of Pimpalner, at a distance from markets. No rates were proposed for channel-watered land pending the settlement of the general question of their rates. Land watered from wells amounted to 1,172 acres, hitherto assessed at rates of Rs. 4 2a. 8p. and Rs. 3 13a. 8p. per acre. For these a maximum of Rs. 3 was proposed, as had been sanctioned in Amalner. The Revenue Commissioner was of opinion that, considering the rise in prices that had lately taken place, the maximum rate of Rs. 2 proposed was too low, and thought it should be raised to Rs. 2 4a. He thought the second group should be subdivided into two, one of villages close to those of the first group at a maximum of Rs. 2, and another of those farther removed from them at R. 1 14a. These proposals were approved by Government, and reduced the revenue by about Rs. 6,000 instead of Rs. 7,688, by which it will be seen from the

following statement the Superintendent's rates would have brought it down to :—

Cham.	Villages.	Average on Cultivation of 43 Years.		At Current Rates on Cultivation of 1860-61.		Ave- rage.	Collec- tions.	Estimated at proposed Rates on the same Area.	Ave- rage.	Per cent. Decrease.
		Area.	Rs.	Area.	Rs.					
1 2 3	9	5,163	8,848	7,783	11,210	1 7 1	11,126	9,595	1 3 5	13.7
	80	10,570	16,778	14,019	15,918	15 11	15,769	11,546	11 6	26.7
	90	5,411	5,908	9,163	8,395	14 8	8,215	6,281	11 0	35.7
	89	21,144	24,837	32,965	35,523	1 1 8	35,11 0	27,422	13 4	21.8

The Survey Reports sent in about this time on the revision of assessments in Khândesh contained such meagre details that it is only possible to form a very superficial judgment of the suitability of the rates from them. In this, as in other cases, the area of arable waste at the time of settlement can only be guessed by looking at the difference between the realisable revenue and the assessment on the total area, which was Rs. 61,048; the margin between Rs. 27,422 and this left ample room for the immediate loss of revenue to be made up and largely exceeded by waste lands being taken up for cultivation.

NANDURBÁR.

X Six villages were experimentally assessed in the subdivision of Nandurbár in 1861, and the remainder were brought on for revision in 1862. It contained altogether 216 villages, or 210 after deducting the six mentioned. Nineteen villages were alienated, and ninety, mostly inhabited by Bhis, were managed under the *dotbandi*, or plough-tax system, with which it was not proposed to interfere. Deducting these 109 villages, there were 101 left, the papers of only 89 of which were before the Superintendent when he wrote, and his proposals for the whole were based on these. Nandurbár was one of the frontier districts of Khândesh in the north-west. It was bounded on the north by Sultánpur, on the other side of the Taptée, on the east by Virdal, and on the south by Pimpalner, and on the west by the Dáng jungles. The north and north-east portions resembled the more easterly districts. From the Sahyádrí range in the west there branched out

spurs that divided the subdivision into narrow strips, the soil in which was very poor in consequence of its admixture with trap rocks. This was chiefly in the south. In the north, along the Táptee, the black soil had become much deteriorated by having been mixed with sand in an overflow of the river thirty-three years previously. In the west there was a good deal of low scrub jungle. The water in the rivers appeared to be gradually drying up, probably in consequence of the destruction of the forests; that it had been more abundant formerly was proved by the remains of numerous dams across streams. At the settlement only nine water-channels were in use, and these were in need of repair. This was the case with most of the wells also, partly in consequence of their construction in rock, where the water-bearing strata were uncertain, and partly through neglect on account of the heaviness of the assessments. The crops were almost all *khariph*, or early, which were occasionally watered from wells to save them; on such occasions the Superintendent proposed to levy no water assessment. The population of the subdivision numbered only eighty to the square mile, and these were all agriculturists. Those of them who were industrious, as the Gujars, were in good case, and had cattle amply sufficient for their needs, but these were scarce with the lower classes. The Surat and Dhulia road, which was unmetalled, passed through the subdivision, and another from Taloda to Nandurbár, but there were no metalled roads. Nandurbár itself was the chief market, and there were two other local markets, but none of them were of any importance. Agents of Bombay firms were in the habit of going round the country and buying their produce directly from the cultivators themselves. There was some export of wheat, but most of this came from Sultánpur *en route* to Gujarát and elsewhere. There were no manufactures of any consequence, the only one worthy of note being that of grass oil, which was a good deal used in rheumatic complaints. British rule was introduced in 1818. Captain Briggs, the Collector, considering that the revenue derived from the country was much less than it could bear, raised the dry-crop rates in 1822 from 25 to 60 per cent., but the immediate result was a fall in the cultivated area of 1,382 acres, and in revenue of Rs. 13,349. Up to 1837-38 cultivation had

increased, but not the revenue; a sign that the heavily assessed better kinds of land had been forsaken and poor descriptions taken up. The rates were then reduced 30 per cent., and from 1839-40 a gradual improvement took place; but heavy remissions had still to be given in unfavourable seasons. For maximum rates of dry-crop assessment four groups of villages were proposed at rates similar to those of Virdal. Considering the late rise in prices, the maximum rate of Rs. 2½ was thought to be low; but, taking into account the unhealthiness of a portion of Nandurbár, and its distance from the railway and good markets, in connection with the sparseness of the population, only eighty to the square mile, it was not thought advisable to continue the rate of Rs. 2 6a. adopted experimentally in the six villages settled in the previous year. For the fourth group the Superintendent at first proposed a rate of R. 1 8a., but as the returns when compiled proved more favourable than had been anticipated, eleven out of the fourteen villages were raised to R. 1 10a., and the remaining three, inhabited by Bñls, which had been administered on the plough-tax system, lowered to R. 1 6a. by way of experiment to see whether the Bñls, at that low rate, would take to regular cultivation. No rates for channel-watered lands were proposed at the time of settlement, as the dams had had to be re-examined, but the returns of their condition had not been received. Of lands watered from wells there were only 881 acres. The old rate of Rs. 4 2a. 8p. per acre had been so heavy that only a few of the more wealthy ryots had been able to make use of them. It was now proposed to adopt a maximum of Rs. 2 12a. in villages near markets, and one of Rs. 2 8a. in more distant villages. The general result of the revision in eighty-nine villages, excluding the six previously settled, will be seen from the subjoined statement:—

Class.	Villages	Max. Rates.	43 Years' Average on Cultivation.		On Cultivation of 1839-41.			At Survey Rates on same Area.		Total Survey Assessment.	
			Rs. a.	Acres.	Rs.	Acres.	Rs.	Average. Rs. a. p.	Rs.	Average. Rs. a. p.	Acres.
1	38 2	2 4	10,562	24,869	19,053	45,021	2 5 10	33,174	1 11 10	35,217	56,063
	2 0	6,282	10,290	9,540	15,727	1 10 6	11,454	1 3 3	47,330	46,680	
	1 12	912	1,319	1,123	1,573	1 5 3	1,009	14 10	11,734	9,642	
	1 10	1,724	1,580	2,886	3,176	1 1 7	1,314	8 5	16,042	7,223	
4	3	1 6	37	504	—	—	—	—	—	2,413	2,377
	50		19,493	39,013	32,064	68,013	—	47,321	—	1,12,246	1,21,947

As in Virdal and other parts settled under Mr. Davidson, the returns are so imperfect that it cannot be ascertained what proportion of the 113,246 acres was unarable, and how much arable waste; but it is clear, from the difference between the total Survey assessment and that on cultivation, Rs. 55,935, that there was ample room for the immediate deficit to be made up from the anticipated cultivation of waste assessed land. The rates were sanctioned for thirty years in 1862.

NIZAMPUR PETA.

The petty division of Nizámpur, in the subdivision of Pimpalner, was settled in 1869. It is bounded on the north-west by Nandurbár, on the east by Dhulia, Málegáon and Virdal touching it at the south-east and north-east angles. It is intersected by ranges of low, rocky, abrupt hills, and everywhere cut up by ravines. Its soil was consequently all poor, belonging to the four lowest classes of the Survey classification scale, averaging 3a. 4p., and consisting for the most part of a thin layer of gravelly *barad* over trap or lime. It contained eighty-seven villages, all under direct Government management, and had an area of 490 square miles, of which about fifty-one were unarable. The rainfall was uncertain, being sometimes very scanty and at others excessive, and the climate was unhealthy from the prevalence of fever. There were few wells made for purposes of irrigation, as their construction in rock was expensive, and the supply of water uncertain. Sixteen villages had channel irrigation from dams, to the extent of about 1,600 acres, and on this the prosperity of the division mainly depended. There was generally a great want of water except on the banks of the rivers, as there were no tanks and few drinking wells. The villages on the banks of the Pánjra and Kán rivers had abundance of water, but the Burai and other streams ran dry in the hot weather, this being the chief cause of the scanty population and small area of cultivation. Small storage works for irrigation were much wanted, and could be provided without much expense.

Three-fourths of the cultivated area was under *báji*. Agriculture generally was very poor, cultivation not being continuous, except immediately round the village sites. There was much *kumri* or ash-manure cultivation, and no regular system of fallows. The land was allowed to lie waste for several years as soon as it appeared to be exhausted. The total population was 14,244, only twenty-nine to the square mile, and was entirely agricultural and badly off, not being much in debt only because they had no credit. If cattle-breeding had not been practised, the assessments could not have been paid.

There were weekly bazaars at Nizámpur and several other places, of which that at Nizámpur was the largest. There were no made roads, and the nearest railway station, that of Chálísgáon, was forty-five miles distant from Nizámpur. The tract of country was on the whole the poorest and worst in Khándesh. The current revenue system was a *bigá* rate on cultivation, and of late years the system of annual agreements to take up or relinquish land had been enforced. The decennial averages of revenue, &c., had been as follows:—

	Cultiva- tion. Acres.	Asses- ment. Ra.	Remis- sions. (Ra.	Collec- tions. Ra.	Average Rate. Ra. a. p.
1818-19 to 1837-38	10,374	23,568	2,649	20,919	2 4 4
1838-39 to 1857-58	11,896	19,682	3,080	16,602	1 10 3
1838-39 to 1847-48	16,783	23,500	2,097	21,403	1 6 6
1848-49 to 1857-58	19,360	26,420	2,166	24,254	1 5 7
1858-59 to 1866-67	25,084	35,623	542	35,081	1 6 9

Although the increase in cultivation since the accession of British rule had been 124 per cent., only 17 per cent. of the arable area was occupied, whereas in Málegáon it had been 41, in Bhargáon 66, in Lohará 60, and in Dhulia 33 per cent. The dry-crop cultivation in 1866-67 was 24,745 acres, assessed at Ra. 24,433, or under a rupee an acre, whereas by comparison with the following districts it should have had lower rates:—

	Average R. a. p.
Málegáon	0 11 7
Chálísgáon	0 15 4
Bhargáon	1 0 5

For maximum rates of dry-crop assessment the following three groups were proposed :—

First group.—Twenty villages. Nizámpur and Jetháná, two market towns, with other villages to the south on the Kán and Pánjra rivers, having the densest population, the best drinking water, and near the bazaars of Sákri Bhadua and Ner in Dhulia. The maximum proposed was Rs. 2.

Second Group.—Eighteen villages, all on the Burai and its tributaries, or favourably situated for markets. Maximum, R. 1 12a.

Third group.—Forty-nine villages in inferior situations.

According to strict rule the villages to the east of Nizámpur should have had higher rates as being nearer the market of Dhulia, but that tract of country was really the worst in Khán-desh. Water was very scarce in it, and in fourteen villages, nearly equal to one-fifth of the whole district, only 474 acres had been cultivated in 1866-67.

The rates of neighbouring subdivisions had been fixed as follows :—

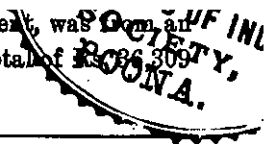
	R.	a.	R.	a.	R.	a.	R.	a.	R.	a.
Nandurbár . 1861-62	2	8	2	2	1	12	1	10	1	6
Virdal . . . 1860-61	2	8	2	2	1	12	1	8		
Songír Peta . 1861-62	2	4	2	0	1	10				
Dhulia . . . 1862-63	2	6	2	2	1	14				
Málegáon . 1866-67	2	8	2	4	2	0	1	12		

The proposed rates were introduced experimentally in 1868 for a year and sanctioned by Government, but were considered by the Survey Commissioner to be to some extent too high. The latter proposed a lowering of the maximum rates of the second and third groups by four annas each, and, for a few villages in the extreme west, proposed a maximum of one rupee. The average on the total area of dry-crop land by Mr. Pedder's rates had been 5a. 3p., and on the portion under cultivation 7a. 5p. only.

The best channel-watered land was on the Pánjra, the next on the Kán, and the most inferior on the Burai. For these three severally maximum rates of Rs. 12, Rs. 9 to 5, and Rs. 5½ to 3 were proposed, and nothing was to be charged for occasional waterings to save crops. The total reduction by Mr. Pedder's

KHA'NDESH.

rates, it will be seen from the subjoined statement, was ^{an} ~~an~~ average of R. 1 6a. 8p. to 10a. 11p., and from a total of ~~Rs. 309~~ ^{Rs. 24,627} to Rs. 24,627, or 81.8 per cent:—



Class.	Villages.	40 Years' Average.		On Cultivation of 1866-67.		By Survey Rates.					
						Dry Crop.			Channel-watered.		
		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Avg. Rs. a.	Acres.	Rs.	Avg. Rs. a. p.
1 2 3	20	5,142	10,454	3,414	10,034	9,697	4,583	7 7	813	6,345	7 12 10
	18	5,698	7,468	5,061	11,346	10,526	5,007	7 7	575	3,129	3 11 3
	46	5,903	5,507	9,119	8,339	14,394	6,428	7 2	44	138	3 1 1
	87	16,444	23,429	17,594	36,309	34,617	16,018	7 5	1,432	8,609	6 0 2

TOTAL.

Acres.	Rs.
10,510	10,926
11,101	7,136
14,438	6,563
<u>36,049</u>	<u>24,627</u>

The modified rates proposed by the Survey Commissioner were finally approved, and a guarantee for thirty years given by Government in 1869. The average rates for the year before the settlement under the old and new assessments compared as follows:—

	Dry Crop.				Irrigated.			
	Old.		New.		Old.		New.	
	R.	a. p.	a. p.		R.	a. p.	R.	a. p.
First class	1	1 0	7 7		11	12 8	7	12 10
Second class	0	15 7	7 7		7	10 2	3	11 3
Third class	0	14 4	7 2		3	4 0	3	1 0
		<u>0 15 9</u>	<u>7 5</u>		<u>9 13 2</u>	<u>6 0 2</u>		

AMALNER.

The subdivision of Amalner had the settlement introduced into it, and the rates guaranteed for the usual period of thirty years, in 1859. It is one of the most centrally situated in the Collectorate, and being surrounded by other subdivisions with very similar physical characteristics, served as a guide in fixing the rates of assessment in the latter. It was bounded on the north by the

Taptee, and was perfectly flat from a little to the north of Amalner to the river, in the valley of which there was rich black soil, producing the finest crops. In the south the country was much more rocky and sterile, with but little water. The Táluka was divided between the good and bad soil into two almost equal portions of about 155,000 and 152,000 acres. The prevailing crop was *bájri*. The old rates of assessment had not only been heavy, as in Chopda, Yával, and Sáodá, but very unequal, even in neighbouring villages with similar soils, and apparently at their highest in the southern villages where the soils were poorest, some of them ranging as high as R. 1 9a. and Rs. 2 1a. per *bigha*. In proposing maximum rates of dry-crop assessment and the groups to which they were to be applied the Superintendent followed the natural divisions of the tract of country, having two classes in the northern and two in the southern portion. The rates were as follows:—

		Northern group.				Southern group.	
		Villages.	Rs. a.			Villages.	Rs. a.
1	.	66	2 4	1	.	67	1 14
2	.	100	2 0	2	.	16	1 8
		166				83	

These rates gave the following comparative results in the several groups on the dry-crop cultivation:—

30 Years' Collections.		Collec- tions of 1855-56.	1856-57 at Old Rates.			At Survey Rates.	Estimated Rental of Total Area.		
Rs.		Rs.	Acres.	Assmnt. Rs.	Avgc. Rs. a. p.	Rs.	Acres.	Rs.	Avgc. Rs. a. p.
1 2 1 2	96,324	1,13,986	42,144	87,252	2 1 2	65,676	76,911	1,21,804	1 8 7
			29,522	44,379	1 8 1	32,219	68,134	90,749	1 0 6
			11,729	16,631	1 6 8	9,252	56,544	41,745	11 5
	14,822		1,682	1,893	1 2 0	911	16,061	7,591	7 7
1,11,146		1,32,027	85,077	1,30,155	1 12 3	1,06,056	2,41,650	2,61,889	1 1 4

It will be observed that, as in other Reports by Mr. Davidson, the particulars given are meagre, the area of waste, range of prices, &c., not being stated. The percentage reduction, calculated according to the estimated rates under the old and new systems is, in the several groups, 25·8, 31·4, 49·6, and 69·4, and that on the whole taken together 38·6.

With regard to irrigated land, there were many wells lying useless in consequence of needing repairs, and out of eight dams only four in use from the same cause. Under wells there were on the whole 4,057 acres, and under dams 1,586 acres, but of the latter 438 were partly irrigated from wells. In addition to being much neglected and allowed to silt up, the dams were none of them really good. The current rates were Rs. 6 12a. and Rs. 5 per *bigha*; these the Superintendent in the first instance proposed to continue until a system of crop-rates, of which he was in favour in preference to a fixed rate on the land, had been brought forward and discussed. He subsequently appears to have proposed a general rate of Rs. 5 an acre on all lands under dams, with one of Rs. 8, as sanctioned in Chopda, on lands under wells. The former was objected to by the Revenue Commissioner, and Government, being of opinion that the reduction by the rate proposed was unnecessary, ordered his view to be adopted. They observed, with regard to the dry-crop assessment, that although the loss of revenue in the first instance was large, it would probably soon be made up by the cultivation of waste land. The difference between the old assessment on the channel-watered lands and that by the proposed rate of Rs. 5 was shown for four villages to be over Rs. 2,000, as follows :—

	Old.		New.	
	<i>Bighas.</i>	<i>Ra.</i>	<i>Acres.</i>	<i>Ra.</i>
Amalner . . .	527	2,556	397	1,950
Mandul . . .	294	1,468	222	1,107
Mudhi . . .	173	1,165	131	880
Betávad . . .	356	2,360	243	1,601
	<u>1,350</u>	<u>7,549</u>	<u>993</u>	<u>5,538</u>

CHOPDA.

Proposals for the Survey settlement in the Chopda subdivision were submitted by the Superintendent, Mr. Davidson, in 1857, and sanctioned by Government in 1858. It was bounded on the north by the Sápura hills, on the east by Yával, on the west by the Thálner subdivision, and on the south by the Taptee. It had

previously consisted of two petty divisions, Chopda and Arávad, but the two had been amalgamated into one. It had an area of 339 square miles, of which only about 18 per cent. was cultivated, that cultivated in the year before the settlement having been 39,787 acres, and the waste 132,665. It was divided into 153 villages, 96 of which were inhabited and 57 deserted; of the latter 16 were entirely waste and were not divided off into Survey numbers.

In physical configuration this tract of country was very similar to Ráver, flat, except in the neighbourhood of the Sápura range, from which numerous nullahs ran down to the Taptee, none of them being large enough to be called a river except the Aner. The banks of the Taptee were too high to be used for irrigation, and the remainder of the streams did not hold sufficient water. It had a great deal of rich black soil, but in irregular patches, beneath which was a yellow soil not so productive. Towards the Taptee it was much cut up by ravines, as in the other districts similarly situated. The people were as a whole not in a prosperous condition, and possessed but few good houses, most of these being of unburnt brick with flat or thatched roofs. A great many of the inhabitants were Bhíls, but there were also a considerable number of Vanjáras (Brinjaries), who bred cattle, and brought down wood from the Sápuras on bullocks, there being but few carts. The husbandry was of the same description as in Sádá and other districts along the Taptee. The market-places were Chopda, Arávad, and two other minor ones, three in the east, and Dhanora in the west. The traffic towards Surat from the eastward ran through it, but there were no made roads, and the only cleared road ran from Chopda to Arávad. There was, in the Superintendent's Report, the usual want of information, especially with regard to the pressure of population, prices of produce, &c. That the population was scanty may be inferred from the small area under cultivation, as given above. All the particulars given in the Report on the subject of former cultivation, and how it influenced the pitch of the new assessment, will be found in the statement below. The grouping for maximum dry-crop rates was in accordance with the existing state of affairs, and the natural configuration of the country, as, although the

G. I. P. Railway was under construction, it was too soon to judge how its opening would affect prices and markets. The groups and maximum rates proposed were as follows:—

First group.—Eighty-five villages in the open country bordering on the Taptee, free from jungle and the depredations of wild beasts. Maximum Rs. 2 4a.

Second group.—Forty-four villages north of the above, and with more jungle. Maximum R. 1 14a.

Third group.—Twenty-four villages near the hills, and mostly covered with jungle. Maximum R. 1 2a.

In place of making a separate class for villages cut up by ravines, an allowance was made in the classification of fields.

The general result is contained in the following statement:—

	36 Years' Cultivation.			Estimated Total Survey.			Per-centage Decrease in Rates.
	Acres.	Rs.	Average. Rs. a. p.	Acres.	Rs.	Average. Rs. a. p.	
1	19,470	47,887	2 7 4	95,690	1,84,549	1 6 6	42·8
2	4,550	9,489	2 1 2	48,111	50,957	1 0 11	49 0
3	950	1,776	1 18 4	28,480	13,449	7 7	74·1
	<u>24,970</u>	<u>59,052</u>	<u>2 5 10</u>	<u>1,72,281</u>	<u>1,98,955</u>	<u>1 2 6</u>	<u>51·1</u>

There were only thirty-four wells, of less than forty-five feet in depth, assessable, irrigating 111 acres. Lands under them were assessed, as elsewhere, at Rs. 3 an acre.

SULTANPUR.

Reports for the revision of assessment in the Jámner and Sultánpur subdivisions were submitted in 1865, and sanctioned with a guarantee for thirty years in the same year under one Government Resolution.

Sultánpur lies in the extreme north-west of the Collectorate. It is bounded on the north by the Sápura hills, on the east by Thálner, on the south by the Taptee, which separates it from Virdal and Nandurbár, and on the west by foreign territory. It was divided into two portions, one under a Mámlatdar at Shádá, and the other under a Mahálkari at Taloda. There were altogether in the subdivision 506 villages, of which 177 were under a bigla-

rate system (*bighoti*) and 329 *átbandi* or plough-tax. Of the 177 *bighoti* villages, 166 were under direct Government management and 11 alienated; and of the 329, 302 were Government and 27 alienated. 176 villages were uninhabited. The revision extended to only 118.

The soil in the open country as far as the foot of the hills, which threw out no spurs, and rose up almost abruptly from the plain, was a rich black. The rivers were the Taptee and Gomi, the latter falling into the former. Water was generally found nearer the surface than in Ráver and Sáodá, but was not much used for irrigation. The open part of the country was healthy, but in the west towards the jungles it became malarious. There were no made roads, but the traffic from Burhánpur towards Surat passed through it. There were markets at Shádá, Taloda, Kukarmunda, and two other places. Shádá was the largest market, followed by Taloda, where a considerable sale of timber and wood, especially since a demand for railway sleepers had arisen, afforded a means of livelihood for the Bhils, who preponderated among the inhabitants. Next came the Gujars, immigrants from Gujarát, who still spoke their own language. These were good agriculturists, and as a rule well to do, having many of the Bhils as their servants. There were also a good many Vanjáras (Brinjarries), who bred cattle and sheep in large numbers in the extensive pasturage grounds that still remained. No manufactures were carried on except a little dyeing at Shádá, but carts of a good pattern were made and had acquired a wide reputation. The husbandry did not differ from that of the surrounding country. In the 118 villages there were 30,992 inhabitants, or 126 to the square mile.

At the introduction of British rule the revenue was only about Rs. 36,000, which in 1863-64 had increased to Rs. 1,83,564. The original rates of assessment had been high, rising in one village to Rs. 2 10a. the *bigha*, or Rs. 3 8a. the acre, and in many to Rs. 2 1a., or Rs. 2 12a. the acre. In others, again, they had been very uneven, from 8a. to R. 1 15a. In proposing rates for dry-crop assessment, the chief criteria looked to were the prevalence or otherwise of jungle, and the abundance of or difficulty in procuring drinking water, the villages being divided accordingly into

six groups, the highest of which was assessed at Rs. 3, and the others went down by gradations of four annas to R. 1 12a. in the sixth group.

The result of adopting these rates as compared with the revenue of 1863-64 was shown in the following statement:—

Class.	Villages.	Cultivation of 1863-64.			Total Survey Assessment.			Increase or Decrease.
		Acres.	Old Rates. Rs.	New Rates. Rs.	Acres.	Assessment. Rs.	Average. Rs. a. p.	
1	41	42,011	1,00,518	96,167	49,838	1,07,777	2 2 9	- 4-8
2	24	18,085	35,908	35,717	25,812	51,208	1 15 9	- 5
3	16	15,657	26,202	27,784	23,179	38,788	1 10 9	+ 6-0
4	9	5,828	10,487	9,639	8,515	13,888	1 10 1	- 8-0
5	16	5,847	6,906	7,866	15,401	19,571	1 4 4	+13-9
6	12	4,091	3,548	4,762	7,831	8,051	1 0 5	+34-2
	118	91,404	1,83,564	1,81,925	1,30,431	2,39,278	1 13 4	- 8-9

The area irrigated from 142 wells was 535 acres, on which mostly vegetables and a little sugar-cane were raised. The rate proposed for this was, as elsewhere, Rs. 3 an acre. With regard to channel-watered land, that on the Gomi, where there was a dam that watered eight villages, had been good; in consequence of want of repairs, however, the dam had become useless.

The average area watered, and its revenue for ten years, had been as follows:—

	Area. Acres.	Assessment. Rs.	Spent in Repairs. Rs.
1852-53	361	2,614	—
1853-54	441	3,367	133
1854-55	217	1,546	—
1855-56	531	4,233	—
1856-57	154	1,353	—
1857-58	184	1,505	—
1858-59	187	1,637	—
1859-60	185	1,424	300
1860-61	257	1,719	—
1861-62	175	1,127	—
	<u>2,693</u>	<u>20,575</u>	<u>333</u>

Average 2,057½

It says little for the manner in which the interests of the land revenue were looked after that a dam on which Rs. 2,057 a year depended should have had so little spent on it, and have been allowed to fall to ruin. No rates were proposed pending such time as the dam might be put into order again.

JAMNER.

The subdivision of Jámner occupies the extreme south-east corner of the Collectorate. It was bounded on the north by Varangáon and Nasirábád, on the west and partly on the south by Lohará, and on the rest of the south and the east by Berár and the Nizám's territory. It contained 207 villages, with an area of 530 square miles, and a population of 62,298, or 129 to the square mile. The country was generally undulating, with a range of low hills to the north, and was well watered, though it contained no large river. There were no made roads, but a fair-weather road from Bodvar to Jámner; Neri and the railway station at Masávad afforded an outlet for the agricultural produce of the district. Its markets were at Jámner, Bodvar, and nine other less important places. At the latter some of the Bombay mercantile firms had established agencies, as it was conveniently situated for the Nár-gáon railway station. There were no manufactures, except a little coarse cotton cloth, made by 200 looms. Cotton occupied 31 per cent. of the cultivated area, *bájri* 10 per cent., and *javári* 4 per cent.; the remaining area was taken up with miscellaneous crops. Prices had risen considerably of late years since the opening of the railway, as seen in the subjoined statement:—

	Seers per Rupee.	
	1859-60.	1864.
Cotton	16	3
Javári	54	18
Bájri	51	16
Wheat	32	12
Grain	27	12
Linseed	27	12

This was at the height of the American war prices.

The old rates of assessment had varied from Rs. 2 6a. 9p. to 7a. 6p. per acre, but there is nothing in the Superintendent's Report to show how they had affected the prosperity of the country. It was proposed to divide the whole into four groups for maximum rates of dry-crop assessment, with a subdivision in the first.

First group.—Fifty-one villages situated along the banks of the Kág and Vágur rivers and near the main road. It included the whole of the petty division of Bodvar except uninhabited villages, and those on the Nizám's frontier among the hills. Rate Rs. 8, and for the subdivision Rs. 2½.

Second group.—Seventy villages, surrounding those of the first, but farther removed from market towns and the high road.

Third group.—Eighteen villages, still farther from markets and the road.

Fourth group.—Twenty-seven villages in the south on the Nizám's frontier.

There had been lately a large increase in the area on which cotton was grown, showing the influence of the railway in opening up speedy communication with Bombay.

		Cotton Area.
		Acres.
1861-62	. . .	42,604
1862-63	. . .	41,327
1863-64	. . .	52,270

There were 990 assessable wells in the subdivision, watering 3,238 acres, in which common vegetables, 579 acres of wheat, and 144 of sugar-cane, were grown. For the land under these the usual rates of Rs. 3 per acre for the best, and Rs. 2½ for inferior, were proposed. The general result of these proposals will be seen from the following statement:—

Class.	Villages.	Cultivation of 1863-64.			Gross Survey Assessment.			Increase or Decrease.	
		Acres.	Old Rates. Rs.	New Rates. Rs.	Acres.	Assessment. Rs.	Average. Rs. a. p.		
1	51	64,968	76,580	92,638	86,747	1,12,805	1 4 10	+ 30-9	
	27	17,686	17,391	18,923	30,610	28,737	15 0	+ 8-8	
2	70	46,457	42,557	44,838	90,779	72,187	12 9	+ 5-3	
3	18	12,348	10,106	10,121	24,435	16,258	10 8	—	
4	27	10,483	7,780	7,105	31,267	16,947	8 8	- 8-6	
		194	1,51,849	1,54,414	1,73,636	2,63,838	2,46,334	15 0	+ 12-4

How the incidence of the old rates of assessment had affected the progress of the subdivision, or whether it had prospered otherwise under British rule, cannot be discovered from the Report; but from the difference between the areas in Cols. 3 and 6 there was evidently ample room for expansion of cultivation.

PIMPALNER.

✂ The subdivision of Pimpalner, with the petty divisions of the Mahálkaris of Jaikheda, and Abhona, were experimentally settled in 1869, and the rate for all three reported for confirmation to Government in 1870 in one Report. ✂ On the raising of Násik into a full Collectorate the two petty divisions were transferred to it, and an account of the revision of their assessment has accordingly been given in treating of that Collectorate. The present description will therefore be confined, as far as possible, to Pimpalner alone.

It lies partly above and partly below the Sahyádrí range, the petty division of Navápura being in the latter position on the road to Surat, from which it is separated by the Gáikvár's Mahál of Songadh. On the north it is bounded by Nandurbár and the Taptee and Nesu rivers, on the east by the petty division of Nizámpur, and on the south by Jaikhedá, from which it is separated by the Sailbári hills. Communication with Navápura and the low country of Gujarát is by the Kundaibári pass, down which there is a metalled road. It contained 222 villages, inclusive of those in Navápura. Four villages were alienated in Pimpalner, and of the 141 nominally in Navápura, 50 were mere names, as their boundaries were unknown, 60 more were held on leases from 1864, 2 were alienated, 13 were only circuit-surveyed in order to fix their boundaries, and 16, in which the plough-tax system was in force, were surveyed in detail. The last were along the road towards Surat. The part of Pimpalner above the Gháts had 81 villages, 79 under Government management and 2 alienated, into one of which a settlement was introduced. Of the 81 villages 56 paid revenue on a *bigha* rate and 25 on the plough-tax system. The total number to be settled was thus 95, inclusive of the 16 measured in detail in Navápura; but,

owing to the papers not being ready, a settlement was introduced at the time into 81 only. The area of the 95 villages was 455 square miles, or 291,819 acres, of which 114,710, or 39 per cent., were unarable. The soil on the whole was very poor, the average classification being only 4a. 4p. The population was 26,355, or 60 to the square mile. The district was much cut up by ranges of hills, the general direction of which was from west to east; these formed valleys of greater or less width, with rivers and streams running in them, along the banks of which most of the population and cultivation was found. The hills were mostly bare, but a few had teak trees on them. The soil varied greatly in fertility, from deep black to the poorest stony, the upland *mull* predominating in quantity. There were 10,814 acres of channel-watered land, which paid half the land revenue. The cultivation of dry-crop land was rude and careless. Only in the east was *bájrí* raised, and towards the west only the coarsest grains. The average rainfall for nine years had been nearly eighteen inches, and heavier in the west than in the east. The climate of Navápura was unhealthy, from the prevalence of jungle. There were no made roads except those down the Kundabári and Saibári passes; on all the country tracks communication was difficult on account of steep passes and deep ravines. The railway also was so far distant as to be practically of no use to the district. There were no important markets, surplus produce being mostly exported to Dhulia and Surat. A *bigha*-rate system was commoner in the east, where also of late years the plan of written applications for taking up or relinquishing land (*kabuliyats* and *risindmahs*) had been enforced. The plough-tax system prevailed in the west, the bullocks in each man's possession being counted, whereas in Jaikhedá a holding of thirty *bighas* was considered the equivalent of a plough. The following statement shows the result of the old system of revenue management in fifty-five villages, of which complete records were forthcoming:—

10 Years' Averages.	Cultivation. Acres.	Re- mitted.		Col- lected.		Average.		Per cent. Remissions.	
		Ra. Rs.	Ra. Rs.	Ra. Rs.	Ra. s. p.	Ra. s. p.	Ra. s. p.	Ra. s. p.	
From 1818-19 to 1827-28	13,255	61,477	4,758	56,719	4 10 3	7 11 10			
" 1828-29 " 1837-38	14,159	50,319	5,941	44,378	3 8 10	11 12 11			
" 1838-39 " 1847-48	18,136	43,830	2,485	41,405	2 6 9	5 10 7			
" 1848-49 " 1857-58	18,516	44,344	2,233	42,111	2 6 4	5 0 7			
" 1858-59 " 1867-68	23,500	60,223	359	59,964	2 9 0	6 11			

The rate at which cultivation had increased in Pimpalner had been much slower than in Jaikhedá and Ábhona, notwithstanding that the rates of assessment, as seen in the statement above, had been considerably reduced, and it was therefore clear that the former had been over-assessed; it was accordingly proposed to fix comparatively low settlement rates. Prices in the five years previous to the revision had risen greatly, as seen below:—

	Seers per Rupee.				
	Wheat.	Rice.	Javári.	Báji.	Molasses.
From 1855 to 1859 .	30 $\frac{1}{4}$	13 $\frac{1}{2}$	45 $\frac{1}{24}$	38	10 $\frac{1}{8}$
„ 1865 to 1869 .	8 $\frac{1}{16}$	4	15 $\frac{1}{8}$	11 $\frac{1}{2}$	4 $\frac{1}{8}$

There would have been a good reason in such an increase for raising the assessment, but the people were poor and in debt, and the proposals, which will now be explained, were calculated to lower the average dry-crop rate from Rs. 1 0a. 4p. to 7a. 9p.

It may be noticed *en passant* that the average number of inhabitants per house in Pimpalner was much less than in Jaikhedá and Ábhona, viz. 3.15 as against 4.49 and 5.09. This may probably be accounted for by the fact that among the Konkanis, a large proportion of whom were among the agriculturists of Pimpalner, it was the custom for sons when they grew up to live apart from their parents, while among the Kunbis in Jaikhedá and Ábhona they still remained in their parents' homes.

The following were the maximum rates of dry-crop assessment that had been fixed for Nizámpur, Málegáon and Báglán:—

Nizámpur .	2 0	1 12	1 8	1 4
Málegáon .	2 8	2 4	2 0	1 12
Báglán .	2 2	2 0	1 12	1 10

On the analogy of these it was proposed to fix the maximum in the east of Pimpalner lying towards Nizámpur and Málegáon at Rs. 2, and lower it gradually towards the west till it reached the plough-tax villages, where it was to fall to a rupee. The maximum for channel-watered land it was proposed to fix at Rs. 15 per acre, and for small temporary dams in which water did not last beyond December at from 8a. to 12a. in addition to the dry-crop rates.

The general result of the adoption of these rates for fifty-six

bigha-rate and twenty-four plough-tax villages is embodied in the following statement:—

FIFTY-SIX VILLAGES.

Class.	Villages.	Maximum Rate.		Area and Assessment 1867-68.	
		Rs. a.	Acres.	Rs.	
1	13	2 0	6,699	30,899	
2	13	1 14	6,089	19,552	
3	9	1 12	5,557	4,988	
4	20	1 8	5,849	10,623	
5	1	1 4	608	595	
	56	—	24,252	66,657	

Assessment of 1868-69.

Dry Crop.			Channel-watered.			Total.	
Area.	Average.		Area.	Average.		Area.	Rs.
	Rs.	Rs. a. p.		Rs.	Rs. a. p.		
5,473	6,153	1 2 0	1,643	25,046	15 4 1	7,115	31,199
5,914	6,470	1 1 6	970	13,541	13 12 4	6,884	20,011
6,481	5,472	13 7				6,481	5,472
5,806	5,853	1 0 8	564	5,624	9 15 7	6,170	11,477
554	567	1 0 5	1	7	7 0 0	555	574
23,978	24,515	1 0 4	3,177	44,218	13 14 8	27,155	68,733

According to the Survey Settlement.

6,955	4,250	9 9	1,828	23,823	12 12 2	8,783	27,573
8,509	4,747	6 11	1,162	10,559	9 2 9	9,671	15,406
8,126	3,156	6 3				8,126	3,156
9,582	4,075	6 10	834	5,427	6 8 1	10,416	9,502
1,000	262	4 2	29	41	1 6 7	1,029	308
34,172	16,490	7 9	3,853	39,450	10 8 10	38,025	55,940

The decrease in the five classes of villages was thus:—

First class	. . .	11.6 per cent.
Second class	. . .	23.3 "
Third class	. . .	42.3 "
Fourth class	. . .	17.2 "
Fifth class	. . .	47.2 "
On the whole	. . .	18.6 "

TWENTY-FOUR PLOUGH-TAX VILLAGES.

Class.	Villages.	Maximum Rate.		Ploughs.	Rs.
		Rs. a.			
4	3	1 8		41½	398
5	8	1 4		133	2,357
6	11	1 0		273½	3,094
7	2	12		78	505
	24	—		531	6,354

Dry Crop.			Survey System.				Channel-watered.		Total.	
Area.	Average.		Area.	Average.		Area.				
Acres.	Rs.	s. p.	Acres.	Rs.	Rs. s. p.	Acres.	Rs.			
1,468	582	6 4				1,468	582			
6,721	2,743	6 6	489	925	2 1 9	7,160	3,668			
16,966	3,890	3 8	142	187	15 5	17,108	4,027			
1,664	788	7 7				1,664	788			
<u>26,819</u>	<u>8,008</u>	<u>4 9</u>	<u>581</u>	<u>1,062</u>	<u>1 18 3</u>	<u>27,400</u>	<u>9,065</u>			

The people in the plough-tax villages having complained of these rates, the Superintendent, Mr. Pedder, proposed that the last three should be lowered by four annas each, so that the maximum for Navápura, in which the seventh-class villages were situated, should be 8a. only. He was doubtful whether the new system would answer at all until the country was more advanced, and suggested that if that were found to be the case, the system of giving leases of their holdings to individual cultivators should be tried. In the villages of Abhona below the Gháts he had already given leases for ten years to the Patels of the several villages, on condition that they should not levy more than Rs. 8 per plough. He was also in favour of crop-rates in place of uniform rates per acre in channel-watered lands. It would result, he thought, in the water being economized, and the whole area commanded by each dam being cropped, whereas, in the case of fixed rates, no one, when his turn came round, would abandon his right to raise a crop of sugar-cane, and if the water failed everything was lost. If this were not agreed to, the Collectors must be instructed to be liberal in the matter of remissions when there happened to be a real failure of water. Government did not accede to this, but sanctioned the remaining proposals with a guarantee for twenty-five years, so that the settlement might expire at the same time as those of Báglán and Nizámpur, in 1893-94.

SAODÁ REVISION.

The first portion of the Collectorate to come under revision on the expiration of the Survey lease of thirty years was the subdivision of Sáodá. At the original settlement, as at the revision, it was under the charge of a Mámlatdár and two Maháلكaris, and

with 22 villages added to the original 287 from the old Chopdá Táluka, and 4 transferred to Bhusával deducted, there were 305 villages for revision.

The subdivision occupies the extreme north-east corner of the Collectorate. It is bounded on the north by the Sátapura hills, on the south by the Taptee, on the east by the province of Nimár, and on the west by the Chopdá subdivision of Khándesh. With the exception of three villages situated within the hills, and called the *pál tapá*, the Sáturas form a large State forest reserve, and from their base the subdivision slopes at an almost uniform gradient southwards to the Taptee. The best black soil is found in villages along that river, and as the hills are approached it becomes much intermixed with pebbles out of the trap and disintegrated trap rock. There is little alluvial deposit, as the smaller streams that come down from the hills into the Taptee have only a course of about fourteen miles, and are nowhere sluggish enough to allow the formation of backwaters during the rains at their points of junction with the larger stream. Their channels have in the course of centuries become choked up with fragments of rock carried down from the hills, and their true beds consequently lie deeply out of the soil below, so that in heavy rains they frequently overflow their banks. Wells occupy a well-marked belt of country midway between the hills and the Taptee, and on each side of this the water-bearing stratum lies too deep for irrigation, the result being that many of the villages at the foot of the hills are so devoid of water as to be uninhabitable. The climate is favourable for dry-crop cultivation, the rainfall, which is tolerably even throughout, having averaged for the ten years from 1875 to 1884 from 29, 35, to 36 inches.

For revision purposes all separately recognized occupancies have been separately demarcated, fields of unwieldy size divided into easily workable areas, and all old Survey numbers containing mixed dry-crop and irrigated land have been remeasured in order to ascertain the area under irrigation, in addition to those in which from any cause the boundaries may have changed, with a view to the due rectification of areas and maps. This has resulted in the original 20,868 old Survey numbers having increased to 33,480. Re-classification of soil has been carried out sufficiently

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to provide for the greater difference according to modern practice between superior and inferior soils being assigned to them, and to bring under regular classification all lands left unclassified at the first settlement. 23,275 numbers and 1,73,730 acres have been re-classified in the field, and the classification adjusted in 10,205 numbers and 99,910 acres. The total areas of the old and new measurements vary only by eighteen acres, but the irrigated area has increased by 9,727 acres, and 8,130 acres, formerly under the head of unarable, have been added to the assessed arable land. The chief crops are *javári* and *bájrí*, early crops, 41·7 per cent., and cotton and wheat, late crops, 37·8 per cent. Cultivation in the subdivision is on the whole careful. Manure is carefully hoarded and much used in the lighter early-crop soils, which are frequently ploughed. Deep black soil is not ploughed oftener than once in three years.

Since the first settlement the communications of the subdivision have been revolutionised. The large traffic formerly passing through the district was then carried along a black soil track of some breadth, but entirely unimproved. Now a vastly increased traffic is borne by the G. I. P. Railway, which enters at the eastern extremity and traverses more than half the length of the subdivision, and has no less than five stations. Feeders to the railway have been made at the Ráver and Sádá stations, the latter to the important market towns of Sádá and Faijpur. Connection has also been established between Ráver and the Bhusával station as far as the north bank of the Taptee. In two-thirds of the whole area, the produce exported being grown within ten miles of the railway, and the most remote village not being above twenty-five miles from a railway station, fair-weather roads are almost all that are required, and the drawbacks arising from difficult transport during the rainy season lose much of their importance. In addition to the market towns mentioned, there are several places where weekly fairs of only local interest are held. There were between 1,400 and 1,500 cotton and silk looms employed in the subdivision, but no other manufacture of any importance.

The progress of Sádá in material prosperity during the period of the first settlement may be judged by the following statistics.

Population had increased 40·7 per cent., and tiled and flat-roofed

houses 141.5, while thatched houses had diminished 5.7 per cent. The increase in superior houses is so out of proportion to that of population that there was probably an error in the returns for the old settlement, which gave an average of 9.8 people to each house. Agricultural cattle had increased 8.4 per cent., and milch and other cattle 19.6. Horses and sheep and goats had fallen off, but carts had nearly doubled in number, and wells and water-lifts were more by 12.9 per cent. Population was reported at the settlement to have reached the unusual density of 295 to the square mile. The increase, however, had only kept pace with the extension of cultivation, as there was 1.8 acre of cultivated land per head of population, precisely as in the first year of the first settlement. The average of a pair of oxen for every 17 acres of cultivation found to exist was also unusually high. Of the wells in working order, 8,377 in number, 2,721 were used for irrigation; how many had been used for this purpose at the time of the first settlement the records did not show. X

The villages lying along the skirts of the Sâtpura hills particularly showed a large increase in population. At the period of the first settlement they were almost entirely uncultivated, and much infested by wild beasts, and naturally showed a more marked improvement than the rest of the subdivision. The one exception was under the head of agricultural cattle in the wildest villages, the inhabitants of which had been mostly Vanjâras engaged in cattle-breeding, and the lands of which had, since the first settlement, been brought into cultivation by the ryots of villages at a greater distance from the hills, whose cattle appeared in the record of their own villages. 85 per cent. of the land was cultivated by the occupants themselves, and the remainder was let out either for money or grain rents. It was reported that the average selling price of land was about Rs. 30, or nearly equivalent to twenty-four times the average assessment.

The course of prices during the Survey lease had been as follows:—

	<i>Jawâri.</i> Sears per Rupee.	Wheat. Sears per R.	Linseed. Sears per R.
1854-55 to 1863-64	45	33	26
1864-65 to 1873-74	26	14	15
1874-75 to 1884-85	22	14	14

In addition to these cotton had risen fully 100 per cent.

In the 209 villages settled in 1854-55 and 1855-56, the settlement in the first instance reduced the revenue by Rs. 1,07,891, but by the end of the first ten years it had risen again to within Rs. 37,000 of the old collections. After this the progress of cultivation was more gradual, but at the expiration of the settlement the account stood as follows:—

	Assessment on Cultivation. Rs.	Assessment on Waste. Rs.
First year of lease	1,96,639	50,392
1884-85	2,44,260	1,699

In the twenty-two villages formerly in Chopdá, settled in 1856-57, the Survey assessment in the first instance doubled the revenue demands, but cultivation nevertheless extended rapidly, and the general result in the thirty years had been that the revenue on cultivation rose from Rs. 9,721 to Rs. 17,708, and the assessment on waste fell from Rs. 8,059 to Rs. 664. In the whole of the villages the unimportant remissions given in the first five or six years subsequently ceased altogether. For three years, out of 183 notices of sale of occupancy rights to recover arrears of revenue, not one eventuated in actual sale.

The grouping of the villages at the original settlement for maximum rates of dry-crop assessment was in eight classes, at rates varying from Rs. 2 6a. to R. 1 2a. The greater number were under rates from Rs. 2 upwards, and lay in the open part of the plain country between the Taptee and the edge of the Sápura jungles, and were classed according to their nearness and accessibility to the chief market town. The remaining villages lay along the skirts of the hills, and were grouped according as they were more or less broken by patches of jungle, or had a scarcity of drinking water, or were infested by wild animals that destroyed the crops. In grouping for revision the main factor to be considered was the railway, which had been located in the vicinity of the markets and line of traffic on which the old grouping was based, but had, so to speak, obliterated small distinctions and placed all villages within easy reach of the five railway stations on one general level as regards communications and markets. The open plain thus fell into two groups: first, the eastern, which

contained the railway; and second, the western, in which the distance from railway stations averaged fourteen miles, and which was therefore less affected by it than those in the former.

After these groups came one of eight villages on the Taptee, the internal communications of which were much broken up by ravines, and during the rains by the backwaters of the Taptee.

The remaining two groups it was proposed should form two long strips between the Sâtpuras and the open plain, where the character of the cultivation was less advanced, drinking-water scarce, and the population consequently more sparse and less civilised.

It was evident that Sâodâ had in the first instance been settled at very low rates, probably from motives of policy in a district in which considerable agitation had been set in motion against the new Survey system. The rates in other neighbouring subdivisions had subsequently been pitched considerably higher, but the Superintendent was precluded from proposing as heavy maximum rates as he thought Sâodâ could well have borne in order not to overstep the limits of enhancement on revision settlements that had been fixed by Government. The maximum rates proposed for the four groups respectively were Rs. 2 10a., Rs. 2 8a., Rs. 2 4a., and R. 1 10a. The garden area in Government land under the first settlement had been 2,485 acres, assessed at an average of Rs. 2 1a. 5p. an acre. A light maximum rate of Rs. 3 was imposed on those lands under wells where the water was not over forty-five feet from the surface. It was not proposed to assess such lands under the revision at anything higher than the dry-crop rates, which would give an average of Rs. 2 3a. 11p. an acre. For twenty-nine acres watered by channels a maximum of Rs. 10, giving an average of Rs. 8 15a. 5p., was proposed.

The general result was as follows:—

Class.	Villages.	By Old Survey.		By Revision Survey.						Increase per cent.
		Occupied Government Land.		Occupied Land.	Waste Land.		Total.			
		Area.	Ra.	Area.	Ra.	Area.	Ra.	Area.	Ra.	
1	153	1,64,390	2,34,338	1,72,777	2,98,280	1,473	763	1,74,349	2,99,043	27.5
	30	3,515	3,068	4,336	3,838	70	19	4,806	3,078	29.0
	41	27,066	22,390	27,139	29,249	243	127	27,381	29,336	31.5
2	41	28,337	13,313	28,900	17,048	3,708	1,175	32,606	18,223	28.1
	332	2,23,238	2,63,398	2,31,333	3,48,968	3,480	2,084	2,35,943	3,51,070	37.5

It will be seen that the area not in occupation is comparatively small, and consists of inferior land, assessed at only about 6a. an acre. In five villages in which the enhancement of assessment exceeded the limit of 66 per cent. laid down by the Government, satisfactory reasons were given. The old average rate on the whole occupied area was R. 1 2a. 11p., and by the new R. 1 7a. 11p., an increase of five annas per acre. The rates were sanctioned by Government and guaranteed for thirty years in May 1886.

CHOPDA.

~~1886~~
~~1858~~

The revision of the original thirty years' Survey Settlement in this Táluka was carried out in 1888. It lies on the north of the Taptee river, to the west of Sáodá, to which it is very similar in its general features, having also the Sátapura hills as its northern boundary; on the west is the Shirpur Táluka, and on the south, on the opposite bank of the Taptee, are Amalner, Erandol, and Nasirábád. Of its original number of 173 villages, 13½ forest villages have been transferred to H.H. Holkar, 7 to the Shirpur and 22 to the Sáodá Táluka, so that 130½, in addition to 3 *inámi*, villages remain.

Owing to the separate measurement and demarcation of all recognized occupancies, the subdivision of large block numbers and others of unwieldy size, the separate record of irrigated areas and bringing up to date of all boundaries, 11,086 old Survey fields have become 14,730 new numbers. The difference in area between the old and new measurements is very trifling. In only three cases were errors discovered in the former, and re-adjustment of classification according to the more modern standard, by which the relative values of good and inferior soils is made to differ more than they did under the old system of classification, was found a comparatively easy matter.

In this, as well as in most other parts of the Collectorate, the chief crops are cotton and cereals, there being 36½ per cent. of the former, and 47·8 per cent. of the latter. There is comparatively little garden cultivation, as the rivers are too deep below the surface to admit of being dammed up for irrigation purposes. In

the course of the Survey lease, however, that from wells has increased by rather more than 700 acres.

It has not profited to the same extent from the advent of the railway as the Tálukas on the south of the Taptee, but the indirect advantage of large manufacturing and trading centres having been formed at Jalgaón and at other points on the line has been considerable, in providing outlets for its exportable products.

In other ways its advance in material prosperity since the first settlement has been notable. The population has increased by 82 per cent., and houses by 111 in superior and 42 in thatched tenements. Agricultural cattle are more by nearly 40 per cent. The proportion of land to each plough of two bullocks is 14 acres, whilst in neighbouring Tálukas it is 15 acres and more. Milch and other cattle, as is always the case when, in consequence of the area for pasturage being diminished and more land being brought under the plough, there is less room left for the crowds of useless beasts that used to be kept, have decreased by 12·3 per cent., and sheep and goats by 7·3 per cent. Horses and ponies have, however, increased by nearly 400 (77 per cent.), and carts have more than doubled in number, having risen from 2,619 to 5,401, a sure proof that the carrying trade is much more extensive than it formerly was.

X The area of land in occupancy has increased proportionately from 44,957 acres, assessed at Ra. 67,245, in 1856-57, to 127,667 acres, assessed at Ra. 1,57,488, in 1886-87. The reveñue has been collected without difficulty, remissions having had to be given only in years of extreme scarcity. In the years 1884-85 to 1886-87 the last under the old settlement, although 441 notices of sale of occupancy right were issued for the collection of revenue demands, not one case of actual sale took place, the demands having been paid up.

X The Superintendent sums up the present state of matters as follows:—

“Chopdá, when the Survey Settlement was first introduced, was a half-cleared, thinly-populated tract, whose produce was protected with difficulty from the ravages of wild animals during its growth, and even then realised but scanty value, owing to the great distance from the coast and the natural difficulties of transit. Chopdá now is thickly populated and richly tilled from end to end; its

products, which are amongst the most valuable raised in the Presidency, find ready access to the coast by a main line of rail which runs within some 25 miles of its borders. Its cultivated area has trebled during the lease, while the revenue is realised with ease, and land is sublet on the average at three times the Government assessment."

Under these circumstances occupancy rights, nearly 88 per cent. of which are said to be in the hands of the recorded occupants themselves, in addition to over 6 per cent. sublet, have naturally acquired considerable value. In forty-four cases of sale by order of Civil Courts, 623 acres, assessed at an average of R. 1 6a. 11p. per acre, realised Rs. 15 11a. 6p. per acre. In 110 cases of lease land, assessed at Rs. 2,709½, was let for Rs. 9,151, or 3·4 times the assessment. Similar favourable terms were obtained in cases of lands mortgaged as security for advances of money.

The prices of produce had also advanced greatly. Cotton may be said roughly to have doubled in value since the commencement of the Survey lease, and the prices of *javári*, *bájrí*, and wheat have risen respectively from 34, 40, and 21 *seers* the rupee to 22, 23, and 18. There could, therefore, be no doubt that an enhancement of assessment was quite feasible.

The bulk of the villages have now been arranged in two groups of eighty-two and twenty-seven, from east to west, following the line of the Taptee, with a rise from the old maximum rates of Rs. 2 4a. and Rs. 1 14a. to Rs. 2 12a. and Rs. 2 4a. A third small group of nine villages, at a maximum of R. 1 6a., has been made of villages lying along the foot of the Sátapura hills, which are unhealthy and only partly cleared, in addition to being badly off for drinking-water and only cultivable from a distance. The maximum is only R. ½ higher than the old one of R. 1 2a.

The result of the adoption of these rates in the three groups of villages respectively is an increase of assessment by 32·5, 30·9, and 26·8 per cent., which, under all circumstances, is certainly moderate. They do not in any case come up to the level of the percentage laid down by Government as the maximum beyond which the assessment in any group of villages is not to be increased on revision. The average rate per acre under the first settlement was R. 1 3a. 9p., and will now be R. 1 10a.

As already noted, there is no irrigation from canal water. Land watered from wells, which have not increased in any great numbers, will only pay dry-crop rates, and all benefit of improvements will be reaped by those who expend capital on them.

AMALNER.

The settlement of the Táluka of Amalner, now containing 275½ Government and 1½ alienated villages, was revised in 1889. It originally comprised 251½, but in consequence of re-arrangement between this and the neighbouring Tálukas, the former now constitute the net number under one Mámlatdár's charge. The villages were originally settled at various times, extending from 1857-58, in which the majority came under the Survey system, to 1868-69. The previous measurements and classification of soils have been utilised to a great extent for the purposes of revision, there being only five numbers out of 22,247 in which mistakes of over 15 per cent. in area were discovered, and 75 which had to be rectified for other reasons. In classification almost the whole of the old work was found sufficiently good to be confirmed. There is a net diminution of area by 823 acres out of 337,344. In dry-crop and garden land there is a decrease of 9,104, and increase of 3,006 respectively; this is accounted for by about 3,000 acres having been transferred from dry-crop to garden, and 6,000 to forest as unarable and unassessed. It lies to the south of the Taptee river, and is consequently nearer the line of the G. I. P. Railway than Chopdá, being about the most central of the subdivisions of the Collectorate. As already described, the northern portion along the Taptee river abounds in rich black soil, and the more southerly is an undulating plain of broken ground with a low range of hills covered with thorny scrub. It is on the whole well supplied with means of communication, for in addition to several roads connecting it with the markets of Dhulia and Dharangón, Amalner and Párola, which are also large commercial centres, are within its limits.

The southern portion is about twenty-four miles from two railway stations, the villages in the north-east are about thirty miles from one station, and of the remainder the most distant is forty miles from the line of rail. The establishment of the G. I. P. railway in this and the neighbouring Talukdars has had the effect of stimulating the cotton industry, and of converting much of the land in the north, formerly devoted to late (*rabi*) crops, to the growth of cotton, an early (*kharif*) crop, for ginning and pressing which steam machinery has been set up at Párolá, Dhulia, Dharangáon, Erandol, &c. At present about 50 per cent. of the total cultivation is cereals, 7 per cent. of oil-seeds, and 31 per cent. of cotton.

During the currency of the Survey lease the Taluka has considerably improved in the matter of material resources. Population has increased 46·6 per cent., and houses 41½ per cent., two-thirds of the latter being of a superior description and one-third thatched. Agricultural cattle have increased 23·2 per cent., giving a pair of oxen to about eighteen acres of cultivated land. The area per head of the agricultural population has risen from 1·9 to 2·7. Cows and buffaloes, sheep and goats, have decreased in numbers, owing to the contraction in the area of waste used for pasture, in which herds of useless and underbred cattle used to roam at pleasure, so much so that one of the Collectors in former days proposed the impracticable plan of erecting pounds to shut them up in. Carts have increased by over one-half, and are of an improved pattern, a remunerative carrying trade to and from the railway having sprung up of late years. The same influence is to be seen in the larger number of horses and ponies, now used by many for market purposes in preference to the slow transport of former days by bullock carts. The total number of wells and water-lifts is greater by 27·2 per cent, a large proportion of these being used for irrigating land, the area of which has more than doubled, being now 6,176 acres, in place of 2,937. The general increase in cultivation has been from 114,094 acres to 242,828, or 112·8 per cent., the rise being most marked in the lowest class of villagea, where it has been over 504 per cent. 87½ per cent. of the cultivated lands are held by the registered occupants and their partners, and 7·4 are sublet. Registration

returns for the three years previous to the revision show that in 284 cases land has been sold for over twenty times the assessment, from sixty-one to seventy times the valuation having been realised in five cases. They prove that the average rent at which land has been leased has been Rs. 8 15a. 8p., or 3·7 the average Survey valuation of Rs. 1. 1a. 8p. the acre, while Rs. 2,41,376 have been raised on the mortgage of 16,279 acres assessed at Rs. 17,548. There is a probability that the population will soon press too heavily on the soil, for while, during the last five years, the births have been 4·1 per cent. on the number of people, the deaths have been only 2·9.

Prices have not risen greatly, 128·6 per cent. for wheat and 204·5 for *javári* (*Holcus sorghum*). This and the increase of population, with the improvement in means of communication, have resulted in the following figures:—

	Assessment on cultivated land. Rs.	Assessment on waste. Rs.	Per cent. in- crease on cultivation.	Per cent. decrease on waste.
First year of lease	1,42,254	1,24,740		
1887-88	2,50,804	7,023		
	<hr/>	<hr/>		
Difference	1,08,550	1,17,717	76·3	86·8

Ample reason is thus afforded for appropriating to the State a fair proportion of the gains accruing to the people from causes beyond their own control.

In the old grouping of villages for maximum rates of dry-crop assessment more attention seems to have been paid to fertility than to proximity to markets. The former Superintendent of Survey said: "I have already divided the Táluka into two compartments, the northern and the southern, and have shown the northern to be much more fertile and richer in soil than the southern. To this division I shall still adhere in apportioning rates." On this consideration he made a grouping of six classes at maximum rates varying from Rs. 2 4a. in the north to R. 1 8a. in the south-west. In the revision one rate of Rs. 2 12a. has been applied throughout, as the difference between the various classes of soil would appear to have been fully brought out in the classi-

fication of soils, the inferiority in the south being made up for by its greater proximity to the railway. In three groups of ten villages taken respectively from the northern, central, and southern portions of the Táluka the average rates of this maximum have come to Rs. 1 12a. 2p., Rs. 1 3a. 6p., and 4a. 11p.: this proves the correctness of the remark made above with regard to classification.

It is admitted that the maximum rate might have been raised to Rs. 3, which has already been sanctioned for Chopdá, on the north of the Taptee. The latter is more distant from the railway line than Amalner, and the reason given for this departure from correct principles of settlement is that the adoption of the higher rate would have resulted in an enhancement of more than 33 per cent., the maximum limit of increase laid down by Government for the revenue of a Táluka on revision. It is true that such a limit has been fixed, but it surely could not have been intended to abide by it under all circumstances, to the manifest injury of the State and the laying of unequal burdens on people living on the opposite banks of the same river. It would have been more theoretically proper for Chopdá to have had the rate of Rs. 2 12a., and Amalner that of Rs. 3. Or the difficulty might have been partially rectified by ordering the two Tálukas to be gradually assimilated by an increase of two annas at two intervals, so as to bring them to an equality by the end of the thirty years' lease.

The land under irrigation from wells in existence at the original settlement has been brought down to within maximum dry-crop rates, and that under new wells has had no fresh assessment imposed. Owing to increased area, the revenue under this head is Rs. 10,294 in place of Rs. 6,127. In land watered from river channels improved at the cost of the State, a maximum rate of Rs. 14 per acre has been fixed. The old average rate was Rs. 8 1a. 7p., and the new comes to Rs. 10 7a. The total revenue from this source is Rs. 7,640, as against Rs. 5,207 under the first settlement.

The general result of the revision is to raise the revenue from Rs. 2,50,804 to Rs. 3,31,145, an increase of Rs. 80,341, or 32.3 per cent. There are still 10,666 acres of inferior land unoccupied, assessed at Rs. 5,917, an average of 8a. 10p. per acre. The en-

hancement on all Government land in occupation is from R. 1 Os. 6p. to R. 1 5a. 10p., or 5a. 4p. an acre, the equivalent, according to the latest prices, of rather under 12 lbs. of wheat.

ERANDOL.

Two hundred and twenty-seven villages of the Erandol Táluka, which lies to the east of Amalner, came under revision in 1890, and one, formerly alienated, which has lately lapsed to the State, under settlement for the first time. It consisted originally of 237 villages, but, owing to several changes having been made from one Táluka to another with a view to consolidation for administrative purposes, it now consists of 229, one of which is alienated. X Original settlements were introduced into the 227 villages at different times, extending from 1857-58 to 1870-71; into most of them in 1858-59. Twelve villages, formerly in the Bhadgón Táluka, settled under a lease for twenty-six years in 1865-66, were to come under revision in the year 1890-91. X

According to the system of testing the old Survey operations adopted here as elsewhere, only 39 numbers out of 19,444 were found to be wrong in area more than 15 per cent., and 99 were re-measured in consequence of changes from floods and other causes; 234 have been included in forest, and 10,478 have been confirmed.

The old classification of soils was found satisfactory. It was confirmed in 18,828 numbers, and done over again in 616 for various reasons, as in the case of the measurements. A total diminution in the arable area of 4,207 acres was accounted for by 2,626 acres having been converted into garden, by errors in the old recorded measurements to the extent of about 1,000 acres, and by the action of floods. There have been 656 new wells constructed in the course of the Survey lease. This has resulted in the increase of area under irrigation just noted.

This tract of country is very similar in physical features to Amalner, to the east of which and to the south of Chopdá and south and west of Jalgón it is situated. It has, however, bene-

fited more than Amalner by the advent of the railway, which runs almost the entire length of its eastern boundary within a few miles, this portion of the line having in it the four important stations of Páchora, Mahjí, Mhasávad, and Jalgáon. Roads practicable for traffic all the year round, moreover, traverse it in various directions. It contains the market towns of Erandol, Dharangáon, and Kásoda within itself. There are six weekly bazaars, and the markets of Amalner and Párola are easily accessible. The Máhjí fair, held once a year, enables the weavers of the Táluka, who possess 1,323 looms for cotton and 52 for woollen goods, to dispose of their wares, and of the cotton carpets and cattle-cloths made at Kásoda. There are also seventy presses for the extraction of oil. The principal export is that of cotton, which is either cleaned in the 4,039 hand-gins scattered over the country, or sent to neighbouring steam factories to be pressed and sent to Bombay.

All the circumstances point to a substantial advance in the prosperity of the Táluka. During the Survey lease population has increased 57·2 per cent. and superior houses 64·5, while thatched houses are fewer by 8·3 per cent. Agricultural cattle have increased by 18·8 per cent., which gives about seventeen acres to a pair of oxen; while cows and buffaloes, and sheep and goats have diminished by 24·6 and 23 per cent. respectively, in consequence of the contraction of the area of pasturage ground. The number of carts is 2,460, or 50·8 per cent. greater than it was, on account of the development of the cotton industry and improved means of communication with the railway. An increase in the number of horses and ponies may be attributed to the same cause, as in Amalner. The area under irrigation has risen from 2,685 to 5,311 acres, owing to the greater number of wells, now 1,161 in number, in use; the increase has been 31 per cent. The value of agricultural produce having also, as noted under Amalner, greatly advanced, there can be no doubt that a reasonable increase of assessment can be borne by the cultivators without any undue pressure on their resources. Over 84 per cent. of the occupied area is in the hands of the recorded occupants and their partners, and about 10½ per cent. is sublet. In 100 cases of leases land has been let for 5·4 times the Survey assessment. In the same number of cases of mortgage without possession, 1,364 acres

have been taken as security for Rs. 18,632, an average of Rs. 13 10a. 7p. an acre and 14·2 times the Survey assessment; while in a like number of cases in which possession was given, 17·9 times the assessment and an average of Rs. 20 6a. 4p. per acre were advanced. Assessed land is thus proved to have acquired a considerable saleable value.

Remissions were given in 1871-72 in the case of land remaining waste from failure of rain to the extent of Rs. 4,849, but with this exception they have been trifling. For the last three years there has been no distraint of property or sale of occupancy rights for the collection of revenue.

In place of the six groups for maximum rates of dry-crop assessment into which the Táluka was divided at the first settlement, the whole has been assessed together at the same rate of Rs. 2 10a., as in Amalner, and for similar reasons to those given under that Táluka. The same objections to departure from principle may be urged here with even greater force. Erandol is decidedly more favourably situated than Amalner and Chopdá, in which maximum rates of Rs. 2 12a. and Rs. 3 have been adopted, and the Bombay Government have taken the lower rate proposed by the Superintendent, notwithstanding the wish of the Survey and Settlement Commissioner to adopt one of Rs. 2 12a. in default of one of Rs. 2 14a., which he would himself recommend, and the proposal of the Revenue Commissioner to raise the whole Táluka to the latter maximum. To depart from the scientific principle that the assessment on all lands should be equalized by differentiating that on those distant from markets (and therefore costing more to convey produce thence) from the burden laid on others from which the conveyance of produce to the place of sale is easy and cheap, is to create in the 33 per cent. enhancement rule a kind of fetish, to offend against which, under any circumstances whatever, is to be regarded with holy horror. It is to be hoped that at the next revision thirty years hence truer views will prevail, and the anomaly now sanctioned in both Amalner and Erandol will be done away with.

The garden land in the Táluka is entirely irrigated from wells, there being no streams available from which water could be led by irrigation channels. At the former settlement there were

2,685 acres, of which 2,515 were Government land, assessed at an average of Rs. 2 2a. 9p. per acre. The area now irrigated is 5,123 acres. This, under the rules, is assessed at dry-crop rates, land under new wells having no extra rate levied from it, and is rated at an average of R. 1 14a. 7p. an acre. The increase under this head, as compared with the original settlement, is Rs. 4,319, or 78·9 per cent.

The general financial result of the revision has been to raise the State demand on occupied land from Rs. 2,21,652 to Rs. 2,93,991, an increase of 32·6 per cent. The average rate per acre is Rs. 1 6a. 1p. If the maximum rate had been fixed at Rs. 3, as in Chopdá, the average would have come to about Rs. 1 9a. 3p., a difference of 3a. 2p. an acre, equivalent at the average price of wheat for the eleven years ending with 1888-89, to about 6 lbs. per acre more, or, to express it in other terms, about the value of a woman's labour for a single day. The average holding per head of population being about two and one-fifth acres, one man's extra labour for two days in a whole year would have far more than met the additional demand of the State on his land.

The village of Ringangáon, lately lapsed to Government, has now been settled for the first time at the same rates as those fixed for the rest of the Táluka.

BHUSAVAL.

This subdivision was constituted after the first Survey Settlements out of the old Varangáon Táluka, with the addition of eighteen villages from Nasírábád (now named Jalgáon), four from Sáodá, and forty from Jámner. It contains 237 Government villages and 7 *inámi*, 91 of the former being in charge of a Mahálkari at Edalábád, and the remainder under a Mámálatdár at Bhusával. As in other cases, the separate measurement into new Survey fields of original subordinate numbers, the separation of dry-crop from irrigated lands, and other reasons with a view to representing the actual state of occupancy, have resulted in an increase in the total number from 23,389 to 24,590. The diffe-

rence in area under the original and revision settlements is only 337 in 856,359 acres, and has mostly arisen from the action of floods, the old measurement having been found faulty in only two instances. In classification of soils only 867 Survey fields had to be amended out of 23,389, and the remaining 22,522 were confirmed. As at present constituted, Bhusával is bounded on the north by the Taptee river, which separates it from Sáodá, on the west by the Vághur, beyond which lies the Táluka of Jalgáon, on the south by the Jámner Táluka, and on the east by the provinces of Berár and Nimár. It contains rather over 91,000 inhabitants, showing an average of 164 to the square mile. The G. I. P. Railway in its main line merely crosses its north-western corner before crossing the Taptee near Bhusával itself, but the branch to Nágpur runs completely through the south-eastern portion, and has, in addition to Bhusával itself, the stations of Varangáon and Nárgáon within the limits of the Táluka. In addition to the railway it has one made road (new) from Jalgáon viá Bodvad leading to Malkápur, and the old road from Jámnti viá Bodvad and the Nárgáon station towards Burhánpur. There are also numerous cart-tracks practicable at all seasons but the monsoon months, and there is no village throughout the Táluka above twelve miles from a railway station. In addition to the railway stations there are markets at Jámnti, Bodvad, Edalábád, and Harankheda. The Táluka is thus in a favourable position both with regard to its means of communication and facilities for disposal of produce.

It has advanced greatly in material prosperity during the currency of the Survey lease. Its population has increased by 40·7 per cent., and the number of its substantial houses by 84·9 per cent., accompanied by a decrease of 5·8 in thatched houses. Its agricultural cattle have increased nearly 41 per cent., and the number of carts has nearly doubled, from 3,334 to 6,352, the latter proving a large extension of the trade of the country. Sheep and goats and horses have diminished, as usual where the area of cultivation has been enlarged and that of pasturage become less. Even milch cattle, which in most places have fallen in number from the same causes, have increased by nearly 6 per cent. The number of wells and water-lifts had also increased by 28·8 per

cent. These improvements are not confined to any part of the country, but are fairly spread throughout.

As might be expected from this increased prosperity, the land in occupation and the Government revenue from it have risen, in the former from 57,190 acres in 1861-62 to 128,961 (125 per cent.) in 1889-90, and in the latter in the same period from Rs. 86,763 to Rs. 1,62,738 (87·5 per cent.). For the last ten years of the lease the remissions of revenue that had to be given were almost nominal, and, except in one year, when Rs. 105 (out of Rs. 1,73,263) were outstanding, the whole was paid up before the expiration of the year. Out of 435 cases in the years 1887-88 to 1889-90 in which notices of distraint of property for non-payment of the Government demand were issued, it was only had recourse to in ten cases.

Statistics of sales and mortgages of land show that it has acquired a large saleable value. In 100 cases of ordinary sale, 1,117 acres, assessed at Rs. 1,382, sold for Rs. 23,689, or 17·1 times the assessment. In 46 sales by order of Court, 670 acres, assessed at Rs. 8,529, fetched nine times that assessment. In 100 cases of simple mortgages, 1,315 acres, assessed at Rs. 1,771, were mortgaged for Rs. 27,869, or 15·7 times the assessment. In 100 cases of mortgage with possession, 1,228 acres, assessed at Rs. 1,654, were mortgaged for Rs. 17,241, or 10·4 times the assessment; and in 100 cases of leases, 1,431 acres, assessed at Rs. 1,874, were sublet for Rs. 9,888, or 5·3 times the assessment.

With regard to prices, that of cotton has probably doubled (this occupies more than one-third of the whole cultivated area), and in *javári*, *bájrí*, and wheat the number of seers procurable for a rupee has risen respectively from 45½, 47½, and 33½ in the ten years preceding the settlement to 23½, 24, and 17½ in the five years from 1884-85 to 1889-90. During the period of the lease, however, prices have slightly fallen.

Referring to the remarks made above with regard to the original settlement of Varangáon and other Tálukas, it is now acknowledged that there were anomalies and incongruities in the settlement made by Mr. Davidson and Mr. Ellis, owing to the difficulties in grouping villages with the meagre information available at the time; and the new grouping, based on the experience

gained during the Survey lease, is much simplified, the bulk of the Táluka being included in one general group at a maximum dry-crop rate of Rs. 8½ per acre, whilst the villages at which the railway stations lie, and a certain number in the immediate neighbourhood of these, were rightly proposed by the Superintendent to be raised by four annas to a maximum of Rs. 8½. In forwarding this proposal the Collector remarked that the means of communication are no better now than they were thirty years ago, and accordingly objected to the increased rates for the railway station groups.

This was followed by the Survey Commissioner, who was of opinion that such special rating was unjustifiable, inasmuch as it was opposed to the argument that the prices of produce in East Khándesh do not vary with distance from the rail, provided communications are good. Government, in agreeing to these recommendations and negating the Superintendent's proposals, have declared that the special rate is opposed to Survey principles.

The whole point of the Superintendent's argument appears in this instance to have been lost sight of, an argument borne out by common sense, that produce raised and saleable at the place of raising must be able to undersell that raised at a distance and therefore saddled with the extra cost of carriage to the place of sale. Far from being opposed to Survey principles, this is the very principle on which the Survey assessments have been based from the first. A capitalist in purchasing two parcels of land, one at a market and railway station, and another at a distance from either, would certainly give more, *ceteris paribus*, for the former than for the latter, and the former may reasonably bear a heavier assessment.

Accordingly the whole Táluka has now been guaranteed precisely the same maximum dry-crop rate of assessment for the next thirty years.

The garden land irrigated from wells in the Táluka is small in area, amounting to 5,180 acres as compared with 1,292 acres recorded at the original settlement. This will now be assessed at dry-crop rates, on the principle that improvements carried out at the ryots' expense must not be taxed. Of land watered by channel irrigation there are only five acres, which will bear an average

assessment of Rs. 6 9a. 7p. an acre. The average per acre of Government occupied land under the original settlement was R. 1 3a. 10p., and would have come to R. 1 10a. 6p. under the revision if the Superintendent's proposals had been carried out in their entirety. It will be somewhat less under the ruling of Government noted above.

JAMNER.

This is the last of the Tálukas of the Collectorate that has as yet come under revision on the expiration of the first thirty years' settlement. It lies to the south of Jalgóon and Bhusával, and is bounded on the west by the Páchora Táluka, on the east by the province of Berár, and on the south by the Nizám's dominions. Since the previous settlement forty villages have been transferred to Bhusával and three to Jalgóon, whilst it has received twenty-eight from the Lohará (now Páchora) Táluka and two from Nasir-ábád. It therefore now contains 197 villages, of which twenty-six are *inámi*, so that 171 come under revision.

As elsewhere, a certain number of the old Survey Fields have been re-measured, and their soils re-classified for revision purposes, with a view to representing occupancies as they exist at present, with the result that 18,731 old numbers have increased to 20,486 new ones. There were only twenty-two in which the difference between the old and new measurements exceeded 15 per cent. The difference in the total area under the two amounts only to 275 in 283,974 acres. In classification 504 numbers have been revised (2·7 per cent.) and 18,227 confirmed.

Jámner is not so favourably situated as Bhusával in the matter of communications, as it lies at some distance from the line of the G. I. P. Railway. There is only one line of metalled road in it, viz., that running from Jámner through Neri to the stations of Jalgóon and Mhasávad, which lie at the distance of twenty and twenty-two miles. Another has been commenced to the market town of Bodvad in Bhusával. There are some good cart-tracks, however, which sufficiently supply the means of inter-communication except in the monsoon months. There are ten

local markets for the disposal of agricultural produce, and those of Bhusával, Jalgaón, &c. are at no great distance. Steam machinery for the ginning of cotton has been established at Jámner and Neri, which must find plenty of employment, as over 4½ per cent. of the arable area is devoted to its production. There are no manufactures of any importance, but the carrying trade must be large and improving, as is shown by the number of carts during the Survey lease having increased from 2,684 to 4,421 (64·7 per cent.).

That the material prosperity of the Táluka has also increased in the same period will be seen from the following statistics:— Population has increased by over 30 per cent.; and the number of houses, almost all of which are flat-roofed or tiled, by 83 per cent. This proves that the people are more liberally housed than in former days. The number of agricultural cattle is half as much again as it was, and the average area of land under each plough is fifteen acres, which is nearly the same as in Bhusával. Milch cattle, sheep and goats, and horses and ponies have decreased, as was to be expected from the increase of cultivated area from 109,302 acres in 150 villages, the great bulk of the Táluka, in 1863–64 to 163,901 acres in 1889–90, and the consequent diminution of the area for pasturage from 93,413 to 23,723 acres. Wells in the same period have increased by 472 (22·6 per cent.). Of these 773 are used for irrigation purposes, the area under which kind of cultivation has increased from 1,939 to 2,381 acres. As the prices of *javári*, *bijri*, wheat, and grain (the chief agricultural products with the exception of cotton) have risen greatly since the years that preceded the first settlement, but have rather fallen since the first years of that settlement, an improvement in the communications of the country was the only factor to be taken into consideration in fixing the pitch of the new assessment, and the maximum rate fixed in the first instance has been retained accordingly.

Under Messrs. Davidson and Ellis the Táluka, as it was then constituted, was thrown, for maximum rates of dry-crop assessment, into seven groups, with rates varying from Rs. 3 to R. 1 12a. Owing to the subsequent changes in markets, brought about by the construction of the G. I. P. Railway and its Nágpur branch,

it has now been found practicable to reduce the whole to two groups, one comprising the bulk of the Táluka, and the other its south-eastern corner, consisting of forty-seven villages. This division is avowedly based on the greater distance of the latter than of the former from markets, and this proposal has received the sanction of the Bombay Government, notwithstanding that the very same principle, viz., the higher assessment of villages at and near railway stations and markets, has been declared in the Bhusával revision to be contrary to the Survey principles. The manifest contradiction in the two settlements is more clearly brought out in the case of a few villages, noted by the Superintendent, which, from having been formerly the least favourably situated and consequently lowest assessed, have been put into the first class avowedly in consequence of their now being favourably situated with regard to the new markets, and have had their assessments raised accordingly beyond the theoretical increase of 66 per cent. ordered by Government not to be exceeded on a revision of assessment. In this case the principle negatived in Bhusával has been affirmed.

The general increase in the first group, according to the same maximum as that adopted for the first group under the previous settlement, has been 30·5 per cent., although the increase in some villages exceeds 66 per cent., as just shown. That in the second group of villages as a whole slightly exceeds the theoretical limit of 33 per cent. allowable under the rules for a whole group.

In their review of the Reports on which the revision has been sanctioned, the Bombay Government admit the anomaly of the maximum rates in the Tálukas of Sáoda, Erandol, and Amalner, better situated than Jámner, being respectively Rs. 2 10a., Rs. 2 10a., and Rs. 2 12a., whilst that of Jámner is Rs. 2, but state that the undoubted improvement in the condition of the people, and the fact that the existing rates have not pressed heavily upon the people, justify the continuance of the latter rate.

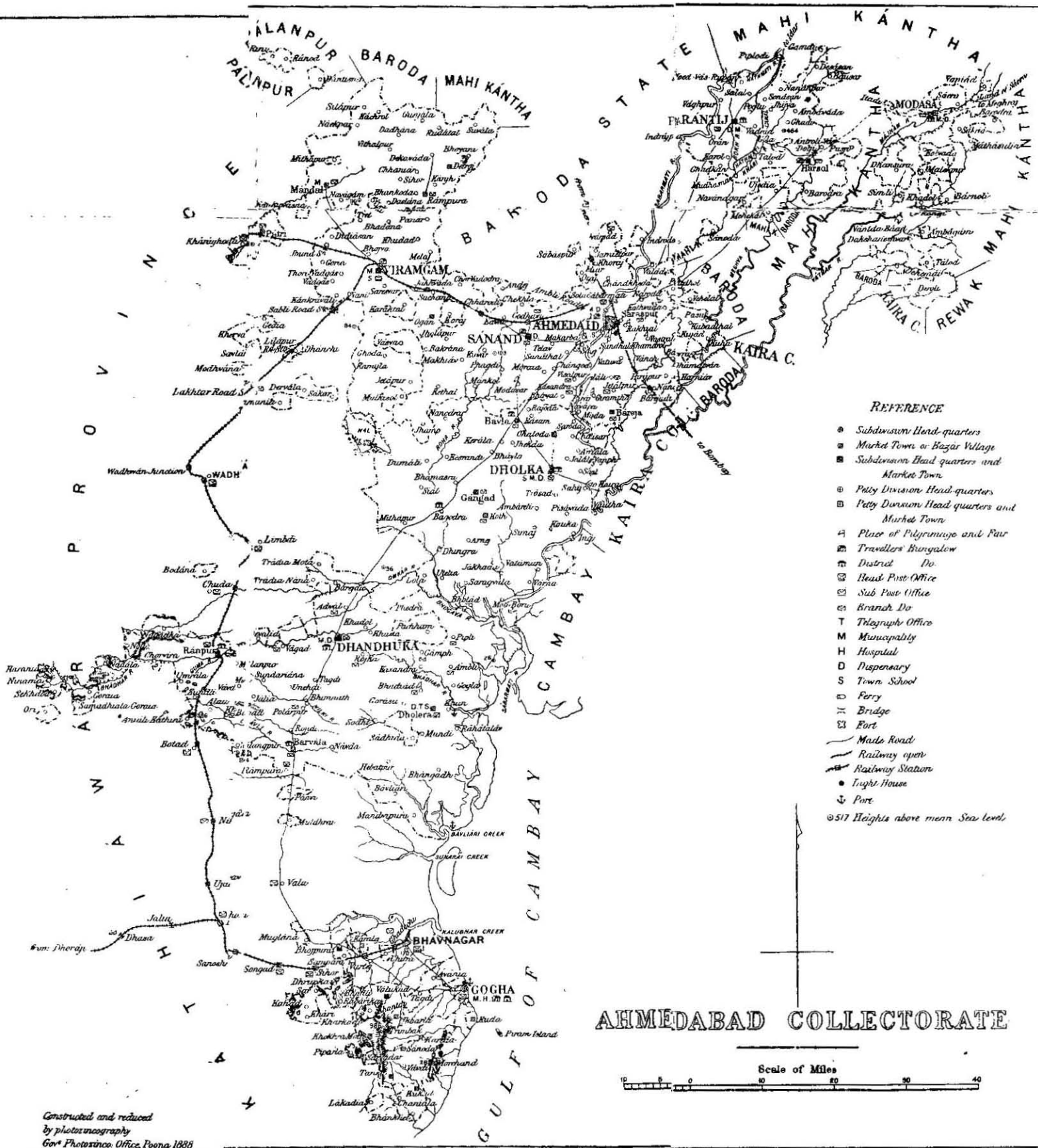
During the years 1887-88 to 1889-90, 1,569 notices of distraint had had to be issued for non-payment of the State dues, but in only forty-six of these was property actually sold. Again, from 1877-78 to 1884-85 no remissions of revenue had had to be given, and

since the latter year they have been of trifling amount. Moreover, registration returns prove that the occupancy right in land has acquired a considerable marketable value. In twenty-four cases of sale by decree of Court, 389 acres, assessed at Rs. 404, realised 14·3 times the Survey assessment. In 100 cases of sale by private contract, 1,258 acres, assessed at Rs. 1,110, brought 15·8 times the assessment; and in fifty-two cases of lease, 890 acres, assessed at Rs. 970, were let for 5·7 times the assessment. In 100 cases of mortgage without possession more than eleven times, and in a similar number with possession 10·5 times, the assessment were borrowed. All these facts prove that the material prosperity of the Táluka has greatly advanced in the thirty years of the Survey lease just expired.

The area under well irrigation has increased during the same period, as shown above, from 1,939 to 2,381 acres; but the benefit of the improvements remains, as elsewhere, with the tenants who have carried them out. There is no irrigation from channels in the Táluka, the beds of the rivers and streams that traverse it being too deep to permit of dams being erected for the purpose.

An account of the original settlement in the Tálukas of Sáoda, Shádá, and Shirpur has been omitted in this Collectorate, but as its general principles were precisely the same as in the remainder, there appears to be no occasion for going into further details.

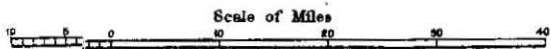
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REFERENCE

- Subdivision Head-quarters
- Market Town or Bazar Village
- Subdivision Head-quarters and Market Town
- ⊙ Petty Division Head-quarters
- ⊙ Petty Division Head-quarters and Market Town
- ⊙ Place of Pilgrimage and Fair
- ⊙ Travellers Bungalow
- ⊙ District Do
- ⊙ Head Post Office
- ⊙ Sub Post Office
- ⊙ Branch Do
- ⊙ Telegraph Office
- ⊙ Municipality
- ⊙ Hospital
- ⊙ Dispensary
- ⊙ Town School
- ⊙ Ferry
- ⊙ Bridge
- ⊙ Fort
- Made Road
- Railway open
- Railway Station
- Light House
- ⊙ Port
- ⊙ 517 Heights above mean Sea level

AHMEDABAD COLLECTORATE



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Govt Photographic Office, Poona 1888

remembered that in most of these passages the very words of the orders of Government have been quoted.

With reference to the orders noted above that, in revising the assessment of villages paying revenue in the shape of a plough tax, a fair proportion should be assessed on alienated land, Government, in sanctioning certain revisions proposed in 1842, directed that, in the case of lands held at higher rates in consideration of alienated together with Government land, the extra assessment must be imposed on the latter unless the holders of the former would consent to pay a quit-rent for their land. The Collector was directed to exert himself to encourage the taking up of leases of holdings by granting low rates, and to push on actively the work of revision. By this time the advisability of encouraging the conversion of dry-crop into irrigated land by the offer of liberal terms had forced itself on the notice of Government, and orders were issued for the grant of leases for thirty years in the Deccan and Southern Mahratta country Collectorates, according to the system virtually in force in all places where the Revenue Survey assessment had been introduced. Strange to say, however, the orders were not extended to the Konkan or Gujarát, as those parts of the country were not believed to require such encouragement. Various methods for promoting the spirit of enterprise in all parts of the Presidency had, however, been in force from very early days; it appears unnecessary to enter into greater detail with regard to these. The Collector, in 1846, was referred to existing orders which allowed of advances being made for the repairs of old wells; and his proposal to give varied terms of settlement according to the greater or less expense of making new wells was negatived as complicated and unnecessary.

No change of importance took place in the Collectorate till 1851, when the Revenue Commissioner took objection to the introduction of a revised assessment, fixed, according to the usual Pancháyat system, into 175 villages, by the first Assistant in charge of the Collectorate without reference to higher authorities. In the end of this year the first step towards a thorough revision of the assessments of the whole Collectorate was taken by the measurement of the Dholka subdivision being commenced, under

declared liable to have their rentals increased, like other Tálukdári estates in Dhandhuka and Gogha in the Gaikvár's territories in Káthiávád. It was clearly proved by ancient rent-rolls of both subdivisions that the rentals of the Chief had fluctuated from time to time both upwards and downwards, and from one of the former, dated ninety years previously, it appeared that at that time the estate had been assessed Rs. 27,000 a year higher. The Collector believed that the subsequent decrease was entirely due to the venality, remissness, or imbecility of Native officials. He considered that the Rs. 18,000 added to the rental were far below what the State had a right to demand, viz. the equivalent of one-third of the gross produce, and saw no reason why Bhaunagar should pay what was estimated to be only 15 per cent. of the revenues while the inferior Grassias paid as much as 25.

The effect of the punishment inflicted on the Patels of Nadiád and the introduction of direct Government management into that subdivision appears to have been marked. Its revenue at the cession had been calculated at Rs. 1,75,000, but the area of cultivation had been found by survey to be considerably in excess of the estimate, and the revenue had now reached Rs. 2,62,263. The item of village expenses in the Collectorate was at this time carefully inquired into, and reduced from Rs. 23,948 to Rs. 5,863. Inquiries were also instituted into the necessity for the large establishment of hereditary District Revenue Officers in Nadiád, consisting of seven principal and three inferior Desáis, a Muzmoondar (district accountant), and three Amín Patels. The services of the Desáis appear to have been at once dispensed with as useless.

In addition to the territorial changes involved in the Province of Gujarát in the formation of the new Collectorates of Ahmadábád and Kheda, and the consolidation of Bharuch, in consequence of the various cessions and exchanges of portions of country that took place in 1817-18, a considerable modification was made in the duties of the Collectors of Land Revenue by the transfer of the management of the Land Customs, which had up to that time been in their hands, to the Collector of Sea Customs.

In 1818-19, with reference to the wish expressed by the Court of Directors that ryots' payments should be fixed on a considera-

of the Summary Settlement. In the case of the lump sums paid on the first of the three descriptions of alienations mentioned, those lump rentals were continued as heretofore. Some minor arrangements were made with regard to excess in these lands discovered on measurement.

JAMBUSAR.

In 1876 Jambúsar (Jumboosar), the most northerly subdivision in the Collectorate, came under revision. Bounded on the north by the river Máhi, and on the west by the Gulf of Cambay, the soil on the coast is, like the whole tract of country on the east of the Gulf, more or less impregnated with salt, owing to its comparatively recent recovery from the sea; whilst passing from this tract eastward are to be found both the alluvial deposits of the black cotton-soil and the light-coloured *gorát* or *márvá*. It contains eighty-seven villages, two of which are alienated. Although it has no made roads within its limits, country tracks for conveyance of produce inland and to its two ports of export, Tankária and Degám, are practicable and open except in the monsoon months; and the line of the B. B. & C. I. Railway runs not far from its eastern boundary. The nearest station in British territory is that of Pálej, with which, as the intermediate Dhádar river has been bridged, communication is easy. Its inhabitants, especially in the east and north-east, are as skilful agriculturists as any in Gujarát, and, as a general rule, very well-to-do. Cotton-cleaning factories have been established at Jambúsar and Kávi, and the consumption of a large proportion of the locally produced cotton in these, and probably its conveyance to some extent by rail to Bombay, account in a great measure for the late falling-off of the trade at the two ports mentioned. It was, of course, greatly affected also by the commerce of Málwá and North-East Gujarát, which, before the line was made, came to Tankária as the nearest sea-port, having been turned aside and borne to and from Bombay directly by the railway. Jambúsar itself affords a good market, as well as some of the rich and populous villages in the north

CHIKHLI.

Proposals for the revision of assessment in the Chikhli sub-division were submitted by the Superintendent of Survey in September 1865, and modified rates were finally sanctioned by Government in February 1867.

Chikhli lies in the south-east of the Collectorate, being bounded on the north by Súpá (Jalápur) and Gaikvár's territory, on the east by the latter and the Native States of Váda and Dharampur, on the west by Valsád (Bulsar), the Gaikvár's Táluka of Gandevi and part of Súpá, and on the south by the Auranga river, which separates it from the late Párnera division of Valsád. At the time of settlement it contained 73 villages, 68 of which were *khálsá*. It is intersected by the Ambika, Káveri, Karera, and Auranga rivers, rising in the hills to the east and flowing into the Indian Ocean. In the low-lying lands and valleys the land is very fertile, but between the valleys the soil is comparatively shallow and unproductive. The rainfall averages 71 inches, and the fall is very uniform, but rather increases towards the hills. The climate is very favourable for the growth of rice and sugar-cane, for which Chikhli is famous.

Although the railway stations of Amalsád, Bilmora, and Dungri are within easy distance of the western boundary, the intervening tracts of country are destitute of made roads, which, from the nature of the soil and the hindrance caused by the Gaikvar's territory and unbridged rivers coming between, it will probably take a long time to overcome the difficulty of making. It contains no large markets within itself, but Gandevi, in the Gaikvár's Táluka of that name, and Valsád, are within convenient reach. Since the opening of the railway the molasses of Chikhli has been largely exported to Gujarát. The population is almost entirely agricultural, and is divided into two chief divisions of *ujli-paraj* (fair) and *káli-paraj* (black), the former being skilled agriculturists, and consisting of Brahmins, Kunbis, Vohras, &c., and the latter very unskilled, consisting of Dhondias, Kolis, Dublas, Naikas, &c. Many of the Dublas were until lately hereditary bondsmen of the Desáis and Bhátela Brahmins. The *ujli-paraj* form about one-sixth only of the population, and alone have