



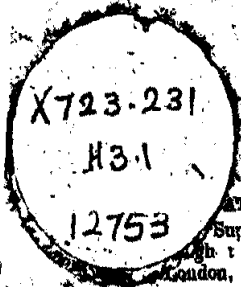
# The Bombay Survey and Settlement Manual

BY  
R. G. GORDON, I.C.S.

VOLUME I  
PART I—HISTORICAL

*(Reprinted under G.O., B.D., No. 9625/24 dated 28-5-34)*

—  
SECOND EDITION



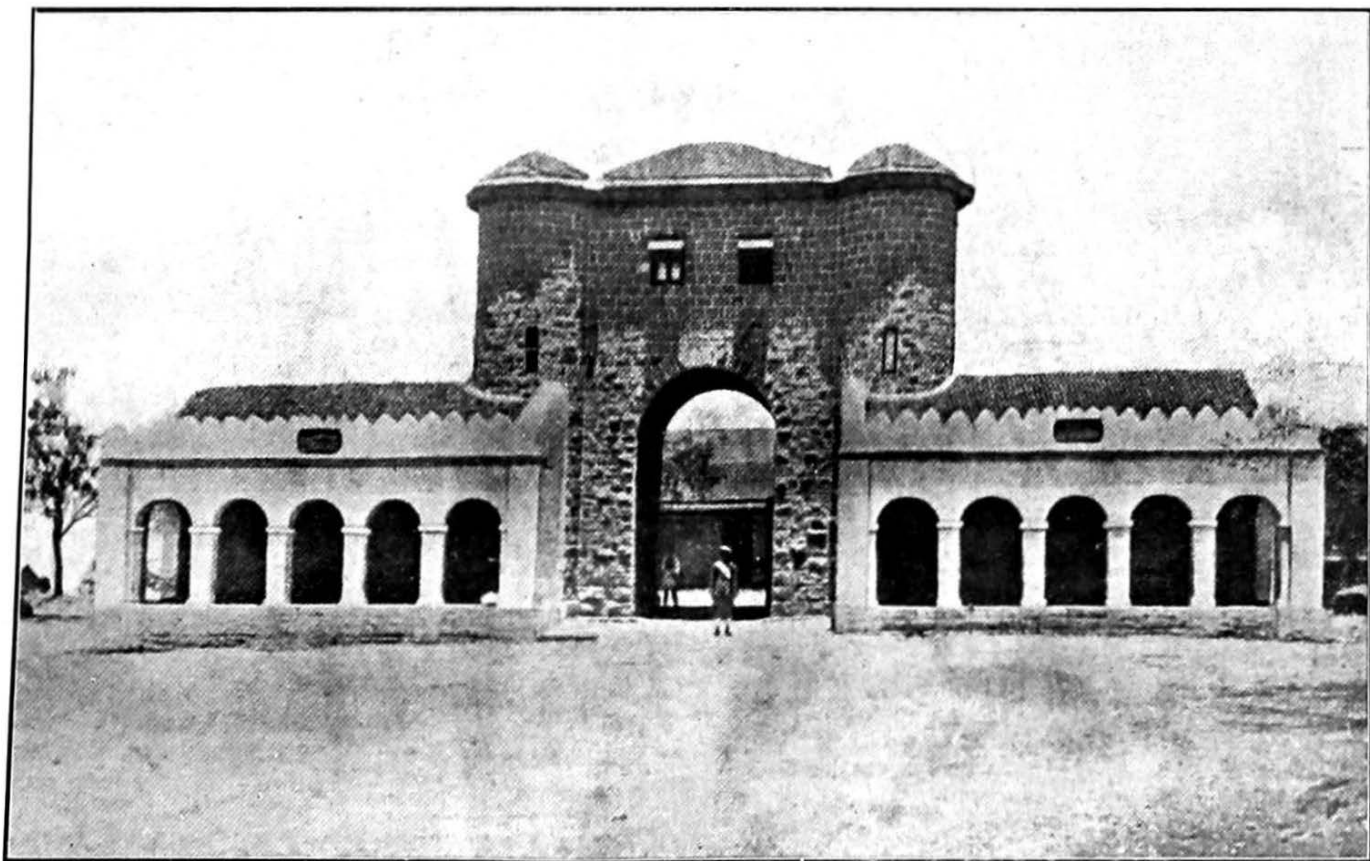
BOMBAY

AT THE GOVERNMENT CENTRAL PRESS

Superintendent, Government Printing and Stationery,  
High Commissioner for India, India House,  
London, E.C.3, or through any recognized Bookseller

Price: Re. 1 As. 4 or 2s. 5d.

1948



MEMORIAL TO MR. E. Goldsmid, I.C.S.,  
*Originator of the **Bombay** System of Survey and Settlement.*

*This Dharamshala was built as a memorial to Mr. Goldsmid in the year 1855 on a site close to the Dikeal station on the G. I. P. Railway. The inscription on the two panels which can be seen in the front of the building runs as follows:—*

THIS REST HOUSE HAS BEEN BUILT  
FOR THE BENEFIT OF ALL TRAVELLERS

IN MEMORY OF  
HENRY EDWARD GOLDSMID  
OF THE BOMBAY CIVIL SERVICE

WHO NEAR THIS SPOT COMMENCED IN 1835-36 THE DECCAN REVENUE SURVEY AND ASSESSMENT, THE FIRST OF A SERIES OF FISCAL IMPROVEMENTS AND WISE REFORMS WHICH HAS SINCE BEEN EXTENDED TO OTHER PARTS OF THE BOMBAY PRESIDENCY. HE WAS REVERED BY THE POOR AND INDUSTRIOUS WHEREVER HE WAS PERSONALLY KNOWN THROUGHOUT LARGE PROVINCES AND MANY WHO CAN NEVER KNOW THE NAME OF THEIR BENEFACTOR HAVE CAUSE TO BLESS THE RESULT OF HIS LABOURS. MEN OF VARIOUS RACES AND CREEDS LOVED HIM FOR HIS WARM, SYMPATHIZING NATURE WHICH EVER FOUND EXPRESSION IN BENEVOLENT ACTS AND THEY HAVE BUILT THIS REST HOUSE THAT HIS NAME SHOULD NOT BE FORGOTTEN WHEN THE GENERATION WHICH KNEW HIM SHALL HAVE PASSED AWAY.

HE DIED IN EGYPT ON THE 3RD JANUARY 1855.

## P R E F A C E.

The publication of the Revised Survey and Settlement Manual has been sanctioned by Government Resolution No. 7807, dated 22nd August 1914, in supersession of the former Manual in three volumes consisting of one Government Selection and two volumes compiled by Rao Bahadur H. V. Sathe. The revised Manual has been entirely re-written and re-arranged but a very considerable amount of the material has been drawn from the valuable storehouse of information collected by Mr. Sathe and incorporated by him in the former Manual.

The present Manual is divided into two Volumes and three Parts : Part I—Historical (Volume I), Part II—Technical and Part III—Appendices (Volume II). In Part I an attempt is made to trace the history of the Bombay system from its commencement to the present day. This account is prefaced by a very brief and necessarily incomplete account of the Indian and early British systems of Land Revenue Administration which preceded the introduction of the Bombay system in order to explain the conditions under which it arose. The history of the Bombay system is then traced from its commencement and first development under Goldsmid, Wingate and Davidson, with a summary of the Joint Report, through the Original and Revision Settlements down to the present day. An account is then given of the classes of Land Tenures with a chapter on the History of Occupancy and the Part concludes with a chapter on City Surveys.

In Part II the subject of Survey, Classification and Assessment are treated technically and in detail. In the chapters on Classification the Classification Rules of the various surveys have been reduced to order and presented on one plan which will, it is hoped, render them more easy of comprehension than they are at present. The Rules themselves—both Survey and Classification—have been incorporated in a separate selection (No. DXXXII) under the orders contained in paragraph 1 of Government Resolution No. 7807, dated 22nd August 1914.

Part III contains certain appendices upon various special subjects. Of these, Appendix I contains a tentative account of the origin of the Deccan village community with a view to elucidate the history of the Miras and Uprī tenures which

formed the foundation of occupancy in the Deccan. Appendix II gives, as a matter of historical interest in connexion with the early revenue history of Gujarat, the Dharo or Revenue Statement of the village of Prantij for the year 1824 A.D. The remaining appendices deal with technical subjects.

In conclusion I have to thank those gentlemen who have given me advice and assistance in the preparation of the revised Manual, more especially Mr. Pratt and Mr. Seddon, who have read through the whole draft, and Mr. Wiles, who has afforded ungrudging and invaluable assistance in the preparation of the sections dealing with the Konkan and Kanara Surveys. I have also to express my acknowledgments to the authorities of the Government Central Press for the readiness with which they have responded to the many calls that have had to be made upon their patience.

R. G. G.

A LIST OF IMPORTANT SETTLEMENT SELECTIONS.

THE DECCAN.

District.	Taluka.	No.	Remarks.
Poona.	(Old) Indapur (with others).	CLII 157	The first taluka settled under the Bombay system. The first Revision Settlement Report of Colonel Francis gives an excellent account of the events preceeding the introduction of the new system and of the new system itself.  (Also see Sir George Wingate's remarks upon Permanent Settlements attached to the Report).
	Junnar	CCV 205	Contains a review of the old Survey system by Mr. Stewart.
Nasik	Nipad and Chandor.	CXXX 130	Contains a detailed account of the new system both of measurement, Classification and Assessment by Mr. Goldsmid, and also Lieutenant Davidson's explanation of the Soil Scale and the Classification of Motasthal and Patasthal lands.
	Igatpuri	GLXVIII 168	Contains Mr. Tytler's explanation of his system of Rice Classification with his remarks upon the true policy which should underlie a Rayatvari Settlement.  The Government Resolution sanctioning the Revision Settlement lays down the principles to be observed in the Assessment of New Rice.
Satara	Patan	CCKXIII 293	Contains Mr. Ozanne's account of the application of the Kolhapur Rules, the Dongar Class and the General Position Class in the Survey of the Satara district, with an explanation of the Jantris used in the Deccan Survey.
Satara	Rhanapur	CCCLIX 259	Contains a full account of the system of Patasthal Classification and Assessment, by Mr. Fletcher.

District	Taluka	No.	Remarks.
Khandesh	Dhulia	CCCLXXV 375	Contains Mr. Pedder's account of Patasthal cultivation in Khandesh and of his system of Classification applied thereto.

## THE SOUTHERN MARATHA COUNTRY.

Dharwar	The Old Kod taluka.	CDX 160	Contains Captain Wingate's account of his system of Rice Classification.
	The Old Bankapur taluka.	CLV 155	Contains Colonel Anderson's account of the Classification of New Rice.
Bijapur	Bagalkot	CLXXVI 176	Contains an instructive discussion by Mr. Stewart regarding the Assessment policy of the Bombay system of Settlement.
	Bagavadi	DXI 571	Gives the so-called "Baidhan Rules" for regulating the construction of new bandharas for Patasthal cultivation.
	Indi	DIX 509	Contains an account of Dry-crop Classification by Colonel Anderson.

## GUJARAT.

Ahmedabad	Dholka	CCXVII 217	The first taluka settled in Gujarat: contains an account of the first experimental Settlements in Gujarat.
	Daskroi	CCXIV 214	Contains Mr. Roger's account of the previous Revenue History of Gujarat, and in addition a long correspondence regarding the Classification and Assessment of Well-lands, Bhatha and Dhekudiat in Gujarat.
	Sanand	CCLII 252	Contains correspondence upon the subject of Sub-soil Water Classification.
Kaira	Mehmadabad	CCLXXXVIII 288	Contains a discussion regarding the principles of the Classification of Rice lands in Gujarat.
Panch Mahals	Jhalod	CLXV 165	A very important Selection, containing a review by Government of the whole question of the Assessment of lands under wells.

District.	Taluka.	No.	Remarks.
Surat	Chikli	CCCLXXXI 381	Contains Mr. Maconochie's account of the Classification of Natural Bagayat Lands.
	Bardoli	CCCLIX 359	Contains an account by Mr. Ozanne of the use of the distance scale at the Original Surveys.

THE KONKAN.

Kolaba	(Old) Khala-pur petha.	CCXXIII 223	A very important Selection, the whole Konkan System being dealt with in detail both by Colonel Francis and Mr. Stewart, with particular reference to the question of New Rice.
	Panvel	CCLXIV 264	Important for the discussion by Mr. Ozanne of the Classification and Assessment of Rabi and Varkas lands.
	Alibag	CCXC 290	Describes the Konkan System of classing Garden lands.
Ratnagiri	Rajapur	CCXXII 222	Contains an interesting account of the old Maratha settlements by Mr. Stewart.
	Devgad	CCLIII 253	Contains a similar account by Mr. Achyat Rao Bhaskar Dessai.
	Mandangad	CCCLXX 370	Contains the orders of Government confirming the old Classification of the district.

KANARA.

Kanara	Supa and Yellapur.	CLXXXVII 187	Contains accounts of the old revenue system of the district.
--------	--------------------	-----------------	--



# CONTENTS.

## VOLUME I.

### PART I—HISTORICAL.

CHAPTER	SUBJECT.	PAGE
I	Introductory .. .. .	1
II	The Indian Systems of Land Revenue Administration .. .. .	4
III	The British System of Land Revenue Administration—Early Period .. .. .	17
IV	Commencement and first Development of the New System .. .. .	29
V	The Joint Report .. .. .	59
VI	After the Joint Report .. .. .	74
✓ VII	The Original Settlements .. .. .	76
VIII	The Revision Settlements .. .. .	114
IX	The Land Tenures .. .. .	183
X	The History of Occupancy .. .. .	184
XI	The Rights and Obligations of the Occupant .. .. .	206
✓ XII	Inam Tenures .. .. .	215
XIII	Miscellaneous Tenures .. .. .	223
XIV	City Surveys .. .. .	237

**PART I.**

**HISTORICAL.**

## CHAPTER I.

### INTRODUCTORY.

IN an almost purely agricultural country like India the sheet-anchor of the financial administration has always been the revenue derived from the land. Even at the present day when the revenue from other sources has been so greatly developed, the proportion of the whole taken from the land amounts to some 25 per cent., and was of course enormously larger in pre-British days, when these other sources were as yet untapped. Whenever therefore and wherever any organized administration has existed in India the necessary concomitant to its existence has been some system of Land Revenue.

Such systems have been many in number, for the territories which form the Bombay Presidency, like the rest of India, have been subject to many successive waves of conquest from the time of the early invasions by Scythian or other tribes down to the historical period of the Mahomedan, Maratha, and British Empires. Each new system, however, was forced to build upon the foundations left by its predecessor, the British no less than the Maratha and the Mogul. The present system, as it stands to-day, has therefore been evolved from the Indian systems which preceded it and cannot properly be understood without at least some knowledge of the evolution which gave it birth. Hence, before proceeding to describe, the present system of land settlement, it is essential to give in outline a survey of the Indian and early British systems from which it arose.

British and other systems of land revenue compared.

It is necessary, however, to make a few preliminary observations :—

(i) According to the present system of Land Revenue the settlement and the administration of the revenue are two distinct matters. The settlement of the revenue is made taluka by taluka at long intervals of 30 years by officers appointed specially for the purpose, and, having been so settled, remains unchanged till the expiration of the period for which the guarantee has been given. At the time when the periodical settlement is concluded the revenue officers are of course consulted and to this extent may be said to have a share in the settlement. Once the final

orders of Government have been passed, however, the settlement becomes part of the established order of things with which normally the revenue officer has nothing to do but to administer. In such circumstances it is quite feasible to treat the settlement and the administration of the Land Revenue as distinct, and to write a description of each separately.

Under the Indian and early British Governments, however, there was no such distinction between these two branches of the administration. In fact, the settlement of the Land Revenue was the prime and distinctive duty of the Revenue officer. This is accounted for by the fact that in those days the settlements were made, not at long intervals, but annually, the demand for each year being fixed for each village individually by the senior district officer personally on a consideration of the character of the current agricultural season. Hence, in dealing with these early periods it is impossible to treat the settlement of the Land Revenue as a thing apart from the ordinary administration as it is now when the two have been definitely separated. In describing these early systems it will, therefore, be necessary in dealing with the settlement of the Land Revenue to give some account of the administration also.

(ii) At the same time, though settlement and administration were formerly so intimately connected, there was from another point of view a very real separation. While it is true that the total amount to be raised was settled by the district officers the individual distribution of this amount was a matter of local, nay of village, concern only. Then local administration had to produce a certain amount of revenue but, provided the result was satisfactory, the distribution thereof was left to the villagers.

It is for this reason, that, while it is possible to give a reasonably connected account of the Land Revenue on its purely administrative side, no history—properly so-called—of the assessment in detail can be given. Left to themselves and the natural human instinct of variation the villages produced a crop of kinds and methods of assessment so bewildering that it is no wonder the early British administrators were lost in the maze in which they found themselves entangled.

(iii) A further circumstance, which, while it introduces greater complications into an already complicated subject, is of interest for its own sake, is the fact that the territories which form the Presidency as now constituted had, previous

to their welding together into their present form, no common administrative history. It is true that they all formed part of the Maratha Empire, but that, in Gujarat at any rate, was purely predatory and produced no system of administration which can be properly treated as such. In these circumstances, till the spread of the present method of settlement brought all under one common system, the administration of the Land Revenue was purely local in character. To describe each of these systems in detail would, however, be foreign to the present purpose. It was in the Deccan that the existing system arose, from which it spread over the rest of the Presidency. Hence, as it was formed under Deccan conditions, it is to the history of those conditions that attention must primarily be paid. Consideration of the rest will be subsidiary to this main object.

## CHAPTER II.

### THE INDIAN SYSTEMS OF LAND REVENUE ADMINISTRATION.

In his book upon "The Land Revenue in British India" Mr. Baden Powell divides systems of settlement into three classes, viz. :—

Systems of settlement.

- (1) Settlements for single estates under *one landlord*.
- (2) Settlements for estates of proprietary bodies, usually *village communities*.
- (3) Settlements for *individual occupancies*—called the *rayatvari* system.

In the first two classes the settlement is made by Government with the landlord or village community, and the holders of individual occupancies are merely the tenants of these proprietors. Under the Rayatvari system, the settlement is made with the individual occupants who are themselves landholders and not tenants.

This difference in the kind of settlement naturally leads to a corresponding difference in the method of historical treatment. Thus, in the case of the zamindari or landlord system of the United Provinces, the chief interest lies in the history of the zamindars with whom the settlement is made and who are responsible to Government for the payment of the Land Revenue, while the history of the village and the village community, who are merely the tenants of the zamindars, can be treated as subsidiary and comparatively unimportant.

Rayatvari and other systems compared.

In the case of a Rayatvari system, however, the positions are reversed. Here the zamindar is non-existent, except in the case of a few isolated tenures, and it is the villager with whom the settlement is made and who is responsible for the Land Revenue. In these circumstances the chief interest lies in the history of the village, and some treatment of this subject is therefore essential as an introduction to any account of a Rayatvari system of settlement.

It is necessary, however, to face an initial difficulty in the fact that the whole question of the origin of the Village Community in India is admittedly most obscure and controversial and hardly susceptible of definite solution. The chief evidence upon the points at issue is that of survivals, and though it is

Origin of the Village Community.

true that "skilled political writers can reconstruct such communities from existing survivals with as much assurance as the anatomist reconstructs an extinct species from a fossil bone,"\* all that can really be attempted is a very tentative sketch which will account for the observed facts without claiming to lay down any dogmatic conclusions.

One obvious objection to such a reconstruction is that a natural suspicion must attach to all attempts to set up a single type of village community for the whole of a province containing such a variety of races as Bombay. Investigation, however, does shew such a remarkable similarity in the evidence from different parts of the Presidency that the assumption of a common type, not of course necessarily of a common origin, but evolved under the pressure of similar circumstances, is not by any means so unreasonable as may appear.

In view, however, of the controversial aspects of the question it has been thought better to relegate the discussion of the points at issue to an appendix (*vide* Appendix I) and, in the present chapter, to state the conclusions arrived at without argument as representing an account of the origin and character of the early type of Village Community which at any rate fits the facts. The subsequent history of the Community will then be traced in broad outlines down to the period of the Maratha administration, of which a rather more detailed account will be given, as it was upon the system derived from their predecessors that that of the British was necessarily based.

Early type of Deccan Village Community may conjecturally be depicted as follows :—

The village, then as now, consisted of the village proper and a surrounding tract of country, at first probably without any very accurately defined boundaries, but in course of time, as cultivation extended more widely, those boundaries would be determined and fixed with all the detail described in Manu (Chapter viii, 246, etc.) The village and territory attached was owned by a small body of joint proprietors—called, in the Deccan, *Thalkaris*. The origin of these proprietary bodies is somewhat obscure, but from analogy it may be conjectured that they were the result of the settlement of tribes and clans of invaders from Northern India of Scythian origin who drove their Dravidian enemies before them into the southern districts

\* W. H. Moreland: *The Revenue Administration of the United Provinces*, page 30.

which they now hold. The village proprietors themselves in all probability were the *bhayats* or offshoots of the head of the clan from whom they held their lands on a kind of feudal tenure, not unlike that now existing among the Rajput village in the Ahmedabad district. (If this be the case then the Thalkaris probably correspond to the aristocratic class of Marathas of the present day as distinguished from the humble Kunbis. At the outset the proprietary bodies may have held their lands in common, sharing the produce only, but the facts are uncertain, nor can any determinative evidence be derived from analogy. However this may be, it is certain that, even if held in common originally, the village lands were ultimately sub-divided among the various shareholders, at first into large family sub-divisions, and these again into smaller shares on inheritance, according to the Hindu law.) It seems probable that the village proprietors were, at the outset, like the present-day Rajputs, (averse from agriculture as a degrading pursuit and left the work of cultivation to be done by their vassals, the present-day Kunbis,) corresponding to the Rajput Kardias. The rent paid by these tenants to their landlords was originally a share in the crop collected at harvest time on the village threshing floor. So was the *raj-bhag* or assessment paid to the local Raja, perhaps according to the proportion laid down in the picturesque phrases of Manu—"As the leach, calf and the bee take their food, so must the king draw from his kingdom moderate taxes. A 1/5th part of (the increment of) cattle and gold is to be taken by the king and the 1/8th, 1/6th or 1/12th part of the crops," though "a Kshatriya king, who in time of war takes even the 1/4th part of the crops, is free from blame, if he protects his subjects to the best of his ability". In course of time changes would also occur in the methods of assessment. The old system of taking a share in the actual crop as it lay on the threshing floor affords too many opportunities of evasion and concealment. It was, therefore, improved upon and the amount of the assessment calculated by an estimate of the standing crop, either by the eye alone or, more accurately, by first making a crop experiment.

The employment of such systems as these connote the existence of some rough standards of area which, in the Deccan at any rate, would seem to have been based, not as might have been expected upon superficial extent, but upon productive capacity. Thus, to use a modern equivalent, a guntha would mean a piece of land capable of producing, say, half a maund of grain, and the area of a field of five gunthas in area according



to modern measurement, but which, owing to poverty of soil, would produce only half a maund of grain, would be considered as one guntha only.

(Further, with the growing complication of the administration must have arisen the necessity for a staff of village and district officials—the Desmukh, the Deshpande and the Kulkarni: the Desmukh being the District Governor, and the Deshpande and the Kulkarni the District and Village Accountants respectively. These offices, perhaps, as in Manu, originally appointive, eventually became hereditary like every other office in India.

The first two stages of development took place in pre-historic ages and can only be inferred from the evidence derived from survivals. The third and last stage, however, occurred during the historic period, being almost universally ascribed to the time of the Mahomedan dominion. This stage witnessed the collapse of the Village Community. Unable to undertake the responsibility of the heavy village assessments, now taken in cash, or to obtain rent from their tenants, the landlords were compelled to give up their surplus lands and sank to the position of Government tenants themselves. Nevertheless, they still retained some of their old privileges—social and territorial—under the title of Mirasdars. Their vacant lands fell into the hands of Government which leased them out to tenants-at-will—called Upris—at a yearly rental.)

In the history of assessment the final stage is the substitution of cash rates for payment in kind. The change can only come with the development of a currency system, but, once that has been brought about, every Government dealing with large areas will hasten on the substitution, both to save the cost and trouble of administration, and also to put a stop to the numberless opportunities of fraud and speculation which the crop-share system affords. Cash rates would probably be introduced at first for the assessment of such crops as sugarcane, to which the method of payment in kind is not easily applicable, and were gradually extended till the whole system was one of cash rates.

A necessary concomitant of cash assessments is an accurate system of survey. The originator of the system of surveys and settlements which are the feature of the Mogul period is said by Abu Fazl to have been Shir Khan, the conqueror of Hamayun: It was the genius of Akbar, however, aided by

his famous minister (Todar Mal) which brought the system begun by him to its fullest development. He first fixed the size of the unit of measurement—the *bigha*—and then standardized the instruments of land measurement—the *gaz* or rod and the *tenab* or chain. (The whole of the cultivable lands of the Empire, which included a great part of the Deccan, were then measured in accordance therewith.) The next operation was the settlement of the Land Revenue. The basis of the assessment was the division of soils into three classes by a system of classification. The average produce of each class was then ascertained and the average of these three amounts struck; one-third of this total was then taken and the result converted into a money rate on the average of 19 years' prices and fixed as the standard of assessment. At the outset this assessment was made annually, but, on account of the difficulty of obtaining the annual record of prices, was in the end fixed for a term of ten years.

The account of Akbar's system as given in the *Ain-i-Akbari*—of which the above is a very brief summary—is, it must be confessed, not very clear with regard to details, but the main points are obvious, *viz.*, that the assessment was based upon a land classification and fixed for a term of years. (This system was imitated by Akbar's great contemporary Malik Amber the Abyssinian Minister of the Adil Shahi dynasty of Ahmadnagar, and was carried on by Akbar's successors Jehangir and Shah Jehan, but all counsels of moderation were swept away by the fanatical Aurungzebe, of whose revenue methods Mr. Pringle has left the following account:—"Aurungzebe.. . . . towards the end of this period, having overthrown the Bijapur dynasty, it occurred to him to exercise his revenue talents in the settlement of that part of his new dominions which was situated in the neighbouring taraf of Mohal. This he at first attempted to do by an increase of 50 per cent. of the tankah of Malik Amber, but, before the first year had expired, the return not being, as it would seem, sufficiently large to satisfy the imperial will, the standing crops were cut down and half taken from the cultivators and sold at a high price in the Camp bazar; the sum thus realized from each village, if it exceeded the tankah with the additional 50 per cent., was fixed as the standard for future exactions, and if it fell short of it, the latter sum was confirmed. After that the Emperor decamped, depriving the rayats at once of his custom and his management and leaving the imperial jamabandi as a standard for his successors, in consequence

of a persistent adherence to which the whole country, with the exception of a few of the largest villages, became jungle in less than 20 years.”\*

(The above account carries the history of the Village Community and the assessment down to the beginning of the Maratha period. It is meant merely to shew what was, in all probability, the main course of development. So far as details are concerned, the system of administration in ancient India was essentially local, and it is not to be supposed that progress was everywhere simultaneously in the same direction or had arrived at the same point. Nevertheless, allowing for local variations, the course of evolution seems to have been roughly that described above.

In dealing with the Maratha period, however, ample evidence regarding the general character of their administration exists in the reports of the first British administrators and, as the British system was founded directly thereupon, it is necessary to deal with it in some detail. The history of the Maratha Revenue system may be divided into two parts *viz.*, (i) the early period under able rulers like Nana Fadnavis, (ii) the period of the “farming system” under the last Peshva, Baji Rao.

#### THE EARLY PERIOD.

(Turning first to the Village Community—the cultivators were divided into two classes, *viz.*, the Mirasdars and the Upris.)

The Miras Tenure. As a tenure of land Miras had the following characteristics:—

(i) The land held constituted, what is called in the reports, “private property,” that is to say, it was heritable, and transferable, such transfer being always attested by formal documents witnessed, not only by the Patel and Kulkarni, but also by the old hereditary district officials, the Desmukh and Deshpande.

(ii) The assessment upon such land was theoretically supposed to be fixed, but in practice, as will be shewn subsequently, no such limitations were observed. In fact, advantage was taken of the Mirasdar’s devotion to his ancestral fields to tax him far more heavily than other cultivators.

\* Pringle : *Settlement Report of Mohol*, 1831.

(iii) The Mirasdar had what was practically an inalienable right to the possession of his land ; so much so that he might even leave the village for an indefinite period and omit to pay the assessment upon it, and yet, upon his reappearance, he would be allowed to reclaim his property, even though it might have passed into the possession of another person, nor was he usually required to make up the arrears of assessment.

(iv) In the event of a resident Mirasdar failing to pay his assessment the whole body of Mirasdars was held responsible for the deficiency, though this rule was abrogated if the defaulter had left the village.

(v) Miras lands which were what was called "gatkul" or deserted (from gat = gone and kul = tenant) were at the disposal of Government, either to lease on the Upri tenure or to hand over to others on the Miras tenure on payment of a fee. This power of disposal seems even to have rested with the Patel, though it seems doubtful whether this was not an assumption on his part.

In addition, however, to being a favoured form of Land tenure, Miras was also a source of social distinction. The Mirasdars in fact formed an aristocratic body, having, what is called in the reports, "the freedom of the village." They had the first place at all feasts and festivals ; they had the right also to be the first to receive *pan-supari* on all formal occasions ; and so on. It was in fact these social distinctions which were supposed by a competent observer to constitute the main attraction of the tenure.

(From this description it will be clear that in the Mirasdar is to be seen the descendant and representative of the old Village proprietary body, now sunk to the position of tenants of Government, albeit of a favoured class, yet still clinging with passionate devotion to their ancestral fields.) The existence of this feeling was fully recognized by the Revenue authorities and, according to Wingate, a Mirasdar was hardly ever deprived of his land in any circumstances. At the same time this sentiment was taken advantage of in other ways, Miras lands being heavily taxed in full knowledge that only in the last resort would they be surrendered. Under the administration of rulers like Nana Fadnavis such disadvantages cannot have been felt in full force, and Miras had a saleable value up to, it is said, ten times the assessment, but the oppressive taxes of the farming system fell heavily upon these lands and Miras became practically unsaleable.

(The second class of Tenure was known as the "Upri."

The Upri Tenure. The Upris were mere tenants-at-will, cultivating Government lands at a yearly rental, at the end of which time they were free to resign them and go elsewhere. Having no interest in their lands beyond that of getting the largest profit in the smallest possible time this system of leasing led to slack and wasteful methods of cultivation, the results of which are often deplored in the reports. For the same reason their rates of assessment were considerably lower than those of the Miras lands: so much so that in times of stress, and hence more particularly under the farming system, the Mirasdar was often driven to desert his Miras and take up land on the Upri tenure, though such attempts were always discountenanced by the authorities, who went on the theory that cultivation was not, as nowadays, a matter of inclination, but a paramount duty.)

Turning now to the subject of Assessment, (the settlement of the Land Revenue) was an annual affair and, though practice differed somewhat in different districts, usually consisted of two operations, viz., first, a settlement of the revenue in bulk for each individual village between the Mamlatdar or the Kamayisdar and the Patel, aided by the old hereditary district officials, the Deshmukh and the Deshpande, who were supposed to represent the interests of the rayats, and secondly, a distribution of the amount so agreed upon by the Patel over the holdings of the individual cultivators. The first operation was carried out upon consideration of the general state of the cultivation and crops of the current year in comparison with those of previous years. On this basis a total amount was fixed to be levied from the village as a whole for the year, subject, however, to an implied condition that if the season turned out better or worse than had been expected some addition or subtraction might be made to or from this amount to make up for the profit or loss.

The total Land Revenue of the village for the current year being settled in this manner, the Patel returned to the village and proceeded to make the individual distribution over the various holdings. It was in connection with this distribution that the extraordinary variety of methods of assessment already referred to arose, due to the fact that Government had an interest only in total and not in the individual assessments which were therefore left to the caprice of local and village custom. It is necessary first to note that the assessment

was divided into two main parts, *viz.*, the land assessment proper, which was supposed to be fixed and was imposed directly upon the land itself, and extra assessments over and above the land assessment called *pattis*, a device aimed at increasing the total amount of revenue without outraging the feelings of the cultivators by actually increasing the land tax itself. The land assessment proper was usually a rate fixed upon the local land measures. These varied, however, to a most extraordinary degree, as the following quotation from an early report will shew:—"With respect to the denominations under which land is assessed.....their variety and absurdity demonstrate a wanton bizariness that could scarcely have been looked for in a people reputedly simple and uniform in their opinions and economy..... The tukkeh at Kothol is raised from the rokkeh, each of which is supposed to contain ten bighas or  $7\frac{1}{2}$  acres. At Akolner the tukkeh is composed of suganis, pice and rokkeh, the rokkeh being equal only to  $2\frac{1}{2}$  bighas. At Lakangaon there are ten tukkeh to one phyni, and as the phyni contains 30 bighas the tukkeh here contains only 3 bighas instead of 480 as at Talegaon or 240 as at Ashti. With respect to the mun at Ranjangaon, it is rated at 10 bighas; at Jangaon it is not reduceable to bighas at all. At Parner  $6\frac{1}{2}$  bighas equal one mun. The phyni at Sirol has the chahur of 120 bighas as a referable standard, 4 phyni being equal to one chahur of 120 bighas. At Muhar the phyni of 30 bighas is considered as identical with the kunchi of 20 muns, reducing the mun therefore to  $1\frac{1}{2}$  bighas."\* Comment seems hardly necessary, but it may be noted that the author of the report gives it as his opinion that in the case of the mun at any rate, what was ostensibly a measure of area was really a measure of productive capacity, *i.e.*, that in speaking of 11 muns of land what the rayat really meant was an area capable of producing 11 muns of grain. This explanation would account for the differences observed, as the area of land required to produce this amount would of course vary with different classes and qualities of land.

As for the actual rates of assessment, these varied as much as the land measures themselves. Though Rates of assessment. there was often nominally one fixed rate per bigha—or whatever the local land measure might be—yet the actual rates varied not only with the quality of the soil but also with the crops grown. Further, they were varied to suit the actual condition of the individual cultivators, and a man in poor

\* From a lithographed copy, unsigned.

circumstances would have his land tax reduced till his affairs recovered. In these circumstances it is not possible to give any definite rates of assessment.

Turning now to the second division of the land assessment—the *pattis*, these were extra levies over and above the land tax proper, imposed usually by the local officers. They generally consisted either of commutations in cash for demands of supplies which had originally been levied in kind or of charges which had been made in the first instance to meet some particular emergency, but which had finally settled down into a fixed demand and treated as part of the ordinary revenue. The number of these *pattis* was very numerous, e.g., in the Poona district there were no less than 24 different kinds which were levied in almost every village, while in Ahmednagar the number went up to 26. Most of these are more or less understandable, e.g., *toop patti*, a levy of *ghi*, formerly paid in kind but since commuted for cash; *ambari toga patti*, on account of the privilege of using an elephant *howda*, similarly commuted; *Dasara bakra patti*, for a goat at the Dasara; *lohokur patti*, on account of wool for stuffing saddles; and so on. It is less possible, however, to understand the reasonableness of levying *ad aeternum* such a tax as *Hubshi patti*, originally imposed "to defray the expense of repelling the Abyssinians from the Konkan," or, most extraordinary of all, *kate moranaval patti*, a fine levied from each house by a Mamlatdar whose feet had been hurt by thorns in surveying the village lands. The heaviest of all these *pattis*, however, was the *saudir varied patti*, levied originally to form a fund for bribing the Ministers at court, but afterwards as usual treated as part of the ordinary revenue and audited as such by the official accountants. It is naturally impossible to give any fixed rates for these taxes, varying as they did indefinitely.

In addition to these two main heads there was another large class of miscellaneous taxes which have to be reckoned with: e.g., taxes on cattle, sheep, goats and other animals; house taxes; taxes on various trades and so on, all of which, though not properly included under "land assessment," must be reckoned as such as the real incidence was upon the land. In this connection also reference must be made to the transport taxes levied on grain and other goods passed from one district to another (compare the Chinese "likin") which constituted a very heavy burden on agriculture, especially of course upon remote districts

Returning to the land assessment proper, the series of complications by no means ended with the endless variety of land measures, land assessments, pattis and other taxes. It has already been stated that the old hereditary district officers—the Deshmukh and Deshpande—were allowed to retain their emoluments though their work was done by others. These emoluments consisted of a percentage on the Land Revenue, amounting to as much as 25 per cent. of the whole in some cases, and were, to the confusion of the administration, collected by the individual himself. But in addition to this the remainder was also sub-divided into fractions called (1) sirdeshmukhi, (2) chaut, (3) balti, (4) sahotra and (5) mokassa, assigned to (1) the Government, (2) the Ministers and Sardars, (3) the Pratinidhi, Peshva and Pant Sachin, (4) the Pant Sachin alone and (5) the Sardars alone, which were all separately recognized in the Government accounts and, in case of dispute, collected by each of the claimants individually, the result being “a general struggle in which the rayats were sure to suffer from the violence of the combatants.”\*

Turning to the district organization, the main divisions were under the charge of officers called Mamlatdars in large and Kamavidars in small districts. These large divisions were again sub-divided into smaller areas under Karkuns, and they into charges of four or five villages under Shaikdars. The Mamlatdar was made far more responsible for the revenue than his modern counterpart; in fact, he had to advance half of the estimated revenue for his district before collections began, and the remainder by instalments, but always in advance. So long as he paid the demand he was entitled to make what he could for himself without much scrutiny as to the means employed. Such a system would not of course be suitable to the modern type of administration but need have been none the worse for all that. Under Nana Fadnavis the Mamlatdars were men of position and influence, who were retained in their districts for long periods together, even up to 50 years. They were thus enabled to gain a thorough knowledge of their people, and, while naturally alive to their own interests, were careful not to press the rayat too hard and to adapt their demands to the necessities of the case in a way which even modern Governments, at times, may have reason to envy.

\*The Hon'ble Mountstuart Elphinstone: *Report on the Territories conquered from the Paishwaz*, 2nd, edition, 1872.



## THE FARMING SYSTEM.

Under the last Peshava, Baiji Rao, however, the methods of administration took a distinct turn for the worse. The ordinary revenues of the districts proved insufficient to meet the heavy cost of his wars and the extravagance of his court. The result was the introduction of the farming system which is thus described by Elphinstone :—“ The changes introduced by that system may be described without much difficulty. They were in fact rather aggravations of the evils of the ancient system than any complete innovations. The office of Mamlatdar, instead of being conferred as a favour upon a person of experience and probity, was put up to auction among the Peshva's attendants who were encouraged to bid high, and sometimes disgraced if they shewed a reluctance to enter into this sort of speculation. Next year the same operations was renewed, and the district was generally transferred to a higher bidder. The Mamlatdar thus constituted had no time for inquiry and no motive for forbearance ; he let his district out at an enhanced rate to under-farmers who repeated this operation till it reached the Patels. If one of these officers farmed his own village he became the absolute master of everyone in it. No complaints were listened to, and the Mamlatdar, who was formerly a check on the Patel as the Government was on the Mamlatdar, now afforded him an excuse for tyranny of bearing the blame of his exactions. A man's means of payment, not the land he occupied, were the scale on which he was assessed. No moderation was shewn in levying the sum fixed, and every pretext for fine and forfeitures, every means of rigour and confiscation, were employed to squeeze the utmost out of the people before the arrival of the day when the Mamlatdar was to give up his charge ; amidst all this violence a regular account was prepared as if the settlement had been made in the most deliberate manner.”\* This was the heritage to which the British succeeded, a fact which accounts to a great extent for their first failures recorded in the next chapter.

The account given above relates to the Deccan only, and omits all consideration of Gujarat, the Gujarati, the Konkan and Kanara. In a work of this character it would clearly be impossible to enter into the history of these tracts in equal detail, but fortunately, for all practical purposes, it is unnecessary to do so. A reference to Appendix I, in which the

\* Elphinstone *Op. cit* page 27.

question of the origin of the Village Community is discussed, will shew that the history of the village system of Gujarat apparently corresponds closely with that of the Deccan. As regards the remaining divisions of the Presidency, in the Southern Maratha Country the early British reports note the familiar separation of the rayats into a privileged class called Chali and a non-privileged class corresponding to the Upris. The Konkan is of course Maratha and its history consequently the same as the Deccan.

In these circumstances the assumption of a common original type and a common history for the Village Community over the whole Presidency is one that, on the evidence, may quite reasonably be justified.

With regard to the history of the assessment also the main outlines are the same for the whole, though, as might be expected, details, such as those of local land measures and methods of calculating the assessment, varied almost indefinitely. An account of such details would, however, be of merely academic interest and need not be given here.

## CHAPTER III.

### THE BRITISH SYSTEM OF LAND REVENUE ADMINISTRATION.

#### EARLY PERIOD.

THE leading principles of Revenue administration laid down for the guidance of his officers by the first Commissioner of the Deccan, the Hon'ble Mr. Mountstuart Elphinstone, were "to abolish farming, but otherwise to maintain the native system; to levy the revenue according to the actual cultivation; to make the assessments light; to impose no new taxes; and to do away with none, unless obvious and unjust; and, above all, to make no innovations".\* Within these limitations individual officers were given a very wide discretion as to the actual measures to be adopted. One and all, however, are stated by Mr. Elphinstone to have "kept up the principle of the Rayatvari Settlement"—a phrase which has to be explained, as it is this feature of the Bombay, in common with the Madras, system which differentiates it from all the other systems established in British India.

It will be remembered that the first Land Revenue Settlement carried out by the British in India was the Permanent Settlement of Bengal, made by Lord Cornwallis in 1790. The main object of this Settlement was the introduction of the English Landlord system which the Governor-General, in ignorance of the actual conditions of the country, had determined was the panacea for all agricultural evils. Accordingly, individuals, some with perhaps some sort of title, others without any sort of title whatever, were sought for and set up as landlords of estates, the Land Revenue of which was then settled in perpetuity. It was expected by the Governor-General that the result of his system would be the creation of a body of loyal, contented and intelligent landowners who would not only be a source of strength to Government, but would also, like their English counterparts, take an interest in their estates to the improvement of the condition, not only of their lands, but also of their tenants, the cultivators. But these brilliant anticipations were doomed to early disappointment. The new landlords, so far from making improvements,

\*Elphinstone: *Op. cit.* p. 30.

proceeded to rackrent their unfortunate tenants to the utmost limit. At the same time, Government, having no direct interest in the land and the cultivators, found it difficult to obtain any real and detailed information regarding the condition of the agricultural population or the resources of the country. It was at this juncture and as a reaction from the Permanent Settlement, that Colonel Read introduced his Rayatvari system into the districts of Barambol and Dandigul of the Madras Presidency in 1793. The main principle of this system was that of direct relations in revenue matters between Government and the cultivators as compared with the Landlord system by which Government deals with a middleman. It was proposed to base this system upon a complete survey and assessment of the cultivable lands, and it was claimed that, in this way, Government would obtain a view of the resources and condition of the districts impracticable under the rival system. It was also claimed that the direct dealing of Government with the rayat would ensure to the latter the justice and consideration which it seemed impossible to expect from the Zamindar. These ideas of Colonel Read were enthusiastically taken up and given wide currency by Sir Hector Munro, the father of the Madras Revenue system.

This is not the place to enter into a discussion of the relative merits—apart of course from the question of a permanent or non-permanent settlement—of the Landlord and the Rayatvari systems. Each has its own peculiar problems. The former system always has to face the main difficulty of (tenancy legislation,) but on the other hand Government is saved a vast amount of troublesome and detailed work by the fact that the responsibility for and the collection of the Land Revenue lies in the hands of a comparatively small body of persons. The latter, while escaping the problems connected with tenancy legislation, has to solve the difficulties inherent in a system under which the administrative officers of Government have to deal direct with the small revenue accounts of the large body of individual cultivators, a difficulty which increases with the growth of the population and which, as will subsequently appear, has only lately been faced in Bombay.

At the period now under consideration, however, sentiment was decidedly in favour of the Rayatvari system, and it is not surprising that the early British administrators of Bombay decided upon its introduction into the newly acquired territories.

The keynotes of the new administration, therefore, were to be no changes, except for the reformation of abuses, and low assessments accompanied by the introduction of the Rayatvari settlement. The introduction of such a system might surely be expected to have been accompanied by a rapid and permanent increase in the prosperity of the agricultural population. But, so far from this being the case, it was possible after nearly 20 years of an administration supposed to have been conducted on these principles, to describe the general condition of affairs in these melancholy terms which, though originally applied to Coimbatore, were equally applicable to the Deccan:—"After so many years of peace and plenty it is lamentable to find the revenue less secure, the people less respectable and perhaps intelligent, the servants less to be depended upon, and private rights not more certain and secure than when the Province first came under the Company's government."\*

It is not possible here to go fully into the causes which led to this unhappy state of affairs, as that would entail a detailed inquiry into the history of the various divisions and districts. But the main general causes, partly administrative and partly economic, of failure to realize the early promise, seem to have been the following. First and foremost, there is no doubt that in the early years of the British administration the Deccan was far too highly assessed—a circumstance sufficient in itself to account for the greater proportion of the evils enumerated. It is somewhat strange to find this feature of over-assessment, when one of the chief principles laid down by the Chief Commissioner was that the assessments should be low, but the conditions were so complex that it is hardly a matter for wonder if the administration went astray.

In the first place, from the cultivator's standpoint a state of war and the presence in the field of the Maratha armies had distinct advantages, for two reasons: firstly, the resultant high price of grain, and secondly, the reduction of the agricultural population. The first effect, caused by the large demand, though felt of course more especially in the vicinity of large camps and the Court at Poona, reacted beneficially over the whole country. The second effect was due to the fact that the Maratha armies were largely composed of men who, attracted by the prospects of plunder—always the main object

\* Thackeray: quoted Briggs' *The Present Land Tax in India*, 1830, p. 309.

of the Maratha raids—had given up agriculture for the more lucrative profession of a soldier; indeed, in the vicinity of Poona there was hardly a family but had one or two of its members thus serving. The effect of their absence was felt in several ways. While the increase of the Maratha forces raised the demand for grain, the decrease of the agricultural population reduced the supply, the result of course being a rise in price. Again, the remittance from the camps to the villages of a share in the loot further increased the wealth of the country and so tended to raise prices to a still higher degree.

It is not of course to be supposed that the Maratha Governments were unaware of this increase in prices, and under the title of the *kamal* rate the assessments were raised to a far higher level than had existed before the war, more particularly in the districts situated in the neighbourhood of Government head-quarters at Satara and Poona. In the more remote districts, e.g., Bijapur and Pandharpur, where supervision was far more lax, the assessments were on a correspondingly lower scale.

With the close of the war and the advent of peace these conditions automatically ceased to exist. The military camps and the court at Poona were broken up, the stream of wealth was stopped at its source, and the soldier once more exchanged his sword for the reaping hook. The result of this swelling of the agricultural population was of course an immense increase in the supply of grain. But the disappearance of the camps and the Court simultaneously decreased the demand for grain for purchase. The occurrence of either of these events would in itself have been sufficient to ensure a large drop in prices. Combined, they naturally produced a double effect and prices fell like a stone, and, though several famine years followed, never regained the height reached during the wars.

The natural accompaniment of such a fall in prices should have been a corresponding decrease in the rates of assessment. Such action was not, however, taken by the British administration, the result being the state of over-assessment referred to. It is easy of course to be wise after the event and to censure those responsible for allowing such a condition of things to exist, but before doing so it is necessary to realize the difficulties inherent in the situation. In the first place, the first Collectors were, ordinarily, military officers without experience of the extraordinarily complicated Revenue system which they found themselves called upon to administer. Even so, a large part of their time was taken up with political and

police duties arising out of the late troubles. Both these circumstances led to the administration of the Revenue system being entrusted largely to Indian subordinates and those not of the best class. The native agency, from the Kulkarni upwards, had in fact been utterly corrupted by the influence of the farming system under which "common honesty was not expected of any Mamlatdar". So unreliable indeed were they, that a large number of the first Mamlatdars under British rule were imported from Madras, *e.g.*, for the Southern Maratha districts, where no less than 21 out of 22 were of this class—a circumstance which, while it doubtless conduced to greater honesty in the administration, was regrettable in that it introduced a second grade of high officials knowing little of the country or people.

With a new race of inexperienced officers it was no wonder if mistakes were committed, but even with the best will in the world it would have been difficult to discover what the land assessment should be. Firstly, there was the absence of all correct accounts, due to the pernicious heritage of the farming system, which precluded all attempts at gaining accurate knowledge. True, the Kulkarni was usually ready to produce accounts on demand, but they were almost invariably false, and, as such, worse than useless, as only calculated to deceive. Secondly, there was the extraordinary variety of the land measures and methods of assessment, examples of which have already been given, which must have rendered the introduction of a real Rayatvari system a matter of sheer impossibility without an accurate survey and radical changes in method. In fact, there is no doubt that the new system, though nominally Rayatvari, was really the old system under a new name. This is definitely stated to have been so by the second Commissioner of the Deccan (Mr. Chaplin) and is evident from the instructions given by him in 1822 regarding the methods to be adopted in making the annual revenue settlements. Two alternative methods are prescribed—(i) the old system, according to which the village was to be settled for in bulk and the total arrived at distributed over the individual holdings, and (ii) by which the individual settlements were to be made first and added together to make the village total. The employment of this second method, however, is deprecated on account of the interminable quarrels and delay which is stated to be the inevitable result of all attempts to settle with the rayats individually. Hence the former is recommended for general adoption. This system was that of the Marathas with the added precaution that the

Sub-divisional officer and the Mamlatdars were supposed, after settling the village total, to fix the contributions of the rayats also. There is no need to go into these instructions in detail, but a few points call for attention. In the first place, a vivid light is thrown upon the difficulties of settlement by the precautions ordered to be taken to guard against the malpractices of the Kulkarnis who seem to have been masters of the situation. They are said to deceive by omitting to note cultivated lands ; by neglecting to shew the correct rent rates, quit rents, pattis, etc. ; by entering the Patel's lands at low rates, Government land as inam, arable as grass and so on. In order to induce the rayats to divulge the tale of these nefarious doings the Commissioner prescribes various kinds of rewards and punishments to be offered to them and rival village officers. Again, in distributing the village total over the holdings it is directed that the circumstances of individual rayats are to be taken into consideration, but as the rayats themselves are the only persons with the requisite knowledge they are again to be bribed and threatened into disclosure. Small wonder if a Revenue system which depended upon the goodwill of the Kulkarni and alternate cajolery and threatening of the rayats was not a success.

But while the working of the system thus lay in the hands of subordinates, these subordinates themselves had a direct interest in raising the rates to the highest possible limit. For the inevitable accompaniment of impossibly high assessments was a pernicious system of annual remissions which, while overloading and complicating the accounts, did not really benefit the rayats, as the sums nominally remitted were collected by the subordinates themselves and went into their pockets. In these circumstances it is not surprising if over-assessment was the rule and that the settlement of the Land Revenue became " a struggle the whole time between the rayats and the Revenue officers, to keep up revenue on the one hand and to evade payment on the other ".

In addition to the main factor of over-assessment and its accompanying evils, one other circumstance must be mentioned, which, as Wingate remarked, " perhaps as much as the weight of the assessment itself, has contributed to reduce the cultivators to their present state of poverty and wretchedness and to occasion the slovenly, inefficient system of cultivation now prevailing ". This was an idea, which seems to have been current among the Revenue officers of the day, that the



criterion of administrative efficiency was to be found in a nominally large rent roll and a wide extent of cultivation irrespective of other circumstances. The consequence was that "the district and village officers have been accustomed to use every expedient, whether of persuasion or intimidation, to prevent land being thrown out of cultivation, and this with little or no regard to the means of the cultivator who, upon sustaining any reverse, such as mortality among his cattle, has been obliged to retain the same quantity of land under cultivation and to pay the same revenue when no longer able to raise the same quantity of produce" \*.

It early became evident that the only remedy for this impossible state of affairs lay in the introduction of a true system of Rayatvari settlement, based upon a proper land survey, accompanied by an assessment of the Land Revenue upon certain fixed principles, understandable by the higher grades of Revenue officers upon whom, as always in India, everything depends; and the sweeping away of the unintelligible complications of the old system. As Mr. Chaplin observed so early as 1822, "Without it I fear the fluctuations in the rate of assessment of land may prove very prejudicial to the rayats whose rents from not being defined by any authentic accounts are liable to be raised or lowered by an arbitrary standard at the discretion of the local officers, who owing to inexperience and sometimes to insufficient information make sudden innovations, from which either injustice to individuals or an uncalled for sacrifice of revenue is almost sure to result. A survey must always be the proper groundwork for a proper Rayatvari settlement. When the value of each field is fixed and the account methodised any Collector of the most moderate capacity may make the settlement; and all intricate perplexing scrutinies hereafter rendered unnecessary".† Various independent attempts were made by local officers to carry out such a system, notably by Mr. Thackeray in the Southern Maratha Country, but it was impossible that such a large piece of work should be carried out by Revenue officers in addition to their already multifarious duties. The only possible solution was the appointment of a special officer to work out a system on definite principles capable of universal application. And in 1827 such an appointment was at last made, and Mr. Pringle,

\* Paragraph 20 of Lieut. Wingate's Report No. 139 of 4th August 1838: SS. Indapur No. CLI, page 112.

† Chaplin: Report of 20th August 1822.

the Assistant Collector at Poona, placed on special duty to devise a system of survey and settlement for the Poona and surrounding districts.

It would be beyond the province of this book to give any detailed account of Mr. Pringle's system, for which the reader is referred to Volume II pp. 101-109 of Mr. Roger's *Land Revenue of Bombay*. Briefly, it comprised two main operations—(i) a survey of all the cultivable lands field by field, and (ii) an assessment of every field so measured. As regards the first operation—the fields measured seem to have been the subdivisions of the old ancestral shares already referred to, which were reckoned as 'fields' in the Kulkarni's accounts. As such, these fields were subject to no standard of area and might be of any size from 100 acres downwards; nor would each necessarily be in the possession of one occupant only, but might be held jointly by several joint occupants. The measurement itself was done by chain (of 16 annas=33 feet) and cross staff, and the standard of area was the English acre with its subdivision the guntha, the guntha being a square the size of which equals 1 chain or 121 square yards, 40 gunthas making 1 acre.

The second of these operations, viz., the field assessment, was a highly complicated measure which it is exceedingly difficult to describe in a few words. In brief, Mr. Pringle based his system on the theory that the relative capacity of different classes of soils to bear assessment is in proportion to their average *net produce*, meaning by this expression the surplus of the gross produce which remains after deducting the cost of cultivation. His first measures therefore were (i) to divide the soils he met with into classes, (ii) to ascertain the average gross produce of each class, (iii) to discover the average cost of producing this amount, and (iv) to find the "net produce" of each class by deducting (iii) from (ii). The result of these calculations would be to give him a scale in terms of "net produce" which would express the relative assessment-bearing capacity of each class from the highest to the lowest, as the surplus over the cost of cultivation varies of course with the productive quality of the soil. As for (i), the number of soil classes varied locally but were usually fixed at nine, (ii) the average gross produce of each class was determined by local inquiry from the rayats, crop experiments, etc., (iii) the cost of cultivation was calculated in the most extraordinary detail, including not only the expenses of labour, seed, bullocks, etc., but also such items as

insurance against loss of cattle, fees to artificers and even the cost of propitiating the local deity at harvest time. So minute in fact were these inquiries that some of the *kaifiats*, as they were called, ran to rolls of paper 30 yards in length. The average gross produce was then converted into money at an average of prices for past years, and the net produce found by deducting the cost of cultivation.

The next operation was to place each field in one of the soil classes, the place of a field containing more than one class of soil being determined by the average. The total area of each class of soil contained in the village could then of course be found by adding together the areas of the individual fields placed in that class.

Next, the total area of the cultivable lands was reduced to acres of the first class in accordance with the "net produce" scale *e.g.*, if the net produce of the first class was Rs. 16 and of the fourth Rs. 4, then 4 acres of the fourth class would be counted as 1 acre of the first class. This "reduction" was carried out, not only for the year in which the survey was made, but also for past years, by a series of, it must be admitted, very dubious calculations, the result being to express the cultivable area for all those years in acres of the first class.

Lastly the revenue collections for each of these years were calculated from the Kulkarni's books and the total so discovered divided by the acreage found by the method given above. The result was the assessment for an acre of soil of the first class for each year, and the average of these assessments gave the final average assessment of an acre of such soil. The average assessment of the soils of the other classes could then be found by the proportions of the "net produce" scale. The assessment of any particular field would then be the area multiplied by the acre rate of the soil class in which it was placed.

By an extension of operations conducted on these principles over a wide area, and by constant check and mutual comparison of the results with the figures of net produce, Mr. Pringle believed that he would be able to arrive at standard rates by which the assessments could easily be regulated. They were then to be guaranteed for 30 years, the old system of annual settlements being, of course, automatically done away with.

A survey and settlement conducted on these principles was extended over the whole of the Poona and several surrounding districts. Unfortunately, however, for the hopes with which it was started the result

Causes of failure.

was failure. The assessments could never be collected and the old system of annual remissions with all their attendant evils again came into force. Further, the survey itself was found very defective and vitiated by fraud; in fact, several of Mr. Pringle's subordinates were criminally prosecuted and convicted. Apart from this, the main causes of failure seem to have been:—

(i) the impossibility of proper supervision by only one European officer over the very large body of subordinates serving under Mr. Pringle;

(ii) the extremely intricate nature of the inquiries attempted. These inquiries were made by Brahmins without any kind of agricultural experience and must have been impossible of check by Mr. Pringle;

(iii) the failure to realize that what was essentially needed was a large reduction of the assessments. It is true that such reductions were made in some cases, but in others great enhancements resulted;

(iv) the occurrence of a series of famine years which put the finishing touch to the fate of this unfortunate experiment.

Yet in spite of failure Mr. Pringle's settlement was not entirely void of good results for the future. These were:—

(i) the introduction into common use of the English acre as the standard land measure;

(ii) the practical introduction of a common tenure by the abolition of all real difference between the tenure of the Mirasdar and the Uprī. By basing the land assessment upon the value of the land itself and not as heretofore upon the status of the holder and by guaranteeing the rates for a long period, Mr. Pringle to all intents and purposes did away with all the old distinctions between the two and so prepared the groundwork for the more definite "survey tenure" which was to come with the new system;

(iii) the disappearance of the old order of things with its complications of patts, local land measures, local assessment etc., was in itself of course an enormous step in advance, the importance of which can hardly be over-estimated.

In 1836, finding the condition of the Revenue administration going from bad to worse, and all attempts to make Mr. Pringle's system a workable measure having failed, Government came to a reluctant conclusion that the whole operations would

Origin of present system of settlement.

have to be commenced *de novo*. Mr. Goldsmid of the Civil Service, aided by Lieut. Wingate of the Engineers as a survey expert, was therefore directed to commence operations in Mohul and Madha of the Poona district. This was the commencement of the present system which from these small beginnings was in the course of time to be extended over the whole of the Presidency.

With regard to the remaining districts of the Presidency it is unnecessary to go into a detailed account of their Revenue administration under the British. It may, however, be mentioned that this history differs to a considerable degree from that of the Deccan. Particularly was this the case in North Gujarat where, under a succession of able officers such as Williamson, the districts were so prosperous that Mr. Elphinstone in 1822 expressed grave doubts as to the wisdom of introducing a survey on the ground that it might, by upsetting the existing arrangements, tend to subvert this prosperity. At the same time there is no doubt that, judging by present standard, the assessment was both high and also unfair in its incidence owing to the extraordinary way in which, as Mr. Elphinstone remarks, the rates varied even in neighbouring villages. Further, the system of calculating and levying the assessment was complicated in the extreme and differed in almost every village. As an instance of these complications the "dbara" or Revenue statement for 1824 of the head-quarter town of Prantij in the Ahmedabad district, taken from the survey report of Lieut. Melvill, will be of interest, and is therefore given in Appendix II.

As for the southern districts of Gujarat, their revenue history is not by any means so prosperous as that of the North, particularly in the case of the Surat district, "the present condition" of which Mr. Elphinstone reported in 1821 to be "very much depressed". The cause of this depression he states to be "the extreme heaviness and inequality of the assessment. . . . The bighoti doubles that of Broach and the Government share appears by the Talati's books greatly to exceed half the produce."\* In the Broach district he remarks that the custom "was to take half the money produced and leave the rest to the rayat."

It is needless perhaps to add that improvements were made from time to time by different officers, but these were purely

\*Elphinstone : Minute of 5th April 1821 : quoted Briggs, *Op. cit.* p. 332.

local efforts and effected no permanent change worthy of record. Surveys also were tried and, commencing with the Broach district in 1811 under Colonel Monier Williams, the whole of the Ahmedabad, Kaira and Surat districts were surveyed in turn. The work in Kaira and Ahmedabad was carried out by Captain Cruikshank and Lieut. Melvill and the survey reports written by these two officers are invaluable for a true understanding, not merely of the revenue system, but also of social conditions in Gujarat in the early part of the 19th century. But the practical effect of these surveys was small, firstly, because the original survey was not stereotyped by the erection of boundary marks and therefore quickly ceased to correspond with conditions in the field, and secondly, because they were not accompanied by a settlement of the Land Revenue.

The history of the Konkan is much the same as that of Gujarat, though in the case of a large part of the Thana district the settlement effected by Mr. Davis in 1836-1838 by reducing the revenue demand from 30 to 17 lakhs, effected an enormous improvement in the condition of the cultivators.

For all parts of the Presidency in fact the same story might be repeated of local effort and its general failure to make any permanent improvement but, attention may be more profitably directed to the history of the system of Survey and Settlement which finally swept away all local anomalies.

## CHAPTER IV.

### COMMENCEMENT AND FIRST DEVELOPMENT OF THE NEW SYSTEM.

THE success of the new system, inaugurated in Indapur by Goldsmid and Wingate, and hereafter to be described, was extraordinary. Results of the new system. Cultivation increased enormously; the total revenue demands rose in spite of large decreases in the individual assessments; while at the same time the arrears were never so low. The land acquired a value which it had never possessed before and was eagerly taken up by the very individuals who under the old, bad system had been the first to desert it.

Causes of these results. These results were due mainly to the following causes:—

(i) The first principle and the foundation of success was that of "moderation in demand". Both Goldsmid and Wingate had grasped the principle which, though so obvious nowadays, was then hardly realized, that a fixed money assessment, in a country like India, must be studiously moderate if it is to be regularly collected and the necessity for constant remissions and resultant peculation done away with. They also saw that a low assessment, by allowing the land to yield a rent, would lead to the creation of a valuable property and the accumulation of agricultural capital to the advantage both of the rayat and Government. In pressing this policy upon Government they were backed by a powerful advocate in Mr. Frazer-Tytler, whose influence, as Mr. Stewart remarks, "did much to pave the way for the present Bombay system of settlement". As that officer urged in submitting his proposals for the settlement of the Nasik Dangs: "We cannot possibly err on the side of lowness of assessment as regards the ryots, and total exemption would be the furthest point to which we should go, had we solely their interests to look to. In framing an assessment therefore, in which the well-being of the ryots is what we have in view, the question becomes—What is the utmost Government can let them have? and not—What is the utmost they can let Government have? Hitherto the latter question has unfortunately been too

often considered : and it is one which it is utterly impossible to settle with nicety, without rendering the ryot liable at any time to be called upon for more than a fair share of his profits in the soil. How much can Government let the ryot have ? does not appear so difficult a question. It may sometimes be a struggle to be generous, but it always meets with its return ; and it is now generally allowed, that to yield much to the ryots is to receive much from them. All reason and experience lead to this conclusion and we have lately had practical proof of it. The interest of Government then, as well as that of the ryot, leads us to lowness of assessment. Give as much therefore to the ryot as Government can spare, and take only as much as the present necessities of the State demand, ought, it appears to me, to be the standard of our revised assessment."\*

(ii) An extension of the same principle was the guarantee of the assessment for a long period of years. It will be remembered that Mr. Pringle had intended to guarantee his assessments for 30 years, and the adoption of such a period of guarantee was now strongly urged by Wingate on the ground that the consequence would be a great stimulus to agricultural enterprise, as the rayat would get all the benefit of improvements made by himself to his holding over a long term, and thus would be encouraged to employ his capital in full security that the benefits would be ensured to himself.

(iii) The settlement of the assessment upon clear and simple lines as distinguished from the detailed and complicated methods of Mr. Pringle.

(iv) The concurrent settlement of rights in land and the gradual introduction of one form of tenure.

(v) The insistence from first to last upon direct and strict supervision of every operation by European agency. Instead of trying to emulate Mr. Pringle's *tour de force* in taking the whole burden upon his own shoulders, the work was now to be done by small bodies of subordinates under the direct control of a European superior. These were at first usually military officers—"only one of the many

\*Paragraph 68 of Mr. Frazer-Tytler's Report of 19th April 1841 : SS. No. CCXVIII Igatpuri, p. 66.



occasions" as Sir Bartle Frere remarked "on which the Government of India has been indebted to the army for officers who had rendered the most effective aid in the general administration of the country."

(vi) The stereotyping of the survey and settlement of field boundaries by the erection of official boundary marks without which the whole of the survey work would be in danger of being rendered useless owing to the changes in field boundaries.

But the first Survey Officers were by no means content with confining themselves to the assessment of the Land Revenue. Their duties brought them into the most intimate and everyday contact with the village life, and in reading the old Settlement Reports it is impossible to avoid being struck with the knowledge of and the sympathy with the people therein displayed. Especially was this so with the first of the race who, taking up their task at a time when the whole cultivating class was sunk in the apathy of despair and when the revenue administration was a chaos, saw the fruit of their labours in re-populated villages, extended cultivation, and the creation of wealth and property, in agricultural land combined with a large increase in the public revenue. In truth, the first Survey Officers regarded themselves, not simply as men engaged in technical and laborious operations, but as reformers in every sense of the word. With such views they used their exceptional local knowledge to ameliorate local conditions in every possible way. Thus, with miserably inadequate resources, amounting at times to grants of not more than Rs. 5 per mile, they set themselves to improve the country tracks which, often encumbered as they were with rocks and boulders, constituted the only routes of communication in those primitive days. Projects for new roads, bridges, railways, etc., were also forced upon the attention of Government, not to mention proposals with reference to irrigation and drainage works, and even education and sanitation. Thus, to Lieut. Davidson is apparently due the credit of being the first to suggest the establishment of a system of village schools, which he did in making his Settlement Report for the Mohol taluka of Sholapur in 1839 by proposing what was virtually a cess for educational purposes to be employed in setting up such schools. The realization of this idea was, however, to come later on, as the Government of the day, while agreeing with the suggestion in principle, decided that it would be "premature to adopt and act on the scheme, however philanthropic and praiseworthy it may appear, without more experience of the new settlements, on the successful working of which it would, in a great measure,

depend." To the survey, again, is due the credit of the first attempt at an accurate census of the rural population. But perhaps the greatest of all their achievements, and that one for which credit is rarely given them, was the creation of the present type of Deccan cart. In 1840 the only country carts were large, lumbering contrivances, with wheels of stone and so heavy that it took 8 or 10 bullocks to draw them, and so precious that they remained as heirlooms in families for generations. In fact, during the course of a tour of the districts between Poona and Sholapur, lasting 5 months, Sir Bartle Frere saw only 3 carts. Lieut. Wingate set himself to remedy this state of affairs and produced the first of the new type in Sholapur; this was subsequently improved upon by Lieut. Gaisford, and finally evolved into the now familiar Deccan cart. As might be expected, it was at first looked upon with contempt as an impious innovation, and no carpenter could be found to undertake repairs, but, needless to add, its obvious merits soon won for it the place it now occupies in rural economy.

Turning now to consider the new system of settlement in detail, the measures adopted at the outset

The system of Survey and Settlement.

were on an exceedingly simple scale. The survey work was confined to a test of Mr. Pringle's measurements which were accepted when found on examination to be within 10 per cent. of the truth. The acre was adopted as the standard and the Kulkarni's field as the unit of measurement. No attempt was made to produce maps, the areas of the fields only being ascertained and a descriptive record of their boundaries prepared.

Assessment.

The assessment work was of course re-done *ab initio*, but the complications of Mr. Pringle's system were avoided. Indapur consisted almost entirely of lands bearing dry-crops, such as *jowari*, *bajri*, etc., without the assistance of irrigation, whether from wells or water channels (*páts*). In such areas productive capacity depends mainly upon the natural fertility of the soil. Hence the determination of the relative value of fields for assessment purposes was made to depend upon this factor of "natural fertility". For this purpose soils were divided into three orders, *viz.*,

1. Black soils,
2. Red do.
3. Gravelly do.

so arranged in order of fertility. Each of these orders was then sub-divided into three classes, *viz.*, 1st Black, 2nd Black,

3rd Black ; 1st Red, 2nd Red and so on, making 9 classes in all. Exactly how each of the sub-classes in each order were distinguished is not quite clear, but probably a pure soil of the order would be classed as 1st Black ; a soil of the same order, but wanting in depth or purity, as 2nd or 3rd Black in accordance with the extent of the deficiency ; and so with the other two orders.

Each class of soil was then given an assessment rate per acre, which rates were at the outset expressed for the purpose of ease of manipulation in *reas*, a Portuguese coin, 25 of which went to the anna. The original scale was as under :—

1st Black	300	reas	=	12	annas.
2nd „	240	„	=	9	„ 7 pies.
3rd „	170	„	=	6	„ 10 „
1st Red	200	„	=	8	„
2nd „	130	„	=	5	„ 2 pies.
3rd „	75	„	=	3	„
1st Gravelly	100	„	=	4	„
2nd „	60	„	=	2	„ 5 pies.
3rd „	35	„	=	1	anna 5 „

In order to determine the assessment of any particular field in accordance with this scale, trial pits were first dug in various portions of the field and the quality, depth, etc., of the soil examined in each. The average acre rate was then found by multiplying the shares of each class by its rate according to the scale, adding up the total and dividing by the total number of shares. Multiplication by the area would then give the assessment of the whole field. The following example will explain the process :—

Suppose a field with an area of 3 acres were found on examination to contain three shares of 1st Black soil, two shares of

2nd Red and four shares of 1st Gravelly. Then the assessment would work out as follows:—

Soil.	Shares.	Total reas.
1 Black .. ..	3	900
2 Red .. ..	2	260
1 Gravelly.. ..	4	400
Total .. shares	9 reas.	1,560

Average rate  $\frac{\text{per share}}{\text{per acre}} = 173 \text{ reas.}$

Hence for the whole field of 3 acres the assessment would be reas 519, or, at 25 reas to the anna, Re. 1 annas 5.

These proceedings involved two very delicate operations, *viz.*, firstly, the determination of the relative value of the nine classes of soil, and secondly, the fixing of the actual assessment rates—both of which were performed by one and the same operation, as the acre rates express both the relative value of the soils and also the rates of assessment. In Mr. Pringle's Settlement the relative values of soils had been fixed according to the "net produce" scale after a series of most elaborate calculations, the acre rates being also settled by a similarly elaborate process. But the authors of the new system, discarding such methods as only calculated to confuse and mislead, preferred to trust rather to their own judgment and such skilled advice as could be obtained. To quote the Indapur Report\* :—"By visiting fields of each of the nine classes of soil and determining with the assistance of those best skilled in agriculture and by the judgment and knowledge they themselves possessed what assessment, after taking into consideration the uncertainty of rain and all other circumstances, an acre of each sort of soil could bear, and applying rates thus fixed to returns prepared and checked with the greatest care of the quantity of soil of each sort existing in each field, Messrs. Goldsmid and Wingate succeeded in preserving in the assessment the true principle of assessing each field at what it will bear whilst they adopted a plan compatible with speed of execution". This was, it must be

\* SS. No. CLI, New Series, p. 89.

admitted, a somewhat indefinite process, but at the same time was all that, in the circumstances, was humanly possible, and the confidence thus reposed in the judgment of these two officers was amply repaid by the wonderful success of the resultant settlement.

Indapur being almost entirely a dry-crop taluka, the methods described above covered practically the whole of the area for settlement. There were, however, a certain number of fields irrigated from wells, which were assessed by assigning a certain number of acres as the irrigable area to each well according to its capacity, and then fixing a rate of Rs. 2 per acre on the well, leaving the shares in the well, if more than one, to divide the amount among themselves. It is interesting in view of later history to note that the Collector of Poona, in commenting on these proposals, protested against this well assessment as a tax upon industry, but was overruled by Government.

The total assessment of the Indapur taluka as settled on these principles came to Rs. 84,000—a sum which, although not ostensibly worked out on any theoretical principle, was given a theoretical justification in the following way. The *kamal* assessment under the Marathas amounted to Rs. 2,28,000 and this is stated to have been a commutation for 5,472,000 *shers* of grain at a price of 24 *shers* to the rupee. Now, the price of grain for the two years previous to the new settlement was 66 *shers* to the rupee, at which rate Rs. 84,000 was a commutation for 5,444,000\* *shers*, an amount closely corresponding to the grain basis of the Maratha settlement. But, theory or no theory, the new assessment was an enormous reduction from that of Mr. Pringle which had amounted to no less than Rs. 2,00,000 although the total of the collections from the taluka in any one year had in no case exceeded Rs. 48,000 during the period of the Company's rule.

The last important question for decision was the period for which the assessments were to be guaranteed. Government had at first decided that the term should be ten years, but Lieut. Wingate pleaded for a longer period in the following terms:—  
 "Government has already determined that the present settlement should last for ten years; but I would respectfully submit that this is much too limited a term to admit of the resources of the people being greatly increased, or to hold out much

\*The figures 544,000 of the printed Report are obviously erroneous.

inducement to undertake permanent improvements involving any considerable outlay of capital. It would tend indeed to retard rather than to advance such objects, by creating a distrust of our intentions at the expiration of the term an apprehension of the assessment being then raised in proportion as the land had increased in value, which would effectually prevent any expensive improvement. Besides a better system of tillage which may be hoped for from a moderate assessment, the most general improvements likely to be undertaken are the construction of wells and *bunds*, with the view of converting *jirayat* into *bagayat* land, both of which, however, require in general an expenditure of capital which it would require many years to repay. The most certain way of giving an impulse to agricultural industry and attracting capital to the improvement of land would be to create a private property in the latter by declaring the present settlement to be permanent; but should Government be averse to compromising its claims to such an extent I would strongly advocate the policy of extending the present term to a period of at least 30 years, which would afford time for the renovation of the dilapidated resources of the country, and hold out to the cultivator a fair prospect of obtaining an adequate remuneration for any outlay he may feel inclined to make in the improvement of his estate. Such a term would secure many of the advantages of a permanent settlement, and by rendering land saleable tend to bring it into the possession of people of capital and thus check in some measure the continued subdivision of property arising from the laws of inheritance, which threaten to retain for ever the cultivating classes in the position of mere labourers, and to prevent the accumulation of wealth with its attendant advantages of an extension of commerce and manufactures.”\*

The arguments put forward with such ability and foresight proved successful and the term of guarantee was fixed at 30 years—a period which was subsequently accepted as the standard term for the duration of Bombay Settlements.

The result of the new assessment was a marvellous increase in the prosperity of the taluka. The cultivated area went up by leaps and bounds, and in the second year of the settlement the collection rose to Rs. 50,000, a sum which exceeded by Rs. 2,000 the collections in any previous year in spite of the great reduction in the assessments. Yet, while the revenue was thus substantially increased, a fertile source of corruption was done

---

\*SS No. CII, p. 110.

away with by the almost entire absence of any need for remissions, hitherto the bane of the administration.

This striking success amply justified the extension of the system to the neighbouring talukas and districts, the natural result of which was the acquisition of experience and the consequent introduction of many great improvements into the somewhat crude methods adopted at the outset.

Progress of the new system.

### SURVEY.

The inconvenience of keeping a merely descriptive record of field boundaries soon became evident, and to this was therefore superadded a *rough sketch map*, shewing the relative position of the various fields within the village boundary. A great stride forward was next made in 1839 at the suggestion of Lieut. Davidson, when for the sketch map was substituted a *scale map*, by plotting the individual fields to scale separately from the measurements and then transferring these plotted sketches to one sheet by tracing paper, thus forming a village map which, though it would not have satisfied the Survey's later requirements, was a vast improvement upon anything that had been in existence before.

Maps.

An equally important adjunct to the survey was the erection of official boundary marks to the fields measured. These were essential, as in their absence the continual changes due to encroachments, division, etc., would in a short time have resulted in a complete failure in correspondence between the survey measurements and the facts as found in the field. This indeed actually happened in the case of Mr. Pringle's survey, for as, Wingate states, "after the lapse of 10 years only, a very large proportion of the boundaries of fields laid down at the survey has been changed or wholly obliterated". At first an attempt was made to secure this object by inspection at the ploughing season and a system of fines for the obliteration of the original boundaries by the rayats, but the impossibility of carrying out the enormous amount of inspection involved soon rendered this system of no effect and led finally to the evolution of an official mark, easily recognisable and easily preserved. This was at first a narrow mound of earth circling the whole field, a species which was soon, however, found both too troublesome and too expensive. Hence in 1840 the low, narrow mound enclosing the field was

Boundary marks.

reduced to the large, broad earthen mound pointing the boundary of the field at the corners and supplemented on long boundaries by similar mounds at intervals, a type which still remains the characteristic mark of the Bombay survey system. This improvement also was due to Lieut. Davidson.

#### ASSESSMENT.

It was, however, in the department of Assessment that the greatest improvements were made. As, however, these developments are of a somewhat intricate nature it is desirable to re-state the main principles which had to be kept in view. The object of the whole system was, from the outset, to assess fields in accordance with their relative natural fertility. This was found in the case of dry-crop lands to depend primarily upon the Order—as represented by the colour—the Depth and the Quality of the soil. Properly speaking, therefore, in assessing fields there were two chief operations to be performed—firstly, the expression of the relative values of fields in terms of Soil fertility, and secondly, their assessment in accordance therewith. In the first development of the system these two operations had been performed as previously explained, by arranging 9 classes of soil under 3 Orders and attaching an assessment rate per acre to each class, these rates expressing both the relative values of the soil classes *inter se* and also the rates per acre. As progress, however, was made, difficulties arose in working this system. Experience shewed that the original 9 classes of soil based upon colour would by no means cover the extraordinary range to be found in the districts under settlement, owing in great measure to the surprising variations in depth, which was found to affect fertility far more than the order or quality of the soil. In fact, Black soil might be found covering the *substrata* to such a small depth as to be equal only to 2nd Gravelly. But according to the original scale even the worst Black soil could not be assessed at less than reas 170 per acre, whereas the rate for 2nd Gravelly was only reas 60 per acre.

Various expedients were tried to remedy the confusion, such as increasing the soil classes for Black to four, but the same difficulties remained.

The solution was found by Lieut. Davidson, the Assistant Superintendent, Nasik Survey, who, reporting in 1840 on the Settlement of Chandor, made the following suggestions for improving the system of classification, which as the questions dealt with are highly important from

Introduction of a  
new system of classification.



the practical no less than the historical point of view, may be given in his own words :—

“ You are aware that, on many occasions, the arrangement according to colour cannot be preserved without sacrificing the classification according to value. There are soils, essentially black, which, from deficiency in depth or the presence of deteriorating qualities, have to be entered in the reds and even in the gravelly, while some reds are so superior in texture and fertility as to intrude into the blacks ; on such occasions it is incumbent on the classifier to make a note explaining the apparent incongruity of a red soil being entered as a black and a black soil as a red or a gravelly.

“ Were these instances of rare occurrence it would be of little consequence, but they are, and must be, so frequent as in a great measure to vitiate the classification according to colour, and under these circumstances I think it would be much better to do away with a part of the system which can only lead to ambiguity, and class the soils solely with reference to their values.

“ With regard to the number of classes, where the descent from the best to the worst soil is so very gradual, it is evident that in order to obtain a very minute classification it would be necessary to have a great number of classes. But to multiply the classes is just to multiply the labour, and to increase the labour is to add to the expense, so that to limit the number of classes is obviously called for. While in this view it would be impolitic to have too many classes, in another it would be injurious to have too few. For, where the difference between any two adjoining classes is very great, as must be the case when the number of classes is very limited, the intervening soil is in danger of being over-assessed by being entered into the higher, and runs the risk of being too lightly assessed by being thrown into the lower.

“ Nine classes have been adopted in the survey now in progress in the Southern Deccan, and although the greater range from value of the worst to that of the best soil in this Sub-collectorate may seem to call for alteration, I do not think there is any real occasion to increase their number.”

He next proceeds to consider the important question of how the relative values of the different classes of soil were to be fixed :—

“Supposing nine classes to be fixed upon, the next question to which I would invite attention is by what steps we should descend on the scale of valuation from the highest to the lowest class. In other words, if the relative value of the highest and lowest class be determined, how shall we fix that of the seven intermediate ones ?

“Were the soils *naturally* divided into nine distinct classes varying in fertility, this arrangement in nature would at once prescribe the steps in our scale of capability. But it is otherwise. The gradations by which the superior soils pass into the inferior, so far from being distinct, are not even observable.”

After quoting authority for this statement he resumes :

“From the above it would appear that we have soils of infinite degrees of relative value to arrange into a limited number of classes . . . . . Each class should retain soils of nearly uniform value, and to do this there must be a uniform difference in the value of the classes.”

In discussing this question he refers to three possible alternative scales; illustrating his remarks by the diagrams here reproduced :—

“The first mode of gradation that suggests itself is that in which the steps are equal. It is exhibited in the first of the following diagrams (D, E, F and G), each step, from 100 the highest to 12 the lowest, being 11. With a scale of this kind the error which arises from having to render the intermediate soils into the class to which they most approximate (an error inseparable from the system) would be trifling with the rich and extensive with the poor soils, which last, from their very poverty, are less able to bear it. It will be observed that, although the steps are in one sense equal, each being 11, they vary from 11 to 50 per cent. when considered with reference to the proportion they individually bear to their classes; consequently, should the soils intervening between classes 8 and 9 be entered by one man in 8, and by another in 9, the rate per acre according to the first would be double what it is according to the second, while on the other hand a difference of one-ninth only would result from entering the intervening soils of 1 or 2 into either of these classes.

DIAGRAM D.

*in which the steps of the scale are actually equal.*

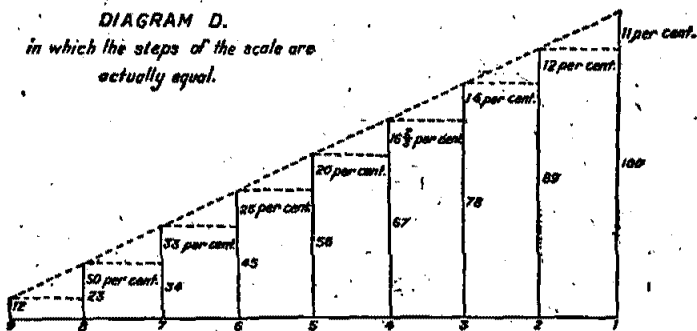


DIAGRAM E.

*in which the steps of the scale are relatively equal.*

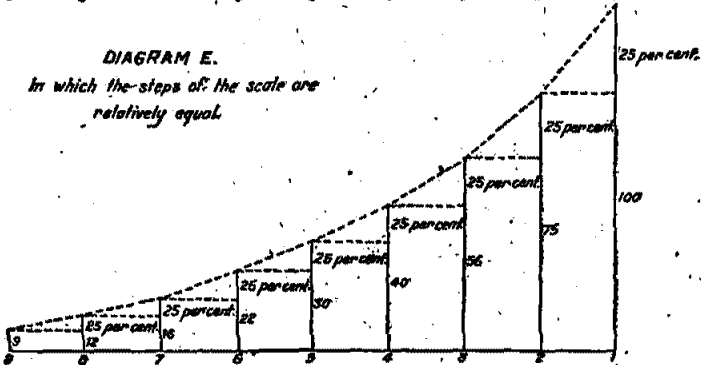


DIAGRAM F.

*being a combination of the scales exhibited in Diagrams D & E.*

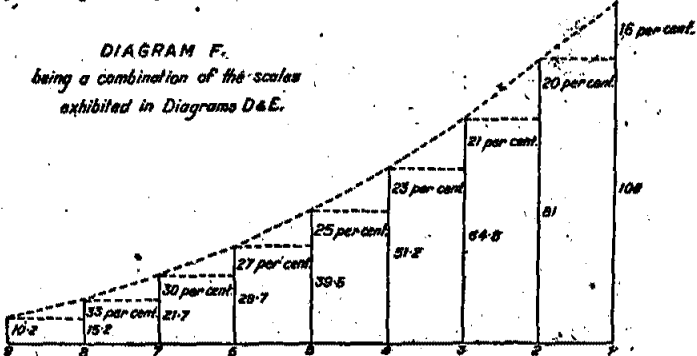
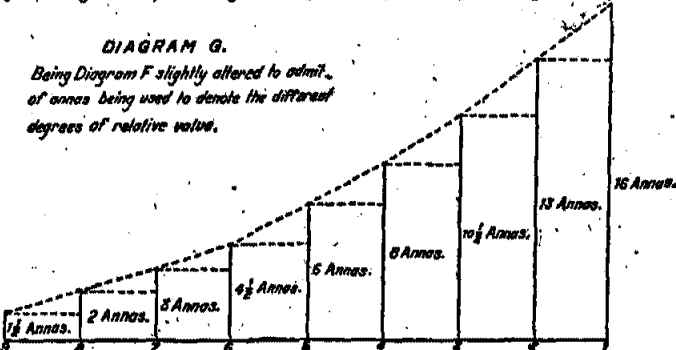


DIAGRAM G.

*Being Diagram F slightly altered to admit of annas being used to denote the different degrees of relative value.*



" This objection may be met by making the steps of the scale *relatively* equal, as in diagram E. Each step is a certain proportion (in this instance one-fourth) of the class from which each descent is made. Thus, class 1 being 100, class 2 is  $100 \frac{100}{4} = 75$ , class 3 is  $75 \frac{75}{4}$  or 56 nearly and so on. According to this scale, the intermediate soils for which no classes are provided, may be thrown into the nearest class without involving, in any instance, a greater error than  $12\frac{1}{2}$  per cent.

" In the first of these scales relative equality in the steps is sacrificed for the sake of actuality, and in the second actual equality in the steps is lost, while relative equality is maintained. The first scale is objectionable because the relative difference of its lower classes is too great, but the second scale is also equally objectionable because the actual difference of its lower classes is so small that the most practised classifier could scarcely detect it. These scales seem to form the extremes of actual and relative gradation and I believe that the scale best suited to our purpose is to be derived from a combination of them both.

" Under this impression I have framed the scale of values exhibited in diagram F. The same is given in diagram G, but slightly altered to admit of our adopting the method of relative valuation by annas, which is most familiar to the Natives."\*

The quotation given above is most important: firstly, because it shows the genesis of the rupee-scale of classification which is the characteristic feature of the Bombay system, and secondly, because it explains exactly how the relative values of the different classes of soil were fixed.

After dealing with the classification of Dry-crop land

Development of the new system of classification.

Lieut. Davidson proceeds to discuss the question of the classification and assessment of Motasthal and Patasthal lands. In order however, to preserve continuity of treatment it is desirable to describe the subsequent development of the Dry-crop classification system before turning to the subject of Irrigated lands.

\* Paragraph 3, etc., of Lieut. Davidson's Report of 1st September 1940: S. No. CXXX, Niphar and Chandor, p. 46.

The new system of Lieut. Davidson was ordered to be introduced into the Poona Survey at the end of 1841, but this does not seem to have been done, and the old method of classing by colour was carried on in that survey for 11 years. The confusion caused thereby will be seen by a reference to Lieut. Francis' Report upon the Original Settlement of the Junnar taluka in 1851, where he shews that every taluka and mahal in the Poona district had its own classification scale according to the whim of the Superintendent. It is no wonder therefore if, at the Revision Surveys, it was found necessary to re-classify the whole of the lands in this district.

This Poona system, however, is off the line of general development, which in the other Surveys followed upon the principles laid down by Lieut. Davidson and, since it is upon these principles that the system of the Joint Report was based, it is necessary to trace their history in some detail.

It will be noted that, while general references are made in this report to the classes of soils, and the dependence of their relative values upon quality, depth and the presence or absence of deteriorating factors, no exact description is given of the methods by which these factors were to be taken into account in determining what the relative values were to be: nor, since the rules under which the classification were carried out have been lost, is it possible to state definitely what those rules were. But judging from an examination of the old field books still existing in the Ahmednagar Record Office, the system was almost certainly as follows:—

(a) The classification scale was based upon depth and quality of soil, pure "Black" soil of  $1\frac{3}{4}$  *haths*\* in depth being considered "first class" or 16 annas valuation.

(b) In the case of *Black* soil the valuation was lowered one class—

(i) for every decrease of  $\frac{1}{4}$  *hath* in depth;

(ii) for the presence of any deteriorating factors or "faults," as they were technically called, sufficient to cause loss of fertility.

---

\*1 *hath* = 1 foot 6 inches.

The classes of faults. These faults seem to have been the following:—

No.	Technical term.	Description.
1	Chunkhad	A mixture of minute fragments or nodules of limestone.
2	Gochu	.. The same as the above, only that the nodules are larger.
3	Utarvat	.. An appreciable slope in the surface of the field.
4	Valsar	.. A mixture of sand.
5	Resvat	.. A want of cohesion among the constituent particles of the soil, arising from the presence of fine sand.
6	Dupan	.. The liability of being swept over by running water.
7	Upalvat	.. Excess of moisture from surface springs.
8	Karal	.. Clayey soil which when dry turns very hard, which does not easily absorb water, and which if once wetted does not dry soon.

The actual scale, as given by Lieut. Davidson, was the following:—

Class.	Anna valuation.	Depth.
1	16	$1\frac{3}{4}$
2	13	$1\frac{1}{2}$
3	$10\frac{1}{2}$	$1\frac{1}{2}$
4	8	1
5	6	$\frac{3}{4}$
6	$4\frac{1}{2}$	$\frac{1}{2}$
7	3	$\frac{1}{4}$
8	2	
9	$1\frac{1}{2}$	

The valuation of pure Black soil without deteriorating factors would then be reckoned in accordance with the depth given in column 3. But, if Black soil of, say,  $1\frac{1}{2}$  *haths* in depth, contained a "fault" of *chunghad* or limestone, then its normal classification value of  $10\frac{1}{2}$  annas would be reduced to 8; and so on throughout all the other classes.

(c) "Red" soil was considered one class inferior to Black, and pure red soil of  $1\frac{1}{2}$  *haths* in depth was therefore classed at 13 annas, one class reduction being made in the normal annas for the presence of faults in the ordinary way.

(d) "*Barad*" or gravelly soil, being usually of short depth, its maximum depth was taken to be 1 *hath* and, if pure, such soil was reckoned as 6th class and its maximum anna valuation therefore as  $4\frac{1}{2}$ .

It remains to shew how the classification of a field was carried out in accordance with this scale.

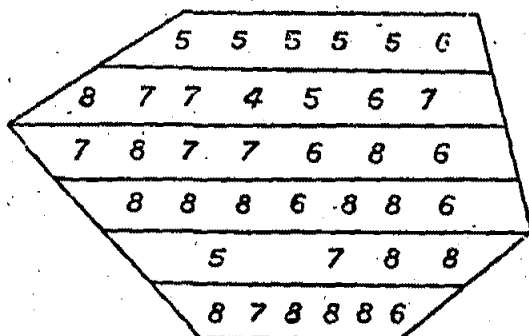
The system of field classification. From a description of the procedure followed, as given by Lieut. Davidson, it would seem that, in 1841, the classer used to go over the field and estimate the relative quantity of each class of soil contained therein. This seems to have been done in a very rough-and-ready fashion by inspection and occasional digging. No diagram of the field, apparently, was drawn, nor was anything left on record to shew the exact location of the different classes of soil. The classer merely made his estimate and would then put down in his field book that the field of, say, 10 acres contained 2 acres of first class soil, 7 of 4th class and 1 of 7th class. The valuation of the field was then worked out as follows:—

Class of soil.	Area.	Valuation.
1	2 acres	32
4	7 "	56
7	1 "	3
	—	—
Total	10 acres	91 annas

Average value therefore 9 annas 1 *pie*.

This means to say that, relatively to a field of 16-ann valuation, the value of this particular field was  $\frac{9}{16}$  or just over half.

The chief disadvantage of such a method of classification must have been the difficulty of testing the work done by the classer and the great liability to error in such a rough quantitative analysis. An improved system was, therefore, introduced, by which the classer was made to divide the field into a number of equal portions and test the soil in each; then to draw a rough sketch map of the field and to shew by figure the situation of the different classes therein as determined by him, as in the following example, taken from the Ahmednagar records:—



These details were then worked out in the office as follows:—

Class.	Shares.	Annas.	
4	1	8..	Colour Red; Depth $1\frac{1}{2}$ <i>kaths</i> ; Fault Reshvat; therefore 4th class.
5	4	24..	Colour Red; Depth $1\frac{1}{4}$ <i>kaths</i> ; Fault Chunkhad: therefore 5th class.
6	3	$13\frac{1}{2}$	Colour Red; Depth 1— $1\frac{1}{4}$ <i>kaths</i> ; Fault Chunkhad: therefore 6th class.
7	4	12..	Colour Red; Depth $\frac{1}{2}$ <i>kath</i> ; no Fault therefore 7th class.
8	7	14..	Colour Red; Depth $\frac{1}{4}$ <i>kath</i> ; therefore 8th class.

Total .. 19     $71\frac{1}{2}$

Hence average value  $\frac{17\frac{1}{2}}{19}$  annas = 3 annas 9 picas.



The new system is clearly an advance upon the old, as, by compelling the classer to record the exact *data* upon which he based his classification, it enabled a far more stringent test to be taken of his work. It was still imperfect, however, as the diagram did not shew the situation of each class of soil within the field nor for what parts the different faults were given. The last and final development, therefore, is that by which

(a) the field was divided up into compartments of roughly equal area according to the different classes of soil and each compartment classed separately ;

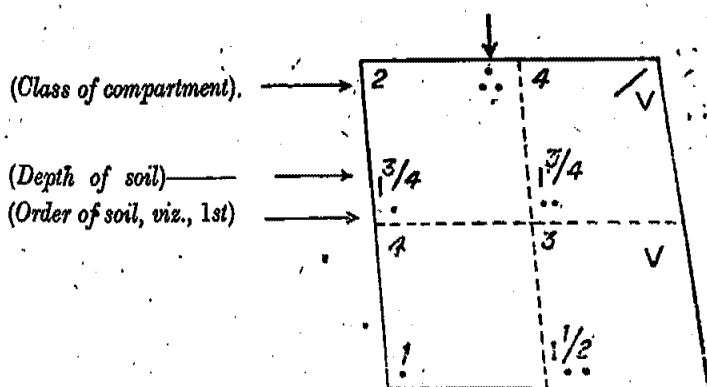
(b) conventional signs were invented for the various faults and marked in the compartments in which they occurred, together with the order of the soil (shewn at first by means of dots and later on by the letters P, D and T), with the depth and the soil class of the compartment as worked out from the classification scale.

These conventional signs were as under :—

- |             |   |            |       |
|-------------|---|------------|-------|
| 1. Chunkhad | ∴ | 5. Resvat  | ×     |
| 2. Gochu    | > | 6. Dupan   | ~~~~~ |
| 3. Utarvat  | / | 7. Upalvat | □     |
| 4. Valsar   | v | 8. Karal   | ∧     |

The classification work done in a field would then be tabulated as under :—

(Fault of chunkhad)



In the example given the field is divided up into four compartments, in the first of which the dot  $\odot$  in the left hand bottom corner shews the Order of the soil, viz., 1st or black, and the figures ( $1\frac{1}{2}$ ) in the same corner the depth in *haths*. In the top right hand corner the three dots shew a fault of

*chunghad*. Hence the class of the soil in this compartment is the second, as being of the first class lowered by one fault; so the figure 2 is placed in the top left hand corner. Worked out in the same way, the figures 4, 4 and 3 shew the soil classes of the other three compartments.

The classification value of the field was then worked out in the following manner :—

Class.	Shares.	Annas.
2	1	13
3	1	10½
4	2	16
Total ..		4
		39½

Average value 10 annas.

In the above description of the development of the classification system one scale of values only, that of Lieut. Davidson, has been used by way of illustration. In actual fact, however, this was by no means the only scale employed, each Superintendent making alterations therein according to his view of local conditions. It was not till the publication of the Joint Report that a standard scale was prescribed, to be varied only in exceptional circumstances. As an example of a variation from the original scale may be given that drawn up by Captain Davidson himself in 1846 to suit the altered conditions in the Patoda (now Yeola) taluka :—

Class.	Original scale.	New scale.
1	16 annas	16 annas.
2	13	13½
3	10½	11
4	8	9
5	6	7
6	4½	5½
7	3	4
8	2	3
9	1½	2

The reason given for the change was that the difference between the productive powers of the best and worst soils was not so great in Patoda as in Chandor, and that it was therefore necessary to level up their relative values. The result of the apparently slight change, it may be noted, was to raise the assessment by no less than 17 per cent. above the amount which would have been obtained by the use of the Chandor scale—a circumstance which shews clearly the great importance of the classification scale in relation to the pitch of the assessment.

After disposing of the classification of Dry-crop land Lieut. Davidson proceeds to consider the question of the system of classification to be adopted in the case of Garden or Bagayat lands, comprising, in the Chandor taluka, Motasthal or land watered from wells, and Patasthal or land watered from reservoirs formed by damming up streams, the water being led to the land by means of channels.

The chief difficulty to be faced in framing a system of classification for such lands is, he states, that, whereas in the case of Dry-crop there is only one factor of value to be considered, in that of Motasthal there are three such factors, viz., the supply of water, the quality of the soil and the sufficiency of land under the well to admit of the land being allowed to recruit its strength by a course of dry-cropping. In framing a system of classification it is necessary to decide what part each of these factors plays in determining the fertility of Motasthal land, and to arrange the relative scale of values accordingly. It might be thought possible to consider all the three factors collectively, but “the estimate of each garden would then resolve itself into a mental process resulting in a certain value pronounced by the classer, a degree of obscurity would attend the operation, and where there would be so little matter of fact, and so much mere matter of opinion, it would be at once difficult to check the work and to ensure its uniformity.”

There is, however, he says, an indirect method by which these relative values may be arrived at. “Take two wells of equal capacity, which water each an acre of first class soil, but the one has sufficient land under it to admit of dry-cropping every other year, while the other has not this advantage. If in these instances the capability of paying assessment, as ascertained by consulting *bagayat* cultivators, and from general

inquiries, during the progress of the survey, be in the proportion of 7 to 6 respectively, 6 will be the combined value of the water and soil, and 1 the comparative value of one year's rotation".

Acting on these principles Lieut. Davidson next takes each factor and divides it into classes as follows:—

(i) *Soil factor.*—In the soil classification of this kind of land 3 classes were considered by Lieut. Davidson to be sufficient, as constant manuring and irrigation, in his opinion, tended greatly to equalize the relative properties of the various soils. Of these, the first comprised the 1st and 2nd classes of the Dry-crop scale, the second class the 3rd and 4th of the same scale, and the third the remaining Dry-crop classes.

(ii) *Rotation factor.*—Three classes were arranged under this head also in accordance with whether the extra land available was sufficient (a) to give the irrigated land two years' relief, (b) to give one year's relief, or (c) there was no extra land, the area under the well being constantly irrigated.

He then arranged his scale of values according to the interaction of the Soil and Rotation factors as follows:—

Classes.	Relative value, assuming, 100 as value of the 1st class.	Sufficiency of extra land for Dry-crop Rotation.	Class of Soil.
1st ..	100	2 or more years ..	First.
2nd ..	85	1st year ..	First.
3rd ..	73	2 or more years ..	Second.
4th ..	62	None ..	First.
5th ..	52	1st year ..	Second.
		2 or more years ..	Third.
		1st year ..	Third.
		None ..	Second.
		None ..	Third.

(iii) *Water factor.*—Instead of dividing this factor into classes Lieut. Davidson ascertained the capacity of each individual well by inquiries regarding the depth of water, capacity of the springs, etc., and then allotted a certain number of acres to each well according to its capability.

The assessment of any particular garden would then be determined by the rate per acre, as found proportionately to that of the 1st class according to the soil and rotation scale, multiplied by the number of acres assigned to the well.

With regard to *Patasthal* lands, Lieut. Davidson remarks :

The classification of *Patasthal* lands. "In *Motasthal* cultivation the quantity of land irrigated being in a great measure regulated by the capacity of each well, the land under one well receives proportionately as good a supply of water as double or treble the quantity of land under another well of double or treble the capacity, so that to assign a certain number of equally watered acres to each well is in accordance with the "waeewat" or system of *motasthal* culture prevailing in these districts. But the same method cannot be pursued with regard to the *patasthal* cultivation because, from natural causes, the supply of water to lands lying near the *ban.thara* is more abundant than to such as lie remote; and the surface watered is not, as in the case of *motasthal*, proportional to the supply. For these reasons I found it necessary to class the supply of water in *patasthal* cultivation instead of assigning a certain number of acres according to the supply as in *motasthal*.

"The *patasthal* and *motasthal* differ in another important point, which is, that in the former there is no system of rotation of dry-cropping.

"It would appear then, that in fixing the *patasthal* rates we have only two points to consider, namely, the supply of water, and the quality of the soil. The supply of water I have arranged in 6 classes and 3 of soil, forming by combination 18 varieties as exhibited in the following diagram :—

*Supply of water.*

		1st class.	2nd class.	3rd class.	4th class.	5th class.	6th class.
Quality of Soil.	1st class ..	100	75	62	53	47	40
	2nd class ..	87	63	56	50	44	37
	3rd class ..	75	56	50	44	33	27

"The numbers represent the relative value I have assigned to each variety, and by combining into one such as approximate in value, I have reduced the 18 varieties to 12 classes."\*

In the Joint Report the classes of land are divided under three principal heads, viz., Dry-crop, Garden and Rice. Of these, the early classification system in the case of Dry-crop

The classification of Rice lands.

\* Paragraph 28 of Lieut. Davidson's Report.

and Garden was devised by Lieut. Davidson and has been described in the foregoing pages, and it remains to describe that of the third class—Rice. The credit of working out a system of classification for this class of land belongs to Mr. Fraser-Tytler, of the Civil Service, who, in 1841, was appointed to settle certain Dang villages in the Kownai taluka of the Nasik district. The principles adopted by him are fully explained in a "Memorandum on the Classification of Rice Lands," printed in the Igatpuri Selection, No clxviii. He starts by first inquiring whether any system of classification is required at all, since the opinion seems to have been held that it was unnecessary, "owing to rice land being supposed to run very much in beds of equal value." This opinion Mr. Tytler proves to be incorrect by a minute investigation into the character of actual rice fields, which shews that "so far from rice beds running with any sort of similarity, we may have every degree of fertility within the limits of the same compartment." And he concludes that "To establish therefore standards for the different varieties of soil—in other words, determine upon a scale of classes, under the respective heads of which were to be brought all lands of equal or nearly equal productive power—becomes absolutely necessary. Nothing but inequality of assessment could result from any other mode of assessment."

He then proceeds to explain the principles upon which his system of classification is based as follows:—"The first and most essential point in any system of classification is to fix standards, and to fix them on a uniformly descending scale in value, from the highest to the lowest. Without such standards we have no guide to give the Native classifiers—our system is complex and checking difficult. This would especially be the case in rice where so many different influences combine in each field, all of which must be weighed singly and conjointly before we can arrive at an estimate of its productive power or value.

"We can, by calculations founded on *data* easily procurable, arrive at conclusions concerning the comparative intrinsic value of different soils, and the average expense attendant on their tillage, and thereon form a scale sufficiently minute for all practical purposes. The chief difficulty we have to encounter in rice land is that which presents itself in the classification of the baghayet of the Desh, namely, many influences combining in each case to form the result—the value of each influence requiring to be separately ascertained before we can hope to be uniformly correct in our classification."

"We can, however, ascertain the relative value each influence bears to the whole, and therefrom we can determine the comparative value each bears to another, and consequently fix separate standards of each influence to guide the classifiers in their work and to ensure uniformity. For instance, if we take two fields precisely similar in all respects, save that one has a good jheel (supply of moisture) and the other has none, and assuming 16 annas as the value of the first field, find by our enquiries that their values are in the proportion of 16 and 12, then 4 is the deduction made on account of the absence of jheel or moisture. Following out this process, we find, that assuming 16 annas as the value of first class land, all of whose features are perfect, 8 annas is due to the colour of the soil, 4 to the jheel, and 4 to the embankment."

In framing his scale of comparative values therefore for the classification of Rice lands, Mr. Tytler took Lieut. Davidson's 16 anna scale and broke it up to form separate scales for the 3 factors of value, viz., Soil, Moisture and Embankments, in the proportion of 8, 4 and 4. He then, for the purpose of classifying each factor, resolved these scales into sub-scales as follows:—

Class.	Soil.	Moisture.	Embankment.
1	8	4	4
2	5	2	2
3	3	..	..
4	1	..	..

by the combination of which he produced 12 varieties, as Lieut. Davidson had done in the case of Patasthal. For the purpose of assessment, however, he reduced these twelve varieties to 4 classes as under:—

Class.	Comprising varieties.	Average classification.	Name of class.
	1-2	16 annas.	Awal.
	3-4	13 "	Doom.
3	5-8	9½ "	Seem.
4	9-12	4 "	Char-seem.

In classifying a field according to these rules the classer "first classes the soil according to the scale and rules laid down, then the jheel, and then the embankment, and adds their relative values as given in the several scales to find the result, or class of the field."

The above account of the origin of the system of Land Classification may appear somewhat long and unnecessarily detailed, but it is Classification which lies at the basis of the whole Bombay system of Settlement and it is impossible to understand that system without acknowledge of the principles and methods by which the different kinds of lands were classed. From a study of the methods employed by Lieut. Davidson and Mr. Tytler, who formed the model for all subsequent systems, it will be found that the principles upon which their Classification system were based are the following :—

The object was to find the relative value of fields and to express that value in terms of a fixed scale. In doing this it was necessary to adopt a different procedure in the case of—what may be called—the “single factor” kind of land, i.e., Dry-crop, in which there was only one main factor of value to be taken into account, from that employed in the case of Garden and Rice lands in which there were more than one factor.

(a) For Dry-crop, therefore, one scale alone was necessary with gradations according to the depth and quality of the soil, and minor deteriorating factors.

(b) For Rice and Garden, however, it was necessary first, to specify the different factors of value, next to set the comparative value which each factor bore to the others and thirdly, to express the total value of the field as a combination of those factors, either, as by Mr. Tytler through the medium of *anna scales*, or, as by Lieut. Davidson, by first arranging the various combinations in order and then grading them in a scale from 100 downwards according to the opinion of the Settlement Officer as regards their comparative value.

The relative value of fields having been fixed by classification, the last operation that remained was to determine the rates of assessment. Under the old Poona system this was not a separate operation, as the scale of classification and of assessment were one and the same. But by the new scheme Classification and Assessment were divorced and became separate processes. The method by which these rates were fixed may be best explained in Mr. Goldsmid's own words :—

“The scale of relative rates having been fixed in the very judicious manner suggested by Lieut. Davidson, the next and most important step remains, namely, to determine



the actual amount of rates to be levied from the highest and lowest classes of dry-crop and garden land. This settled, the intermediate classes naturally arrange themselves in the graduated scale.

“In reviewing most of the former surveys undertaken in districts where the rayatvāri system prevails, I find that the actual rates were *professedly* arrived at by calculation of produce, either gross or net, and the Government share thereof, and that, in some instances, the results so obtained were modified by a complex analytical process, commencing with the amount of revenue realized from a whole province, pergunnah, or district, during a term of former years, and carried down by a series of sub-divisions, so as to ascertain the amount of revenue paid or payable during a like term of years, by the minutest portion of land in each village.

“However specious such calculations may appear, so many elements of uncertainty must, of necessity, enter in their formation, so ready a knowledge of every subject, habits of industry so stupendous, must be possessed by individuals who undertake them, that it is difficult to conceive how correct results could possibly be attained, even by an extensive European agency, composed of men possessing qualifications of the highest order and a perfect practical acquaintance with local agriculture and its attendant sciences, whilst I am certain that any attempt to carry on such calculations through Native agents must end in signal failure.

“In framing the rates for the two turufs I have been guided by a careful consideration of the rates fixed for other parts of the country the assessment at present nominally obtaining in these districts, the actual payments for a series of years as far as such can be obtained from the imperfect records procurable from the hereditary officers, the effect which these payments appear to have had on the circumstances of the people, the altered value of money, the present state of agriculture, population, markets, and a variety of other particulars, difficult to be explained or even recollected.

“I am fully sensible that the particulars enumerated as having guided me in fixing the rates may appear vague and unsatisfactory, but I am convinced that a more equitable assessment has been imposed than had I attempted to reduce to practice the most approved of theories for regulating the demands of Government . . . . .

"It must be considered that in any revision of assessment Government have only the judgment, and what may be termed the practical tact of the superintending officer to rely on." (And, after referring to his former experience, he adds :) "Therefore I hope that Government will place sufficient confidence in me to sanction the survey rates, although I have not attempted to support my recommendation either by lengthy calculations, nor by shreds and patches of political economy."\*

The rates actually fixed by these methods were—

	First class.	Lowest class.
Dry-crop (9 classes) ..	1 0 0	0 2 3
Motasthal (5 classes) ..	4 0 0	2 0 0
Patasthal (12 classes) ..	8 0 0	3 0 0

the value of the intermediate classes being found by proportion according to the scale for each kind of land.

A somewhat more succinct account of the procedure followed by the Settlement Officer is given in a Joint Report of Goldsmid and Wingate published in 1840, which may be taken as complementary to that detailed above:—

"The present condition of the agricultural classes, the state of particular villages, the amount of the Government realisations, the prices of produce, and similar considerations, compared with those of preceding years, afford us the chief groundwork for determining satisfactorily what abatement or addition should be made to the existing Jumma. We also by a similar process arrive at an opinion of what the rates of the different soils should be, and by applying these to the ascertained area and classification we find what amount of Jumma these rates will produce, and, by examining whether this is as much in abatement or excess of the existing Jumma as our previously formed opinions had led us to think necessary, we are enabled to correct our first estimate of the appropriate amount of Jumma and thereby finally settle our rates."

The system outlined above is of a similar type to the Punjab system of "aggregate to detail," according to which the Settlement Officers first settled the amount of assessment in gross for the whole area, and then distributed it in detail over the individual estates comprising it. As will, however, be seen from a perusal of the early Settlement Reports, the first

\* Paragraph 84, etc., of Mr. Goldsmid's Report, No. 135 of 1st November 1840.

Bombay Settlement Officers were not accustomed to fix an arbitrary sum for the area under settlement and then force their rates into harmony therewith. They rather, relying upon their knowledge and experience, first adopted trial rates from the different kinds of land and then tested the effect of these rates by working out the total for the area under settlement. If they found that the result of applying these rates was to produce a total amount for the area which corresponded with their ideas of what the district could bear, looking to the past revenue history, the present state of cultivation and so on, they would confirm them; if not, they would make the necessary alterations accordingly. In fact, they tested the rates by the aggregate and the aggregate by the rates, until they produced what they considered to be a fair assessment.

It is unnecessary to go into further detail here with regard to the methods of fixing the rates of assessment, as the subject will call for further attention subsequently, but in view of later developments it may be noted (i) that the early Settlement Reports, in comparison with those of a later stage, are as might be expected, rather wanting in form and coherence owing to the fact that, previous to the publication of the Joint Report, the Settlement Officer was without an exact statement of the principles according to which settlement operations should be conducted; and (ii) in these first settlements the necessity of differentiating between the various portions of the settlement area had not been recognized, and it was customary to apply one and the same maximum rate over the whole. The aim of the Settlement Officer, therefore, was to produce rates which would be fair on the average, the result being that villages advantageously situated must have been comparatively under-assessed and those situated disadvantageously over-assessed.

This description of the early operations may be concluded by an account of the organization of the

Organization of the  
Survey Department.

Survey Department in its opening stages. As has already been noted, the new Survey, at the commencement, was an isolated experiment of a local character in the Poona district. At the outset, therefore, it was under the direct control of Goldsmid and Wingate without intervening authority. As the operations extended, however, it became impossible for these officers to supervise them single-handed. Hence (Assistant Superintendents) were appointed, usually military officers, such as Lieut. Nash,

Lieut. Davidson, Captain Landon and others, Captain Wingate taking control as Superintendent. In 1840, however, a separate survey was organised for the Nasik district under Captain Davidson, which was afterwards extended to Ahmednagar and subsequently to Khandesh. Operations were commenced in the Southern Maratha Country in 1841 on similar lines in charge, first of Mr. Goldsmid and latterly of Captain Wingate. The duties of the various officers were clearly defined and Wingate's "Rules for the Conduct of Native Establishments of the Southern Maratha Country, Revenue Survey Department" drawn up. One other important innovation was the separation of the Survey and Classing Establishments, and their concentration under different officers, by which, not only was the course of the work facilitated, but an independent check was provided of one establishment on the work of the other.

## CHAPTER V.

### THE JOINT REPORT.

STARTED originally as a local experiment the Survey had been extended from Poona to Nasik, Sholapur, Ahmednagar and the Southern Maratha Country. So far, however, no guiding principles had been laid down for the conduct of the operations, which had consequently assumed a somewhat desultory character under the direction of individual Superintendents. The ever-widening scope of the work, however, and the prospective extension of the Survey to the Konkan and Gujarat made it imperatively necessary that some authoritative statement of principles should be made as regards both the future conduct of the work and also the Revenue system to be based upon the foundation of the Survey and Settlement. With these objects Government in 1847 directed the three Superintendents—Mr. Goldsmid, Captain Wingate and Captain Davidson—to hold a conference at Poona “for the purpose of taking into consideration the best means of bringing the somewhat diversified operations of the several Revenue Surveys of this Presidency into conformity as far as practicable” and also “for ensuring the results of the surveys being turned to the best account and maintained in their original integrity in the future management of the districts.” The result of their deliberations was the Joint Report which was a source of plenary inspiration for the guidance of the extended operations. It is true that the principles laid down with reference to the unit of assessment and the question of tenure had subsequently to be very considerably modified, but this was due to the fact, which is often forgotten, that at the time when the Report was written the Survey had not extended beyond the Deccan districts and that the rules relating to these subjects were therefore expressly meant to apply to Deccan conditions only. As the authors themselves state in paragraph 84 of the Report “they should be considered applicable only to the collectorates above the Ghauts, already surveyed or in course of being so. In other divisions of the Presidency, where the husbandry and revenue system are different, great alterations may be necessary.” But, so far as the Land Assessment is concerned, which is, after all, the question of primary importance, the principles enunciated being of universal application are in their essential features still unchallenged.

To turn, however, to the Report itself. According to the subject index it is divided into 11 main Divisions of the sections and 87 paragraphs, but for the Report. purposes of the present chapter the subjects dealt with may be divided into the three main heads of—

A.—The unit of assessment.

B.—The assessment of the unit.

C.—The revenue system to be based thereupon, with special reference to the important question of tenure, as laid down in the Joint Rules.

#### A.—THE UNIT OF ASSESSMENT.

In all systems of Settlement the question of the unit of assessment is of fundamental importance, for upon the answer thereto really depends the character of the whole system, as comparative study would readily prove. In some systems there is a "natural" unit ready to hand; thus, in the Landlord system of Bengal such a unit is found in the "Estate", in the Village system of the United Provinces and the Punjab it is the "Village". But this is not the case with a Rayatvari system. The term "Rayatvari" merely means that the State enters into direct relations with the cultivator as regards the payment of Land Revenue and, unlike other systems, contains no implication as to what the unit is to be. Hence it is that the author of such a system, having no unit ready to hand, has to invent one; and that the answer to the questions which arise in connection therewith is by no means an easy one is sufficiently proved by the fact that the matter has even till recently been one of debate and inquiry in Bombay.

After a few opening paragraphs, in the course of which the "chief design" of a revenue survey is stated to be "the regulation of the customary land tax so that it shall at once secure an adequate revenue to Government, the progressive development of the agricultural resources of the country, and the preservation of all proprietary and other rights connected with the soil", the Joint Report turns to this question of a unit (paras. 5-10). Two alternative systems are discussed. Firstly that of the assessment of "holdings", according to which the assessment is placed upon the whole of the area held by the occupant whether situated in one place or not—a system which connotes the granting to the holder of a long lease of this area for the period for which the assessment is guaranteed. In such a case the assessment is placed, not upon particular portions of the holding, but upon the whole area as one estate, no part of

which can be given up separately from the whole, as each portion is jointly and severally liable for the whole assessment. The old "Khatabandi" system of Gujarat was of this nature. The second system is that of the so-called "field" system, according to which the assessment is placed, not upon "holdings", but upon individual "fields", the village for this purpose being divided into separate parcels of land of a convenient size, each of which is assessed on its merits as a unit independently of the "holding" in which it may be situated. In this case the occupant is responsible for the assessment of each such "field" as a separate entity and can, under certain conditions, resign any one of the individual "fields" and so diminish his holding if need be, or may increase it by taking up vacant "fields" at the Government assessment.

Of these alternatives the second is pronounced by far the superior. It is pointed out that with a body of small proprietors the best system must be that which gives the greatest flexibility of transfer and allows the rayat to contract or enlarge his holding according to the state of his resources. Under the system of assessing holdings this is impossible, as the "holding" is one and indivisible. By assessing "fields", however, the desired flexibility is attained, as a rayat with diminished resources can reduce his holding, either by handing over one or more of its constituent fields to another with ampler means, to their mutual benefit, or by resigning them to Government.

The main object of the survey, therefore, is declared to be "the imposition of a field assessment" (para. 10). But what is to be the definition of the word "field"? It will be remembered that at the time of Mr. Pringle's survey and also in the early days of the new survey the "field" had meant the old ancestral sub-divisions as recorded in the Kulkarni's books. But these were naturally constituted upon no sort of principle, their area being dependent upon purely fortuitous circumstances; hence they were frequently of enormous size and also held by a number of separate occupants. As such they were totally unfitted to serve as units in such a system as that outlined above.

An alternative was to constitute the sub-divisions of these large fields held by separate individuals as survey fields; in other words, to make a field of every piece of land held separately. But this course was rejected as impossible, as these areas were subject to constant change and "no advantage that we are aware of is to be gained by making permanent a state of things which, though representing at the time of

survey the distribution of the village lands amongst the members of the community, would not continue to do so after the lapse of a very few years" (para. 12). The third alternative was to take a middle course, ignore both the impossibly large "field" of the Kulkarni's records and the fluctuating holding and to constitute a permanent artificial unit by dividing the village lands into areas of a reasonable size based upon some fixed principle. This was the course recommended in the Report and adopted.

In laying down such a principle it was necessary to provide on the one hand that the area of the unit should not be too large for the individual cultivator to deal with single-handed; and on the other that it should not be too small for survey and administrative purposes. The Report finds such a principle in that of "the area that could be cultivated by a pair of bullocks, as farming cannot be prosecuted at all with a less number than this. This area would vary with climate, soil, description of cultivation, and methods of husbandry" (para. 12). For the Deccan the standard was laid down as—

20 acres of light dry-crop soil.

15 acres of medium dry-crop soil.

12 acres of heavy dry-crop soil.

4 acres of rice land dry-crop soil.

In making up these artificial units it would be necessary, of course, to split up holdings larger than the standard size into two or more such units and to combine holdings falling short of the standard into a single survey, unit, and, subject to certain exceptions, provision is made in the Joint Report accordingly. The survey unit so constituted was to have its boundaries permanently fixed by means of official boundary marks of the type already described (p. 37).

As many changes were made subsequently in the principles by which the size of the "survey number", as it was called, was regulated, it is desirable to point out that the rules at the time they were made were perfectly suitable to the conditions existing in the Deccan of a comparatively small agricultural population with large holdings and extensive areas of waste. The Superintendent of the Ahmednagar Survey reported that very few holdings would fall below the areas prescribed for the "survey number", and this condition of things was doubtless typical of the rest of the Deccan country. That the principles laid down were found inapplicable to the Konkan and Gujarat was not the fault of the authors of the Joint Report.



## B—THE ASSESSMENT OF THE UNIT.

✓ The principle of assessment laid down by the Honourable Company for the guidance of its officers was "that land should be assessed in accordance with its capabilities" (*vide* Joint Report, para. 67), thereby excluding consideration of such details as the means, caste or condition of the cultivators which, though the foundation of the Indian systems, was objectionable, as "by creating different rates of profit upon capital employed in agriculture it would interfere with its natural and most advantageous distribution by diverting it from lands actually in cultivation to the lowly-assessed waste of those villages of which the cultivators happen to be poor" (para. 67). It would also foster in the latter a slovenly mode of agriculture and at the same time "the assessment would become less and less suitable with every improvement in their condition". The method of carrying out the directions of the Honourable Company laid down in the Joint Report are those described in the last chapter with the improvements dictated by experience. These methods were:—

(a) to find and express the relative value of survey numbers by means of Classification, and

(b) to fix the absolute rate of assessment in accordance therewith by maximum rates settled by the system of "Aggregate to Detail".

(a) *Classification.*

The objects of the system and the justification of the methods recommended for carrying out the classification of lands are thus explained in the Report:—"The object sought to be attained by our system of classification is the determination of the relative values of the fields into which the land is divided during the process of measurement. The circumstances affecting the values of fields within the limits of the same village, where the climate may be considered uniform, are their natural productive capabilities, their position with respect to the village as affording facilities or otherwise for agricultural operations, and, in the case of garden and rice lands, the supply of water for irrigation. In estimating the relative values of fields the whole of these might be considered together and the resulting estimate of their capabilities recorded by the assessor, or the latter might record his estimate of each particular by itself. The former system, by requiring a judgment to be given on a consideration of so many distinct and varying particulars, is

evidently dependent for the accuracy of its results, on the ability, experience and integrity of the assessor, and to secure anything approaching to uniformity would require a very high standard of qualifications in the agency employed. Such an agency, however, is unobtainable, for it is not possible to collect men of sufficient ability and experience, and, even if it were, we could not depend on their integrity, so that it becomes a matter of necessity to frame a system of operations sufficiently clear and defined to admit of men being trained for the duty and to enable us to keep an effective check upon their proceedings. To accomplish this object we have been led to separate and define, as far as possible, the various elements which combine to make up the value of a field and from these to frame such a system of classification as will leave little to the uncontrolled judgment of the classer" (para. 39).

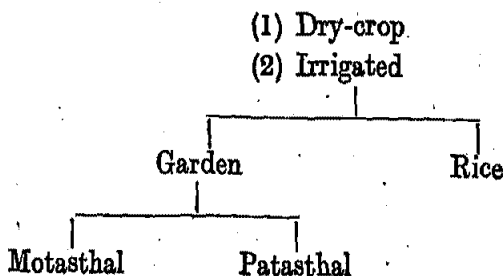
This system connotes—

- (i) the division of cultivated land into classes;
- (ii) an inquiry into the factors which go to make up the value of each such class; and
- (iii) the arrangement of a system of classification by which to record the relative value of these factors for each particular field.

(2) *The classes of land.*

Cultivated lands are divided in the Joint Report into two main heads, *viz.*, Dry-crop and Irrigated—a fundamental division which obtains in all Indian systems of land assessment. Of these, Irrigated lands are again sub-divided into Garden and Rice, the former including all those which are not rice, and the latter those in which "rice is the ordinary, if not the only, crop". A further sub-division is made of garden lands into lands irrigated from wells (*motasthal*) and those irrigated from tanks or dams (*patasthal*).

The scheme of Land Classes in the Joint Report is, therefore, as follows:—



(ii) *The factors of value.*

The chief factors of value are stated to be—

- (1) the quality of the soil ;
- (2) certain extrinsic circumstances ;
- (3) facilities for irrigation.

Of these, the two first are common to all, but the third is *ex hypothesi* restricted to the second of the main classes of land, viz., the Irrigated class.

(iii) *The system of field classification.*

(1) *Soil classification.*—The system of soil classification recommended for general use (para. 42) is substantially the same as that framed by Lieut. Davidson and described in the last chapter. It comprises a scale of annas based upon depth, soil fertility being stated to be “ chiefly dependent on its power of imbibing and retaining (moisture,) and as this quality is mainly affected by depth, we have chosen the latter peculiarity as the principal regulating influence in the formation of our scale of values ” (para. 41). This scale is divided into nine classes ; three Orders of soil are distinguished, viz., Black, Red and Gravelly. The scale as a whole is given as follows :—

Class.	Relative value of Class in annas or 16ths of a rupee.	Soils of the		
		1st Order.	2nd Order.	3rd Order.
		Of a fine uniform texture, varying in colour from deep black to dark brown	Of uniform but coarser texture than the preceding, and lighter in colour which is generally red.	Of coarse, gravelly or loose friable texture, and colour varying from light brown to grey.
		Depth in cubits	Depth in cubits.	Depth in cubits.
1	16	1½	.....	.....
2	14	1¼	1½	.....
3	12	1¼	1¼	.....
4	10	1	1¼	.....
5	8	¾	1	.....
6	6	¾	¾	1
7	4½	¾	¾	¾
8	3	.....	¾	¾
9	2	.....	.....	¾

The chief difference between the scale framed by Lieut. Davidson and that of the Joint Report is to be found in the

variations which have been made in the relative values of the different classes of soil, as will be seen from the following comparative table :—

Class.	Original scale.	Joint Report scale.
1	16	16
2	13	14
3	10½	12
4	8	10
5	6	8
6	4½	6
7	3	4½
8	2	3
9	1½	2

The net result of the changes made was a general rise all round in the scale of values, particularly in the lower as compared with the higher classes of soil. Thus, while the increase in the valuation of the 2nd class is 8 per cent., it is 25 per cent. in the 4th class, 33 per cent. in the 5th, and 50 per cent. in the 7th and 8th. This meant a corresponding rise in the comparative assessment of the worst as compared with the better class of soils, which was found at the Revision Surveys to have been unjustified and consequently had to be corrected.

For the classification of the soil in Rice lands the report gives no actual instructions, leaving it to the Superintendents to frame their own scales in accordance with the peculiarities of the different districts.

The Report next proceeds to discuss the deteriorating factors or "faults", by which the class of soil, as determined by the order and depth, was to be reduced, and also explains how classification according to this system was to be carried out in the field and worked out in the office. In these respects, however, the Joint Report system is exactly the same as that described in the last chapter and the account therein given need not be repeated.

(2) *Extrinsic circumstances.*—By the expression "extrinsic circumstances" is meant "distance of a survey number from the village site" or other similar conditions which may affect its value indirectly. Thus, *ceteris paribus*, a field which is situated close to the village site is more valuable than one at a distance, as being more convenient, not only for cultivation, but also for the watching of crops, cartage of manure and crops and general supervision. The exact method of allowing for such distinctions is not laid down in the Joint Report which

is content merely to note that they should be taken into account leaving Survey Officers to work out the details.

(3) *Facilities for irrigation.*—In treating of the classification of "Facilities for Irrigation" also (paras. 54-63), the Joint Report, on account of the wide divergences in local conditions which the authors were aware would be met with, is content merely to note the main points to be taken into consideration in framing the classification scales. These points are—

*Garden lands.*

- (a) *Motasthal*—the supply, depth and quality of the water.
- (b) *Patasthal*—the amount and duration of the water-supply.

*Rice lands.*

Under this head the class of "facilities" is two-fold, *viz.*, firstly, the inherent moisture due to the position of the field, those that are low-lying naturally receiving more moisture than those situated on higher levels, and secondly, the supply derived from tanks or other sources.

In all of these cases the intention of the Joint Report is that, as with soil classification, scales should be arranged differentiating between various classes of water-supply in the terms of which the "class" of supply for any particular survey number might be expressed, though Survey Officers are again left to work out their own system in accordance with local conditions.

The advantages of the system of Classification outlined above are thus summarized in the Joint Report:—

Advantages of the system. . . . .  
 "The system we have thus endeavoured to describe possesses the following important advantages:—it obliges the classer to give his minute attention to every portion of the field and, by requiring a separate estimate of the value of each, his judgment is brought to bear on a very limited number of particulars and the chance of error thereby greatly reduced. The distinct record of the valuation of each share further admits of the operation being tested in its minutest details, so that any error of judgment or carelessness on the part of the classer in the valuation of any one share in a field subject to re-examination may at once be discovered and brought home

to him even if it should not affect the accuracy of his average valuation of the whole. The determinate character of the rules of this system and the facility afforded for the application of a minute and searching test must greatly conduce to the promotion of uniformity in the work of different classers—a consideration of immense importance where a trustworthy and experienced agency is not to be obtained” (para. 49).

(b) *Assessment.*

The Report next turns to consider “the best mode of fixing the absolute amount of assessment”. This part of the Report may be divided into the three heads of—

(i) Grouping.

(ii) The determination of the Aggregate.

(iii) The distribution of the Aggregate.

(i) *Grouping.*

“The first question for consideration,” it is stated, “is the extent of territory for which a uniform standard of assessment should be fixed.” The term “standard of assessment” is not defined in the Report, but meant in practice “the same Maximum Rates”. The problem for solution, therefore, is as to extent of territory to which the same Maximum Rates should be applied.

The principles upon which the answer given is based are so important in the history of the Bombay system that the Report may be quoted *in extenso* :—

“The first question for consideration is the extent of territory for which a uniform standard of assessment should be fixed. This will depend upon the influences we admit into consideration with a view to determine the point. Among the most important of these influences may be ranked climate, position with respect to markets, agricultural skill, and the actual condition of the cultivators. The first of these may be considered permanent; the second and the third less so; and the fourth, in a great measure, temporary. And as our settlements are intended to be of considerable duration, there is an obvious advantage in regulating the assessment by considerations of a permanent character, or at least such as are not likely to undergo any very material change during the term of years (generally 30) for which it is to endure.

“67. In determining, then, upon the extent of country to be assessed at uniform rates, we are of opinion that the more permanent distinctions of climate, markets, and husbandry should receive our chief attention. We should not think of imposing different rates of assessment on a tract of country similarly situated in respect to these three points, in consequence of the actual condition of the cultivators varying in different parts of it. Were we to do so, we should depart from the principle laid down by the Honourable Court of Directors, of assessing land according to its capabilities, and adopt the objectionable one of doing so with reference to the means of the person holding it. The effect of such a system, by creating different rates of profit upon capital employed in agriculture, would interfere with its natural and most advantageous distribution, by diverting it from lands actually in cultivation to the lowly-assessed waste of those villages of which the cultivators happen to be poor. By enabling the latter to meet the Government demands without the application of the same degree of capital and skill required in the case of better cultivated villages, it would foster in the former a slovenly and unremunerative mode of husbandry. By taking into account an element so uncertain and liable to change as the condition of the cultivators in particular villages, the assessment would become less and less suitable with every improvement in their condition. On the other hand, by basing the assessment on considerations of a durable character, we have the promise of its remaining suitable for a lengthened period, and at the expiration of the term for which it is confirmed, requiring no further alteration than a simple increase or decrease of its amount, as the exigencies of the country and Government might demand.”

Next proceeding to consider the practical application of these theories the Report goes on to remark :—

“68. Each collectorate being divided into districts (i.e., ‘talukas’), of which the management and records are distinct, it is an obvious advantage to consider the assessment of each of these divisions separately. And were the points bearing on the distribution of the Government demand alike in all parts of any such division, one standard of assessment would be suitable for the whole. But this is seldom the case; and there are usually such marked distinctions between different portions of the same district as to require the assessment to be regulated with reference

to these. The first question, then, in proceeding to the assessment of a district is to ascertain whether such distinctions exist, and to define the limits over which they prevail. This, however, will seldom be a task of much difficulty, and involving any very minute investigations, as market differences only, calling for an alteration in the rates of assessment, require notice; and within the limits of a single district three to four classes of villages would generally be found ample for this purpose."

The instructions given above may now be summarized as follows:—

(a) The unit of settlement is to be the taluka.

(b) Where within the taluka there exist marked and permanent distinctions between different tracts, such as call for a variation in the standard of assessment, the villages are to be divided into classes—or Groups to use the term usually applied.

(c) This division into Groups is to be based upon considerations of a permanent character, chief of which are to be differences in—

(1) Climate.

(2) Proximity to markets.

(3) Husbandry.

The principles of procedure outlined above are clearly a great advance upon those described in the last chapter. At the outset all the villages in each taluka had been assessed at one and the same Maximum Rate with the idea that differentiation was unnecessary. It must soon, however, have been found that, if the assessments were to be equitable, such differentiation was essential, as what may be a fair assessment in one part of a taluka may be grossly unfair in another part. This difficulty may not have been noticeable at first when the assessments were so exceedingly low as in Indapur, but the more the assessment approached what was a fair assessment from the Government point of view the more must the need of differentiation have been felt.

(ii) *The determination of the Aggregate.*

The next and most important operation is "to fix the absolute amount of assessment to be levied from the whole", an operation which is described as being "perhaps the most important and difficult connected with the survey, and requires,



beyond all others, the exercise of great judgment and discrimination on the part of the officer on whom it devolves" (para. 70).

✓ The methods to be used are described as follows :—

"The first requisite is to obtain a clear understanding of the nature and effects of our past management of the district, which will be best arrived at by an examination and comparison of the annual revenue settlements of as many previous years as trustworthy *data* may be procurable for and from local inquiries of the people during the progress of the survey. The information collected on the subject of past revenue settlements should be so arranged as to enable us to trace with facility the mutual influence upon each other of the assessment, the collections and the cultivation." This, it is considered, can best be done by the aid of diagrams giving the information required in tabular form, for the preparation of which instructions are given which need not be detailed. "The information thus collected and exhibited with that obtained by local inquiries into the past history of the district will generally enable us to trace the causes which have affected its past condition; and a knowledge of these, aided by a comparison of the capabilities of the district with those of others in its neighbourhood, will lead to a satisfactory conclusion regarding the amount of assessment to be imposed."

(iii) *The distribution of the Aggregate.*

The final operation is the distribution of this aggregate over the various classes of Land and the Groups. This is to be performed by fixing Maximum Rates which, when applied through the medium of the Classification of the survey numbers to the classes of Land within each Group would produce the sum desired. In the Joint Report itself no instructions are given how this operation is to be performed, Settlement Officers being merely directed "to fix the Maximum Rates for the different classes of cultivation when of course all the inferior rates will be at once deducible from the relative values of our classification scale."

These operations were, in fact, felt to be such as should eminently be left to the decision of the Settlement Officer in accordance with the principle laid down in para. 179 in speaking of their recommendations as a whole, that "to have attempted greater minuteness would, without answering any

useful purpose, have fettered the operations of the survey by enjoining particular methods of procedure which local circumstances might render inapplicable."

Comparing the Joint Report system of Survey and Settlement with that described in the last chapter it will be seen that the chief developments are—

Summary.

(a) the evolution of the survey number based upon the principle of "the area that can be ploughed by a pair of bullocks;"

(b) the introduction of the principle of "Grouping".

In its essential features, however, *viz.*, the determination of the relative values of fields by means of Classification, and of the rates of assessment upon general considerations in reliance on the "practical tact" of the Settlement Officer, the system of the Joint Report is one with that described by Mr. Goldsmid seven years before.

### C—THE JOINT RULES.

After dealing with "certain points connected with the interior management of the Survey Department" (paras 80 and 81) the Report next proceeds to the third important division of the subject of settlement, *viz.*, "the most suitable means for ensuring the results of the surveys being turned to the best account and maintained in their original integrity in the future management of the districts." In the Report itself the measures which the authors considered necessary for the purpose are detailed in a number of rules called "The Joint Rules" without discussion on the ground that "to attempt to establish the suitability of every proposition that we have to make in regard to it would lead to almost interminable and, in our opinion, uncalled for discussion" (para. 84). It must, however, be noted that, although the questions raised were not discussed in the Report itself, a long and important correspondence did, as a matter of fact, ensue between Government and Captain Wingate on the proposals made, which it is essential to peruse if the objects which the rules sought to attain are to be understood.

The main object was the establishment and maintenance of the new system of (Occupancy) which the authors of the Report considered essential to the success of the survey system. In view, however, of the later history of this question and the importance of preserving continuity of treatment, it has been

thought better to reserve this portion of the Report for future consideration in a special chapter devoted to the history of Occupancy, as a whole. For a description of the Joint Report system of Occupancy, therefore, and its subsequent developments the reader is referred to Chapter X of this Part.

The Report closes with references to the two subjects of Revenue Accounts—stress being laid upon Remissions and suspensions. and the urgency of preparing and adopting some uniform system—and of remissions of Land Revenue. As regards the latter, it is interesting to remark in these days, when a system of remissions forms part of the ordinary administration, that, in the opinion of the authors of the Report, “all abatement of the established revenue should be regarded as exceptional to the ordinary management of surveyed districts and ought not to be made unless for special and urgent considerations, which cannot be provided for by general rules” (para. 86).

## CHAPTER VI.

### AFTER THE JOINT REPORT.

THE publication of the Joint Report and the clear statement of principles and policy laid down therein led to a great development of the new survey system. (Three years later the Survey was extended to Gujarat and the Konkan,) and in the same year the appointment was created of a Settlement Commissioner in general charge of the whole operations which was given to Captain Wingate. From that time district after district was taken in hand, until the whole of the British territory had been brought under the operation of the Survey. But it was not till the year 1891 that work in the last unsurveyed taluka—Devgad of Ratnagiri—was brought to a close and the “Original Settlement” of the whole area finally completed. Long before that time, however, the period of 30 years’ guarantee had expired for those talukas to which the Settlement had been first applied; and thenceforth Original and Revision Settlements proceeded *pari passu*.

In dealing with the period subsequent to the Joint Report, therefore, it is impossible to follow the strict chronological sequence of events as was practicable in recounting the earlier history of the system. Not that it is necessary, or indeed possible, entirely to separate the history of the Original and Revision Settlements. Thus, with both classes of surveys proceeding simultaneously, it was natural that all technical improvements, whether in methods of measurement or classification, should be adopted equally in both: e.g., “the traverse system” of village surveys was first adopted at the Revision Survey of Indapur in 1868, but was afterwards applied to all subsequent Original Surveys also. At the same time the main problems of the Original and Revision Settlements were essentially different and call for separate treatment. Those of an Original Settlement were as to the type of survey number to be adopted and sometimes the system of survey; again, the special system of classification adapted to local conditions had to be worked out; and lastly, the amount of Land Revenue to be raised had to be settled upon *data* which were often imperfect and unsatisfactory. It was not seldom indeed found necessary—particularly in Gujarat—on account of the wide variations in the rates of assessment

Future progress of the survey.

The problems of Original and Revision Settlements differentiated.

inherited from former Governments of even adjoining villages to soften the transition from the old to the new system by allowing deviations from strict principle, leaving the anomalies to be remedied at Revision. The Revision Settlements, on the other hand, found the country already surveyed and the fields classified and, still more important, a clear record of 30 years' management upon which to base conclusions regarding the new rates of assessment. (Hence the main problems of the Revision were, firstly, to what extent were re-survey and re-classification necessary, and secondly, upon what principles were the new rates to be fixed for the next period of guarantee, with special reference to the possible rate of enhancement over the existing assessment and also to the important question of the taxation of improvements effected during the currency of the expiring settlement.)

In Chapters VII and VIII, therefore, the subjects of the Original and Revision Settlements will be dealt with separately with reference to their special problems. In doing so it will be necessary to take note of the legislation which forms a marked feature of the period to be reviewed. The most important of the Acts passed are the following :—

The Survey and Settlement Act	..	I of 1865
The first amending Act to the above	..	IV of 1868
The Land Revenue Code	..	V of 1879
The amending Act to the above	..	IV of 1913

## CHAPTER VII.

### THE ORIGINAL SETTLEMENTS.

IN 1851 the Survey was extended to the Konkan and Gujarat and entered upon regions presenting very strong points of contrast with the Deccan. It would indeed be difficult to find tracts of country differing more profoundly in physical and agricultural conditions than the Deccan, the

The different divisions of the Presidency described.

The Deccan.

Konkan and Gujarat. The typical Deccan country is a table-land, rising on the west to the heights of the *ghats* where, with a shallow soil and a super-abundant rainfall, the chief cultivation of the scanty population of poor hill tribes inhabiting them is rice; further east the country broadens out into the "Transition tract", an undulating plain of black trap or laterite soils with a fairly equable climate and sufficient annual rainfall and hence a moderately large and prosperous population. The cultivation here is mainly dry-crop with a fair proportion of irrigation from wells and *pats*. On the eastern side, though the aspect of the country is much the same as that of the Transition tract, the great uncertainty of the rainfall makes a state of scarcity chronic, with the usual result of a small population and uncertain cultivation, the latter being, as might be expected, mainly dry-crop.

No greater contrast could be presented between such condi-

The Konkan.

tions and those of the Konkan—the tract lying between the *ghats* and the sea coast. Here the typical aspect of the country is, on the coast, a low-lying stretch of country often much cut up by salt creeks and arms of the sea; further inland the district presents a very broken and irregular appearance, consisting of low tracts of cultivable soil interspersed with large stretches of barren, rocky soil called *varkas*, and still again by heights of forest-clad hills. Being exposed to the full force of the monsoon the rainfall is certain and exceedingly heavy, the cultivation being, therefore mainly rice in its two varieties of salt and sweet, the former cultivated in the saline tracts near the sea and the creeks, and the latter in the talukas further inland. Garden cultivation is chiefly confined to the pockets of rich soil found near the rivers, in which are grown betel, cocoanuts, mangoes, etc. The rainfall being assured and the annual harvest certain, the population of these districts has always been exceedingly large and the land in consequence much sub-divided.

With both the Deccan and the Konkan may be contrasted Gujarat which is a broad and, except in parts of the south, well-wooded plain, absolutely flat with an alluvial soil ranging from the sandy, coarse *goradu* of Ahmedabad through the rich loam of Kaira to the deep black cotton soil of Broach and Surat. Here want of soil-depth is hardly ever known, as rocky *substratum* is non-existent. The rainfall until a few years ago was considered certain and sufficient, forming a mean between Deccan scarcity and Konkan exuberance. The characteristic cultivation is dry-crop, whether *bajri*, *jowari* or cotton, with rice in the lower levels, either watered by the rainfall alone or irrigated from wells or tanks in supplement. Here also the population is very dense, certain parts of the Kaira district having a population of over 500 to the square mile.

In these circumstances it is not surprising if, in order to meet local conditions, considerable modifications were required in the system of the Joint Report; in fact, so difficult was it for any central authority to have sufficient knowledge to control the detailed operations, that the separate Surveys—the Deccan and Southern Maratha, the Konkan, the Gujarat and later on the Kanara Surveys—in these respects may be said to have been practically autonomous and to have worked out their own system free from interference. Hence it is that the different Surveys present many variations from each other in practice, particularly in methods of Classification, which were evolved independently in response to the need of local conditions and which it is impossible to refer to any common basis of principle. These differences, it must be owned, introduce complications which make the comprehension of the system as a whole very difficult in its detailed aspect—a difficulty which is intensified by the fact that the old Survey Officers seldom referred to these detailed processes in their Settlement Reports, but were content to work them out for themselves and issue orders to their subordinates. It is, therefore, very often impossible to state the principles upon which they relied, and all that can be done is simply to explain the facts as they stand.

In dealing with the history of the system under the Original Settlement the same order of subjects will be followed as that adopted in the chapter on the Joint Report, viz., first, the unit or "survey number" and its survey, secondly, Classification, and thirdly, Assessment, leaving the question of Tenure for separate treatment.

## A.—THE SURVEY NUMBER.

The history of the survey number is really inseparable from that of Occupancy. It is, however, treated from that point of view in a special chapter (Chapter X), and it is only necessary here to go into the question from the technical standpoint without discussing matters of principle.

The survey number of the Joint Report was the product of Deccan conditions as they existed at the time of the first survey, which were large holdings, a small population and extensive areas of waste. To such conditions a number of large size based upon the principle of "the area which could be ploughed by a pair of bullocks" was well suited; hence the Deccan number with its area of from 4 to 20 acres according to the character of the cultivation. But conditions in the Konkan and Gujarat were far other than those of the Deccan. Here pressure of the population upon the land had resulted in its being far more sub-divided; so that the adoption of the theoretical standard of the Deccan would have made the survey number a mere conglomeration of numerous sub-occupancies. In Gujarat, therefore, it was found necessary to make the rule that not more than 5 sub-occupancies should be included in a single number. In the case of the Konkan rice and garden lands the great extent to which sub-division had proceeded made numbers of a still smaller area essential; hence in these cases the standard size was lowered to from 1-5 acres. The *varkas* lands, on the other hand, being of enormous extent and small value, were divided off into large numbers of from 15-500 acres. Force of circumstances, therefore, brought it about that theoretical standards of area for the survey number, such as that of the Joint Report, had to be abandoned and in their place substituted the simple rule of practical convenience.

The next stage in the history of the survey number is the evolution of the "*pôt* number". In the rules attached to the Joint Report mention is made of "shares" of a survey-number. By this expression is meant holdings which, being below the area necessary to constitute a number of the standard size, were included with other holdings in a standard number in accordance with the principles enunciated in the Report. In the Deccan these shares were not measured or assessed, but were shewn in the accounts against the names of their holders as constituting so many annas in the rupee of the whole

The *pôt* number and recognized share.



number : e.g., a 2 or 4 annas share. In Gujarat, however, such subordinate holdings were measured, though very roughly, after the regular survey had been completed, and the assessment calculated by rule of three. No measurement record proper was kept of these areas and the survey number still remained the unit, both of survey classification and assessment. Such sub-divisions were called "recognized shares" and were given legal recognition as "subordinate shares of a survey number" in the Survey Act of 1865.

The evolution of the *pôt* number took place in the Konkan. Like the "recognized share" the *pôt* number was a "subordinate share within the survey number", but it was also something more than this; for, whereas the recognized share was formed only of separate individual holdings, in the Konkan, in the case of "mixed numbers", i.e., those containing more than one class of land, such as garden mixed with rice, etc., every separate parcel of each class held by a different occupant was made into a separate *pôt* number. But the chief distinction between the two lies in the fact that the *pôt* number, unlike the recognized share, was separately measured, classed, assessed and later on demarcated by boundary marks. The survey number, in fact, became an aggregate of *pôt* numbers, though it was still separately measured and mapped; it was also in one way the unit of holding, since, by the Survey Act of 1865, if a holder of a *pôt* number resigned his share for any reason, the holders of the remaining *pôt* numbers had either to take it up or pay the assessment thereupon. This, however, was a purely administrative measure, designed to preserve the integrity of the survey number, the real unit both of holding and assessment being the *pôt* number.

It remains to notice an isolated class of land not mentioned in the Joint Report, viz., "*pardi* land".  
*Pardi* land. This may be defined as "cultivated or cultivable land surrounding houses within the village site". It is first mentioned in Wingate's Survey Rules of 1853, Nos. 60 and 61, where all such areas, if above half an acre, were ordered to be measured into "*pardi* numbers" and demarcated, the question of their assessment being left for future decision. The necessary orders were passed by Government Resolution, No. 1765 of 5th May 1858, by which *pardis* above  $\frac{1}{2}$  acre in area were ordered to be assessed, those under  $\frac{1}{2}$  acre being exempted.

To complete this subject—since that date a number of orders have been passed at various times as to the limit of exemption in accordance with local circumstances. The orders at present in force are summarized below :—

Survey.	District.	Taluka.	Area exempt up to	Remarks
Deccan and Southern Maratha Country.	All	....	$\frac{1}{2}$ acre.	
Gujarat	Kaira	Theara	} 1 acre.	} As Kalipanj tracts were large parts allowed by custom.
		Kapadvanj		
"	Surat	Ali	"	"
	Panch Mahals	Halol	$\frac{1}{2}$ acre.	
	Remainder	....	$\frac{1}{2}$ acre.	
Konkan	All	....	$\frac{1}{2}$ acre.	
Kanara	All	....	$\frac{1}{2}$ acre.	

As for the Boundary Marks which went to demarcate the survey number—it is only necessary to state that the species to be employed was settled by the Superintendent to suit the requirements of soil and climate. The chief mark was everywhere the earthen, supplemented in the Konkan by stones and in Gujarat by stones and small pillars of brick and chunam.

The measurement of the survey number was carried out by the method of chain and cross-staff on the same lines as those previously described, and, in fact, save for improvements in style and finish of the work done, no change in method is observable from the start to the finish of the survey. Notable advances were, however, made in the methods of measuring whole villages and in the construction of Village, Taluka and District Maps. The chief improvement in the Village Map was effected by the introduction of a system of measurement of the village lands upon main "base lines" run through the village from one boundary to another with subsidiary base lines branching off therefrom. By setting out such lines with the theodolite and measuring from and plotting upon them the survey numbers through

which they passed a skeleton map was formed, into which the remaining numbers could be fitted. In this way the accuracy of the Village Map was much increased and it became, as it is now, a very correct topographical record.

Until 1864, however, no attempt was made to construct an accurate Taluka or District Map; but in that year a system of "traverse survey" of village boundaries by the theodolite was introduced which enabled a highly accurate Taluka Map to be constructed by fitting together the traverses of individual villages. Still later the topographical value of these maps was greatly enhanced by connecting them up by measurement with the stations of the Great Trigonometrical Survey of India.

The final stage in evolution was the District Map, made by piecing together the Taluka Maps in the same way as the Village Maps had been fitted together to form the Taluka Map.

To complete this account, it may be added that maps constructed on the basis of measurements made by the Revenue Survey were awarded a prize in the Vienna Congress of 1882—the whole history forming an instructive example of evolution from the rough, hand-drawn sketch of the first survey to the accurate topographical map of an excellence sufficient to gain a prize at an International Exhibition.

#### B.—CLASSIFICATION.

Survey methods are invariable, scientific and of universal application, and there was, therefore, little opportunity for variation in system in the different Surveys. It is quite otherwise with Classification. This is in its nature variable, firstly as being essentially dependent upon local conditions, and secondly because, as the answers to the local problems had to be worked out on the spot, the methods employed varied with different Superintendents. The result of the combined influence of these variable physical and human factors, therefore, was that the Classification systems of the different Surveys present a variety which is, it must be admitted, confusing to those who have not been brought into intimate connection with the working of the Survey system.

In spite, however, of variation in details the main principles as laid down in the Joint Report were preserved in all the Surveys, *viz.* :—

- (i) The separation into various classes of land.
- (ii) The settlement of the relative factors of value for each of these classes.

(iii) The arrangement of a system of "field classification" for each of these factors.

Leaving the description of individual variations for the second and technical part of this work, the main features of the various systems may now be described under these three heads.

### (i) *The Classes of Land.*

In making their division of land into classes the authors of the Joint Report went upon the system familiar to the Indian cultivator and the Indian administrator. Dry-crop was one class and *bagayat* was another, and, since the latter was more valuable than the former, it was to be assessed at a higher rate. It is true that at the Indapur Settlement the Collector, Mr. Mills, had objected to this differentiation on the ground that it meant the taxation of industry, but he was overruled. For the same reason, the special assessment of rice land might have been—and apparently was—objected to as a taxation of improved Dry-crop, but Mr. Fraser-Tytler replied: "Doubtless these embankments have occasioned vast outlay on the part of those who constructed them, as have the wells of the Desh. The *bagayat* rate there is a well tax, the rice rate here is an embankment tax. It would be as reasonable to object to the classification of a field on the score that it was in a high state of improvement and had, from constant tillage, care, accumulation of manure, etc., etc., risen far above its original power of productiveness as to object to the embankment being considered in our classification. We must classify land with reference to its actual condition at the time, and not with reference to what it might have been."\* This was the theory accepted by the first Settlement Officers and they consequently made their division of lands into classes for purposes of assessment in accordance with the facts as they found them. Thus, Captain Prescott in Gujarat assessed at high *bagayat* rates in Surat all lands found growing sugarcane, and in the Konkan all land found growing *rabi* crops was classed as *rabi*, though in both cases the more accurate system of the Revision Surveys had cause to quarrel with the class division as constituting, in many instances, a direct tax on industry owing to the inclusion of inferior kinds of land not really of the *bagayat* or *rabi* standard.

As for the actual division made—that depended in each case upon the local conditions of the areas coming under the

\* Paragraph 36 of Mr. Tytler's Report of 19th April 1841: SS. No. CLXVIII, Igatpuri p. 70.

purview of the different Surveys. The main line of division was everywhere that of the Joint Report into Dry-crop and Irrigated. In the districts of Nasik and Satara, and in the Konkan, it was found necessary to make further sub-divisions of Dry-crop, such as Mál and Bhadli, Tisali and Kumri, Rabi and Varkas, to cover the poorer classes of land found in the hill country. Irrigated lands were everywhere divided into Garden and Rice, with local sub-divisions, such as that of Garden in Gujarat into lands watered from wells, lands watered from *dhekudis* or water-lifts from rivers and streams and *bhatha* land, or of Rice in the Konkan into Sweet and Salt.

### (ii) *The Factors of Value.*

As in the Joint Report, the factors taken into account as determining the relative value of fields were divided into the two classes of Intrinsic and Extrinsic circumstances. The meaning given to the former class was the same as that of the Joint Report, though variations were, of course, made in the actual factors for the various classes of land to meet the local conditions of the different Surveys. The valuation of such factors was everywhere made by some process of classification, though here again no one system was universally adopted.

In the Joint Report the meaning of "Extrinsic circumstances" had been left vague and undefined. With the extension of the survey system, however, such factors were clearly defined and valued by methods which are fully described subsequently under the head of the "Distance from village scale".

### (iii) *The System of Classification.*

In outlining their scheme of field classification the authors of the Joint Report laid down a standard scale for Dry-crop lands only, leaving the Superintendents to devise their own systems for the other classes of land. In the settlements that followed a variety of systems was, therefore, employed. The favourite system was that of the "rupee-scale", on the lines of the methods introduced by Lieut. Davidson and Mr. Tytler, though with modifications which largely changed its character. Other systems were modelled upon that adopted by Lieut. Davidson for the classification of *pátasthal* lands. Certain other classes of lands again were not assessed through the medium of classification at all.

In the following pages a general account will be given of these systems. Before doing so, however, it is necessary to

describe the modifications in the system of the rupee-scale referred to above, as the subject is of importance in all the Surveys.

The rupee-scale, as devised by Lieut. Davidson and applied by him to the classification of Dry-crop land, had a maximum of 16 annas and 8 subordinate classes. As modified by Mr. Tytler for use in classing the rice lands of the Dangs, the rupee-scale was broken up into 3 portions of 8, 4 and 4 annas for the classification of the soil, moisture and embankment factors respectively. In both of these systems, it is important to notice, the best class of land was that valued at 16 annas, and it was to this that the maximum rate was applied. But, with the progress of the survey, the 16-anna scale was found

**The Rupee-scale.**  
**Enlargement of the scale.** too restricted to cover the whole field of classification. Thus, as Mr. Ozanne has remarked: "The Joint Rules enumerated 'faults' but omitted to prescribe opposite 'advantages'. It was, however, very soon found, as experience was gained, that in the interest of the relative valuation of soils it was just as necessary to recognize advantages as to allow deductions for faults. One of the earliest recognized 'advantages' was the alluvial increase for which rules were laid down as early as 1855 at least. Under it, lands enjoying the advantage of river flooding, with the consequent deposit of valuable silt, were subjected to an increase of one or more classes (of 2 annas each) according to the estimate of the benefit accruing".\* This means that the maximum classification valuation of Dry-crop land was raised from 16 annas to 22, as, by the Survey rules, 3 classes increase or 6 annas could be added for this particular "advantage".

Another example of the same kind, though of a slightly different character, is that of tank-irrigated rice in Gujarat, where the factors of value are those of soil, moisture and tank assistance. In this case, in order to cover all the possible variations, it was found necessary to adopt a scale giving 16 annas to soil, 8 to moisture and 8 to the tank factor: a total of 32 annas in all.

**Importance of the change.** The importance of this change lies in the intimate connection which exists between the classification scale and the maximum rate. In the Bombay system the maximum rate is always applied to 16-anna land, i.e., to land of that valuation

\*Paragraph 14 of Mr. Ozanne's Report, No. 763 of 27th April 1891: SS. No. CCLII, Sanand, p. 40.

irrespective of what the actual maximum classification may be. The result of extending the scale above 16 annas, therefore, was that the maximum rate and the maximum assessment for lands classed according to the rupee-scale system ceased to coincide. Thus, in the case of tank-irrigated rice, where the classification scale went up to 32 annas, if the maximum rate were Rs. 2, the maximum assessment would be  $Rs. 2 \times \frac{32}{8} = Rs. 4$ . This peculiar method of fixing the rates is due to the exigencies of the rupee-scale as an instrument of calculation which made it necessary for the maximum rate to be always applied to 16-anna land. The result, however, is that the term "Maximum Rate" is really a misnomer, the true "Maximum rate," i.e., the highest rate at which any particular Class of land is assessed, being that which results from the application of the survey "Maximum Rate" to the classification value of the "best land of that class, which may as in the case of *uttam bagayat* lands in Surat, amount to more than three times the "Maximum Rate" of the Survey.

The classification systems of the different Surveys will now be described under the heads of Dry-crop, Garden and Rice.

The Classification  
system.

### (i) The Classification of Dry-crop Land.

The ordinary Dry-crop land in all surveys was classified according to the Joint Report system, with the modifications in the scale just described. At the commencement of the Survey, however, certain special classes of Dry-crop were not assessed through the medium of classification. The excepted classes were the *mal* lands of Nasik, the *daliran* lands of Poona and the *varkas* of the Konkan. Of these, the former comprise the poor and shallow kinds of Dry-crop situated in the hill country which are only cultivated at intervals of several years. In this case the system adopted was that of leasing the whole area of such lands within each village on "*ukti*" leases to the cultivators as a body for payment of a lump sum. *Daliran* lands were those situated near forest areas and covered with brushwood, which were cultivated at intervals by clearing off the undergrowth. These were assessed by the "*kohia*" method, by which a fixed rate was charged on each bill-hook used for clearance purposes on the analogy of the plough-tax (*outbandi*) system of Khandesh.

*Varkas* lands are practically the same as the *mal* of Nasik, but their main use at the time of the Original Surveys in the Konkan was for the purpose of providing *rab* manure for the

cultivation of rice. At the first Konkan surveys this class of land was not assessed separately at all on the ground of expense, but was treated merely as an adjunct to the rice fields, a combined rice and *varkas* rate being imposed upon the latter alone.

All these classes of land were, however, subsequently brought under the ordinary rules and their assessment fixed on the basis of a field classification.

### (ii) *The Classification of Garden Lands.*

The question of the classification and assessment of Garden lands has always proved, perhaps, the most difficult problem which the Bombay Survey has had to solve. Such lands may be divided into the following classes:—

(a) lands watered from wells;

(b) lands watered by means of *dhekudis* (Gujarat) or *badkis* (the Deccan), i.e., water lifts by which the water is drawn from pits dug in or near the beds of rivers or streams;

(c) lands watered from *pâts* or channels by which the water is led from reservoirs formed by damming streams or water-courses.

Difficulties in the classification of such lands.

The difficulties which arise in the assessment of such lands are partly theoretical and partly practical.

According to the theory of the Bombay system lands should be assessed "according to their capabilities," that is to say, their (natural advantages) for the production of crops. Now in the case of Garden lands it is clear that, though the land must possess certain natural advantages in the shape of a water-supply available for purposes of irrigation, yet that advantage cannot be utilized except by the employment of human labour and capital in the construction of wells or other means of irrigation. To levy a special assessment upon Garden lands, therefore, is, in spite of the natural advantages which the land must possess, to tax industry; or, in other words, to assess upon considerations other than those of its natural capabilities. The extent to which this proposition is true varies with the different classes of land, as the amount of capital expended is naturally greater in some cases than in others. It is greatest in well irrigation and, on the average, probably least in that of *pâtasthal*.



The chief practical difficulty lies in the fact that the object of the Bombay system of Settlement is to lay a fixed assessment upon a fixed area of ground. This principle could be carried into effect in the classification of Dry-crop and Rice lands, in which the areas devoted to the particular class of cultivation were well defined and the factors of value taken into account for the purposes of classification fairly constant. But in the case of Garden lands neither of these conditions was fulfilled. In the first place, the area which any particular well or *pât* may irrigate is not fixed, but varies from year to year in accordance with the need of rotation of crops, the rights of various owners and so on. In the second place, the supply of water is by no means a constant quantity but changes, in the case of wells with the level of the sub-soil water, of *dhekudis* and *budkis* with the course of the river or stream and in that of *pâts* with the character of the annual rainfall.

At the time of the Original Surveys the first of these difficulties, the theoretical, was not felt, since lands were assessed in harmony with the principle enunciated by Mr. Tytler of classifying land "with reference to its actual condition at the time". The second kind of difficulty, the practical, was, however, felt in full force and it is not surprising if, in their endeavours to provide a satisfactory solution of such extraordinarily complex problems, various schemes were tried at different times, none of which, however, were entirely successful.

#### (a) *The Classification of Lands watered from Wells.*

The method of classing lands watered from wells adopted in the Deccan surveys up to the year 1850 was that devised by Lieut. Davidson by which the classification scale was based upon soil and the extent of extra land available for dry-cropping. So many acres were then assigned to the well in accordance with its capacity, and an assessment per acre charged at the rate fixed by the classification scale. Thus, if the acre rate were Rs. 2 and the well was found capable of irrigating 3 acres, the assessment would be Rs. 6. This system was called "*vihirhunda*" and was really a well tax. At the settlement of Junnar in 1850, however, the system was changed and the extent of land irrigable from the well alone ascertained and taken as the basis for calculating *vihirhunda* instead of the extent that the well was yearly capable of irrigating. In other words, the well tax became a land tax, the area irrigable

being ascertained approximately and the assessment placed upon that area at a rate per acre. This was the system subsequently employed in both the Deccan and Southern Maratha surveys.

Under this improved system the *bagayat* assessment in the Deccan was placed upon the area actually irrigable. In the Gujarat Survey, however, it was found impossible to adopt this method of classification and assessment, on account of practical difficulties in the way of determining what the irrigable area should be. Owing to the nature of the soil in these districts it is possible to lead water by channels for long distances, even up to a quarter of a mile, without risk of soakage; hence it is practicable to feed several fields from one well, even though situated at a distance, and to vary irrigation from one to the other as occasion may demand. This is actually done and it is, therefore, impossible to affix a certain, definite share in the water-supply to any particular field. Again, there may be several sharers in one well and, as the right of each shareholder is subject to inheritance and also to transfer by sale, mortgage, etc., the destination of the water is uncertain as it will follow ownership. Again, owing to the sandy nature of the soil, a well is always liable to collapse; while further, the character of the sub-soil is such that the well-water often tends to become salt and so useless for purposes of irrigation. In these circumstances it is impossible to say that any particular field, even if now irrigated, will continue to be so, owing either to changes in the destination of the water, or to the deterioration of the supply. Hence it was found impracticable to adopt the Deccan system of assessment in Gujarat.

At the first settlement in Gujarat—that of Dholka in 1853-1854—several methods of dealing with this problem were proposed, of which the two chief were:—

(a) to fix a water rate according to the crop grown and varying with the quality of the produce, and to lay it upon the individual fields after measurement;

(b) to charge a fixed rate for each water bag used for purposes of irrigation.

Of these, the former was rejected after trial as entailing annual measurements by extra establishment with the almost certain accompaniment of fraudulent collusion to escape payment. The latter method was, therefore, accepted and a so-called "bag-rate" charged in addition to the ordinary soil assessment of the Garden and Rice lands so irrigated.

This system was employed in the settlements of Dholka, Dhanduka and Virangam. At the settlement of the old Jetalpur taluka in 1859, however, the Settlement Officer, Mr. Rogers, rejected the bag-rate system and, on the ground that the irrigated areas under wells and the rights to shares in the water were much more clearly defined than in the talukas formerly settled, attempted to impose a *bagayat* assessment direct upon the land irrigated. This plan, however, proved a failure, and in subsequent settlements a scheme devised by Mr. Pedder was adopted by which a "*bagayat kasar*" or well tax was imposed upon each well according to (its capacity) which was reckoned in "*kos*" or water-bags. This scheme differed from that of the original bag-rate, as the rate of the "*kasar*" imposed was varied in accordance with the dry-crop rate of the village, the soil classification of the field and other particulars. In fact, the well was treated as a survey number, and classed and assessed according to its relative advantages, like the soil. Where there were two or more sharers in a well, the total well assessment was split up into fractions according to the amount of each share. This system was subsequently introduced throughout the whole Gujarat survey. The obvious objection to it is that it was a *well*, and not a *land* tax and as such entirely opposed to the principles of the Bombay system. In the peculiar circumstances, however, any system of assessing Garden lands must have been objectionable in some respects, and Mr. Pedder's was probably the best that could have been devised.

Garden lands in the Konkan are usually planted with fruit-trees, such as cocoanut, *supari*, jack-fruit,

In the Konkan. etc. The classification system applied to these Garden lands was devised by Colonel Francis. He distinguished 3 factors of classification value, *viz.*, Soil, Well-water and Trees, for each of which he framed an anna-scale. The soil and water classification was done in the same way as that of the Deccan on the system of Lieut. Davidson, wells being divided into classes according to the duration of their water-supply, and an anna valuation given to each class. (The chief point to notice is the introduction of the tree factor. The number of trees in each garden was counted and 60 cocoanuts taken as the standard of a first class garden and classed at 16 annas with a sliding scale for smaller numbers. Other kinds of trees were reduced to one denomination, that of cocoanuts, according to a scale of values.

The objection to this system of classification was that the tree factor is in its essence non-permanent and fluctuating, and that, therefore, the land was not being assessed according to its natural capabilities, but upon considerations of purely temporary importance. Colonel Francis justified himself by reference to the former Indian system of assessment and his scheme was approved. At the time of revision, however, the anomaly was remedied, except in Ratnagiri, by methods to be described subsequently.

(b) *The Classification of Lands watered from Dhekudis or Budkis.*

The *dhekudi* or *budki*—the former being the Gujarati, the latter the Deccan term—is a well or pit sunk near the bed of a river into which water either percolates direct, or is led by means of a channel cut from the stream. Lands watered in this way in Gujarat were called *dhekudiat*.

(1) *Dhekudiat*.—The chief difficulty in the way of imposing a permanent assessment on lands of this class in Gujarat was that, owing to the constant changes in the course of the rivers in those districts, land which was watered in this manner in one year might the next year be situated far from the bed of the stream and, therefore, incapable of irrigation by *dhekudis*. A permanent assessment being, therefore, impossible, at the early settlements previous to 1865 the same system was adopted as that for well-watered lands and a bag-rate imposed. The objections to this method of assessment, as explained by Mr. Pedder, were that it required careful supervision, and was even then easily evaded, and that it tended to check the extension of wet-crop cultivation. In 1865, therefore, on Mr. Pedder's recommendation, a new system was introduced, by which a very moderate permanent water rate, to be levied in all circumstances, was imposed on all lands classed as *dhekudiat*, "the lightness of the water rate and the consequent large profits in years when the irrigated crops are raised making up to the people for their having to pay it when they do not or cannot use the water." This rate was imposed upon a scale, calculated "according to the difficulty of obtaining the water, the distance of the field from the river and similar considerations."\* Unlike the corresponding rate levied in the case of wells, however, this rate was imposed, not only upon lands actually irrigated from *dhekudis*, but also upon those irrigable

\* Paragraph 14 of Mr. Pedder's Report of 2nd October 1865: SS. No. CCKIV, Daskrol, p 124.

by this means owing to their proximity to the river bank : a system which is clearly more in accord with principle, since it took into account, not the use, but the capability of using the common water-supply. To guard against the contingency of the river changing its course it was provided that in such an event the water rate would be remitted.

(2) *Budkis*.—The conditions under which land is irrigated in the Deccan by *budkis* differs from that of Gujarat, for the reason that such irrigation is usually conducted from (*nalas*), the course of which is not susceptible to change. It was, therefore, possible to treat the facility for irrigation simply as a permanent factor of classification value. This was generally done and all lands situated within 5 chains—which was considered the effective distance—from a *nala* affording such facilities had an addition made to the soil annas according to a sliding scale.

### (c) *The Classification of Patasthal Lands.*

By Patasthal Bagayat is meant land irrigated by damming streams with dams called "*bandharas*" and leading the water collected above the dam to the area to be irrigated by means of channels (*pats*). These *bandharas* may be either permanent (*pakka*) or temporary (*kacha*), but are usually of the latter description, being constructed annually of earth and stones at small cost. Frequently a stream is dammed at many spots, the overflow from the principal dam being impounded by the next lower dam, the supply of which is often supplemented by springs in the bed of the stream between the two dams. Patasthal irrigation is essentially by flow, but water-lifts—called *sups* or *supdas*—are used to lift the water to the *pat* from the reservoir when the impounded water above the dam falls below the level of the channel.

Except when very small, each *bandhara* usually serves several fields, varying in number according to the head of water and owned by different proprietors, each of whom has the right to take water from the *pat* in turn, the garden highest up the *pat* getting the water first, then the next, and so on till the last when the re-distribution re-commences. The regulation of the water-supply as between the different owners depends entirely upon custom and varies with the district. Thus, in Khandesh and Nasik, where the area under individual *bandharas* is usually considerable, the whole is divided up into *phads* or sections, in each of which the sharers in the *pat* possess

Different classes of  
Patasthal irrigation.

a plot. These *phads* are so arranged as to correspond with the rotation of irrigated crops. Thus, in the case of a village with a 3-year rotation, there might be 6 *phads*, 2 of which would each year be cultivated with sugarcane, 2 with rice followed by sugar and 2 with wheat and similar crops. In the next year the sugarcane *phad* would be cultivated with wheat, the wheat *phad* with sugarcane and so on. There is no rule as to the time for which each garden is entitled to have the water, as it is to the advantage of each sharer to flood his field as quickly as he can in order that his next turn may come round again as soon as possible. Elsewhere in the Deccan, where the area irrigable under individual *pats* is usually smaller, the *phad* system does not prevail in its Khandesh form. There is, however, an approximation thereto in the Satara district, by which the sharers in turn have the privilege of cultivating sugarcane in certain portions of the irrigable area, the supply of water after the 1st March being reserved for them alone, with the understanding that in successive years similar consideration will be shewn to the others. In this district the *pali* or rotation of distribution is fixed for a certain period, say 8 days, and the exact number of hours, or rather *prahars* of 3 hours each per week, during which each sharer may use the water, is carefully arranged.

*Prima facie* this system of cultivation might seem to have a certain affinity with that carried on by means of *dhekudis* and *budkis* previously described and to have, therefore, been assessable according to the same methods, *viz.*, by imposing a rate upon all land irrigable by the erection of a *pat*, whether so irrigated or not. Apart, however from the difficulty of deciding whether *patasthal* irrigation would be possible at any particular place on the stream and also what fields would be irrigable supposing a *pat* to be built, there were other objections to adopting such a system. In the first place, the owners of existing *pats* on any particular stream have always been held to have a prior claim to the water and a right to be safeguarded against their own supply being diminished by the erection of other *bandharas* higher up the stream.\* But further, even fields which might be irrigated from an existing *pat* have not necessarily the opportunity of irrigation, since the occupant may have no right in that particular *pat*. For these reasons it would have been impossible to assess a field for the "natural facility of irrigation from a *pat*" as was done in the case of *dhekudis* and *budkis*.

\* *Vide* the Bandhara Rules (Government Resolution No. 3618, dated 14th July 1874).

The general rule, therefore, was laid down that only that land should be assessed as *pātasthal* "which enjoys the custom of taking water from a stream, and to exempt from such assessment all land which, although it may be obviously irrigable from a stream, has never been so irrigated".

Definition of the Pātasthal area.

Practically speaking, therefore, the assessment which is charged for the water factor in *pātasthal* land is a water-rate imposed for the use of Government water. The rates so assessed were, it is true, fixed as part of the settlement, and, provided the water-supply is not increased through the operation of Government agency, may not be increased during the currency of the settlement, but, as has been ruled by Government, "the *pātasthal* rates, though for convenience imposed and levied along with the ordinary land revenue, form no part of the land assessment proper, as they are calculated upon the average area of the land actually under *pāt* cultivation".\*

Turning now to consider the methods according to which these lands were classed and assessed—the system employed may be summed up as follows:—

Pātasthal Classification.

- (a) The rates fixed were consolidated rates for soil and water combined.
- (b) The water-rate was graduated according to the duration of the water supply and the soil classification, the inferior classes being rated proportionately higher than the superior on the ground that they benefit more in proportion by being irrigated.
- (c) The factor of water-supply was divided into six classes, the sixth being for water available till the end of October and the first for water lasting till the end of May.
- (d) The maximum combined rate for land of 16 anna-soil classification being fixed by Government, the rates for the sub-classes were determined by the Superintendent personally for each survey number on consideration of all the circumstances, the chief of which would be the area irrigated or irrigable, the quality of the soil, the crops grown, the duration of the water-supply, the yearly cost of constructing or repairing the *bandhara* and *pat*, and so on.
- (e) This rate was fixed upon a consideration of "the average duration and average volume of the water-supply,

\*Government Resolution No. 3205 of 4th April 1892: SS. No. CCLIX, Khanspur, p. 70.

bad years and good being balanced together".\* It was, therefore, "intended like the soil rate, with which it was combined, to be levied annually, irrespective of the actual water-supply available in any one year".†

(f) The area upon which this rate was fixed was the average irrigable area in each field as fixed by the Superintendent after consideration of all the circumstances; that is to say, in a field the whole of which was not permanently irrigated, an estimate was made of the average area irrigated annually and that area was shewn as *pâtasthal* and assessed at the *pâtasthal* rate, the remainder being treated as dry-crop and assessed at dry-crop rates. The *pâtasthal* area, therefore, represented merely a proportion and not a specific part of the field. The rayat is in consequence "at liberty to irrigate any part of his field or any area he finds feasible, paying merely the assessment on what has been recorded as the average area the supply suffices for".†

### (iii) *The Classification of Rice Lands.*

The systems of Rice classification may be divided into two, *viz.*, those of Gujarat, the Konkan, and the original Deshi and Dangi systems of the Deccan, which were modelled upon that of Mr. Tytler with an anna-scale for each factor of value; and secondly, the so-called "Dharwar system" of the Southern Maratha Country Survey which was subsequently introduced into some part of the Deccan and upon which the Kanara system is based. According to this system, while the soil classification is worked out through the ordinary rupee-scale, the water classification of the water factor is determined by a scale of "water classes" on the lines of Lieut. Davidson's scheme of *pâtasthal* classification.

#### (a) *The Rupee-scale Systems.*

The question of a satisfactory system of Rice Classification, though not so intricate as in the case of *bagayat*, yet presents considerable difficulties of its own. It is not so intricate because the troublesome factor of water-supply which, for the large proportion of rice lands, is derived from the rainfall and drainage from higher grounds, is naturally of a far more permanent and assured character than that of garden lands irrigated from such uncertain sources as wells and *pâts*. It

\*Paragraph 5 of Mr. Fletcher's Report No. 1027 of 4th August 1891: SS. No. CCLIX, Khanapur, p. 54.

†As above, paragraph 17.



is, of course, true that rice lands also are irrigated from such sources, but they are merely supplementary to that of the rain-water and drainage, and therefore, as Mr. Ozanne remarks "To fix a workable system (of rice classification), the question should be considered with reference to rain rice only".\*

Nevertheless, the arrangement of a satisfactory system is by no means easy owing to the difficulty noted by Mr. Tytler, viz., that of determining the relative values to be assigned to the soil and water factors respectively. In the Konkan, where the rainfall is heavy, certain, and of a uniform character, these factors were considered to have a generally equal

In the Konkan. value; consequently, in the Konkan system of rice classification, 8 annas were assigned to soil and 8 to water. The Deshi system, as applied in the plain villages of the Deccan, was of the same type. Under both these systems the classification annas of each factor were added together and one maximum rate applied to the combined annas in working out the assessment.

In Gujarat, however, it was not possible to adopt such a simple system, owing to the way in which the character of the annual rainfall varies from district to district. In parts of the Ahmedabad district, e.g., Dholka, it is notoriously uncertain; in Kaira on the other hand it is more assured, while in Surat the climate is moist and the rainfall heavy. The relative value of the two factors of soil and water, therefore, varies in different parts of Gujarat and has no permanent relation such as may be said to exist further south.

These variations might of course have been expressed in the classification by altering the anna-scales of value accordingly, but in preference to doing so the same scales for each factor were retained throughout the whole Survey. Instead, however, of combining the annas of each factor and applying one and the same maximum rate to the combination, the device was adopted of having separate maximum rates and, therefore, separate assessments, for soil and water, the relation between the two being expressed, not in the classification, but in the rates which were varied from district to district in accordance with the changes in the relative value of the two factors.

The above are the principles which lie at the back of the Gujarat system of separate rates for soil and water. Exactly

\*Paragraph 14 of Mr. Ozanne's Report No. S. 400 of 19th February 1894: SS. No. CCLXXXVIII, Mehmabad, p. 38.

how they were applied by the old Settlement Officers at the Original Surveys is, however, difficult to ascertain, and certainly, as Mr. Ozanne has shewn, their action was not uniform. It is, however, hardly worth while making investigations into the question, as these rates were practically all revised at the Revision Settlements.

### (b) *The Dharwar System.*

The rice lands of the Southern Maratha Country differ from those of the rest of the Presidency in that they are usually tank-irrigated and also, in the better classes, grow sugarcane in alternate years. The classification system employed was first introduced at the Original Settlement of the old Kod taluka in 1846-1847 by Wingate, who gives a full description of it in the Settlement Report.

Under this system the soil factor was classed according to the ordinary dry-crop scale as in Gujarat. The valuation of the water factor was carried out on the model of the system adopted by Lieut. Davidson for *pâtasthal*, i.e., six water classes were arranged according to the character of the water-supply, ranging from the 1st class, with a supply from a tank giving a certain crop of sugarcane in alternate years, to the sixth class in which the supply was wholly dependent on the rainfall. The maximum rate was applied to land classed at 16 annas with class No. 1 water-supply, the rates for the other combinations of soil and water being fixed by the Superintendent just as was done in the case of *pâtasthal*.

The question of the relative values of the soil and water factors is discussed by Wingate in the Hangal Settlement Report, and the conclusion is given in the Kod Report, "that the value of rice land with a supply of water for irrigation equal to that indicated by our sixth or lowest class would be quadrupled were the supply of water equal to that of our first class"\*. On this basis the values of the intermediate classes were worked out and the result expressed in the assessment rates fixed by the Superintendent.

The advantage of this system was that the Superintendent was able to make the necessary variations in the relative values of the soil and water classes and of the assessment of the various combinations of the two factors by the simple process of altering the assessments of the various combinations

\*Paragraph 21 of Captain Wingate's Report No. 235 of 21st December 1848; SS. No. CLX, Kod, p. 92.

of the two classes without having to go through the cumbrous method employed in Gujarat of having separate rates for soil and water. He was at the same time able to make a much more delicate adjustment to the local conditions than was possible through the anna scale with its comparatively wide intervals between the classes.

### *The Distance from Village Scale.*

In the Joint Report the influence of "extrinsic circumstances," such as distance from drinking water, etc., as a factor affecting the value of land is merely noted without any instructions being given as to the method by which they were to be taken into account in estimating the relative value of different fields. With the extension of the Survey allowances were made for the effect of such external influences upon the value of lands according to a regular system. Two factors alone, however, were taken into account, *viz.*, first, the factor of distance from village site as affecting the relative value of fields within the same village, and secondly, that of situation value with respect to fields in other villages. The importance of the first factor is due to the consideration that of two fields, otherwise of equal value, that which is situated in the neighbourhood of the village site is more valuable than that at a distance, for a variety of reasons, chief of which are the extra cost involved in watching and carrying the crops, the time lost in going and coming, etc. The second factor is of importance because, *ceteris paribus*, a field in a large village is naturally of more value than one in a small village, on account of the competition for land and its higher price, the greater facilities for the disposal of produce, and so on.

Allowance for both these factors was made by one and the same operation, *viz.*, the application of the Distance from Village Scale. The first factor was allowed for by varying the normal assessments, as worked out by the classification values, in accordance with a scale which made allowances for every  $\frac{1}{4}$  mile distance from the village site, numbers situated within  $\frac{1}{2}$  to  $\frac{3}{4}$  mile usually having their assessments raised, and those at a greater distance having their assessments lowered. The second factor was allowed for by making the increase for numbers close to the village greater and the reduction for distance less in the case of large than in that of small villages.

The following illustration will shew how the system worked :

*Factor No. 1.*

Distance.	Normal assessment.	Allowance for distance.	Final assessment.
	Rs.		
S. No. 1, within $\frac{1}{2}$ mile.. ..	3	+ 4 annas.	Rs. 3-4
S. No. 90, between 1 to $1\frac{1}{2}$ miles ..	3	- 4 annas.	Rs. 2-12

*Factor No. 2.*

	Popu- tion.	Distance.	Normal assess- ment.	Allowance for distance.	Final assessment
	Rs.				
Village A	1,000	S. No. 1, $\frac{1}{2}$ mile	3	+4 annas.	Rs. 3-4
Village B	500	S. No. 1, $\frac{1}{2}$ mile	3	+2 annas.	Rs. 3-2

Somewhat different methods of achieving these results were employed in the various Surveys—for which, *vide* Part II, Chapter VII—but the results arrived at were the same in all.

The system of making allowances described above was not introduced into the Konkan Survey because there are usually no fixed village sites such as there are in the Deccan, in Gujarat and in the Southern Maratha Country. In the Konkan the people generally live either in houses situated on or near their lands or else in scattered hamlets. It was, therefore, found impossible to make the distance scale applicable in so many talukas that it was dropped for the whole of the Konkan.\*

Even in the other Surveys, however, the scale was applied only to dry-crop lands and not to garden or rice, for reasons which are not specified, but were probably the smaller bulk and the greater value of the crops grown in these classes of lands which made the factor of "distance" of less importance than in the case of dry-crop.

The above description will have made it clear that the true *raison d'être* of the scale was to make allowance for the factors of situation as affecting the relative value of fields. As will appear, however, in the account given of the methods adopted at the Original Settlements in fixing the assessments of land, the distance scale was sometimes diverted from its legitimate use and made to serve the purpose of altering the normal

\* The Superintendent, Konkan Survey's No. 26 of 6th January 1894.

assessments for reasons other than those contemplated in the Joint Report.

These distance scales and the method of their application have always been controlled by the Survey Commissioner (Survey Commissioner's letter No. S. 850 of 29th March 1895 to the Collector of Kaira). Before 1893 the practice was to take the distances from the village sites or where a village has hamlets from the hamlet sites. In 1893, Mr. Ozanne, Survey Commissioner, changed this to a "general rule" of measuring from the main village only, unless there was a large and old established hamlet (Survey Commissioner's Circular No. S. 2890 of 8th December 1893).

Mr. Ozanne's rule is rather difficult because nearly every hamlet is "old", and "large" is not defined. He argued that the rule as to the main village was "for the sake of simplicity and to encourage the creation of hamlets". "Simplicity" is not a sound reason. The principles of these distance scales, proposed by the authors of the Joint Report, are clear and must be followed. "Simplicity" only means abandoning principles because they give some trouble. We should henceforth follow the original rules and take the distances from the nearest "hamlet" (or if the cultivators live in the "site" of another village then from that village site). If a hamlet is newly (i.e., less than 30 years) established or is a very small group of only 5 houses or less, it should be ignored or if it is a settlement of only one class of people like Dheds or Dharalas, then it should be taken as the distance point only for the lands owned or tenanted by that class of people (Settlement Commissioner's No. S.T. 208 of 15th November 1918).

In Revision Settlements these distance scales are not recalculated as the revised assessments are calculated by merely increasing or decreasing by so much per cent. the existing assessments which embody the old distance scales. It is only in the case of those talukas which have been classed *de novo* in Revision Settlements that the Assistant Settlement Officer should propose new distance scales if he considers that the old scales would not work fairly.

Some of the old scales were more or less deliberately constructed to modify the effect of excessive maximum rates: and not because the profits of the distant fields were so much below those of the near fields as the scales suggest. It would have been wiser to modify the maximum rates: and in revision settlement wiser to apply a less violent "distance scale" and

(since this will raise assessments even if the maximum rate be unaltered) then take a less increase in the maximum rate.

### C—ASSESSMENT.

According to the system of the Joint Report the process of determining the assessment entailed the following operations :-

- (a) The division of the villages of the taluka into Groups
- (b) The determination of a total amount for the area under settlement by an examination of the revenue history of the tract using that expression in the wide sense given to it in the Joint Report.
- (c) The distribution of the aggregate for the whole area over the groups by means of maximum rates for the various classes of land

#### (a) Grouping.

The object of the operation called "Grouping", it may be repeated, was the division of the taluka into homogeneous groups of villages comprising those parts of the whole area the relative conditions of which called for a variation in the "standard of assessment"—to use the Joint Report term—in order to allow for advantages and disadvantages. The necessary variation was to be made by graduating the pitch of the maximum rates for the several classes of land as between group and group in accordance with the estimate of the Settlement Officer regarding the allowance necessary to be made in each case. But within each separate group the same maximum rates were to be applied to the different classes of land, differences in fertility being already taken into account by the classification.

The principles according to which villages were to be grouped are laid down very clearly in the Joint Report. The basis of differentiation is stated to be "marked and permanent distinctions," and these are finally resolved into considerations of—(a) climate, (b) situation with respect to markets and (c) in the background as "in a great measure temporary" the state of husbandry. It is, however, distinctly stated that neither caste nor the condition of the cultivators should be taken into account in this connection, as being undesirable both from the theoretical and practical point of view. In other words, the principle upon which the authors of the Joint Report wished to insist was that the assessment of land should be made to depend purely upon its natural value as determined by its fertility and situation and

that in doing so the human factor of the condition of the cultivators must be entirely disregarded.

A perusal of almost any Original Settlement Report will, however, shew that at the Original Settlements these instructions were very largely disregarded, and that the grouping of villages was conducted in accordance with principles widely divergent from, and sometimes entirely opposed to, those of the Joint Report.

This divergence from principle was due to various causes, the chief of which were the following :—First was the practical difficulty of introducing an assessment founded upon purely theoretical principles of equality into districts where the main feature of the existing assessment, as noted many years before by Elphinstone, was its inequality. More particularly was this the case in Gujarat where the system of caste assessment had prevailed from time immemorial. In these circumstances, to have introduced the Joint Report system without allowing the cultivators time to adjust themselves to the new conditions would have meant ruin to many a village. As Captain Prescott remarked in submitting his proposals for the settlement of the Bardoli Taluka of Surat : " It is quite clear that the soil of a village, inhabited by very poor people, may, in its normal state even, be very superior, and that in a village inhabited by agricultural capitalists it may be very inferior. Our classification shews and allows for this. But no classification in the world will provide for peculiarities of revenue management, customary tenure, or cash rates of assessment, and if we go blindly according to a plan which we are pleased to call principle, and in fixing the maximum rates of villages make no allowance whatever for the condition of the inhabitants, we do harm instead of good."\* Over a large part of Gujarat, Khandesh and in some Deccan districts, therefore, theory was sacrificed and villages grouped so as to allow a transition period between the passing of the old and the introduction of the new system of assessment.

A second cause, which operated in the Konkan Settlements, was the peculiar system of combined rice and *varkas* rates introduced at the first Thana Settlements by Captain Francis, which led him to group the villages "according to the *varkas* areas which they contained, suitable for *rab*, and the opportunities for *varkas* cultivation which they afforded."† This

\* Paragraph 35 of Captain Prescott's Report No. 391 of 11th November 1865 : SS. No. CCCLX, Bardoli, p. 48.

† Paragraph 26 of Mr. Stewart's No. 981 of 22nd May 1868 : SS. No. CCXXII, Old Khandesh.

novel system of grouping was a mistake in assessment methods which was subsequently remedied.

Another cause of a somewhat different nature was the absence at the time of the earlier Original Settlements of good topographical maps, which made the proper grouping of villages in talukas a matter of extreme difficulty, e.g., Mangaon in Kolaba, owing to the variations in geographical aspect which it presents, ranging from the hilly country on the eastern and northern borders to the open valley on the Raigad boundary.

For these and other similar reasons, the division of villages into groups at the Original Settlements was generally of an essentially transitional character, intended as a half-way house between what was theoretically right and practically possible.

(b) *The determination of the aggregate.*

The aggregate was the touchstone of the success of the settlement because it was upon this that the pitch of the rates ultimately depended, even though their distribution over the various classes of lands might be settled by the Superintendent. As, however, has been previously explained in describing the methods of the first Settlement Officer, the aggregate was never a formal sum settled upon *à priori* considerations into which the Settlement Officer had to force his rates apart from any other considerations. It was, in fact, hardly a definite amount at all. What the Settlement Officer did was, after an inquiry into the previous revenue history of the taluka, to decide in his own mind as to the suitability of the existing assessment and whether it was necessary to raise or lower it or keep it at the existing pitch. If it was to be lowered or raised, he would then have to determine the amount of increase or decrease. The result would be, not a definite sum, but rather a rough idea of what the future should be in relation to the existing assessment. If, as was usual, a neighbouring taluka or talukas had been previously settled, then the aggregate would be less important as a factor in deciding what his rates were to be, since those fixed for the areas already settled would naturally form a guide for his own proposals. A good instance of this may be found in the Original Settlements of the 7 talukas of the Thana District, which were all based upon the rates fixed by Colonel Francis for the old Nasrapur (now Karjat) taluka in 1856.



Nevertheless, it was the aggregate produced by the rates fixed by the Settlement Officer which formed the true criterion of their suitability and, provided this was fair, the tract as a whole could be considered equitably assessed even though there might be errors in the distribution of the total over the various groups of villages or classes of land, as over-assessment in one quarter would be counterbalanced by under-assessment in another.

The principles upon which proposals were to be based were stated with great clearness in the Joint Report. They comprised, firstly, a study of the general revenue history—using that term in its widest sense—of the taluka; secondly, the setting forth of the statistics relating thereto by means of diagrams in a form easy of comprehension; and thirdly, a conclusion as to the amount which the tract could afford to pay from a close consideration of those statistics. It was upon these general lines that all future Settlement Officers proceeded. At the outset, however, as might have been expected, the consideration of the various questions involved was conducted in a somewhat amorphous manner, each individual officer framing his own reports in his own way and collecting statistics about and laying stress upon only those facts which happened to strike him personally as important. Further, the diagrams in which the statistics were embodied were also drawn up in a haphazard fashion according to individual ideas and not in any standard forms. The result was that these early reports, instead of presenting a clear and ordered body of statistics and of opinions based thereupon in an easily comprehensible form, were of a somewhat vague and confused character, often passing by essential to dwell at inordinate length upon unessential points. In course of time, however, under pressure from Government, the Settlement Report, like the rest of the system, assumed the scientific form, both in the statement and presentation of statistics, which it has at the present day.

In a Settlement Report, of this later type the three subjects of the revenue history of the taluka, the presentation of statistics in diagrams or appendices and the proposals for the aggregate were dealt with as follows:—

(a) The study of the revenue history of the tract comprised—

- (i) a description of the general physical features of the whole settlement area, both in itself and also in relation to other neighbouring tracts, if any, previously settled;

The  
Report.

Settlement

The  
History.

Revenue

(ii) a consideration of the general state of communications, such as roads, railways, etc., and of impediments to transit, such as unbridged rivers, etc. ;

(iii) a description of the various classes of cultivation including the facilities for irrigation and also of the state of husbandry ;

(iv) an account of the condition of the population with reference to caste, general prosperity, amount of agricultural stock (dead and live), health, education, etc. ;

(v) an inquiry into the statistics of Land Revenue, including those of the actual demand, collections and remissions for as many years as was possible, with an estimate of the incidence of the assessment ;

(vi) a concomitant inquiry into the statistics of occupation of land and its bearing upon the question of the pressure of the assessment ;

(vii) a study of prices ;

(viii) a study of the statistics of leases, sales, mortgages, etc., if available.

Of these, the first four heads relate to straightforward questions of fact, depending for the completeness and accuracy of the inquiry upon the intelligence and industry of the Settlement Officer. The fifth and sixth heads, however, which are mutually inter-dependent, always presented a considerable amount of difficulty, particularly in the case of the earlier settlements. All the statistics that could be collected were bound to be incomplete and untrustworthy, owing to the very conditions of administration which the new system had come to remedy. Particularly was this so with the statistics of occupation, since the lack of a previous survey in the majority of districts, the inaccuracy of those which had been carried out, the existence of various types of unstandardised land measures and other difficulties of a like nature, not to mention the fact that the operations of the new survey almost invariably brought to light a large amount of concealed cultivation, made the statistics of previous occupancy, and so the conclusions to be drawn therefrom, untrustworthy in the extreme. A somewhat similar criticism was often applicable in the case of the statistics gathered under the seventh head, owing to the violent fluctuations in prices experienced, more specially in the Deccan, during the years that preceded the introduction of the new system. As for the last head, the statistics obtained were usually scanty until the time when the opening

of the Registration Department offered facilities for obtaining information.

(b) The number and form of the diagrams, or "Appendices to the Settlement Report" as they are called, depended, of course, upon the subjects dealt with in the body of the report itself. They were finally standardised and settled as shewn in Appendix VI.

The statistical appendices.

(c) There remains the last, and that the most important and difficult, operation of the whole settlement, *vis.*, the proposals of the Settlement Officer for the aggregate: important because the whole of the detailed assessments depended thereupon; and difficult because, as the settlement was to last for 30 years, the Settlement Officer had to project his mind into the future, and endeavour to anticipate the course of events which might affect the agricultural situation and so the incidence of the assessment in the days to come—a task indeed requiring, to use the words of the Joint Report, "the exercise of great judgment and discrimination on the part of the officer upon whom it devolves."

The aggregate.

In coming to a decision, therefore, upon this important subject the Settlement Officer had to regard the matter from two standpoints:—

(a) He had to inquire into the suitability of the existing assessment to the existing conditions: whether it was too high or too low or might be considered equitable.

(b) He had to forecast the effect of probable future changes.

As regards (a)—his local knowledge and experience, reinforced by study of the statistics at his disposal, would afford him ample *data* for a decision upon the suitability of the existing assessment. Thus, if the rayats were apparently prosperous, possessed of a sufficiency of agricultural stock and fairly free from debt; if the arable land were fully occupied and the assessment were collected without the need for constant remissions or the use of coercive processes, it might be concluded that the assessment was *prima facie* not excessive, and might even perhaps be increased. Conditions the reverse of these on the other hand would lead to the opposite conclusion.

As regards (b)—whatever his conclusions with regard to the incidence of the current assessment the Settlement Officer would have next to consider whether the existing conditions were likely to be permanent before coming to his final decision.

There might be improvement in the future and on the other hand there might be deterioration. Apart from purely general causes, such as a long period of peace, a rise in the standard of education or methods of cultivation, etc., those producing the most definite effects are changes in communications or prices. Thus, the knowledge that a new railway was shortly to be run through the area under settlement might affect the proposals considerably on account of the improved facilities given thereby for transit and the new markets for produce opened. A similar effect on a smaller scale might be produced by the building of new roads, the bridging of rivers, and so on. But the influence of communications is relatively small in comparison with that exercised by changes in the level of prices—a subject which had always to be debated most anxiously by the Settlement Officer. Other things being equal, a rise in prices would mean that the assessment could be paid more easily; a fall, that the pressure would be more heavily felt. "Other things", of course, might not be equal. Thus, high prices might be the result of famine; low prices, of an abundant harvest; but in ordinary circumstances the effect would be that stated. No better example of the influence of prices upon a settlement could be given than that of the period covering the American War of 1864. At that time the conflict between the North and the South put a stop to the importation of American cotton into England and the Lancashire mills were thrown back for their supply upon India. The demand was in consequence enormous. The price of cotton, and of all other agricultural produce in sympathy, rose to unprecedented heights. Wealth was poured into the laps of the cultivators who are said to have "shod their bullocks with silver and to have made the tyres of their cart-wheels of the same precious material". It was during this period that several of the Kaira Settlements were made, and the main problem for the Settlement Officer to solve was that of the probable future course of prices. If the existing conditions were to be considered as normal for the future, then the assessments could be considerably raised. But if on the other hand the high level of prices was to be considered as merely temporary, then it would be right to disregard them. There is no need to state here how the Settlement Officers of the day decided the question. All that is necessary is to point the moral of the importance to the right conduct of settlement operations of a correct appreciation of the effect produced by prices upon the incidence of the assessment and the consequent need for a careful inquiry into their probable future course.

(c) *The Maximum Rate.*

The final operation was that of the distribution of the aggregate over the individual survey numbers. This was done through the medium of Maximum Rates, fixed for the different classes of land, e.g., the examples given on p. 56. Next, in order to make the necessary differentiation between the groups of villages the general pitch of the Maximum Rates—or, in the phrase of the Joint Report, “the standard of assessment”—was varied between group and group, from the first group downwards, so as to make the necessary allowance for their respective advantages and disadvantages.

The determination of the Maximum Rates, therefore, really involved two operations, viz., what may be called “Land Rating” and “Group Rating”.

(a) *Land Rating.*—The object of the Maximum Rates for the different classes of land was to provide a rate, which, when applied to the classification values, would produce a suitable assessment for each class in comparison with other classes. It is necessary to lay stress upon the words “when applied to the classification values”, because, as previously explained (p. 85), the settlement Maximum Rate, in the case of lands where the classification scale exceeded 16 annas, was not the real Maximum Rate which could only be found after applying the Settlement Rate to the classification values.

In strict theory the assessments so produced should have been in proportion to some standard of relative value for the various classes of land. Mr. Pringle, it will be remembered, attempted to lay down such a standard by his inquiry into the “average net produce”. The success of this scheme, however, was not such as to encourage imitation, and with the introduction of the new system the idea of basing the assessment upon theory had been abandoned in favour of the empirical system of Goldsmid and Wingate, which may be summarized shortly, in the words of the Indapur Report, as that of “determining with the assistance of those best skilled in agriculture and by the judgment and knowledge they themselves possessed what assessment...an acre of each sort of soil could bear”. It is for this reason that there is so little mention in the Original Settlement Reports of the methods adopted by the Settlement Officer in arriving at his results in the assessment of the various classes of land, because his decision on these points depended, not upon the formal working out of results based on theory, but rather upon the

subjective impressions of local knowledge and experience. Usually, of course, he would have a guide in the rates imposed in neighbouring talukas, the settlement of which had been carried through before his own. He would then merely have to compare the conditions existing in them with those of the taluka under settlement and vary the rates accordingly.

Thus, to give an example of the way in which the old Settlement Officers worked, the rice rates for the whole of the Thane Collectorate at the Original Settlement were based upon those of the old Nasrapur (now Karjat) taluka, as the following table will shew :—

Taluka.	Rate based upon that of
Kalyan	.. Nasrapur.
Murbad	.. Do.
Bhiundi	.. Kalyan.
Vada (then Kolvan)	.. Kalyan, Murbad and Bhiundi.
Mahim	.. Taloja (now Kalyan).
Bassein	.. Bhiundi.
Salsette	.. Bassein.

Turning now to the Nasrapur Report of 1856, it will be found that Colonel Francis, the Settlement Officer, bases his rice rate of Rs. 4-8 solely upon the former rate which had been settled by Mr. Davies in 1835-1836. He remarks: "The year 1835-1836 is a year memorable in the annals of this division, as the date when his (Mr. Davies') Revision was carried out. He adopted several rates, Rs. 4-8 was the highest, and Rs. 4-4 that more generally applied. . . . The terms of his settlement may, I think, be pronounced exceedingly liberal. . . . And as the cultivators have prospered whilst the revenue has been increasing, in proof of which I would notice the present favourable state of their condition contrasted with that described by Mr. Davies in 1834-1835, I think we may safely assume that his settlement is a fair measure of what is a fitting assessment for this division."\* He accordingly fixed his own maximum rate at the same pitch as that of Mr. Davies without further discussion, and the rate for the remaining talukas were settled by comparing Kalyan with Nasrapur, Bhiundi with Kalyan, and so on.

Again, in the important settlement of Dholka in the Ahmedabad district the dry-crop rates seem to have been fixed solely upon a consideration of past collections and cultivation, while in making his proposals for the *bagayat* rates, the Settlement

\*Paragraph 17 of Captain Francis' Report No. 10 of 15th January 1860: SS. No. CCXXIV, Old Nasrapur Taluka, p. 238.

Officer remarks: "I feel that in proposing the following rates of irrigated assessment I must crave the indulgence of Government if I cannot give exact statements and figures to explain the reasons for proposing the exact pitch at which I have placed them..... They, as well as the rates for rice cultivation..... are merely meant as maximum standards, to be modified according to the classification scales and any other peculiar circumstances that may appear worthy of attention at the discretion of the settling officer."\* Again, the rates in Daskroi of the same district also were based upon the revenue derived in the past, the Settlement Officer, Captain Prescott, remarking: "I have endeavoured to fix the pitch of assessment in such a manner as, while equalizing the rates, to keep the revenue as near its present amount as possible, without raising the assessment so as to cause distress or serious discontent in those villagers or among those classes which at present pay comparatively low rates."†

It would be useless to labour further quotations on a subject which could be illustrated from any Settlement Report. The system was, in fact, frankly empirical, depending for the good results attained, not upon theory, but upon the good sense and local knowledge of the Settlement Officer.

(b) *Group rating.*—In order to allow for the differences between the different groups of villages the maximum rates were graduated between group and group at the discretion of the Settlement Officer. Here again it was impossible to proceed on theory, since no amount of calculations would enable him to decide the exact effect of an uncertain as compared with an assured rainfall, or of the presence or absence of a road or a railway, or of other factors which he had to take into consideration in fixing his groups. Such calculations were, in fact never made, the allowances necessary being determined by the Settlement Officer according to his opinion of what was reasonable.

According to the principles of the Joint Report each group of villages formed a homogeneous area within which all differences in the relative value of fields had been allowed for in the classification, except with regard to dry-crop lands for which the factor of "distance from village" also had to be taken into account. Subject, therefore, to an allowance for this

\* Paragraph 30 of Mr. Rogers' Report No. 137 of 14th December 1864: SS. No. CCXVII, Dholka, p. 102.

† Paragraph 46 of Captain Prescott's Report No. 128 of 14th December 1860: SS. No. CCXIV, Daskroi, p. 93.

factor, the assessments for the different classes of lands within the group should have been worked out through the medium of the maximum rates and the classification values without manipulation or alteration of any kind. Here again, however, the Settlement Officers of the time found it necessary to modify the strict theory of the Joint Report system in the interests of practical justice, though in this case the modifications were made *sub rosa* and do not appear in the Settlement Reports—a circumstance which accounts for much of the mystery which sometimes surrounds the methods of the early Settlement Officers.

The chief reason which led to this further divergence from principle was the imperfection of the classification system. The theory of the Joint Report was that the relative values of the different grades of land within each class were sufficiently differentiated by the scale of classification devised for each and that the mechanical application of the maximum rate for each class to the classification values would produce a fair and suitable assessment. Unfortunately, however, experience proved the theory incorrect. The result of the mechanical application of any kind of scale was found to be the over-assessment of the poor as compared with the richer soils. The main reason for this was that no classification scale which could be devised could make the correct allowance for the real difference in value between the two. As Mr. Atkins remarked upon the classification of the rich *goradu* and the poor *mal* soils of Nadiad: "No practical man, with local knowledge and experience of agriculture, could possibly argue that a mere measurement of depth of soil, and deductions on account of standard faults, and allowances for advantages would enable us to distinguish the difference in fertility between the marvellous and magnificent artificial *goradu* soil of the *charotar*, and the equally marvellous though miserable soil in *maha* known technically as *mal*, though radically different from the *mal* in other parts of the Presidency."\* This observation is true, not merely of Gujarat, but of the whole Presidency. Classification by itself alone was in fact too rigid and too mechanical an instrument for the purposes of a practical assessment. It became necessary, therefore, to devise means by which the assessments of the poor and rich soils could be brought more into harmony with their true relative values.

\* Paragraph 19 of Mr. Atkins' Report No. 3263 of 17th August 1894: SS. No. CCXCV, Nadiad, p. 122.



The favourite method of achieving this object was by turning the distance-scale from its legitimate use and employing it to make the adjustments desired, as in the case of the Nandgaon and Malegaon talukas of Nasik, in which the classification values of poor lands was lowered proportionately more than that of rich land for distance from the village site. Another device was to adopt two maximum rates for the same village, one of which was applied to the rich and one to the poor lands. The most potent instrument used for this purpose, however, was the *jantri*. Theoretically the *jantri* was merely a ready reckoner, shewing the assessments resulting from the application of the maximum rate to the classification values in order to save the Karkun the trouble of going through the detailed calculations for each survey number. As such it was used in all the different Surveys, as a purely mechanical instrument of calculation. In the Southern Maratha, and later on in the Deccan Survey, however, the *jantri* for each maximum rate was drawn up by the Superintendent personally, and in doing so he was accustomed to make the adjustment in the assessments which, in his opinion, was necessary to allow for the difference in value between the different grades of land within the same class.

Adjustments of a similar kind were also made in order to soften the transition from the old to the new system of assessment for the reasons already given under the head of Grouping. In the Bardoli Taluka of Surat, for instance, the villages of the Kali Paraj or inferior castes, in addition to having the benefit of lower rates of assessment, had distance scales applied to their fields, which still further reduced their assessments relatively to those of the villages of the Ujli Paraj or higher castes.

The first Settlement Officers were, in fact, at all times ready to adjust theory to necessity, as has well been explained by Mr. James: "The Survey Officers owe their success to their never having allowed themselves to be drawn into the logical results of calculations on theoretical bases, but have always checked their results by a comparison with facts. They have ascertained what the people were paying previously and rectified their proposals accordingly. If, for instance, after carefully classifying the fields of a taluka they found that the scale of rate which they proposed (and which by comparison with others elsewhere seemed fair enough) brought out

a total sum to be paid enormously in excess of what the people had been accustomed to pay, their own mother-wit came to the rescue. They said 'the taluka cannot bear this amount. We must cut down the rates and bring them down to what the people, we feel assured, *can* pay.' Their moderation and sense, and the fact that, even though the total revenue was enhanced, all paid proportionately to the ascertained value of their fields instead of at haphazard rates as before, and that the increase was spread over all except those who had been over-assessed previously, made the settlements a complete success. I have known that distinguished Survey Officer, General Anderson, go over the lists of fields in villages, and actually reduce the assessment on individual fields, where he found that his rules of classification and the rates he had imposed brought out results higher than he deemed prudent. Theory, in fact, in the Survey has always been subordinate to the practical results to be brought about."\*

#### SUMMARY.

The modifications in the system of Survey and Settlement laid down in the Joint Report, which were brought about by the experience gained during the Original Settlements, may now be summarized as follows:—

##### (i) *The unit of assessment.*

(a) The artificial basis of the survey number as "the area which could be cultivated by a pair of bullocks" was abandoned and for it was substituted the rule of local convenience.

(b) In the Konkan, the *pot* number was established as the real unit of holding and assessment, though the survey number was still retained as the unit of mapping.

##### (ii) *The assessment of the unit.*

The fundamental principles of the Joint Report were preserved with respect to the determination of the "absolute amount of assessment" to be levied for the whole taluka and its distribution over the individual fields in accordance with their relative capability through the processes of classification, the distance-scale and grouping. It was, however, found

\* Paragraph 6 of a Memorandum by Mr. James: SS. No. CCLII, Sanand, p. 64.

necessary to modify them in regard to the classification lands and the grouping of villages, owing—

(a) to the discovery that the process of classification alone was not satisfactory as a means of finding the true relative value of fields for purposes of assessment;

(b) to the practical necessity of softening the transition between the new and the old systems in order to prevent the injustice which would have resulted from grouping villages purely in accordance with the theoretical principles of the Joint Report.

## CHAPTER VIII.

### THE REVISION SETTLEMENTS.

In the year 1868 the 30 years' guarantee for the Original Settlement of Indapur expired, and the period of the Revision Settlements began, bringing with it new problems to be faced and destined to provide new answers to some old questions. The Revision Settlement Report of the Indapur taluka is one of the most interesting documents of Bombay Survey literature, containing as it does, not only Colonel Francis' account of the origin and rise of the system, but also the wise and instructive comments of Sir George Wingate to whom the draft report was sent for criticism as he was living in retirement in England. It is impossible, however, to go into the details of the report within the space at command, and the student can only be advised to study it for himself.

The details of the operations incidental to the Revision Settlements will be dealt with as before under the heads of Survey, Classification and Assessment. A short general sketch of the main features, however, will be useful as an introduction. First, then, as to Survey and Classification. In strict theory the amount of Survey and Classification to be done at a Revision Settlement should have been very small. At the Original Settlement the lands had been divided into survey fields which had been demarcated by the official boundary marks and were theoretically indivisible; again, these fields had been classified also in perpetuity. Hence, all that in theory had to be done was to frame new maximum rates and apply them to the old classification figures. Such, in fact at the later Revisions were the only operations undertaken. It was quite otherwise, however, with the earlier Revision Settlements which were, in everything but name, Original Settlements, the whole work of survey, demarcation and classification being done *de novo*. The main cause of this departure was the imperfection of the old work which, as might have been expected, was by no means up to the standard set by the improved methods of the later Original Settlements. In addition, however, to this work there were new problems of land assessment to be decided, such as those connected with "the taxation of improvements," and old questions to be settled on

new lines, such as that of the taxation of well-watered lands, all of which involved re-measurement and re-classification. As time went on, however, and the talukas that fell in for Revision were those in which the later and improved methods had been brought into operation, the accuracy and completeness of the original work became more and more marked, so that the field work of Revision was first reduced to a test of the old measurement and classification and finally abolished altogether, and the original work confirmed in its entirety. When this point had been reached, the only operation to be performed by the Settlement Officer was that of fixing the assessment rates. Hence, the necessity at times of settlement for a special staff engaged in the technical work of measurement and classification was abrogated, and in 1892 the separate Survey Establishment was abolished and the work of settlement handed over to the Revenue Department.

As for Assessment—the methods of the Revision were in all their main features the same as those of the Original Settlements, viz., the examination of the existing settlement in the light of the statistics of the revenue history for the past 30 years and the submission of proposals for the next 30 years based on the same principles as those described in the last chapter. The most important development which will have to be noted is the evolution of rules, firstly to limit the amount of enhancement permissible on the assessments of the Original Settlement, and secondly to temper the burden of large enhancements in individual cases. Finally, it will be necessary to take note of the important change made in the theory and practice of the Bombay system by the introduction of a system of regular remissions and suspensions of the Land Revenue which, although not, of course, part of the actual process of settlement but only of its administration, yet cannot be omitted from consideration, since from a practical point of view they are likely to have an important bearing upon questions of settlement rates.

To turn now to the more detailed consideration of these questions:—

#### A—SURVEY.

The survey work done at the Revision Settlements may be divided into the following heads:—

(a) The correction of the work carried out at the Original Settlement.

(b) The measurement of sub-occupancies.

- (c) The splitting up of large survey numbers.
- (d) The measurement of new classes of land.
- (e) The introduction of new systems of measurement.
- (f) The correction up to date of the survey record generally.

(a) *The correction of the work done at the Original Survey.*—

At the time of the earlier Revisions it was found essential to the accuracy of the work to make an entirely new survey of the whole settlement area. The reasons for taking this course are fully detailed in the Revision Settlement Report of Indapur and may be summarized as follows:—At the Original Settlement the survey work was confined to a test of that carried out by Mr. Pringle, which was confirmed if found within 10 per cent. of accuracy. But by the time of the Revision the standard of correctness had been raised so high that a difference of even 3 per cent. was considered too great, and no Superintendent would have consented to take such an accurate survey as that of the Original Settlement as the basis of his operations. But further, test measurement of actual fields shewed that the real differences between the true and recorded figures of area were far higher than even the 10 per cent. margin, discrepancies of 30, 40 and even 100 per cent. being common. The cause of these startling differences was stated to be that at the Original Settlement the erection of boundary marks was left to the villagers themselves who consequently, not only erected them incorrectly, but also included within their survey numbers large areas of Government waste (*gairan*) which did not belong to them. Not only, however, was the original work inaccurate, but it was also incomplete. Mr. Pringle's survey was a survey of cultivable lands only and did not include *gairan* and hill tracts, and in making their revision Messrs. Goldsmid and Wingate did not go beyond this. Hence it was not a topographical survey at all in the true sense of the word and afforded no basis for the preparation of a village or taluka map.

In these circumstances there was no course open except a complete re-survey of the whole taluka upon modern lines, which was accordingly carried out. A similar course was adopted in the case of the remaining talukas of the Poona district, the earliest settled talukas of Nasik and Ahmednagar in the Deccan, and of Kaladgi (now Bijapur) and Dharwar in the Southern Maratha Country. In the case of the later settled talukas of these districts, however, and of all districts the survey of which had been carried out subsequent to

the introduction of the Joint Report system, a test shewed that the original work had been done so accurately that any measure of *general* re-survey was unnecessary; and the work was conducted according to the system known as that of "Partial re-measurement", by which fields that did not require re-measurement in any case for some of the reasons detailed below were compared with the village map and only measured again where their boundaries in the field were found not to agree with those delineated therein.) ✓

At one time, however, it was thought that the whole of the survey work would have to be re-done for the Gujarat districts on account of the catastrophe of 1887 when the record room at Surat was burnt and nearly the whole of the invaluable records of the Gujarat Surveys, Original and Revision alike, were destroyed. It was finally decided to be unnecessary to go to the extreme measure of a complete re-survey, as the village maps shewing the contours and situation of the survey numbers together with the record of their areas contained in the village papers would suffice for the practical purposes of revenue administration. The work was, therefore, conducted on the system of partial re-measurement. The fact, however, remains that for the Gujarat districts, as a recent calculation shews, the only survey record in existence for about 70 per cent. of the whole area is the village map which, however great its merits as a topographical record, is of small use from the point of view of an accurate survey, not only because of the small scale upon which it is drawn (usually 20 chains = 660 feet to an inch), but also on account of the inevitable inaccuracies involved in the process of constructing it from the measurement record of the individual survey numbers. It is necessary to insist upon the importance of this point because the loss of the survey records is a matter which is often overlooked in connection with survey questions in Gujarat though it is, of course, all-important.

(b) *The measurement of sub-occupancies.*—At the time of the Revision a large number of survey numbers were found divided into several sub-holdings. These were due to one of two causes, *viz.*, either to the clubbing together of occupancies at the Original Settlement to form a survey number of the standard size or to sub-division within the survey number during the currency of the existing settlement. This latter process was, of course, directly contrary to the theory of Occupancy laid down in the Joint Report, but it will be sufficient

here simply to note the fact, leaving this side of the question for further discussion in the chapter dealing with that subject (Chapter X). At the time of the Revision Settlement the Superintendents discarded theory altogether, and, when they found cases of sub-occupancies clubbed together, made those which exceeded the minimum area for survey numbers into numbers, and those falling short of the minimum into *pot* numbers separately measured, classed, assessed and defined by boundary marks. For this course there was legislative sanction, as rule 55, clause (i), of the rules under the Land Revenue Code ran: "Every separate occupancy recognized in the village accounts shall be separately measured, classed and assessed and defined by boundary marks and shall be comprised in a survey number or in a subordinate survey number."

Until the year 1887 the practice was as described. In that year, however, Government protested against the large amount of expenditure which was being incurred upon the measurement of these sub-occupancies, pointing out that "The Survey is primarily a Revenue Survey and it is not a necessary part of its functions to demarcate properties except when it is charged with this duty on behalf of decree-holders and at their expense. Any sub-division of land which is not required for administrative purposes must be justified on other grounds than the convenience of the present holders. When land has been divided into the areas most suitable for revenue purposes the presumption arises that further sub-division should only be at the expense of the parties interested."\* In reply, the Survey Commissioner, after referring to the rule quoted above, remarked that "the present rules for sub-division of lands have been gradually adopted after prolonged experience gained in all parts of the Presidency. Commencing with a somewhat arbitrary division of lands into survey numbers the Survey has become actually a survey of holdings. But all that is done now in the matter of sub-division is done in the interests of good revenue administration only and not for the convenience of the cultivators. Any sub-division over and above that required by the rules is only undertaken at the expense of the occupants." To this representation Government answered that "Doubtless there are many cases in which the separate demarcation and classification of recognized shares has been well worth the cost incurred, securing not only a more equitable adjustment of demand, but a better revenue than under the

\*Government letter No. 4481 of 15th July 1887.



system of proportioning demand on each share to his interest such as is prescribed for occupancies held in common; but it is difficult to believe that in tracts of a homogeneous character there are any such public advantages in demarcation of shares as to warrant the entire cost of the operations being borne by Government."\* Orders were, therefore, finally issued for the amendment of Rule 55 to the effect that

(a) occupancies above the minimum were to be made into survey numbers as before;

(b) occupancies below the minimum were ordinarily to be made into survey numbers or *pôt* numbers, but a discretion was granted to the Survey Commissioner to declare that in any particular class of cases this should only be done after application by the occupants, accompanied by prepayment of the costs of the Survey.

(c) *The splitting up of large survey numbers.*—At the earlier Revisions large survey numbers, both occupied and waste, which exceeded the smaller standard of the later Original Settlements, were broken up into more manageable units according to rules framed for the different Surveys.

(d) *The measurement of new classes of land.*—During the currency of the Original Settlement changes had, of course, taken place in the use to which lands were put. Thus dry-crop and *varkas* might be changed into garden or rice, and so on. It will be necessary to return to the question of these changes and to explain the way in which they were treated at Revision under the head of Classification. It will be sufficient to state here that the results were changes in the Land Classes which added considerably to the measurement work of Revision.

(e) *The introduction of new systems of measurement.*—Apart from the introduction of the "traverse" system of village measurement explained in the last chapter the only development of importance under this head is that of the application of the *phalni* system to the measurement of *varkas* lands. Briefly, the circumstances were as follows:—In the early days of the Konkan Survey these lands were not measured in detail, as they were not assessed separately but were lumped with the rice lands, the latter having their assessments slightly raised on account of the privilege of being allowed to use the *varkas* for the purpose of obtaining *rab* manure therefrom. Further, these *varkas* lands were of such enormous areas and at the same time so valueless that it was

\*Government Resolution No. 357 of 15th January 1889.

considered a useless expense to survey them. They were, therefore, surveyed in the mass with the *gavcharan* and forest lands. This method of survey was, however, strongly disapproved of by Government, owing to the way in which these different classes of lands and with them the various Government and private rights were confounded together.\* Hence an improved plan of survey was adopted and so-called "*varkas* numbers" made up by connecting fixed points in the village map and forming the intervening land into survey numbers the area of which was found by scale. Even this plan, however, was obviously defective owing to the old practical objection that it did not separate the different classes of rights. Hence in 1877 a greatly improved system was introduced into the Nasrapur (now Karjat) taluka by which all *varkas* lands in the possession of the rayats and used for the purposes of *rab* were separated off into large numbers, and the internal holdings measured according to the so-called "*phalni*" system, a shortened form of survey which consists in fixing points within the survey number by intersection and then taking out the areas by area comb from the map of the number drawn to scale.† It was not, however, till the Revision Surveys in 1881 that the measurement of *varkas* on this system was put upon a proper footing; but even then the work was again brought to a standstill by rules made in 1890 by the Settlement Commissioner, directing that the measurement of sub-occupancies in these *varkas* numbers was not to be undertaken unless preceded by an application for sub-division on the part of the occupants. *Phalni*, therefore, practically ceased till the year 1894, when the unsatisfactory condition of affairs was again brought to notice. The matter was then finally taken in hand and the Survey carried through in all the talukas of the Thana and Kolaba districts.

In the Ratnagiri district the question was from the beginning upon a somewhat different footing. There the great majority of the villages are not Government but are held upon the *khoti* tenure, and it was found necessary to survey the *varkas* lands in detail from the first for the purpose of effecting a settlement between the *khots* and their tenants. Hence the history given above applies to the districts of Thana and Kolaba only.

\*Paragraph 12 of Government Resolution No. 3370 of 2nd December 1866: SS. No. XCVI, p. 63.

†For a complete description of the system vide *The Manual of Land Surveying*.

(f) *The correction up to date of the survey record generally.*—During the currency of the Original Settlements many topographical changes naturally took place; e.g., the construction of new roads, railways, canals, etc., changes in the course of streams and rivers and so on; all of which had to be measured up and incorporated in the village and taluka maps.

### B—CLASSIFICATION.

From one point of view the history of the Classification system at Revision is strictly analogous to that of measurement. Thus, at the outset it was found necessary to re-do the whole work on modern lines in the case of the talukas first settled; but subsequently a test of the original classification with corrections where needed was found sufficient. Still later, in the case of the talukas which had been settled last of all, the work of the Original Settlement was sufficiently good to be confirmed without even a test. And finally, as will be explained in more detail in subsequent pages, it was declared by law that, after a second general classification had been carried out in any area, that classification should be final and not subject to general revision in the future.

In the case of the Gujarat districts, owing to the destruction of the records in the Surat fire in 1887 (vide p. 117), it was at one time thought that complete re-classification would be required. It was, however, found possible to deduce the original classification annas by working backwards from the maximum rate. Thus, to take the case of a dry-crop survey number with a rate per acre of Rs. 2 and a maximum rate for the village of Rs. 3. This maximum rate represents the rate per acre upon 16-anna land. The classification value of the particular number with an acre rate of Rs. 2 must, therefore, be  $\frac{2}{3}$  of 16 annas or 10 annas 8 pies. In this way statements of "deduced annas" were prepared for the dry-crop land of every village whose records had been destroyed. It must, however, be noted that these statements give merely the total classification value of each number and cannot shew how this total was arrived at, since the *prati* books containing the details of the work done in the field have been destroyed. Nor could it be employed in the case of rice and other lands with more than one factor of classification value which were, therefore, entirely re-classed.

During the progress of these operations the whole system of Classification was brought up to date and improved generally. The chief improvements made fall under the following heads :—

Improvements made in the Classification system.

(i) The correction of the inaccurate classification of lands, such as *rabi* in the Konkan and Natural *Bagayat* in Gujarat.

(ii) The recognition of additional factors of value in the case of some classes of lands, thus bringing about a more delicate adjustment of relative values.

(iii) Improvements in the classification scale for soil in the Deccan and Gujarat with a view to the relief of the poorer soils.

A far more important class of changes, however, were those due to the policy of Government with reference to the "Taxation of Improvements." This question is *prima facie* a matter of assessment and should be discussed under that head, but the actual result of the policy was to make great and fundamental changes in the system of classification in all its parts, both as regards the land classes, the factors of value, and the system of field classification itself. It is, therefore, essential to give an account of this policy as an introduction to the changes which resulted from it, as it is otherwise impossible to understand them.

Finally, it will be necessary to note the alterations made in the distance from village scales and their method of application, with particular reference to Gujarat.

The Revision system of Classification may, therefore, be described under the following heads :—

- (i) The correction of inaccurate classification of lands.
- (ii) The recognition of additional factors of value.
- (iii) Improvements in the soil scale.
- (iv) The taxation of improvements.
- (v) The distance from village scale.

## (i) THE CORRECTION OF INACCURATE CLASSIFICATION.

### (a) In the Konkan.

(1) *Rabi lands*.—As Colonel Godfrey remarks in the Revision Settlement Report of the old Khalapur petha : "In the former classification land had been classed as *rabi*, not merely on account of its quality, texture or any peculiarity or speciality

of soil, but the crops grown on it at the time appear to have unduly influenced the classers in determining whether the land was *rabi* or *varkas*, and the consequence is that some land has been classed as *rabi*, in most cases correctly so; but the land adjacent to it, of exactly the same kind and quality, which should also have been classed similarly as *rabi*, had been thrown out as *varkas*, presumably because it was not then producing crops known as *rabi* crops.\* These mistakes were corrected at Revision and the lands classed correctly according to their class and not the crops growing on them.

(2) *Pulan lands*.—*Pulan* lands comprise the stretches of sandy soil situated near the seashore, the best class of which are easily convertible into garden. At the Original Survey such lands had been included in *varkas* incorrectly. At Revision they were made into a separate class and classified according to a special scale.

(b) *In Gujarat.*

*Natural or Uttam Bagayat lands*.—In some talukas of the Surat district there is an extraordinarily rich class of *bagayat* land which produces under irrigation the finest crops of sugarcane, and superior garden crops, such as chillies, bananas, etc. At the Original Survey Capital Prescott had not correctly distinguished these lands, but put a heavy *bagayat* rate upon all lands growing sugarcane, thus lumping together indiscriminately the ordinary class of *bagayat* and this special class. The result was that the ordinary class was over-assessed. At the Revision the proper distinction was made, and the richer kind of *bagayat* made into a separate class under the name of “*uttam*” or “*natural bagayat*” and classified according to a special scale.

(ii) THE RECOGNITION OF ADDITIONAL FACTORS OF VALUE.

The natural tendency of the Revision Surveys was towards a more accurate differentiation between the relative values of lands by noting and taking into account in the classification “advantages” which the Original Surveys had overlooked. It is not necessary to give a complete list of such additional advantages here. Two examples are:—

(a) the “facility for growing a double crop,” owing to exceptional advantages for collecting and retaining moisture which some lands possess;

\*Paragraph 32 of Colonel Godfrey's Report No. 21 of 12th January 1888; SS. No. CCXXIII, Old Khalaraj Petha, p. 13.

(b) improved fertility owing to a low-lying situation in hilly districts, such as Satara and Khandesh, which was classed in those districts at Revision according to a scale called "General Position Class."

### (iii) IMPROVEMENTS IN THE SOIL SCALE.

Of all the technical improvements made at Revision this was, perhaps, the most important. The necessity of revising the soil scale arose from the over-assessment of the poor soils in comparison with the richer soils at the Original Surveys. As Colonel Anderson remarked: "It has for years been a common reproach against the Survey assessments that the assessments on the better class of soils were much too low compared with assessments on the poor soils."\*

The cause was partly a wrong standard of classification and partly the limitations imposed by the scale itself. An examination of the old classification generally shewed that the first Survey Officers seemed to have been very chary of using both the highest and lowest classes of the soil classification scale, lands which, according to a correct standard, should have been classed at 16 annas being found at Revision to have been classed at 12 annas or less, soils of 2 annas value classed at 4 annas, and so on. The result was, of course, to under-assess the rich and to over-assess the poor soils. Colonel Anderson thought that "this comparatively low assessment of superior soils was not entirely unintentional at the first settlement, and certainly was not without advantage. In all native assessments it is usual to find superior soils very highly valued and the poor soils held for next to nothing; the result was that much of the better soils was thrown up, and the people were driven to the poorer classes of soils. It is plain that a very low assessment on the good soils in the first settlement would have the effect of a bounty inducing cultivators to abandon the poor soils and resort to those of a better class previously thrown up and remaining waste. After a time, when capital had accumulated from the remunerative cultivation of the better soils, those of a poorer description would gradually be brought into cultivation." By the time of the Revision Settlements, however, all cause for under-assessment of the rich soils had disappeared, as in most districts there was little waste land of any kind, good or bad, as it had all been taken by the cultivators.

\*Paragraph 17 of Colonel Anderson's Report No. 85 of 17th January 1876: SS. No. DLX, Indi, p. 85.

These defects were remediable to a large extent by the process of re-classification in accordance with the more correct standard. This was, however, found inadequate, owing to the limitations of the scale itself. The fact was that the scale of 9 classes ranging from 16 annas to 1 anna was insufficient to cover the real difference between the relative values of the good and poor soils, since, even with an accurate standard of classification, the poorer soils were still comparatively over-assessed. The logical method of amendment would have been to enlarge the scale by the addition of the number of classes required and by raising the maximum value to 18 or 20 annas. As a matter of practice, however, this procedure was found inadvisable, as the field classers, having been trained to work in one standard, found it difficult to work in another, and their classification tended to become uncertain and unequal.

The necessary change was, therefore, brought about in a different way. In most districts this took the form of adding, what were called, "scale increases" to the classification *bhag* annas. The classes were permitted to do their work in the ordinary way and the necessary rectification made in the office by making proportionate additions to the soil annas of the higher classes in accordance with scales fixed by the Superintendent. There were a large number of such scales which were framed by the Superintendent according to the needs of the particular case, of which the following will serve as an example:—

Original. Annas.	Scale increase. Annas Pies.
16—12	2 0
12—10	1 6
10— 8	1 0
8— 6	0 6
under 6	<i>Nil.</i>

This means that a dry-crop field, the classification value of which according to the soil scale was 16—12 annas, would have an addition made thereto in the office of 2 annas, the practical result being an increase of from  $12\frac{1}{2}$ — $16\frac{3}{4}$  per cent. in the assessment, and so on throughout. The effect of this system, as Colonel Anderson remarks, is "to widen the difference between the good and bad soils, so that the increase of revenue raised under a given maximum shall fall more on the good soils than on the bad. It may be taken roughly that in trap districts we commence to enter on the fair fields at

about 9 annas and upwards ordinary classification value, and on the poorer at about 6 annas and downwards. The increase to the better soils above detailed and the decrease to the poorer are not very much taken separately, but they pull different ways and undoubtedly tend, and in a safe degree, to an assessment more in proportion to native valuation, and to the relative rent-paying capabilities of the good and poor soils at the present day, than the scale of the Joint Report, and especially in Revision work where it is above all things desirable to obviate as far as possible any chance of pressure of the increase of assessment on the less productive lands, particularly in tracts of doubtful rainfall."

The foregoing system of making "scale increases" was that adopted in those parts of Gujarat and the Deccan where such adjustment was considered necessary. This was not by any means always the case, *e.g.*, in the districts of Dharwar and Belgaum no such increases were made, though they were found necessary in Bijapur.

In certain talukas of the Poona and Sholapur districts a different system was adopted by which, Scale decreases. instead of increases to the soil annas of the higher classes, decreases were made from the annas of the lower classes. The reason for this procedure—which is more fully explained under the head of Assessment (p. 168)—was that the adjustment in the scale of values had to be made so as to give a reduction in the assessment of these talukas without changing the maximum rates—two objects which were achieved simultaneously by the reductions in the lower soil classes.

#### (iv) THE TAXATION OF IMPROVEMENTS.

[By an "improvement" in the technical sense is meant any improvement in the agricultural value of his holding which is made by a rayat "Improvement" defined. at his own expense and not at the expense of the State. Thus, when a cultivator builds a well either with his own capital or with the aid of funds borrowed from Government under the Improvements Act or the Agricultural Loans Act, he is said to have made an "improvement." Again if at his own expense he converts dry-crop into rice the result is an "improvement." But if in the latter case the conversion is due to the construction of a Government tank, canal or other source of water-supply it would not be termed an "improvement," in the technical sense.] At the original Settlements



land was classed and assessed in accordance with the condition in which it was found at the time, *i.e.*, rice land was assessed as rice, *bagayat* as *bagayat*, dry-crop as dry-crop, and so on. Even at that time, as Mr. Tytler noted, both rice lands and *bagayat* constituted "improvements," since the wells must have been constructed some time previously at the expense of the rayats and similarly the rice lands must have been prepared by them by the construction of embankments. Indeed, as has already been shewn, the Collector of Poona protested against the special assessment of *bagayat* lands upon this very ground. But these opinions were in advance of the age and, though now accepted as the basis for the assessment of such lands, were rejected at the time when they were first put forward, and lands assessed strictly in accordance with their "class".

This being so, it was not till the period of the Revisions that the question assumed importance, since by the terms of the Settlement guarantee, an "improvement" could not be assessed till the Original Settlement expired. At the Revision, however, the question was responsible for more discussion than perhaps any other, and was the occasion of several important pronouncements upon Land Revenue policy on the part of Government. It might have been expected that the originators of the system would have left some guidance on the subjects, but this was not the case, the act being that they had apparently considered that at the Revision lands which had been "improved" would be assessed on the same principles and at the same rates as ordinary lands of their class, any claim for special treatment on account of the expenditure of private capital being met by pointing to the immunity from taxation enjoyed during the currency of the Original Settlement. The views of the Bombay Government, however, had changed in the interval, and one of the main features of Revision policy to be embodied in legislation is that of the "non-taxation of improvements."

The history of this important subject has to be divided into two parts, *viz.*—

- (a) its *legal history* as embodied in the Survey Acts, and
- (b) its *practical history* in respect of the various classes of lands dealt with.

It is impossible, of course, entirely to separate the two and to treat of the one without some reference to the other, but in the interests of clearness the differentiation is desirable and necessary.

(a) *The legal history of the subject.*

The first chapter opens with Rule I of the Rules attached to the Joint Report which gives the form of guarantee and ran as follows :—“ With a view to the improvement of the country and people the assessment now introduced by the Superintendent, Revenue Survey.....has been fixed for a period of thirty years, viz., from Fasli.....to....., during which the full benefit of every improvement, such as the conversion of dry into irrigated land by the digging or repairing of wells and tanks, the planting of fruit-trees, etc., will be secured to the incumbent of the land and no extra assessment levied on that account.”

This guarantee, it will be noted, limited the pledge given by Government to the currency of the existing settlement and thereby implicitly, even if not expressly, reserved the right to tax such improvements at the revision of the assessment. At the same time no definite pronouncement upon the question was made, and it was, therefore, left open for future decision.

By the time of the first Survey Act (I of 1865), however, the need for the encouragement of agricultural improvements, and especially of the construction of wells, had impressed upon Government the advisability of adopting a benevolent and liberal policy in the matter of their assessment, and in drawing up the Act this policy was given a definite shape by the terms of section 30 which, in authorizing the Governor in Council to direct a revision of assessment after the expiration of the period of guarantee, adds : “ Such revised assessment shall be fixed, not with reference to improvements made by the owner or occupants from private capital and resources during the currency of any settlement under this Act, but with reference to general considerations of the value of land, whether as to soil, or situation, prices of produce or facilities of communication.”

The next stage is the enactment of the “ Land Revenue Code ” (Act V of 1879) with which the first Survey Act was incorporated. In the new Act the section just quoted re-appeared as section 106. Immediately after this section, however, there was a new

section 107, which *prima facie* modified the terms of the preceding section. It ran as follows:—

“Nothing in the last preceding section shall be held to prevent a revised assessment being fixed—

“(a) with reference to any improvement effected at the cost of Government;

“(b) with reference to the value of any natural advantage, when the improvement effected from private capital and resources consists only in having created the means of utilizing such advantage; or

“(c) with reference to any improvement which is the result only of the ordinary operation of husbandry.”

The effect of this refinement upon the plain terms of the previous section was, not unnaturally, to arouse doubts in the public mind as to the real intentions of Government. Thus, the presence of sub-soil water is a “natural advantage” which is “utilized” by the construction of a well; such an improvement, therefore, would fall under the purview of section 107, paragraph (b). Similarly, the improvement of the soil by careful cultivation and manuring might well fall under paragraph (c) of this section as being “the result only of the ordinary operation of husbandry.” Needless to say, the section did not as a matter of fact mean that there was any change in the declared policy of Government. At the same time the somewhat ambiguous way in which it was expressed undoubtedly did arouse suspicion, and in 1881 it was thought necessary to issue an executive order to the effect that “clause (b) of the section will not apply to wells dug at the expense of the owner or occupier of the soil.”\*

Three years later the whole question was re-considered and finally settled as part of the important pronouncement upon the general policy of the Bombay Government in the matter of Land Revenue assessment, which is contained in Government Resolution No. 2619 dated 26th March 1884. This important State document (printed as Appendix III) should be read as a whole by every student of the Bombay Land Revenue system. For the present, however, it is only necessary to consider those paragraphs which deal with the

\*Government Resolution No. 6682 of 10th November 1881.

question of the assessment of "improvements". They are the following :—

" 19. Attention will now be directed to section 107. The principles which the Governor in Council desires to maintain are—

" (1) that enhancements of assessments shall be based upon 'general considerations' and not on the increase of value in particular fields ;

" (2) that the occupant shall enjoy the entire profit of improvements made at his own cost.

" 20. These principles being applied to the interpretation of section 107 it is observed that 'reference to the general considerations of the value of land' means reference to increased value due to extraneous causes distinct from the result of expenditure of money or labour by the occupant. For instance, a railway which affords a better access to markets is such a cause. Its value may be judged by examining the scale of prices over a long period and noting the proportion of increase which appears to be permanent. Again, by obtaining returns of the selling and letting value of land.

" 21. The rise in value may be due to improvements made by the landlord, in this case the State. Clause (a) enacts that such improvements effected at the cost of Government may be considered in fixing a revised assessment.

" 22. The interpretation of clause (b) is more doubtful and will be further considered below.

" 23. Clause (c) was intended to meet the case of *pôt-kharab* and also would apply to cases where waste land had been assessed at very low rates in order to encourage its cultivation. This latter case, however, does not occur in Bombay and the clause is of no practical use. Another course is taken under rules subsidiary to Act V with

" (1) land the bringing of which under the plough will be attended with large expense ;

" (2) the reclamation of salt land.

" Such lands are given free for a certain term and at the end of it on a rent gradually rising up to the full assessment.

" 24. So far then in this Presidency the conditions in which assessments are enhanced on revision do not affect the value of improvements made by the occupant. The case of these has now to be considered. In other words, what is the effect of clause (b) of section 107 on the assurance given in section 106 ?

"25. His Excellency in Council desires to regulate the action of Government in this matter by the broad principle that the occupant of land pays for the use of all advantages inherent in the soil when he pays the assessment on the land. Among inherent advantages he would include sub-soil water and rain water impounded on the land, and he would secure to the occupant altogether free of taxation any increased profit of agriculture obtained by utilizing these advantages through expenditure of labour or capital.

"26. His Excellency in Council has no desire to claim any part of such profit for the State either immediately or after a certain term of exemption. There may be provinces where some reservation is necessary, but in the circumstances of Bombay His Excellency in Council is convinced that the material interests of the country will be more truly advanced by laying down a broad principle that the occupant may apply labour and capital to the utilization of all inherent advantages in perfect security that the profits acquired by his labour and capital will never be taxed by the State than they would be reserving a discretion to tax these profits attended by a feeling of uncertainty when and how they may be taxed. The encouragement of higher cultivation in a fully cultivated province is of infinitely greater public importance than the small prospective increase of the land revenue which may be sacrificed by guaranteeing to the occupant the whole profit of his improvements."

After explaining (paragraphs 27-34) that the policy outlined had in actual fact already been applied to the case of lands watered from wells the resolution proceeds to draw the following conclusions :—

"34. His Excellency in Council is led by these remarks to consider whether the three clauses of section 107 are necessary for the security of the land revenue. Having regard to the power reserved under section 55 to fix rates for the use of water of streams and tanks which are vested in Government, and under the Irrigation Act to charge rates for canal water and percolation and leakage rates, to the policy declared with reference to sub-soil water drawn from wells, and to the system of reclamation leases described above, His Excellency in Council considers that section 107 or at any rate clauses (b) and (c) are unprofitable to the land revenue. If in some case, not at once perceptible, an increase of land revenue might be claimed under these clauses without violating any of the pledges given by Government

from time to time—and this is very doubtful—His Excellency is satisfied that no such advantage is comparable to the disadvantage of retaining on the Statute book a provision which is of such doubtful significance as to be capable of discouraging the investment of capital in agriculture. The repeal of section 107 in whole or in part will, therefore, be taken into consideration.”

As the result of the resolution sections 106 and 107 were repealed by Act IV of 1886 and the following section substituted :—

Act IV of 1886.

“It shall be lawful for the Governor in Council to direct at any time a fresh revenue survey or any operation subsidiary thereto, but no enhancement of assessment shall take effect till the expiration of the period previously fixed under the provisions of section 102: provided that when a general classification of the soil of any area has been approved by the Governor in Council no such classification shall again be made with a view to the revision of the assessment of such area.

[“In revising assessments of land revenue regard shall be had to the value of land, and in the case of land used for the purposes of agriculture to the profit of agriculture: provided that if any improvement has been effected in any land during the currency of any previous settlement made under this Act or under Bombay Act I of 1865, by or at the cost of the holder thereof, the increase in the value of such land or in the profit of cultivating the same shall not be taken into account in fixing the revised assessment.”]

The effect of this section is absolutely to secure the occupant against the assessment of “improvements.” It is true that, at the time of the passage of the Bill through Council, one of the Members objected to the use of the word “such” in the phrase “no *such* classification,” on the ground that “only a general classification would be prevented and not a reclassification in regard to individual holdings,” but Government replied that the clause must stand “as a measure of protection to the rayat, as circumstances may arise by which the rayats of a certain village or taluka may become directly interested in re-classification. They might wish for it, with a view to revision of assessment on account of the physical deterioration of the soil . . . . Not the slightest apprehension need be entertained that in leaving the clause as it stands now re-classification will be an element in future

Summary.

**No. 6**

*Page 133—*

*Add* the following as a sub-paragraph *after* the words “when the deterioration from the original standard shall be proved to exist.”

The legal position is clarified and definitely altered by the Land Revenue Code Amending Act of 1939. Section 117-H inserted by this amendment definitely limits the exemption of improvements from assessment to the period of 30 years immediately preceding the date on which the settlement for the time being in force expires and full assessment of the land on the basis of existing conditions is permissible after this period. This is facilitated by guaranteeing only the classification of the soil by suitable amendment of the proviso to section 106.

revisions of assessment,"\* a pronouncement which is important, not only negatively, but also positively, as admitting the right of the rayat to have the classification of his fields revised in cases where deterioration from the original standard shall be proved to exist.

(b) *The practical history of the subject.*

It now remains to turn to the second division of this subject, viz., the practical history of the question with reference to the actual classes of "improvements" dealt with. They are comprised under the following three heads:—

- (1) Garden Lands.
- (2) The conversion of Dry-crop into rice.
- (3) The cultivation of Pôt-kharab.

(1) *Garden Lands.*

The classes of Garden Lands affected are three, viz., firstly lands watered from wells, secondly lands irrigated by *dhekudis* and thirdly *pâtasthal* lands.

(a) *Lands watered from wells.*

This portion of the subject may also be divided into three sections, as different treatment was accorded to lands in the Deccan, Gujarat and the Konkan.

*The Deccan.*

At the Original Settlement of Indapur and subsequently throughout the Deccan Surveys generally, lands irrigated from wells were assessed at higher rates than the ordinary dry-crop in accordance with the practice inherited from the Indian systems. It is true that at the time of the Indapur Settlements Mr. Mills, the Principal Collector of Poona, protested against this procedure on the ground that "to tax *bagayat* land is, in my humble judgment, impolitic and seems directly at variance with the Honourable Court's orders that land should be assessed according to its produce, but as the assessment has been fixed in obedience to orders it only remains now that the error be corrected as soon as possible before its evil consequences will be felt in checking *bagayat* cultivation and throwing wells out of use."† To these arguments, however, the Revenue Commissioner replied that "The Principal Collector appears

\*Proceedings of the Legislative Council of the Governor of Bombay, Vol. XXIV, p. 84.

†Paragraph 10 of Mr. Mills' Report No. 2683 of 20th September 1838: SS. No. CLF, Indapur, p. 118.



to forget that the power of affording water for irrigation is one of the most valuable of the capabilities of land, and to bear it in mind is, therefore, strictly consonant to the order of the Honourable Court. This is a question quite distinct from that as to whether it is worth while to levy a separate assessment when the quantity of irrigated land is so small and where its extension is so desirable as in Indapur; but for my own part I see no objection whatever, as regards Indapur, to levy a higher assessment on *bagayat* than on *girayat* land provided that assessment is in reference to the capabilities of the land."\*

The expression of these opposing views at this time is highly interesting, as they were both eventually to be adopted as the basis of the Bombay system as applied to varying circumstances. For the moment, however, the views of the Commissioner prevailed and the special taxation of *bagayat* lands was approved. //

It was as a matter of fact in Gujarat that the next protest was raised against the special taxation of lands irrigated from wells. In that district, owing to the local circumstances, the general method of assessment was either that of the "Bag rate," according to which the owners of the wells had to pay an annual fee for each "water bag" used for purposes of irrigation, or that of the *bagayat kasar* by which a tax was imposed on the well itself. The bag rate system, which was the survivor of several experiments in the difficult task of devising a satisfactory method of assessing such lands, had in the end proved a failure. At the time when it was originated it was taken for granted that the unsophisticated *rayat* would continue to employ his original 2, 3 and 4 water bags per well and that the tax would in consequence adequately correspond to the capacity of the individual well. Unfortunately, however, the rustic proved more resourceful than was anticipated and the whole system was brought to the ground by the simple process of working double and treble shifts with one bag upon which of course the tax was paid only once. As for the *kasar* system, it failed to cover the case of the large number of *kacha* wells which were built in the districts in which it was in force and which had consequently to be assessed by the bag system. At the same time, while the system was a failure, the principles of assessment upon which it was based were also being questioned.

\*Paragraph 15 of Mr. Williamson's Report No. 2297 of 12th October 1838: SS. No. Cld. 128.

and in 1886 Mr. Barrow Elis, the Revenue Commissioner, Northern Division, submitted an important memorandum to Government, stating his objections thereto in the following terms :—

“ I have the honour to submit, for the consideration of Government, the propriety of abandoning in future settlements in Gujarat and Khandesh all assessment upon wells. The loss of revenue to Government I propose to make up by taxing the water-producing capability of soils, or in other words, by slightly enhancing the valuation of lands in which water is obtainable close to the surface.

“ 2. The necessity for a change of system has become apparent in Gujarat where no mode that has hitherto been devised for taxing lands irrigated from wells is free from the objections of want of simplicity, liability to evasion and inequality of incidence.

“ 3. On this subject Captain Prescott, Superintendent of Survey, Gujarat, reports as follows :—

‘ Everybody admits that the assessment of wells dug at the expense of private individuals and not by the State is contrary to all principle ; the question is whether it is needful and whether the State will suffer serious loss by dispensing with the extra assessment on land irrigated by private enterprise.

‘ Water in the soil, and very close to the surface, is a gift of nature almost peculiar to the province of Gujarat. It ought, therefore, to be considered as one of the fertilizing elements of the soil and its value incorporated and included in the soil assessment whenever it is practicable.’ ”

After referring to the failure of the existing system the memorandum concludes :—

“ 4. I think it must be admitted that the taxation of wells not constructed by the State is a deviation from the broad principles of the Bombay Survey. All wells built hereafter by individuals will be free from taxation ; it seems hard that wells similarly built by individuals, but before the advent of the Survey, should be placed at a disadvantage and subjected to heavier taxation for no reason save that their owners were in advance of their neighbours in employing their capital in agriculture.

“ 5. On the other hand it is quite consistent with the principles of the Survey that if the inherent qualities of the soil be such that water is produced by digging for it

within a few feet of the surface this capability should be taxed as well as other elements of fertility.”\*

The wide scope of these suggestions is evident. They propose to abolish the taxation of the *fact* of irrigation, *i.e.*, of lands actually watered from existing wells, and to transfer it to the *capability* of irrigation, *i.e.*, to lands which though they may not be under irrigation yet have a proved sub-soil water *stratum* capable of being tapped for irrigation purposes by the expenditure of labour and capital. Or, putting the suggestion into “Survey” language, it amounts to a proposal to abolish the special *bagayat* class of land and by way of compensation to add the “factor” of “sub-soil water advantage” to the dry-crop lands possessing it, thereby increasing their classification value and therefore raising their assessment somewhat above that of the dry-crop lands devoid of this advantage.

These proposals were clearly in accordance with the theory of the Bombay system and were ordered by Government to be introduced by Captain Prescott “in any district in which it may be found appropriate” and also “whenever a revision takes place.” It was, however, remarked that “there are doubtless districts in which it would be difficult to carry out the taxation of the water-producing powers of the land sufficiently to compensate for the abandonment of the present system.”†

This proved to be the case in the first settlement at which an attempt was made to carry out the principles laid down in this resolution, *viz.*, at the first of all the Revision Settlements,

that of Indapur. Here the device adopted by the Settlement Officer, Colonel Francis, was “to put the first class *jirayat* rate upon all lands capable of being irrigated from existing wells, irrespective of the value assigned to it by the *jirayat* classification.”‡ This system, it will be noted, did not carry out to the full the previous orders which were to make the extra assessment depend upon the existence of a water-bearing *stratum* irrespective of the presence of actual wells; but, as Colonel Francis remarked, “It is impossible, I think, to work out this plan in the ever-varying soil of the Deccan. I have therefore taken existing wells as a guide and considered only the land under them as having a water-bearing *stratum*.”

System adopted  
at the Indapur  
Revision Survey, 1867.

\*Mr. Barrow Ellis' Report No. 1045 of 30th March 1865.

†Government Resolution No. 2110 of 8th June 1865.

‡Paragraph 178 of Colonel Francis' Report No. 147 of 12th February 1867: SS. No. CII, Indapur, p. 67.

What was, in fact, possible in the case of Gujarat where the proposals originated was impossible for the Deccan, and it was, therefore, necessary to vary the system accordingly.

The result at any rate was to carry out the intentions of Government by the abolition of the special *bagayat* class of land with the well tax attached thereto, although the assessment of all lands capable of irrigation at the same rate, i.e., that of the best *jirayat* irrespective of the quality of the soil, is a grave fault in the system which seems, somewhat strangely, to have been overlooked.

Before, however, sanctioning these proposals the whole report, and with it the questions under consideration, was submitted to Sir George Wingate, then in retirement in England, for the expression of his opinion. Sir George in his reply expressed himself as opposed to the relief of wells from special taxation. His grounds of objection were that the operation of constructing a well is analogous to that of "the opening of a new mine until which time the subterranean mineral lies useless to man and yields nothing to the proprietor of the land in which it exists. But when once capital has supplied the means of bringing the mineral to the surface in a form suitable to man's wants, it immediately acquires value and yields a rent or royalty to the proprietor of the land from which it is extracted".\* Sir George, therefore, suggested a system by which, after allowing the builder of a well a certain sum as a set-off against the expenditure of capital and interest, the remaining profit would be taken as rent on behalf of the State.

This opinion did not, however, commend itself to Government, who re-affirmed their conclusion that "the first principle of taxation should be that which governs our taxation of the land itself, that is, the capability of being used rather than the use itself. If water of good quality be easily available near the surface it is more reasonable to tax such land by a light additional rate, whether the water be used or not, than to levy an oppressively heavy tax on those who expend capital and labour in bringing the water into use" . . . . . At the same time it was admitted that there were two cases in which it might be impossible to put this theory into practice: firstly "when the land is such that when water is not brought to it it will bear nothing and when water is used it will yield a fine crop".

\* Paragraph 6 of Notes by Sir George Wingate upon Colonel Francis' Report No. 147 of 12th February 1867: SS. No. CII, Indapur, p. 144.

in which case "even a light tax in the former case (that of the soil) is impossible". The example given is that of "the sandy tracts in the Konkan which under the influence of water become coconut gardens". In such circumstances "it must be held that the right of Government to levy a rate by virtue of the water below the surface is in abeyance or dormant till the water is produced; but it is doubted greatly, even in this extreme instance, whether it is politic, though it may be asserted to be just, to levy more than would be leviable from first class rice ground which enjoys also the benefits of water, not created it is true by the tenant, but utilized by means of his preparation of the ground". The second case is that referred to in the previous resolution, viz., in respect of districts where "the difficulty of ascertaining what lands have water capabilities may prevent the adoption of a system that, in lieu of taxing wells specially, taxes all land capable of producing water with a reasonable amount of trouble". Where this is so "it may be difficult to ascertain what lands are capable of producing water, but it is easy to make the maximum for dry-crop lands the maximum for well lands also".\*

By the terms of this resolution, therefore, water-bearing lands were divided into 3 classes:—

Summary.

(i) That of districts in which water capabilities are widely diffused and easily ascertainable. Here this capacity was to be treated as an ordinary "factor" of value and allowed for at the time of classification.

(ii) That of districts where the possession of such capabilities is difficult to verify and restricted in extent, in which case, while it would be necessary to take existing wells as a guide, the maximum rates for dry-crop lands should be made the maximum for well lands also.

(iii) That of districts in which the soil element of garden lands is of negligible value as compared with the water element. Here neither of the two former solutions is practicable and it is the actual use of the water that must be charged for, without reference to the value of the soil.

Leaving for the moment cases (i) Gujarat and (iii) the Konkan consideration may be first directed to the history of (ii) the Deccan. So far, it will be noted, the questions at issue had been discussed with reference to the assessment of well lands in general and not to that of wells as

Subsequent history of well assessment in the Deccan.

\* Paragraphs 6-8 of Government Resolution No. 1211 of 27th March 1866.

"improvements". Nor indeed, it would seem, was there any reason to do otherwise, since the object of the new proposals was to abolish the special *bagayat* class and to treat lands watered or capable of being watered from wells merely as a superior kind of dry-crop. On these principles there could, of course, be no proper ground of distinction between wells constructed before the Original Settlement and "improvements", i.e., wells constructed during the currency of that settlement. To make any distinction, in fact, would be, as the Commissioner, Northern Division, remarked, to place their owners at a disadvantage "for no reason save that they were in advance of their neighbours in employing their capital in agriculture". At the Revision Settlement of the Madha taluka of Sholapur, 3 years later in 1871, however, this question of "improvements" was raised by Government. During the course of this settle-

The Madha Revision,  
1871.

ment Colonel Francis, carrying out what, from the Indapur orders, he supposed to be the wishes of Government, had abolished the *bagayat* class and assessed lands capable of being watered from wells by a new and improved method which consisted in making graduated additions to the soil annas of lands possessing these advantages—a system clearly superior to the indiscriminate application of the highest dry-crop rate adopted in Indapur and also more in accordance with the true principles of classification. In working out his system Colonel Francis, following the Indapur precedent, had made it apply to *all* lands capable of being irrigated, irrespective of whether they were under wells constructed previous to or during the currency of the Original Settlement.\* To this procedure, however, Government objected on the ground that it was contrary to section 30 of the Survey Act, which forbade the taxation of "improvements". They remarked that "the only principle upon which such a proceeding would be justified would be in consideration of the (water-bearing properties of the soil.) But the Survey Officers have admitted their inability to act on this principle generally and the result of the proposed system is to tax the man whose enterprize and labour have induced him to sink a well, while his neighbour, whose land may possess precisely the same properties, escapes the extra burden, simply because he has not availed himself of his opportunities".† Orders were, therefore, issued that "the rates in these cases

\* Paragraphs 2-4 of Colonel Francis' Report No. 1101 of 31st July 1871: S.S. No. C1 Old Sholapur Selection, p. 128.

† Government Resolution No. 4050 of 22nd August 1871.

in Indapur and Madha be revised in order to their reduction where it is shewn that the well from which they are actually irrigated, and not simply rendered capable of irrigation, has been constructed subsequent to the introduction of the survey". The result of these orders was that while lands irrigated or capable of being irrigated from wells constructed previous to the introduction of the Original Survey were assessed at higher than their normal dry-crop rate either on the Indapur or Madha system, lands of precisely the same description but under wells constructed during the currency of the settlement escaped all extra taxation and were assessed simply as ordinary dry-crop. This was undoubtedly a blot on the system and unfair to those cultivators whose wells dated from the Original Settlement.

In the year 1874 these orders, which at the outset were intended for "the drier talukas of the Deccan where the rainfall is as a rule light and uncertain", were extended to the whole of the Deccan and Southern Maratha Country Surveys.\* One important modification, however, was made, allowing the Survey Commissioners "in the case of districts where well irrigation has been carried on on an extensive scale, to impose an assessment which should in no case exceed a well assessment previously levied". These orders were to hold good, not only with regard to wells constructed previous to the Original Settlement, but also to those built during its currency, which were of course technically "improvements". The object of issuing these orders was to escape the "needless loss of revenue" which would have resulted from carrying out the revised Indapur instructions. At the same time they undoubtedly constituted a withdrawal from the position then taken up with respect to the taxation of "improvements".

The objections to these methods took a practical shape in the year 1885 when yet a third system of assessment in the case of such lands was added to those already in existence by the introduction of the system of "General Position Class", the author of which was Mr. Fletcher, Survey Superintendent in the Deccan. The objects of the new scheme may best be described in his own words:

"You are aware that it has been the sanctioned practice at revision hitherto to impose on land under wells within reach

\* Government Resolution No. 1028 of 26th September 1874.

of percolation from irrigation works an increase which may amount to double the dry-crop rate. It has been the practice also to place a small increase on all lands within a certain radius of existing wells in consideration of the probable existence of sub-soil springs. We consider that, at all events in a trap country (which is what we have practically to deal with in future), any plan which attempts to assess merely the possibility of irrigation from a well, yet undug, must be founded on probability only, and is liable to be challenged and objected to, if it be, not indeed often, in the event, proved false by the subsequent sinking of unsuccessful wells. On the other hand, it is a general fact which admits, we think, of no dispute, that the productive qualities of land are benefited by both surface and sub-soil drainage in proportion as its soil is low in level and of favourable conformation. This advantage has already (in the classification of gardens in Kanara) been specifically assessed by the survey rules, and there can be no reason why it should not be made a factor in fixing the assessment of dry-crop lands in the Deccan. Again, at Revision Settlements lands irrigated by wells, which existed before the Original Settlement, are assessed at an enhanced rate not exceeding the maximum dry-crop assessment. It has been objected to this practice that it is inconsistent with the policy of Government, who have in all other cases discontinued any special assessment on account of well irrigation. The scheme now submitted is intended to supersede all the above practices by one consistent system of assessing all lands with regard to their position."\*

As for the scheme itself, the detailed description will be reserved for Part II, but its main features were as follows :—

(a) Dry-crop lands were divided into 4 classes in accordance with their situation, ranging from flat, low-lying lands situated in the valleys and thus receiving the best drainage from the high grounds, which were placed in class 1, to ridges and steep slopes retaining neither rainfall or moisture which were placed in class 4.

(b) An anna-scale of the usual type was drawn up by which additions were to be made to the soil annas of dry-crop lands in accordance with the class in which they were placed.

(c) At the time of classification a note was made by the classer as to the situation of the survey number and the necessary additions made to the soil annas subsequently in office.

\*Paragraphs 1-4 of Mr. Fletcher's Report No. 789 of 14th July 1884.



These proposals were considered in a conference of Superintendents and Deputy Superintendents, and, on their recommendation, was applied in the case of the Satara Collectorate and the greater portion of Khandesh.

From the account given above it will be seen that the methods of classifying lands irrigable from wells in the Deccan are of a somewhat complicated nature comprising as they do the three following systems :—

In what districts.	System.
1. Satara and Khandesh	No special taxation of wells. Water facilities, depending upon "position", considered as an element of value and assessed by classification.
2. The drier talukas of the Deccan.	Land under <i>old wells</i> , i.e., those assessed at the Original Settlement, taxed by slight additions made to soil annas; under <i>new wells</i> , i.e., those constructed subsequent to the Original Settlement, assessed as dry-crop.
3. Districts—other than those under 1—with good command of sub-soil water and extensive irrigation.	In the case of <i>all wells</i> —old and new—slight addition to dry-crop annas sufficient to make up for the previous well assessment.

#### *Gujarat.*

The next section of this subject to be dealt with is that falling under (i), i.e., the case of those districts where water facilities are widely diffused and easily ascertainable. These districts are those of Gujarat "where water in the soil and very close to the surface is a gift of nature". In such cases the policy approved of by Government and ordered to be introduced "whenever a revision takes place" was, in the words of Captain Prescott, "to consider water facilities as one of the fertilizing elements of the soil and included in the soil-assessment whenever

it is practicable". It was as a matter of fact at the Original Settlement of the Jhalod taluka of the Panch Mahals district in 1884 that the first trial of the new system in Gujarat was made and from thence extended to the other district. Its chief features are as follows :—

The system of sub-soil water classification.

(1) In every village, after an inspection of existing wells and other phenomena bearing upon the question of the quality of the sub-soil water and its depth from the surface, the village lands were divided up into areas homogeneous in so far that water of a similar quality and at an approximately equal depth might be expected to be found therein. Thus, for example, in one village there might be 4 groups—

(i) in which sweet water might be obtained at a depth of about 10 feet ;

(ii) in which the water was brackish and available at 15 feet ;

(iii) in which the water was of similar quality to the last group but obtainable at 20 feet ;

(iv) in which there was no sub-soil water *stratum* within 40 feet.

(2) Additions were then made to the soil classification annas of the fields within the first 3 groups according to a "sub-soil water classification" scale, based upon

(a) the depth to the water from the surface ;

(b) the quality of the water ;

(c) the soil classification annas of the field.

The full scale will be found in Part II, Chapter IV. The following examples, however, will illustrate the system sufficiently clearly :—

Soil as	Depth to water.	Quality of water.	Addition to soil as
12-16	10 feet.	Sweet	4
"	"	Brackish	2
5-8	10-20 feet.	"	1

The result of making these additions, of course, was to increase the soil classification and so the assessment of the field proportionately.

The system above described was known as that of "Sub-soil Water Classification" and formed part of the ordinary work of field classification no less than that of the soil. It had, of course, to run the gauntlet of objections, the most formidable of which was that it is impossible to tell from inspection of the surface, the depth and quality of the sub-soil water and that there is therefore a danger—to quote the criticism of the Government of India—"of the assessment of a non-existent water advantage or one which it may be impracticable to use".\* This possibility must, of course, be admitted, since "the most gifted and skilled geologist, let alone the 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 these *strata* or the quality of the water hereafter".† And certainly in the Deccan such objections had been found impossible to get over, with the result that the adoption of a true system of sub-soil water assessment was impracticable. In the case of Gujarat, however, the depth of the soil and the concomitant existence of sub-soil water is of so uniform a character that this general objection does not apply. Hence, as Mr. Ozanne remarks "We cannot dig test wells to find out the depth and quality of the water underlying. We cannot use the diviner's rod, but we can, as practical men, using the evidence of existing wells and other evidence available make a difference in the valuation which, for practical purposes, is sufficient"‡. But though it was, of course, impossible to guard against all chance of error in operations of this kind, yet the dangers inherent in the system, were minimised

(a) by the small amount of extra valuation imposed in consideration of the advantage ;

(b) by being careful to assess the advantage only when its presence was clearly indicated by the surrounding circumstances ;

(c) by contracting to reduce the added annas in any case where a cultivator might prove by actual experiment that the advantage was non-existent ;

(d) by the strict supervision kept over the work in general.§

\*Government of India's Despatch No. 650-R. of 24th September 1884.

†Mr. Rogers, *Land Revenue of Bombay*, Vol. 1, p. 45.

‡Paragraph 4 of a Note by Mr. Ozanne : SS. No. CCLII, Sanand, p. 54.

§The Settlement Commissioner Mr. Stewart's No. 33-of 7th January 1885.

It is at the same time necessary to point out that the assessment of these advantages entailed no rise in the *general* assessment; that is to say, if at Revision an increase of, say, 10 per cent. was to be made over the whole settlement area this total amount was not increased by the assessment of sub-soil water advantages. The "aggregate" to be taken from the whole area remained the same, the only effect of the new system being that, in distributing this total over the individual fields, those possessing "sub-soil water advantages" were assessed somewhat more highly than those without these advantages.

This system of assessment received the sanction of Government and was subsequently extended to all the Gujarat districts. It may further be said to have stood the test of time, since it has enabled Government to relieve the cultivator of all apprehension of regarding the assessment of "well-improvements" and has, therefore, given an immense impetus to the construction of wells to the advantage, not merely of the rayat, but also to Government, since wells are in the nature of an insurance against famine and enable the cultivator to hold out when he would otherwise be ruined.

#### *The Konkan.*

The third class of "lands watered from wells" is that of the Konkan, the characteristic of which is that, owing to the sandy nature of the soil, "when water is not brought to it it will bear nothing and when water is used it will yield a fine crop". Such a case differs widely from those of the Deccan and Gujarat where the garden lands are merely the ordinary dry-crop fields with the additional advantage of irrigation and where the main element of fertility is the quality of the soil. In the case of the Konkan garden lands, however, the value of the soil as dry-crop is *nil*, since nothing will grow without irrigation. In these circumstances the adoption of either the Deccan or Gujarat plans of assessment was obviously impossible. The only practicable course both at the Original and Revision Settlements, therefore, was to assess as garden all lands appearing to be such at the time.

#### *Summary.*

The problem of assessing lands irrigable from wells, perhaps the most difficult of all that had to be faced by the Bombay system, was, therefore, solved by methods that have varied in accordance with the pressure of local circumstances and

also of considerations of policy. Firstly, with respect to the great majority of this class of lands which may be called "irrigable dry-crop", the "ideal policy", as most in accord with the spirit of the Bombay system, was that applied to the case of the ordinary dry-crop lands in Gujarat and in Satara and Khandesh in the Deccan, by which the possession of a source of water-supply whether utilized or not was treated simply as an extra "factor" of advantage and taken into account by classification in the usual way. Where however, owing to the nature of the sub-soil "use" was the only evidence of the possession of such a supply, as in the case of the Deccan dry-crop lands, this "factor" could be and was only assessed in this manner in respect of lands irrigable from existing wells; though, for motives of policy and also owing to what cannot but be considered a mistaken reading of section 30 of the Survey Act, an exception was made in favour of wells constructed during the course of the Original Settlement in the case of the drier districts of the Deccan. Finally there was the other, though much smaller, class of *bagayat* lands peculiar to the Konkan which are garden lands pure and simple and not "irrigable dry-crop", and so were made into a separate class altogether and assessed as such.

#### (b) *Land irrigable by Dhekudis.*

As was explained in the last chapter (p. 90) the system of assessing these lands at the Original Surveys was that of levying a "quasi-permanent rate" upon all lands adjudged to be irrigable by the construction of a *dhekudi*. Upon the introduction of the system of "sub-soil water assessment" at the Original Settlement of Jhalod in 1884 this class of land was assessed to sub-soil water advantages only, no extra assessment being levied on account of the facilities of irrigation by means of *dhekudis*. This was, however, a special case due to the poverty of the Panch Mahals district. At the Revision Settlement of the Dholka taluka of Ahmedabad—the first of the Gujarat Revision Settlements—the system adopted was to assess the *dhekudiat* lands for sub-soil water advantages and to add a *dhekudiat* assessment on the same lines as that of the Original Surveys, but to reduce the latter by the amount of the former when the *dhekudi* was in operation, as both methods of irrigation—from well and *dhekudi*—could obviously not be enjoyed at the same time. This system was employed till the time of the Matar Revision in 1893, when the question of *dhekudiat* assessment was again

brought up by the Settlement Commissioner who proposed to re-introduce the "bag-rate" system on the grounds that—

(a) owing to the extraordinary fluctuations in the course of the rivers and streams of Gujarat it was impossible to fix a quasi-permanent assessment on lands supposed to be irrigable by *dhekudis* ;

(b) the result of a quasi-permanent assessment would be injurious both to the rayat and Government—to the former on account of the inevitable delay that would take place in making reductions when these were found to be necessary ; to Government, by reason of the impossibility of entrusting the duty of assessing newly watered lands to inexperienced Circle Inspectors.

The Settlement Commissioner, therefore, contended that the bag-rate system was the best and easiest to work, fairest both to Government and the rayat, and also not oppressive to the latter on account of the small expense involved in the construction of a *dhekudi*.\*

An inquiry was ordered and in the result it was found that the amount brought in by the special *dhekudiat* rate over and above that of the sub-soil water assessment of such lands was so small that Government finally decided to remit the separate *dhekudiat* rate altogether and to assess these lands to the sub-soil water rate only.† The result of these orders was that *dhekudiat* lands in North Gujarat were placed upon exactly the same footing as ordinary dry-crop fields possessing sub-soil water advantages and that the special class of "*dhekudiat*", so far as the Survey classification was concerned, ceased to exist.

The conditions of the Surat district, however, so far as *dhekudiat* lands are concerned, are different from those in the rest of Gujarat.

There the beds of the rivers are unchangeable and the objections to a permanent assessment consequently do not apply. In this district, therefore, the system adopted was that of the Original Surveys by which an addition was made to the dry-crop classification annas of all lands irrigable by *dhekudis* according to their proximity to the river bank and the

\*Paragraph 9 of Mr. Ozanne's Report No. 864 of 1st April 1893 : SS. No. CCCL, Matar, p. 83.

†Paragraph 2 of Government Resolution No. 5870 of 10th July 1894 : SS. No. CCCL, Matar, p. 99.

depth to the stream through the medium of a scale of the usual type.\*

(c) *Pâtasthal Land.*

The Revision system of classing and assessing *pâtasthal* land was the same as that of the Original Surveys; i.e., the soil was classed according to the ordinary soil scale and the combined soil and water rate fixed by the Superintendent personally after an inspection of each *bandhara* and survey number. Previous to the year 1892 no question of "improvements" was raised in connection with the assessment of *pâtasthal*. The only expense incurred by the cultivator in making use of the water-supply was in the construction of the *bandhara*, and this was allowed for by the Superintendent at the time of fixing the rates. New *pâtasthal* was, therefore, assessed at the same rates as old *pâtasthal*, and the rates for both were enhanced upon the same principles and upon the same ground as the soil rates, viz., the enhanced value of the water-supply owing to a rise in prices or other general causes.

At the settlement of the Khanapur taluka of Satara, however, in 1892 the question of the "taxation of improvements" in respect to *pâtasthal* land was brought under discussion. The facts of the case were:—

The Khanapur Settlement of 1892.

(a) that the area under *pâtasthal* irrigation was found to have doubled itself during the course of the past settlement—from 5,000 to 10,000 acres;

(b) that the number of well and *budkis*, used to help out the water-supply of the *pâts*, had very largely increased in number.

Government, therefore, concluded that "A strong probability arises here that the average flow supply to each acre irrigated is less now than it was at the beginning of the settlement period, and that is one of the causes that accounts for the large increase in the number of wells and *budkis* worked as auxiliaries to the flow supply in the *pâts* noticed in the reports. Improvements of this kind effected at the cost of the rayats are not liable to taxation. This consideration strengthens the general argument for reducing the *pâtasthal* rates proposed by Mr. Fletcher. On the whole, His Excellency the Governor in Council does not consider that a sufficient case has been made out for any material increase in the rate of water cess apart

\*Paragraph 15 of Mr. Ozanne's Report No. S. 435 of 19th February 1896: SS No. CCCLIX, Bardoli, p. 116.

from the soil rate imposed at the Original Settlement. The justifiable increase consists of the 30·7 per cent. on the soil rates *plus* the increase accruing from the application of the old water cess to the lands newly irrigated from the *pâts* since the Original Settlement and that accruing from Mr. Fletcher's new grouping."\*

The chief object of these orders was to guard against the danger of assessing the rayats' improvements in the shape of wells and *budkis*. It was, however, taken to constitute a definite statement of Government laying down the principle that the general considerations which were considered sufficient as a ground for the enhancement of the soil rates were not to be taken as applicable in the case of water rates. At the time of the Dhulia Settlement, therefore, in 1897 the question was brought up again by the Settlement Commissioner,

Mr. Muir Mackenzie, who pointed out that there was no reason for thus discriminating between the two and that the same considerations applied in the one case as in the other. To hold otherwise, he argued, would be to discriminate most unfairly between the assessment of irrigated and unirrigated land, greatly to the disadvantage of the latter and far more precarious class of cultivation. He, therefore, contended that water rates should be open to revision upon the same principles as soil rates.

In issuing orders upon this reference Government pointed out that the Khanapur orders were meant to apply to that taluka alone and not to be of general application, and expressed their agreement with the Settlement Commissioner that, "as a general rule, precisely the same considerations which justify an enhancement of soil rates would justify also an enhancement of water rates."†

In the course of the resolution upon the Dhulia Settlement itself, however, Government laid down a further principle of assessment in the case of *pâtasthal* lands which, as applied in certain subsequent settlements, had far-reaching effects. This principle was that "the consolidated assessment is suitable only when a constant supply throughout at any rate some part of the year is assured."‡ This ruling was first given full effect at the time of the settlements of the Sangamner and Kopergaon

\*Paragraph 3 of Government Resolution No. 3205 of 4th April 1892: SS. No. CCLIX Khanapur, p. 112.

†Government Resolution No. 6069 of 14th August 1897.

‡Government Resolution No. 6068 of 14th August 1897: SS. No. CCCLXXV, Dhulia, p. 112.



talukas of the Ahmednagar district in 1904. In his report upon these talukas the Settlement Officer stated that it was in his opinion inadvisable to fix a permanent rate for *pâtasthal* areas because, owing to the majority of the *pâts* having been dry for many years, the necessary data for determining the average area capable of being irrigated and the duration of the water supply were non-existent. As a result of this report Government issued orders that in these talukas no permanent rate was to be fixed and that in the future "any additional assessment leviable for the use of water, the right to which vests in Government, should be fixed by the Collector year by year under section 55 of the Land Revenue Code on areas actually irrigated from *pâts* according to the maximum rates to be prescribed for the talukas."\*

The Sangamner and Kopergaon Settlements, 1904.

This same principle, which it was directed might be "followed as a guide in the case of talukas whose circumstances are similar," was brought into operation at the settlement of the Karmala, Sholapur, Barsi and Madha talukas of the Sholapur District.

In the next year 1905 the question arose as to how the water rate was to be calculated by Collectors under section 55 in the case of *pâtasthal* lands for which the permanent rate had been abolished, and certain proposals were submitted by the Director of Land Records. After considering the papers, however, Government came to the important conclusion that "the occasional assessment under section 55 of the Land Revenue Code of *pâtasthal* lands in tracts where the rainfall is precarious is open to objection."† Such a system, it was pointed out, would inevitably involve a large amount of annual inspection and measurement which would give opportunities for exactions by village officers and lower subordinates. They, therefore, came to the conclusion that "In the opinion of Government, it would be far preferable to adopt a broad and liberal policy, and to abolish *pâtasthal* assessment altogether in the precarious areas . . . . The sacrifice is not heavy (about 1 or 1½ lakhs of revenue) and the result will be a much needed stimulus to private enterprise in the husbanding of the supply of minor rivers, streams and *nalas*, and the irrigation of the small areas commanded by them . . . . If the water is absolutely free every drop

Abolition of *pâtasthal* assessment in certain tracts, 1905.

\*Government Resolution No. 2968 of 20th April 1904.

†Paragraph 2 of Government Resolution No. 2750 of 15th March 1907.

of it will be utilized, the general value of the crop will be improved, and possibly, in times of scarcity, employment will be provided both for making the small works required and for cultivating the irrigated crop."

*Pâtasthal* assessment was, therefore, ordered to be abolished in the following talukas :—

District.	Taluka.
Sholapur .. .. .	All talukas.
	{ Shevgaon.
	{ Jambhed.
	{ Karjat.
Ahmednagar .. .. .	{ Nevasa.
	{ Rahuri.
	{ Sangamner.
	{ Kopergaon.
Poona .. .. .	{ Indapur.
	{ Bhimthadi.

As regards other talukas, Collectors were directed to make recommendations, which have resulted in the total or partial abolition of *pâtasthal* as follows :—

District.	Talukas in which <i>pâtasthal</i> wholly abolished.	Talukas in which <i>pâtasthal</i> partially abolished.
Ahmednagar .. .. .	Shrigonda .. .. .	{ Nagar.
		{ Akola.
		{ Parner.
Sâlara .. .. .	.....	{ Tasgaon.
Poona .. .. .	.....	{ Valva.
		{ Khanspur.
		{ Hayoli.
		{ Baglan.
	{ Nandgaon .. .. .	{ Kalvan.
	{ Igatpuri .. .. .	{ Chandor.
Nasik .. .. .	{ Yeola .. .. .	{ Dindori.
		{ Nasik.
		{ Niphad.
		{ Sinnar.
	{ Amalner .. .. .	{ Bhusaval.
East Khandesh .. .. .	{ Chaliagaon .. .. .	{ Jalgaon.
	{ Rever.	
West Khandesh .. .. .	Nandurbar .. .. .	{ Sakri.
		{ Sindkheda.
Bijapur .. .. .	All talukas.	
Belgaum .. .. .	{ Paragad .. .. .	{ Athni.
	{ Gokak .. .. .	{ Sampgaon.
Dharwar .. .. .	{ Ron.	
	{ Navalgund.	
	{ Gadag.	
	{ Mundargi petha.	

Orders are yet to be issued in the case of certain talukas of the Poona, Satara and Belgaum districts.

These orders providing for the abolition of *pâtasthal* assessment in precarious tracts were at the same time supplemented by the issue of instructions providing for the introduction of a system of remissions in the case of those talukas where the *pâtasthal* assessment was retained. These orders were as follows :—

“ For those *pâts* on which the *pâtasthal* assessment is retained it will be necessary to provide a system of remissions in case of failure of water-supply. It is fairly established that the supply of these small irrigation channels varies roughly with the taluka rainfall. In the case, however, of streams which communicate directly with the Western Ghats this may not always be the case. But taking the shortage of rainfall below the *ghats* as a starting guide the Collector, if he has reliable information that the *pâts* have failed, should, by the 15th December in each year, announce a remission, roughly adjusted to his estimate of the failure, of 4 annas, 8 annas or 12 annas in the rupee of the recorded assessment in all the *pâts* of the talukas, with any notorious or well-established exceptions. Beyond this, no inquiry should ordinarily be made regarding individual *pâts*.”

## (2) *The Conversion of Dry-crop into Rice Land.*

### *The Deccan.*

The second class of “improvement” is that of the conversion of dry-crop into rice land. The first reference to this question is contained in the Revision Settlement Report of Indapur in which (paragraph 136) Colonel Francis remarks: “I should consider that new rice land made out of *jirayat* or dry-crop cultivation land at the rayat’s expense is not assessable otherwise than at *jirayat* rates, provided the land was so assessed under the Original Settlement.” Sir George Wingate’s comment upon this opinion was: “New rice lands made out of dry-crop land at the rayat’s expense Colonel Francis also considers to fall under the exemption contemplated in section 30. This view does not seem to be so open to question, though a good deal might be said on the subject of the situation of the land and the additional value of the produce resulting from its conversion into rice land. Where the situation is favourable,

The Indapur Settlement, 1868.

so that the return is large compared with the expense of conversion, this higher value is due as much to the inherent advantages of the locality as to the application of the cultivator's capital, and a higher rate of assessment might on that account without unfairness be imposed." Indapur not being a rice-producing taluka no definite orders upon the point were necessary, but in the resolution on the settlement Government remarked tentatively: "The question of rice fields as compared with dry-crop land next naturally arises. The Governor in Council is not prepared at present to concur wholly with Sir George Wingate; for it may be asked whether the adaptability of the soil to rice crops is not sufficiently taken into account if the land when so adapted is treated as first class dry-crop land without adding a special rate, because the tenant has expended capital in developing its qualities."\*

The first definite pronouncement on the subject was made at the time of the Revision Settlement of the old Bankapur taluka of Dharwar in 1876.

The Bankapur Settlement, 1876. In making his proposals for the assessments of rice lands for that taluka Colonel Anderson, the Settlement Officer, remarked: "We have to guard against assessing that rice land extra, and especially as such, which comes under the head of improvement. Of course, if an excess of area was found now to be rice land above that recorded at the first Survey, the presumption would be that the excess was the result of an improvement. This would, however, be by no means a certainty, as we know that it was not till a later period in the progress of the Southern Maratha Country Survey that a systematic method of dealing with the rice land, either in measurement or classification, was adopted; and though the total area has not very materially increased above that recorded at the first survey, about 8 per cent. only, yet owing to rice land having been in places disused as such, and converted into dry-crop land, the newly made rice must be something more than the difference between the old and new total areas. A survey field might shew an increase of a fourth in the rice land now in it compared with that recorded formerly; in the water class in each third of the field would certainly differ very much—part might be water from a tank and part by mere rainfall. It would require a long and troublesome investigation—possibly coming to nothing in the end—to ascertain which part was the new rice land and which the old

\* Paragraph 8 of Government Resolution No. 1211 of 27th March 1868: SS. No. CLJ, Indapur, p. 168.

and to what precise extent the water-supply applied to the new rice land was fairly exempt from taxation."\*

On account of the difficulties referred to above no attempt to distinguish old and new rice was made on the field and both were treated alike, both in classification and assessment. In order, however, to guard against the assessment of improvements the assessment of all rice land was adjusted by classing the lowest class of rice land as simple dry-crop and the class above that as "dry-crop land of the same quality, fairly situated as regards accidental flooding; that is, with 1½ class added to its ordinary dry-soil valuation." These two classes were considered by Colonel Anderson to comprise the only two likely to fall under the head of improvements, as "Improvements of lands so as to raise their water-supply above that described as the 5th class are, as a general rule, far beyond the scope of private capital."

The system of Colonel Anderson, therefore, was to treat old and new rice on the same footing as regards assessment, but to guard against the taxation of improvements by assimilating the assessment of the lowest rice classes, in which alone "improved" lands were likely to appear, to that of dry-crop. These proposals were approved by Government without discussion of the principles involved with the remark that "The method described in paragraph 56 as adopted to prevent the possibility of dry-crop land, improved into rice during the currency of the expiring settlement, being assessed contrary to the provisions of section 30 of Act I of 1865, appears to provide for all such cases."†

The system above described was adopted in the districts of Dharwar, Belgaum and Bijapur, and the talukas of Junnar and Maval in Poona.

[At the Revision Settlement of Igatpuri, however, in 1885, certain principles were laid down by Government as regards the policy to be observed in the assessment of such improvements. In his report upon the settlement the Settlement Commissioner had stated that "In the treatment of new rice land the policy of Government that improvements made by the expenditure of private capital and labour should not be specially assessed has been observed and land converted

\* Paragraph 55 of Colonel Anderson's Report No. 7 of 4th January 1876: SS. No. CLV. Old Bankapur Taluka, p. 171.

† Paragraph 5 of Government Resolution No. 1031 of 16th February 1876: Bankapur, p. 177.

into rice has not received any wet-crop rate." In reviewing the settlement proposals Government remarked as follows :—

"As regards dry-crop land converted into rice land during the settlement period, His Excellency in Council has approved in this case the application of the principle that it should be assessed on Revision within the maximum dry-crop rate. This is the just principle when, as is the case in Igatpuri, the capacity of the land for growing rice has been almost entirely conferred by the labour of the occupant in levelling and embanking. There may, however, be cases, such as will probably come under consideration in the Revision Settlements of the Konkan, where the conversion of dry-crop into rice land depends as much upon the natural advantages of the land converted, such as are not inherent in ordinary dry-crop land, as upon the labour of the occupant. If the whole resulting profit is left for ever to the occupant, the assessment will be in fact a privileged assessment and unfair to the public interest, and it is necessary to consider how the natural advantages of the various rice plots may be taken into account in the assessment. The cases will vary from that where natural facilities are turned to account by aid of very little labour and outlay on the part of the occupant to that where land having the ordinary natural facilities of dry-crop land has been converted into rice land entirely by the labour and outlay of the occupant. In the latter, of course, no enhancement of the assessment will be made on account of profit due to the conversion." \*

In the case of the Igatpuri taluka, therefore, the orders were that new rice land should be assessed "within the maximum dry-crop rate". They were carried out in the following way. Owing to the fact of rice areas at the Original Surveys not having been separately demarcated, it was impossible to distinguish the old from the new rice on the field. In order, therefore, to arrive at the new rice area the whole rice area in the field was measured, the area of old rice appearing in the records deducted and the remainder taken as the new rice area. The whole was classed according to the Dharwar system. The new rice area was then assessed by turning the water class into annas according to the scale given in Part II, Chapter 3, and adding them to the soil annas. To the total so arrived at the dry-crop maximum rate was applied. The adoption of this somewhat clumsy method of assessment was due to the

\* Paragraph 10 of Government Resolution No. 3541 of 4th May 1896: SS. No. CLXVIII, Igatpuri, p. 98.

fact that, owing to the circumstance explained above, it was necessary to class both the old and new rice areas together on the same system.

This system of classification was applied in the case of all talukas in the Deccan settled after 1885.

### *The Konkan.*

The occasion for the consideration of the question of new rice land in the Konkan, contemplated by Government in the resolution on the Igatpuri Settlement, arose at the time of the first Revision Settlement to be made in that tract, viz., that of the old Khalapur petha of the Karjat taluka. In the course of his report the whole question was exhaustively considered by the Settlement Commissioner, Mr. Stewart, who remarked as follows :—

“ The whole question has now to be seriously considered for the first time. From the broad principles laid down by Government in the Igatpuri resolution it would seem that Sir George Wingate's opinion has been in some measure reverted to, and that the Revision assessment of this class of land should be based upon a complete valuation of the land with all the natural advantages it possessed in its unimproved condition, all the profits due to the labour and expenditure of the occupant in utilizing these advantages being once for all parted with by the State. Unfortunately there are no means available in the Konkan district for ascertaining with any accuracy the original condition of the land which has been improved upon, while the natural facilities for rice cultivation which obtained at the Original Survey can only be surmised from present appearances. Land which is now level rice may have been formerly uneven *varkas*, and although the rainfall is now perfectly impounded on the field the condition may have been attained by more or less cutting away of obstacles or diversion of natural drainage . . . I can only recommend that at this Revision there should be no attempt at valuing nicely what profits are due to natural advantage and what to the labour and expenditure of the rayat in utilizing them, but that we should compound the matter by adopting a low standard of assessment which will tax only the common advantages which *must* be inherent in dry-crop to tempt improvement and to render conversion possible.”\*

\* Paragraph 32 of Mr. Stewart's Report No. 981 of 22nd May 1888 : §S. No. CCX XIII, Old Khalapur Petha, p. 238.

In order to secure this object Mr. Stewart proposed that new rice land should be assessed by the application to such lands of the maximum rate for *rabi* land of Rs. 2, the effect of which was stated to be as follows:—

“The assessment resulting from the use of the Rs. 2 maximum . . . is Rs. 2,702, giving an average of Re. 1-8-5 per acre, which is about  $\frac{1}{3}$  of the average obtained from the full assessment of the old rice areas. If we take the average produce of an acre of good rice in husk in Khalapur to be one *khandi* or 20 *mans* = 1,440 pounds, the value of the produce with a small addition for straw must be Rs. 30 or thereabouts. This is a low figure, considering the returns from crop experiments detailed in paragraph 61 of the report, but it serves to shew that while the assessment of old rice absorbs about  $\frac{1}{3}$  of the gross produce the demands on the new rice areas will be equal to about  $\frac{1}{20}$ , a rent charge which surely cannot be said in any case to lay under contribution the profits due to the occupant's own improvements.”

These proposals were approved by Government who in passing orders remarked: “The Survey and Settlement Commissioner's proposals will have the effect of assessing at some 12 to 14 annas an acre so much of the difference as is due to the capacity of the land for conversion. This can in no case represent a disproportionate amount of the capital value due to inherent advantage, and the rates proposed by Mr. Stewart are approved.”\*

This system of assessing new rice land was employed in all the subsequent Revision Settlements in the Konkan.

### Gujarat.

The system of assessing new rice land in Gujarat at Revision was on all fours with that adopted in the rest of the Presidency. The principles underlying the assessment so made are fully explained by Mr. Stewart in his report upon the Revision Settlement of the Daskroi taluka of Ahmedabad in 1889, but his remarks need not be recapitulated as they are to the same effect as those made by him at the time of the Khalapur Settlement.

The Daskroi Settlement, 1889.

The system of classification adopted in this case was to class the soil factor by the ordinary soil scale and to add to the

\* Paragraph 8 of Government Resolution No. 5856 of 30th August 1888: SS. No. CCXXIII, Old Khalapur Petha, p. 233.



classification value a "position" class for the facility of conversion into rice possessed by the land just as was done in the case of *rabi* and *varkas* having such facilities in the Konkan. The dry-crop rate was then applied to the combined annas. New rice land in Gujarat, therefore, was treated as dry-crop possessing an "advantage" over the ordinary class of such lands—a procedure which is strictly in accordance with the principles of the Bombay system of settlement.

### (3) *The Cultivation of Pôt-kharab.*

The third and last class of improvement is that comprised under the above head. By the term "*pôt-kharab*" is meant "barren or unculturable land included in an assessed survey number" and includes "any land comprised in a survey number which from any reason is held not to be likely to be brought under cultivation." It thus includes "lands in a field covered with buildings which may be removed at any time, burying grounds which may be disused and brought under the plough, tracks and paths which may cease to be employed as such, beds of *nalas* which may suddenly become culturable from any change in the course of the stream, and such like."

In the Joint Report Rules freedom to cultivate such land included within a survey number without extra assessment was conveyed by the general guarantee given in Rule 1 and also more specifically by Rule 4 which states: "In the registers also a deduction is made on account of barren (unarable) land in certain fields and the assessment placed on the arable land alone; but in the event of the cultivator bringing any portion of the land deducted as barren (unarable) into cultivation no extra assessment is to be levied on that account; the assessment on the field entered in the register is alone to be levied". This privilege was re-affirmed in Rule 14 of the

Under Act I of 1865. rules framed under the Survey Act of 1865, which runs: "If land included at any Survey Settlement in a survey number as unarable be brought under cultivation, no extra assessment will be levied on that account during the period for which such settlement is guaranteed". By the same rule, however, certain exceptions were made in the case of "roads, the beds of tanks used for irrigation, drinking or domestic purposes," the cultivation of which is forbidden "when the land occupied by such roads or tanks is included in a survey number, save when the privilege of cultivating the dry bed of the same has

been specially conceded at the Survey Settlement, or when the tank waters land which is in the sole occupation of the occupant."

During the currency of the Original Settlement, therefore, no question concerning the assessment of such *pôt-kharab* lands could arise. Nor, indeed, was the matter considered of sufficient importance to call for special attention at the time of the first Revision Surveys. As the original guarantee did not extend beyond the period of the Original Settlement the land counted as *pôt-kharab* at that settlement but now cultivated was at Revision classed as "arable" and assessed accordingly. In 1874, however, the large increases in Revision, due to the assessment as "arable" of land originally classed as *pôt-kharab*, attracted the attention of Government. On inquiry it was found that these increases were due to the extraordinarily lax way in which deductions had been made at the earlier Original Settlements on account of these so-called "unarable" lands. One cause of this carelessness was undoubtedly the wild and uncultivated condition of the country at the time of the first Surveys under the new system, which led to the classification of much land really arable as *pôt-kharab*. Another cause seems to have been the inclusion within one survey number of small pieces of cultivated and large areas of uncultivated land—classed as "*kharab*" in order to save the trouble of division into smaller numbers without appreciating what the consequences of such action would be. Hence, as Colonel Anderson remarks: "We find many cases of large areas up to even 400 acres made into a single survey number and a mere fraction recorded as arable." The result was often to place large areas of cultivable land under the denomination of "uncultivable" in the hands of persons with no original title to them whatsoever except that conferred by their accidental inclusion within the same survey number.\* At the same time the increase in individual assessments due to the assessment of these lands was undoubtedly large, and Government began to have doubts whether such assessments did not contravene the provisions of section 30 of the Survey Act regarding the taxation of improvements. It was at first decided that this was so and orders were issued that "the same area shall be deducted from each number as

\* Paragraph 9 of Colonel Anderson's Report No. 85 of 17th January 1875.

unassessed, as was allowed at the Original Settlement."<sup>4</sup>

These orders cancelled, 1876. This rule was, however, cancelled shortly afterwards, the orders of the Government of India having been received that "all land found arable at the Revision Survey should be assessed."<sup>†</sup> Up to 1883, therefore, this rule was followed. In that year, however, the Government of India, actuated by the desire to do away, so far as possible, with the trouble and expense incidental to the Revision Settlements in the re-measurement and re-classification of the land, addressed the Government of Bombay on this question and with reference to *pôt-kharab* lands asked "Whether it may be understood that in those districts, if any, in which the increment due to the cultivation of *pôt-kharab* can be resigned, no new valuation of the soil will be necessary. . . . . and secondly, whether any date can be selected in regard to which it must be accepted that all assessments made previous to it were of such a nature as to require a new valuation in their case, but not in the case of districts assessed after that date." In his report upon this question the Settlement Commissioner was able to state that the time had arrived when it would be possible to carry out the wishes of the Government of India, remarking that "There are very strong indications now that we are approaching the revision of valuations made at a time when land was only entered as *pôt-kharab* because it was really unfit for cultivation, and if we go on assessing such land much longer we shall be running a risk of taxing improvements of a nature over and above the ordinary operations of husbandry. A step, therefore, which in 1874 would have resulted in giving large areas of land to persons wholly unentitled to them at a mere quit-rent, seems now to be very advisable on broad principles of justice, and the cancelled orders of 1874 may, I think, with great advantage and without any appreciable sacrifice of revenue be repeated in 1884."<sup>‡</sup> This proposal was accepted by both the Governments of India and of Bombay and the latter Government finally disposed of the matter as part of the important resolution upon the subject of Improvements already quoted<sup>§</sup> in the following terms:—"This Government has been inclined ever since 1874 to leave the profit of bringing such land into cultivation to the occupant. But it was found

\* Government Resolution No. 6672 of 17th December 1874.

† Government Resolution No. 2773 of 6th May 1876.

‡ Mr. Stewart's Report No. 1360 of 27th June 1883.

§ Government Resolution No. 2619 of 27th January 1884.

that the area thus treated in the early settlements was so large that to forego assessment of it would occasion an unjustifiable sacrifice of the claims of the public revenue. Action in this matter was, therefore, postponed. But the settlements marked by lavish indifference to *pôt-kharab* have now come under Revision. About the year 1874 a more careful system was introduced under the rules of the Joint Report. His Excellency the Governor in Council has, therefore, resolved that the Settlement Officers shall, in the operations for Revision Settlement of land originally settled after 1854, as a general principle, accept and confirm as exempt from assessment whatever area was entered as *pôt-kharab* in the classification of land at the Original Settlement. In other words, as a general rule land which, though arable, was at the first Survey included in a survey number as unarable and was left unassessed, shall also be left unassessed at the Revision Settlement for the benefit of the occupant."

These orders were carried out in accordance with rules varying with the requirements of the different Surveys.

To complete this subject, it may be stated that in 1891 the following orders were passed, defining two classes of *pôt-kharab*, and safeguarding the rights of occupants in certain cases connected therewith:—

The classes of *pôt-kharab*.

"Lands classed as unarable and included in a survey number are of two kinds—

"(i) *Pôt-kharab*, over which the occupant of the number in which it is included has the sole occupancy rights, such as patches unfit to bear assessment, farm buildings, threshing floors, etc.

"(ii) *Pôt-kharab*, over which the occupant of the number in which it is included has not the sole occupancy rights but which, being devoted to public purposes, is the common property of the village community, such as tanks, burial grounds, places assigned to village potters to dig earth from, etc.

"At the Revision Survey it is the practice to exclude the second kind of *pôt-kharab* from the survey number in which it was included at the Original Survey, and to make it into a separate survey number or *pôt*-number. This practice, though in conformity with the law and the orders of Government on the subject, is calculated to affect the rights of the occupant from whose number the *pôt-kharab* is excluded, and to put him to

a disadvantage, inasmuch as by the separation of the *pôt-kharab* he is deprived of the prospective right to cultivate it, should the *kharab* at some future time cease to be used for the purpose to which it is at present devoted—an advantage to which he would be entitled if the *kharab* were allowed to remain in his number. In such cases, therefore, with a view to save the occupants from this disadvantage, it has been decided to enter the *pôt-kharab* in the name of the occupant from whose number it has been excluded, and to record a note against it describing the purpose for which it is used by the village community, and prohibiting the cultivation thereof without the permission of the Collector.”\*

#### (V) THE DISTANCE FROM VILLAGE SCALE.

At the Original Settlements, it will be remembered, the distance from village scale had been turned from its legitimate object and used to make alterations in the assessments in cases where the Settlement Officers found that the mechanical application of the maximum rates to the classification values produced results which were practically objectionable. The system was in fact, as has been remarked, “an empirical method of soil classification.”

By the time of the Revision Settlements, however, the special conditions which led to this manipulation had nearly all ceased to exist and the distance scale could be used for its true function: that of making the necessary allowance for “situation” value. The old scales were, therefore, abolished and new scales, substituted, framed upon true theoretical principles.

In certain cases, however, such as that of *mal* lands in Kaira, where it was thought desirable to modify the assessments of a particular class of land without interfering with the maximum rates or the classification, the distance scale was employed, even at Revision, in order to make the necessary adjustments.†

#### C—ASSESSMENT.

The task of the Settlement Officer at Revision was, in its essence, exactly the same as that of his predecessor at the Original Settlement. He had first to examine the revenue history of the tract and in the light of the facts disclosed to

\* Government Resolution No. 696 of 27th January 1891.

† Paragraph 16 of Mr. Ozanne's Report No. S.-1121 of 4th May 1895. SS. No. CCCCXXVIII, Kapadvanj, p. 53.

Page 162—

*Add* the following as a sub-paragraph *after* the words “the permission of the Collector”—

The practical application of the 1939 amendment is defined by Government in Government Resolution, Revenue Department, No. 3463/39, dated 25th July 1940. The current orders are:

All improvements made by or at the expense of land holders more than 30 years before the expiry of a settlement should be assessed at the revision of that settlement. The period of expiry of a settlement should be measured from the date on which the settlement ceases to be in force.

In the revision settlements taken up after 1939, the improvements recorded at the last revision which were left unassessed were brought under full assessment. New rice and new garden noticed at the last settlement were therefore classified and assessed as old rice and old garden and the favourable treatment given to new wells noticed at the last revision discontinued and these wells treated as old wells and classified accordingly. As regards cultivation of the Pot Kharab similar action to assess it was to be taken where the improvement was noticed more than 30 years before the expiry of the current settlement.

come to a conclusion regarding the suitability of the existing assessment, and whether it could be enhanced or must be reduced or should be retained as it was. He then had to examine the original grouping of the villages and to re-group them if necessary. Finally, he had to fix maximum rates which, when applied to the classification values, would bring the total amount of assessment for the whole taluka which, in his opinion, might be demanded.

With regard to the general considerations upon which the Settlement Officer was accustomed to base his proposals for Revision, the following account, taken from pages 249-251 of the important resolution on Land Revenue policy, published by the Government of India in 1902, may be quoted as an excellent summary of the methods adopted:—"Before fixing the maximum rates the Settlement Officer considers what direction the revision should take. For this purpose he reviews fully every circumstance shown in the past revenue history—prices, markets, communications, rents, selling and letting and mortgage value of land, vicissitudes of season, and every other relevant fact indicating the incidence of the previous assessment and the economic condition of the tract, and upon this induction he bases his proposals for enhancement or reduction of assessment as the case may be. When he finds from the records of the previous settlement that the assessment was pitched designedly low with the object of encouraging cultivation, or for other reason deemed sufficient at the time, and if he further finds from the land records of the period of the lease under revision that cultivation has in consequence largely expanded, that prices have risen, that the assessment bears a low proportion to the sale, letting and mortgage value of land, and that notwithstanding vicissitudes of season the assessment has been paid with conspicuous ease, he will probably propose an increase of assessment. This is what has happened recently in many parts of the Presidency and in particular in the Deccan and Southern Maratha Country. If, however, he should find that the condition of the country has been stationary, that prices have not risen, and that the country has not been developed, or any rise occurred in the value of land, he will not propose any enhancement. Cases of this description have occurred already in the Konkan districts of Ratnagiri and Kanara. Again, if the assessment at the Original Settlement was fixed high and the cultivation has been contracted or the revenue has proved difficult to

collect, and the relation of the assessment to the value and rental of land is found to be high, the Settlement Officer will propose a reduction."

In formulating his proposals his work was, of course, enormously facilitated by the incomparably better material upon which to base a decision ready to his hand in the accurate body of statistics regarding the revenue and general history of the tract, collected during the currency of the Original Settlement—statistics which for range and accuracy far transcended the inaccurate *data* which had been at the disposal of the Settlement Officer at the Original Settlement. In the light of these statistics he was able to correct many inaccuracies and mistakes made at the Original Settlement owing to the imperfection of the material upon which it had been based. This was particularly the case in connection with the grouping of villages which, for reasons given in the last chapter, had necessarily been left imperfect at the Original Settlement. Apart from the correction of errors in grouping the Revision Settlements are mainly remarkable for laying down certain important principles, firstly with regard to the amount of enhancement of the assessment rates permissible, and secondly for lightening the burden of such enhancements in individual cases by allowing their gradual levy. Under the heads, therefore, of—

- (i) Grouping,
  - (ii) the regulation of the rate of enhancements,
  - (iii) the gradual levy of enhancements,
- further detailed consideration is desirable.

#### (i) Grouping.

A comparison of the grouping of the Original Settlements with that of the Revision shews many variations, the causes of which, apart from those of a general nature, such as changes in the territorial boundaries of districts and talukas (of frequent occurrence during the currency of the Original Settlements), were mainly two, *viz.* :—

- (a) correction of the anomalies of the original grouping ;
- (b) changes in communications.

As regards (a)—it was noted in the last chapter that the character of grouping of villages at the Original Settlement was necessarily of a transitional character owing to the fact that to have insisted upon the theoretical standard of the Joint Report would have resulted

(a) Correction of original grouping.



in great injustice in individual cases, and that, therefore, the grouping actually adopted was admittedly a half-way house between what was theoretically correct and practically possible. By the time of the Revision Settlement, however, the interval of 30 years that had elapsed, a period moreover of unbroken peace and of gradual, if quiet progress, had allowed conditions in the agricultural world to assume a character that might reasonably be expected to be permanent and the time was ripe for doing away with the anomalies of the Original Settlement and settling the question upon its true theoretical basis. The old grouping which, particularly in parts of Gujarat and Khandesh, had often been settled upon a caste basis, was, therefore, re-modelled to suit the changed conditions and villages grouped together according to the permanent considerations of climate and situation upon the principles laid down in the Joint Report.

Even, however, in cases where the grouping of the Original

(b) Changes in communication.

Settlement had been made in accordance with these principles it was found necessary to make alteration at Revision, chiefly owing to changes in the state of communications, with respect to which it is not too much to say that the period covering the Original Settlements as a whole—roughly from 1840–1890—witnessed a revolution. † It is only necessary to refer to the description given in Chapter IV of the state of communications as they existed at the commencement of this period and to compare them with conditions at its close in order to realize the transformation effected by the building of roads, railways, bridges and other highways. This transformation, moreover, was not confined to any single tract but was shared by the whole of the Presidency. And as it was by their relative advantages in respect of communications that the grouping of villages within the same taluka was mainly governed, it is small wonder if that of the Revision, for this reason alone, differed profoundly from that of the Original Settlements.

### (ii) *The Regulation of Enhancements.*

In making his proposals for a Revision Settlement the Settlement Officer almost invariably found that the statistical and other data at his command with regard to the history of the taluka during the currency of the Original Settlement would justify a considerable enhancement in the assessment at Revision. That this would be the case might have been expected *a priori*. The original rates had designedly been

pitched exceedingly low in order to encourage cultivation and to increase the stock of agricultural wealth; and this result had been attained, not only on this account, but also owing to the enjoyment of a long period of peace and accompanying prosperity. At the outset of the Revision period the enhancement proposed by the Settlement Officer and sanctioned by Government were not limited by any rules, but were dependent solely upon what was considered justifiable in view of the past history and future prospects of the taluka. Unfortunately the first Revision Settlements happened to coincide in point of time with the American War which was a period of high prices and great agricultural prosperity, a circumstance which seems to have induced the Settlement Officers and Government to take a more optimistic view of the situation than they otherwise might have done. In the result the new assessments in the case of the talukas first revised—4 of Poona and 6 of Sholapur—were enhanced to a degree which, though justifiable at the time when they were promulgated, proved too heavy to be borne during the state of depression which followed upon the conclusion of the war and the great drop in prices which accompanied it. In consequence of the distress that ensued Government ordered

The orders of 1874. an inquiry in 1874 and, as it was held that it was due at least in part to the large enhancements that had been made, were led to lay down certain principles—

(a) for the limitation of enhancements in future Revision Settlements;

(b) for the reduction of the rates in the talukas already revised.

With regard to (a)—in passing orders laying down principles for the regulation of future enhancements Government made the following remarks:—

“Before proceeding to determine the limits of the increases to be henceforth imposed in Deccan Collectorates, His Excellency the Governor in Council will briefly record the reasons which make it imperative that the right to revise past settlements should not be foregone.

“In the first place, it must be borne in mind that the original assessments were imposed at a time when the country was in an extraordinary state of depression, when prices were extremely low and when there were hardly any facilities in the shape of wheeled carriage. It is unquestionable

that in all these respects the condition of the country has materially improved. On these grounds alone it would not, in the general interests of the State, be just to waive the claim to the enhancements which are rightly due, and the liability to pay which has long since been anticipated by the people themselves.

"But there is another important consideration which must not be overlooked. The earlier Original Settlements were effected before the Survey system had been matured and organized, and before the officers and their establishments had acquired the necessary knowledge and experience. The work was consequently exceedingly imperfect as regards measurement and valuation. Without, therefore, abandoning the equitable principles which are the essence of the Survey system, it is necessary to correct obvious errors in measurement and valuation; and by this means to place the earlier settled districts on the same footing as those in which Original Settlements have been more recently introduced.

"5. His Excellency in Council will now proceed to lay down the following precise rules as to limitation of increase. In doing so he has been influenced mainly by the consideration that it is not probable that the higher prices which ruled during the last decade of the Original Settlements will be maintained:—

"(1) The increase of revenue in the case of a taluka or group of villages brought under the same maximum dry-crop rate shall not exceed 33 per cent.

"(2) No increase exceeding 66 per cent. should be imposed on a single village without the circumstances of the case being specially reported for the orders of Government.

"(3) No increase exceeding 100 per cent. shall in like manner be imposed on an individual holding."\*

These rules constitute a declaration of policy in respect of *future* Deccan Settlements. They were not meant to apply to the talukas the assessment of which had been revised previously, for which special treatment was deemed justifiable on the ground that "the work of the earlier settlements was characterised by greater defects in respect to both measurements and classification than that done after some experience had

\* Government Resolution No. 5739 of 29th October 1874; SS. No. CLI, Indapur, p. 174.

been acquired." In these cases, therefore, it was ordered that the rates should be so reduced "as to bring down the increase in the total revenue of a taluka or group of villages within the limits of 50 per cent. This having been done, any case in which the increase in a village is still above 75 per cent., or in an individual holding above 100 per cent., should be specially reported for orders with distinct recommendations from the Survey Officers whether further alterations are necessary, and, if so, how they are to be effected."

The orders passed at this time were meant, as Government later contended, to apply to the Poona and Sholapur Districts only and not to the rest of the Presidency. In the other districts of the Deccan and Southern Maratha Country, therefore, where Revision Settlements were in progress, these rules were not observed and the limits of enhancement laid down therein considerably exceeded. In 1879 this matter

Orders of the Secretary of State, 1879.

was brought to the notice of the Bombay Government by the Secretary of State who expressed his dissatisfaction at the high rate of enhancement and, in answer to the reply that the orders laying down limits were intended for application to the Poona and Sholapur Districts only, gave it as his opinion that the Government of the day certainly meant them to be applied generally and, while not prescribing any hard and fast rule limiting the extent of future enhancements, desired the Bombay Government to "carefully watch and restrain that tendency (towards undue enhancement of assessments), always bearing in mind that the worst effect of under-assessment is a loss of revenue, possibly to some degree compensated for by an increase of wealth among the people, while over-assessment, even when not excessive, is sure to produce a material deterioration of agricultural and general prosperity."\*

No immediate action, however, was taken to put these instructions into effect, owing to the fact that from 1880-1883 the Bombay Government were engaged in carrying out certain other orders of the Secretary of State granting remissions for 3 years on account of the famine of 1876-1878, which, being of a temporary nature, need not be detailed here. The close of this period, however, was coincident with considerable agitation in the public press on the subject of the question of the taxation of land improvements, and in 1884 it was deemed advisable by Sir James Fergusson's Government

\*Secretary of States' Despatch No. 36 of 16th September 1880.

to issue a complete re-statement of its land policy—which was accordingly done through Government Resolution No. 2619, dated March 26th, 1884, from which excerpts have already been given; and an integral part of this policy was the extension of the limits of enhancement laid down in 1874 to all future settlements. It is now, therefore, a general rule of Bombay Settlements that, except in special circumstances, the rates of enhancement at Revision are not to exceed—in the case of—

(i) a taluka or group of villages	.. 33 per cent
(ii) a single village	.. 66        "
(iii) an individual holding	.. 100       "

The most striking instance of departure from this rule is that of the Panvel taluka of Kolaba. In this case the circumstances were altogether exceptional owing to the enormous increase in the value of the *varkas* lands during the currency of the Original Settlement. At the time of that settlement these lands were only of value as affording the usual supply of *rab* for the rice fields like other *varkas*. Since that time, however, a great market for grass had sprung up in Bombay, the supply of which was drawn mainly from the *varkas* lands of Panvel. The enormously increased value thereby given to these lands was, of course, purely a case of "unearned increment" and as such, entirely removed from the category of "improvements". Furthermore, the ownership of these lands had passed from their original possessors and was now in the hand of the large grass merchants of Bombay. In these circumstances the 33 and 66 per cent. rules were abrogated with the sanction of the Secretary of State. In conveying his sanction, however, he remarked: "At the same time I am not prepared to sanction, nor do I understand you to propose, the general abrogation of the rule which has had salutary effect in restricting Land Revenue enhancements during the past 18 years. Departure from that rule should be permitted only in cases where clear and strong justification can be shewn, as in the case of the Panvel taluka."\*

### (iii) *The Gradual Levy of Enhancements.*

In the Government resolution upon settlement policy so often quoted the main causes of increase in the case of individual holdings are stated to be (paragraph 5)—

\*Secretary of State's Despatch No. 86 of 16th September 1890. Quoted Government Resolution No. 7166 of 8th September 1892.

- (a) the assessment of *pot-kharab* ;
- (b) the assessment of encroachments ;
- (c) changes in the system of classification.

In commenting upon these cases it is laid down that "I order to prevent excessive individual increases the fixed standard of valuation must not be abandoned. It will always be optional with Government to remit wholly or in part, or for a particular period, such proportion of the increase in excess of 100 per cent. as may seem necessary."\* It is clear that the system of relief foreshadowed in these remarks was meant to apply only to cases in which the increase was over 100 per cent and it was apparently contemplated that increases falling short of this degree would be collected in full *ab inito*. In the event, however, the system that was actually worked out went much further than this.

(a) *The Deccan.*

Such a system was first brought into operation at the Revision Settlement of the Igatpuri taluka of Nasik by the following orders of Government, given in paragraph 11 of Government Resolution No. 3541, dated May 4th 1885:—

"The proposed rates are fully approved by all the officers who have expressed an opinion and they no doubt represent a very moderate assessment. Much of the best dry-crop land has in fact during the past settlement been held at a quit-rent. But as there has been both a rectifying of classification and as enhancement of assessment on general grounds, the increase is in many cases very considerable, and though the rates are approved it is a question whether they can be at once collected in full without disturbing the domestic economy of the rayats. His Excellency in Council is therefore pleased to direct that, while the *akarbands* should in all cases be made out according to the full sanctioned rates, it should be notified that enhancement in excess of 4 annas in the rupee or 25 per cent. of the assessment on a holding† will be remitted for the first two years of the Revised Settlement, enhancement in excess of 8 annas in the rupee for the third and fourth years, and enhancement in excess of 12 annas in the rupee for the fifth and sixth years of the Revised Settlement, so that the cultivators may adjust themselves to the increased payment by degrees."

\*Paragraph 36 of Government Resolution No. 2619 of 26th March 1884.

†Changed to "Survey Number" R. 2579-05.

This system of relief was subsequently extended to all future Revision Settlements in the Deccan and Southern Maratha Country by Government Resoluton No. 2981, dated April 20th, 1886, and is generally known as the "Igatpuri Concession" from the taluka at the Revision Settlement of which it was originated. The remissions entailed were, it may be noted, granted upon the "*holding*," i.e., upon the revised as compared with the original assessment of all the lands standing in a rayat's name in the Government books as a whole and not upon the assessment of individual survey numbers.

### (b) *The Konkan.*

In the Konkan a similar system was first applied in the case of the Khalapur petha, taluka Karjat, of the Kolaba district. It differed somewhat from that of the Igatpuri concession, the enhancement being levied by instalments of 33 per cent. increase every 3 years instead of 25 per cent. every 2 years, thus avoiding one change of calculation. According to this system the remission was still made upon the "*holding*". Six years later, however, a new system was introduced at the Revision Settlement of Alibag on the recommendation of the Settlement Commissioner who, on the ground that "In the Konkan the survey number is not the unit of assessment, but the *pot* number in rice, *rabi* and garden, and the *phalni tukda* in *varkas*," proposed to substitute the *pot* and *phalni* number as the unit of calculation for remission and to levy increase thereupon on the Igatpuri system, i.e., by instalments of 25 per cent. every 2 years.† This system was approved by Government Resolution, Revenue Department, No. 4380 of 17th May 1894, paragraph 8. Subsequently the instalments of 25 per cent. every 2 years were changed to instalments of 33 per cent. every 3 years by Government Resolutions, Revenue Department, Nos. 1780 of 4th March 1895 and 6875 of 6th September 1895. These concessions are called the Bhiwandi concessions and are applied in the case of all subsequent revision settlement in the Konkan. (R. 9575/24—30th June 1930.)

### (c) *Gujarat.*

At the outset in Gujarat various systems were adopted. Thus, in Dholka the enhancement was taken at the rate of 25 per cent. every 3 years; in other talukas of the same district

\*Changed to "Survey number" R. 2579-95.

†Paragraph 14 of Mr. Ozanno's Report No. S-240 of 31st January 1894. SS. No. CCXC, Alibag, p. 148.

by instalments of 25 per cent. every 2 years ; whereas in the first Kaira Revisions the matter seems to have been lost sight of altogether, since no remissions were granted at all.

In the year 1894, however, an important question was raised in Council and subsequently considered by Government, as to the interaction of the two sets of rules discussed above, viz., the 1884 rules regarding the limitation of enhancements in general and the Igatpuri and similar concessions for their gradual levy in individual cases. The main points at issue were—

(a) whether the rules read together placed an absolute bar to the levy of individual enhancements over 100 per cent during the currency of the settlement ;

(b) whether, if the levy could be made, the whole of the remaining enhancement should be taken in full at the close of the 66 or 75 per cent. period, or whether collection by instalments should be continued.

As regards (a), it was decided that there was no bar in the rules to the levy of individual enhancements above 100 per cent., since "the Igatpuri and other similar orders must be read with and not as intended to cancel the limitation orders of 1874 and 1884" which simply stated that "the proper valuation of the land must not be abrogated in order to avoid individual enhancements," but that "it will be at the option of Government to remit wholly or in part or for a particular period such proportion of the increase as may be necessary.

As regards (b), while admitting that the Igatpuri and the other rules were meant to apply primarily to cases of enhancement of 100 per cent. and under, it was ruled that there was nothing in the spirit of these rules to prevent the application of the system to enhancements above 100 per cent. The question was, however, only of importance in the Konkan where, owing to the special case of the *varikas* lands previously referred to, enhancements up to 300—400 per cent. were possible. To such cases it was decided that the Alibag system of collecting the enhancement by instalments of 25 per cent. every 2 years should be applied. As for Gujarat the orders given at the settlement of Igatpuri were to be applied in the case of all future Revision Settlements retrospective effect being ordered to be given and remissions made in the case of those



Revision Settlements at which no concession had hitherto been granted.\*

(d) *Kanara.*

In the Kanara district a special system of concession for the villages below ghats is in force, which is as follows:—

(1) In the case of holdings in the same village liable to an assessment amounting to or exceeding Rs. 25 a remission of 14 annas in the rupee is given on all waste numbers included in the holding for the first 5 years of the Revised Settlement. After that period all numbers in the holding, whether cultivated or not, are liable to the full Survey assessment.

(2) In cases where the assessment on the cultivated numbers in a holding in the same village amounted to Rs. 25 or more and the increase on the previous assessment is not less than 30 per cent., then a partial remission of the increase is given as follows:—

1st year	..	..	50 per cent.
2nd year	..	..	25 per cent.

after which the full assessment is payable.

(3) The above concessions apply only to whole holdings. If any portion of a holding be transferred during the remission period, such part at once becomes liable to the full assessment, unless the transfer is on succession.†

Summary. The system of concessions may be summarized as follows:—

In what tracts.	Concession.
1. The Deccan and Southern Maratha Country.	Remission of enhancement in excess of 25 per cent. for first 2 years. Remission of enhancement in excess of 50 per cent. for second 2 years. Remission of enhancement in excess of 75 per cent. for third 2 years. On Survey Nos. R. 2579-95. They do not apply to Inam villages, R. 6556-90.
2. Gujarat	Ditto.

\*Government Resolution No. 1780 of 4th March 1895.

†Mr. Davidson, the Collector of Kanara's Report No. 1224 of 13th March 1894.

3. The Konkan .. Remission of enhancement in excess of 33 per cent. for first 3 years.  
 Remission of enhancement in excess of 66 per cent. for second 3 years.  
 Remission of enhancement in excess of 99 per cent. for third 3 years.  
 On the *pôt* or *phalni* number.
4. Kanara .. Waste numbers—  
 Remission of 14 annas per rupee for the first 5 years when the *khata* is Rs. 25 or over.  
 Cultivated numbers—  
 Remission of 50 per cent. for first year.  
 Remission of 25 per cent. for second year when the revised assessment of the cultivated numbers is Rs. 25 or over.

These concessions under the Igatpuri and Konkan systems are now granted when the new *Pakka Akar* exceeds the old *Pakka Akar* by more than the prescribed limits, provided that the excess of the new *pakka akar* over the old *pakka akar* is 4 annas and above.\*

With the abolition of the Survey Department in 1892 and the close of the technical operations the really important work of the Bombay system of settlement was supposed to have come to an end. With the close of the Survey operations the survey number and *pôt* number seemed to have assumed their final shape as the unit of assessment; with the completion of land classification and the guarantee of its finality given by law the relative value of survey numbers, *inter se*, and so the distribution over them of future aggregates, had been settled in perpetuity and the benefit of all prospective "improvements" without extra taxation thereby assured to the cultivator. Not, of course, that this meant the final closure of all Survey and classification work in future. The construction of new roads, railways, canals and other similar operations; the formation of arable out of waste; in short, the necessity of keeping the records

\*Government Resolution No. 9575-24, dated 18th May 1928.

up to date generally, would always entail a certain amount of Survey work. Again, the assessment of waste lands; the conversion of dry-crop into rice or garden through Government agency, by the construction of tanks, canals, etc.; and also the right to a test of the former classification which has been assured to the rayat in case of necessity meant that classification work of some kind will always be on hand. Work of this nature, however, is merely incidental and connected rather with the administration of the settlement system than with settlement itself.

The history of the last few years has, nevertheless, been fruitful in a number of important changes, which have had considerable effect upon both the survey number and its assessment. The most important of these changes from a fiscal point of view has been the introduction of a system of remissions and suspensions of Land Revenue as part of the ordinary administration of the districts. From a different standpoint an almost equally important series of changes have been those brought about by the introduction of the Record-of-rights. Originally introduced as a purely statistical document, the Record has now, by the amendments to the Land Revenue Code made by Act IV of 1913, become the foundation of the occupancy system. As such its effect has been felt rather in the field of Tenure than in that of Survey and Settlement. Nevertheless, it has had certain side effects upon the Survey system on account of the introduction of a new unit of holding and assessment in the "sub-division", the result of which will be the elimination of the *pôt* number. A third change, of a minor kind, has been the introduction of a new system of calculating the assessments, which has resulted in a large saving of time and expense at Revision Settlements. The last point calling for attention is the issue, in 1913, of certain "Instructions for Settlement Officers", laying down the general principles upon which Settlement Officers are to proceed in making proposals for Revision Settlements.

The subjects to be dealt with, therefore, taking them in order under the usual heads of Survey, Classification and Assessment, are the following:—

- (i) The introduction of the "sub-division" and the elimination of the *pôt* number.
- (ii) The new system of calculating assessments.
- (iii) The "Instructions for Settlement Officers".
- (iv) The system of remissions and suspensions.

(i) *The introduction of the "sub-division".*—In the subsequent chapter on the "History of Occupancy" it is explained in detail that under the old "*khatedar*" system of occupancy, when the occupant was the person whose name was recognized as such in the Government books, the only possible unit of holding and assessment was, in the case of officially undivided survey numbers, the survey number itself, and in that of officially divided numbers the *pôt* or *phalni* number. With the introduction of the new system of possessory as distinguished from registered occupancy, a new unit became necessary, which is called in the amended law a "sub-division of a survey number" and comprises any undivided parcel of land held by a single occupant or body of joint occupants, and noted under an indicative number in the land records.

Now, the "sub-division" may, and often does, coincide with the *pôt* number as in the case when the latter is held by one single occupant; but in the large proportion of cases it does not. Such instances are specially marked in the Konkan where, as has been previously explained (p. 79), not only separate occupancies, but, in survey numbers containing more than one class of land, each separate parcel of a different class, even when held by the same individual, were made into *pôt* numbers. The result is that the new "sub-division" often, either cuts across the line of, or includes, several of the old *pôt* numbers.

At the outset it was thought essential to retain the *pôt* number as the Survey unit, but in course of time, and particularly when the policy of measuring and mapping sub-divisions was decided upon, the impossibility of continuing this procedure became manifest. Thus, to take the case of a survey number having 3 *pôt* numbers running from east to west held by 3 occupants whose possession runs from north to south as in the diagram given below:—

Pot No. 1.			
Pot No. 2.			
Pot No. 3.			
	A's share.	B's share.	C's share.

In this case the retention of the *pôt* number would mean the formation of no less than 9 "sub-divisions"; 3 for each

*pôt* number, and this though the actual number of holdings is only three. Such a system could, and did, only result in confusion, while swelling the bulk of the records to an enormous extent. Following on a suggestion made by Mr. Wiles, the Superintendent of Land Records, Southern Division, it was, therefore, decided gradually to abolish the *pôt* number as a unit of holding and to substitute the undivided sub-division.\* Thus, in the example given, the only entry in the Record-of-rights would be those of sub-divisions Numbers 1, 2, and 3, the *pôt* numbers being ignored. The simplification which will result in the Record of Possession is obvious.

As the only record of the original classification of the land the *pôt* number will still, of course, be of importance and cannot, therefore, in this sense be altogether abolished but as a unit of practical value it will disappear.

This important step marks the final stage in the history of the survey number, from its first status as an "ideal holding" to that of a convenient unit of measurement, mapping and demarcating. It also marks the end of the old system under which the Record of Occupancy was tied to the heels of the Record of Survey, and it is now seen that the Survey Record must exist for the sake of the occupant, and not the occupant for the sake of the Survey Record.

At the present time the large proportion of "sub-divisions" are unmeasured and unmapped, their area having merely been roughly estimated by the Village Accountant and entered in the Record-of-rights. Their correct measurement and mapping is, however, essential if the records are to be accurate and properly kept up-to-date. Government have, therefore, issued orders that all sub-divisions within the survey number are to be measured and mapped, and, as the work is largely for the benefit of the occupants, as defining and securing their rights in the land, the Land Revenue Code Amendment Act, IV of 1913, has made provision in section 135G for the recovery of the cost of measurement from the occupants. This work is now being taken in hand by Survey parties.†

The measurement of existing sub-divisions will not, however, complete the work, as new sub-divisions will constantly be arising in the future, owing to partition on inheritance, sale,

\*The Settlement Commissioner, Mr. Pratt's current No. 290 : SS. 290 of 16th April 1913.

†Government Resolution No. 5559 dated 15th June 1914.

mortgage or other forms of transfer. Provision is accordingly being made for special establishments which will keep the Land Records up-to-date by the measurement of new subdivisions as they arise and will at the same time carry out all the ordinary measurement work of the districts which is at present carried out by Circle Inspectors.\*

(ii) *The new system of calculating Assessments.*—In all first and second Revision Settlements previous to 1909 the calculation of the assessments was made by applying the new maximum rates to the classification values according to the methods described in Chapter III, part II. This process, as will be seen, was extremely elaborate and necessitated the employment of a large and expensive staff for this work alone. In that year, however, Mr. Pratt, the Settlement Commissioner, pointed out that the same results could be achieved in a much more simple and less expensive way, by merely taking the old assessments and increasing them by so many annas in the rupee according to the enhancement required, thus saving the labour and expense hitherto involved in the work of calculation. So long, of course, as the work of classification remained uncompleted it would have been impossible to adopt such a system; but when the classification values were fixed the relative values of survey numbers were equally reflected in the assessments and there was, therefore, no need to have recourse to the classification.

The proposals made were accepted by Government, and ordered to be adopted at all future Revision Settlements by Government Resolution No. 10380, dated 27th October 1909.

(iii) *The "Instructions to Settlement Officers"*.—Previous to the year 1910 no official instructions existed, laying down the principles upon which Settlement Officers were to proceed in submitting proposals for Revision Settlements. They were, in fact, left to draw their own conclusions as to the methods to be followed from a study of the reports relating to preceding settlements. In 1910, however, under the authority of Government Resolution No. 9623, dated the 22nd October, a set of instructions, which had been agreed upon by the Commissioners of the three divisions and the Settlement Commissioner in conference, were issued for the future guidance of Settlement Officers. These instructions are by no means elaborate and simply lay down the general principles to be

\*Government Resolution No. 12975 dated 23rd December 1914.

followed. They are printed in full in Part II, Chapter VIII, but may here be summarized as follows:—

(a) The problem for the Settlement Officer is stated to be "to revise the old maximum rates and to fix upon a new set of rates for each group in the taluka."

(b) In carrying out this task "it is necessary for him first to ascertain to the best of his ability what is now the incidence of the existing assessments on the profits of cultivation."

(c) Two lines of inquiry are then suggested—an indirect and a direct line.

(i) The direct line of inquiry—

This comprises an investigation into the following subjects:—

- (1) the statistics of cultivation and occupation;
- (2) the collection of the Land Revenue, whether it has been made with ease or difficulty;
- (3) the material condition of the people in general;
- (4) markets and communications;
- (5) the history of prices;
- (6) the statistics of the selling, letting and mortgage value of land.

Under this last head the importance of the Record-of-rights is emphasized, as furnishing a large body of information with regard to land values, though caution is enjoined in the use of the statistics obtained therefrom.

From a study of the information obtained under each of these heads the Settlement Officer will be enabled to draw broad general conclusions as to the direction which his proposals should take.

(ii) The indirect line of inquiry—

This consists of an investigation into the subjects of rents and the ratio of incidence of the assessment upon them. Rents are divided into two classes, *viz.*, produce rents, and cash rents.

(1) *Produce rents.*—These again are sub-divided into two classes—

(a) rents consisting of a fixed amount of produce, the money equivalent of which can easily be ascertained;

(b) rents consisting of a definite share of the gross produce.

In the latter case it is necessary to make inquiries—

(1) into the average local yield per acre—with the help of crop experiments, either recorded or performed *ad hoc*, and looking to the soil classification of the Survey ;

(2) into the actual share of the produce received by the landlord, which is often reduced from its nominal amount by payments to village menials or of part of the expenses of cultivation, etc. .

(2) *Cash rents.*—The information obtained on this subject from the Record of rights is to be carefully checked by local inquiry and all abnormal rents excluded.

By a consideration of both these lines of inquiry the Settlement Officer will be enabled to formulate his final proposals, but in doing so he must clearly understand “that the arguments for enhancement should be based primarily upon the indirect evidence of the general considerations referred to in paragraph 4 above, and that the rental statistics should be employed only as a check to prevent the enhancement from going too high, and as a guide to secure the proper distribution of the assessment between the various groups.”

. The instructions summarized above introduce no innovation into the Bombay system of settlement which, to quote the words of Government, “has stood the test of many years’ working, and has resulted in the fixing of the Land Revenue demand at, on the whole, a most moderate and equitable standard.” The principles laid down are, in fact, those of the Joint Report, and the only change—if change it can be called—is that due to the more complete information which the Settlement Officer of the present day has at his disposal with regard to the value of land. The main factors in determining the “absolute amount of assessment” still remain those “general considerations of a permanent character” which the authors of the Report considered to form the only possible basis of a fixed assessment.

#### (iv) *Remissions and Suspensions of Land Revenue.*

“All abatement of the established revenue,” the Joint Report remarks, “should be regarded as exceptional to the ordinary management of surveyed districts and ought not to



be made unless for special and urgent considerations, which cannot be provided for by general rules." This *dictum* of 1847 held good for nearly 60 years, during which remissions of Land Revenue were regarded as "exceptional" and only granted in the circumstances named. Nevertheless, even long previous to the publication of the Joint Report, competent observers had expressed the opinion that the idea of a fixed, unalterable assessment was impracticable as the basis of a *rayatwari* system of settlement.\* It was not, however, until the year 1902 that, on a reference from the Government of India,† the question of incorporating a system of remissions and suspensions of assessment as part of the ordinary administration of the Land Revenue was first discussed and finally decided upon in accordance with rules laid down by Government Resolution No. 650 dated 22nd January 1907. It would be beyond the province of this work to go into a detailed consideration of these rules, but briefly they provided for—

(a) *Suspensions* of either the whole or half the assessment when the crop is 4 annas and under and between 4-6 annas respectively.

(b) *Remissions* of suspended assessment in excess of one year's revenue in Gujarat and the Konkan and of two years' revenue in the Deccan, and in all cases where more than 3 years old, with special rules for collection of suspended arrears in following poor seasons and also for the remission of water-rates.

By these rules a fixed and rigid system of assessment has been converted into one of a flexible type, accommodating itself to the vicissitudes of the season and consequently to the resources of the cultivator.

This change in the character of the assessment is one which a Settlement Officer might be perfectly entitled to take into consideration when making his proposals for Revision. No definite decision has yet, however, been given on the point, the policy of Government, as expressed at the time of the second Revision Settlement of the Sangamner taluka of Ahmednagar, being to wait until further experience is gained of the effect of the new system. These orders were expressed in the following terms:—

"The view of the Commissioner, Central Division, that, as a formulated system of suspensions and remissions is henceforth

\*Briggs' *Land Revenue of India*, p. 376, 1830.

†Government of India No. 1-43-65 dated 9th January 1902.

to be applied and as that system involves an abandonment of the principle that the assessment should be paid in bad years as well as good, the assessment payable in normal years should be materially raised, is reasonable. In view of the application of that system it would also be manifestly legitimate, in determining the rates of assessment, to discard the effect of past abnormal seasons. The general concessions to be granted in adverse years are, however, intended as an independent measure of liberality, and it has not been contemplated that the benefit should be in any degree counteracted by an enhancement of the pitch of the assessment. Suspensions and remissions have always been allowed when the necessity of them was proved, and the change now made consists in granting them more freely under definite rules. It is not improbable that it may hereafter be demonstrated that it involves too great a sacrifice of public revenue to maintain the present standard of assessment while liberal abatements are made in bad years, and it may be found necessary to abolish the limits of enhancement which have been prescribed to ensure moderation but which often result in incongruities, preventing the full benefit to public revenues of public improvements. But no change can be made in the principle of determining the assessment until there is such demonstration.

## CHAPTER IX.

### THE LAND TENURES.

The three classes of land tenures.

THE Tenures of the Bombay Presidency may be divided into three classes, viz.—

1. The Survey Tenure.
2. Inam Tenures.
3. Miscellaneous Tenures, which cannot properly be brought under either of the first two heads.

Of these—

#### 1. THE SURVEY TENURE

is that form which consists in the occupancy of ordinary Government land. There are two forms of Survey Tenure, viz., the Old or Unrestricted and the New or Restricted form, the difference between which is that under the Old form the occupant has, as part of the conditions upon which the land is held, the unrestricted right to alienate it by sale, mortgage or any other form of transfer, whereas under the New form that right is restricted and alienation is only allowed by permission of the Collector.

In dealing with the history of the Survey Tenure the subject has to be divided into two parts—the first, relating to the history of Occupancy (Chapter X); and the second to a description of the rights and duties of the Occupant (Chapter XI).

#### 2. INAM TENURES.

The word "*inam*" means "gift" or "grant", and land held on an *inam* tenure is technically called "alienated", i.e., "transferred in so far as the rights of Government are concerned, wholly or partially, to the ownership of any person". (Land Revenue Code, section 3 (20).) This class comprises that large group of tenures, such as service, personal, *devasthan*, etc., the chief feature of which is that the land is held on a reduced assessment which is not liable to revision.

#### 3. MISCELLANEOUS TENURES.

This class covers those tenures which are not properly classifiable under either of the two preceding heads. Examples of such tenures are the *talukdari* and *maleki* in Gujarat and the *khoti* in the Konkan.

## CHAPTER X.

### THE HISTORY OF OCCUPANCY.

ONE of the most-important—if not the most important—questions connected with any system of land settlement is that of the person upon whom rests the primary liability for the payment of the Land Revenue, for it is upon the answer to this question that the form of the whole system really depends. Thus, to repeat examples previously given: in Bengal this responsibility rests upon the landlord and the unit of assessment is the estate; in the Punjab upon the coparcenary body of village proprietors and the unit of assessment is the village.

The assignment of responsibility in either case is due to the particular local and historical circumstances of the tracts in question. (In the Bombay Presidency) though isolated cases of landlord and village estates do exist, e.g., the *talukdari* and *narwadari* tenures respectively, yet, owing to the general dissolution of the village communities described in Chapter II, (the village lands, in the vast majority of cases, were held in small parcels by individuals without any existing connection of interest, whatever their past history might have been. For these reasons, and also on account of the influence of the administrative ideas of the time, the system of settlement adopted in Bombay was the *rayatwari*, the main principle of which is that the assessment is placed not upon the large estate or the village as a whole, but upon the separate small holdings of individuals who in other systems, would be the tenants of the large proprietors.)

(This principle is laid down clearly in the first Bombay Ordinance dealing with the subject of Land Revenue—Bombay Regulation No. XVII of 1827—in the following terms:—

“Section 3.—The settlement of the assessment shall be made with the occupant of the land. The cultivator, when the land is held by him direct from Government is to be considered the occupant; and when it is not so held the person having the highest right or holding recognized by the custom of the country or resting on specific grant, which intervenes between Government and the cultivator, is to be considered.”

(By this regulation the person made responsible for the payment of the Land Revenue or Government was the occupant) and in the Deccan the occupants of what would now be called "unalienated" land were, as previously explained, divided into two classes, *viz.*, the Mirasdars and the Upris. Of these, the first class held their land by a tenure under which these lands were heritable—and therefore divisible according to the ordinary Hindu Law of succession—and transferable, while they also possessed a practically indefeasible right to recovery even after long abandonment. The Upris, on the other hand, were mere tenants-at-will, taking up their lands by special agreement, without rights of succession or transfer, and thus without hereditary attachment to them.

(The regulation noted above made no change in the respective rights of these two classes. It merely laid the responsibility for the Land Revenue upon the occupant, whether Mirasdar or Uprī, leaving the incidents of the tenures to be regulated by custom.)

It was not, in fact, until the time of Mr. Pringle's Settlement that any change occurred, and then of an indirect nature, for though that settlement, by basing the assessment solely upon the value of the land and not upon the status of the cultivator, did something to smooth down the lines of difference, it did not make any change in the relative conditions of the two tenures.

Effect of Mr. Pringle's Settlement.

(With the Joint Report, however, came fundamental changes in the conditions of occupancy which must be explained in detail, as it is upon them that the history of the next 60 years depends. These changes are embodied in the rules attached to the Joint Report, though without comment on the ground that "to attempt to establish the suitability of every proposition we have to make . . . would lead to almost interminable and, in our opinion, uncalled for discussion". But the explanation of the system laid down therein is to be found in the important discussion which followed between Wingate and Government and which is embodied in the correspondence attached to the Joint Report.)

The Joint Report system of occupancy.

(It is important at the outset to lay stress upon the fact that these changes were meant to apply to *upri lands only*, and not to *miras*, as is clear, not only from the rules themselves, but also from many references in the course of Wingate's letters.

The system intended for upri lands only.

The reason of this was, of course, that, while *miras* was considered to be a fixed form of tenure the conditions of which were sanctioned by long custom, the *upri* tenure, as being one of a mere tenancy-at-will, could be modified according to the pleasure of Government who, in letting out such lands, could lay what conditions they liked upon their tenants. It is upon this fundamental and not unreasonable assumption, it is important to remember, that Wingate's whole scheme was based.

(The object of that scheme was to modify and improve the conditions of tenure in the case of the *upri* lands. Now, the main disadvantage of that tenure at the time was its insecurity; since the *Upri*, being merely a tenant-at-will, could be turned out at any time.) The basis of the new system, therefore, was *security of tenure*. This was assured, as Wingate points out,\* by Rule 5 according to which "the only way in which the title of a cultivator to any field can be vitiated is through his failing to discharge the assessment laid upon it . . . . It seems to me difficult to imagine a more secure title to land than this. It is absolutely free from all conditions, except the simple one of discharging the Government land tax, and this condition, it is evident, could not be dispensed with under any plan of management whatever". A concomitant principle is *freedom from interference* which was assured by the same rule, since the assessment being fixed "the occupant is . . . . wholly relieved from the interference . . . . of Government officers. Their power is limited to the collection of assessment due from him for the land entered in his name . . . . They have no right to interrogate him as to whether his fields are waste or cultivated, his crops good or bad".†

(The next principle of the new tenure was *freedom from responsibility*. This was secured by Rule 20 which, by allowing the cultivator to resign any field or fields at his option, gave him the opportunity of contracting or extending the area held by him in accordance with the state of his resources.)

By the new system, therefore, the *Upri* was to get in exchange for a tenancy-at-will, in which he was always liable to be harried and interfered with, a permanent tenure with an assessment fixed by Rule 1 for 30 years, the only obligation laid upon him being that of paying the Government assessment.

\* Paragraph 5 of Captain Wingate's letter No. 239 of 23rd December 1848.

† Paragraph 6 of Captain Wingate's letter.

But, while conferring these benefits upon the holders of *upri* lands, Wingate at the same time thought it absolutely necessary to introduce provisions designed to ward off certain dangers which, if not guarded against, would, in his opinion, form "the greatest obstacle to the success of the permanent Survey Settlement." This great danger, in the view both of Wingate and Government, was the future sub-division of the land owing to the increase of the population, of which—to quote the words of Government—"the inevitable result will be the ultimate sub-division of the land into very small occupancies accompanied by the impoverishment of the whole agricultural class. Farms will become so small as barely to provide subsistence for those occupied in their tillage and the surplus from which the assessment is to be paid so trifling that the slightest deficiency in the ordinary crop will suffice to annihilate it."\* The impoverishment resulting from such a process was illustrated by Wingate by references to the condition of *miras* lands, the sub-division of which was allowed by the conditions of the tenure.

With a lively sense, therefore, of the dangers to be anticipated from this quarter, Wingate laid down as one of the fundamental principles of the new tenure that the survey field must be taken as the ultimate sub-division of the land, beyond which further sub-division must not be allowed to proceed. As he remarked "the preservation of the integrity of the survey fields appears to me an object of such paramount importance as far to outweigh the hardship of saddling a cultivator with a little more land than he wants . . . . If his means are so small as only to enable him to cultivate a fraction of a survey field it would be a public benefit, in my opinion, to get the land out of his hands, and thus admit of the whole field in which his fractional share is included being transferred to some more substantial cultivator."†

This important object, Wingate thought, could be secured in the case of Government lands by the following measures:—

(a) The first and basic principle was to be that the title for the possession of land must be made to depend upon entry as occupant in the Government records, for, as Wingate remarks, "if any other title to the possession of land than that of being entered in the public accounts as the party

\* Paragraph 63 of Government letter No. 5593 of 22nd September 1848.

† Paragraph 13 of Captain Wingate's letter.

responsible for its assessment be recognized, I feel certain that the most important eventual benefits to be anticipated from the Survey will never be realized.”\*

(b) The landholders as they existed at the time of the Original Survey were, therefore, to be entered as “occupants” in the Government records; either of whole survey numbers or, in cases where holdings below the minimum area had been combined to form a standard number, then of “recognized shares.” (Rule 5.)

In the case of numbers unoccupied at that time, not more than one person was to be permitted to take up any number as “occupant,” except in the case of numbers assessed at over Rs. 20 which might be entered in the names of two holders.

(c) Further sub-division of these original occupancies was to be prevented by regulating their inheritance, transfer and resignation as under :—

(1) *Inheritance.*—In the event of the death of any occupant the survey numbers or shares standing in his name were to be entered in the name of his *eldest son or next heir.* (Rule 6.)

(2) *Transfer.*—Transfer was to be made only by “occupants,” and then only of whole survey numbers or recognized shares. (Rule 9.)

(3) *Resignation.*—In the case of “recognized shares,” if one share of a field was given up, either by resignation or decease of the shareholder without heirs, then it was to be offered to the other shareholders, and if they or anyone else refused to take it up the whole survey number was to be relinquished. (Rules 7 and 8.)

The result of this scheme, could it have been carried out, would have been to achieve the object aimed at, for if the legal title to land were made to depend upon entry in the Government record and if Government refused to enter in those records claims to ownership save of whole survey numbers or recognized shares of numbers, then those original sub-divisions would have been stereotyped for all time and further sub-division effectively checked. Nor was there, at the time, any very obvious reason why such a system could not be put into operation. It was meant, it must be repeated, to be applied to the *upri* lands only, and these were held on mere tenancies-at-will. It must, therefore, have appeared possible that Government, in offering to the Upris far better terms than they had obtained before, could lay down any limiting conditions they pleased.

\* Paragraph 20 of Captain Wingate's letter.



Furthermore, in theory and on paper this system actually was introduced successfully. In the eyes of the revenue authorities, the "occupant" of the survey number or share was the person whose name was entered authorizedly in the Government records: on the death of such an "occupant" the name of his eldest son or next heir alone was entered: transfer was permitted of whole numbers or recognized shares alone. Officially, therefore, sub-division, being unrecognized, did not exist.

Theoretical success of the system.

Unfortunately, however, for the practical success of his scheme Wingate appears to have overlooked certain important factors in the situation. First there was the economic factor. Carried to its logical conclusion Wingate's scheme meant nothing less than the establishment of a system of succession to land based upon primogeniture, and he does not seem to have considered what would become of the younger sons and other landless descendants. Presumably they were meant to sink to the position of labourers. What actually happened, however, was that the people, not having seen the Joint Rules and, so far as can be discovered, never having been informed of the limitations imposed upon them, proceeded to sub-divide their lands either on inheritance or for purposes of transfer as though no limitations existed.

Causes of its practical failure.

But further, no practical steps were taken to prevent their doing so, and the Courts enforced partitions so made without regard to the Joint Rules, which were not law and so had no binding effect whatsoever upon their decisions. Yet, while not intervening to prevent such partitions and indeed being compelled by law to carry them into effect, the Collector was not allowed by the Joint Rules to recognize them, and consequently, while he might, by the order of the Court, partition a field among, say, the three sons of a deceased cultivator and put them in possession of their several plots, he was compelled by the Joint Rules to enter the name of the eldest son only as heir in the Government records and the eldest son alone was technically regarded as "occupant".

The result of this divergence was to establish two kinds of title to land—one founded upon possession, recognized by the Courts; the other upon "registration," recognized by the revenue authorities. And the history of the next 60 years is the history of the struggle, first to reconcile and next to combine the two into one sensible and logical system.

Establishment of two kinds of title to land.

Before, however, describing the course of this history it is necessary to consider shortly the subsequent history of the *miras* tenure. In his discussion of the new system of tenure

The subsequent history of the *miras* tenure.

Wingate constantly refers to *miras*, usually in a deprecating tone on account of the disadvantages attaching to the excessive sub-division which it permitted and from which his new tenure would, he thought, be free. But *miras* being an old and established tenure could not be interfered with and therefore sub-division in such lands could not be stopped. At the same time the Joint Rules regarding succession, transfer, etc., were applied to *miras* no less than to the *upri* lands, the result being to establish the same kind of dual title to land in the one case as in the other. Theoretically, the two tenures still differed, in that sub-division was allowed in the case of the one and not in that of the other. In practice, however, this divergence soon ceased to exist and the holders of *upri* lands, as already explained, assumed the right of sub-division exactly as the *Mirasdars*. When this occurred the sole difference between the tenures lay in the right of recovery which the *Mirasdars* claimed to exercise even after failing to pay the assessment to which Wingate refers when he remarks that "until very lately ejection for non-payment of the Government assessment was nearly unknown and paupers were allowed to linger on year after year in the possession of land they had no means of cultivating, the Revenue Officers contenting themselves with screwing out of them what they could and remitting the remainder. This was particularly the case with *miras* land in the Deccan."\*

He recommended, however, that the rule making occupation dependent upon the payment of the assessment should be applied to *miras* lands also and this was done.

With this change the last real difference between the two forms of tenure practically ceased to exist, though the nominal distinction was retained until a considerably later period. For the purposes of the present chapter, however, the distinction may be ignored and both kinds of tenure included under the name of the "survey tenure."

Returning again to the history of occupancy in general, the next stage comes with the passing of the first Survey and Settlement Act in 1865.

Act I of 1865. Up to that year the operations of the survey had been carried

\* Paragraph 13 of Captain Wingate's letter.

on as a purely administrative measure under the authority of Government. As time went on, however, it was found desirable to regulate these proceedings and to give them definite legislative sanction, which was accordingly done by this Act. The passing of the Act involved the supersession of the Joint Rules and their incorporation, with such changes as were thought necessary, in its provisions; and among the rules so incorporated were, of course, those relating to occupancy.

Occupancy under the new Act.

Considerable changes, however, were made, so that the conception of occupancy in the new Act will be found to differ appreciably from that of the Joint Rules. The definition of occupant according to section II (j) was "the person whose name is entered authorzedly in the survey papers, or other public accounts, as responsible to Government for payment of the assessment due upon any field, or recognized share of a field." He was not, however, in virtue of this position, by any means necessarily the sole holder of the survey number or share, since by Rule 27 any co-owners of the occupancy could make application and have their names entered as joint occupants. At the same time by the terms of the law the occupant proper was still held responsible for the assessment of the whole number, the joint occupants merely having the right to have their names entered and their shares shewn fractional parts of a rupee, being responsible for their share of the assessment to the occupant. Further, however, by Rule 32 the occupant could be ejected by any person producing the decree of a competent Court proving that he was entitled to be registered as occupant in place of the incumbent. As regards succession again, failing a claim from other heirs, the rule of primogeniture still held (Rule 27), but according to Rule 28, if there were more heirs than one, they could, if they chose, make an application and be registered as joint occupants on the terms aforesaid, while by Rule 32 a person producing a certificate of heirship from a Court was also entitled to entry as occupant.

(The difference between such a conception of the occupant's position and that of the Joint Rules is clear. The "social reform" idea of the latter system has been abandoned, and the fact of sub-division recognized, while the occupant has been deposed from his position as absolute holder to that of a convenient middleman between Government and his co-sharers—a system adopted to save the trouble, firstly of keeping a large

number of individual accounts and secondly, of sub-dividing the survey numbers into smaller divisions.

But, while recognizing the fact of sub-divisions, the Act refused to allow the original survey numbers or recognized shares to be divided into smaller numbers or shares, even though this might be absolutely necessary in order to carry out a partition order passed by a competent Court. To such lengths, in fact, was this principle pressed that clause 2 of section 14 directs that "When the decree cannot be executed without sub-division of a number or recognized share of a number, the Collector shall so report to the Court issuing the decree, and, according to the orders he may receive from the Court, he shall either transfer the number or recognized share, undivided, to any party named by the Court, or sell the number, or share of the number undivided, and pay over the proceeds as the Court may direct." The result of these provisions was deplorable and led to strong protests from the Bench as turning partition suits into an expensive farce, depriving applicants of their ancestral property by forced sales and leading to all kinds of chicanery and fraud. As the Sessions Judge of Dharwar remarked "Lands have been taken up, capital expended, wells dug, homesteads built, for what? To enable perhaps a single unprincipled son to hand them over, to the detriment of many brothers, to a village money-lender." In the end, therefore, it was found necessary to amend this section and by Act IV of 1868,

Act IV of 1868.

section 17, Rule 2, the sub-division of survey numbers and recognized shares for this purpose, subject only to the limit of a minimum of area, was permitted. Further, by Rule 3, clause 2, of the same section permission was granted to Survey Officers at Revision Survey to sub-divide *any* survey number, or share, subject to the limitations of area imposed. The effect of these provisions was to break down the corner-stone of the Joint Report system, *viz.*, the indivisibility of the original survey numbers—to split up which would, Wingate predicted, result in the ruin of the whole Survey. It is hardly necessary to state that this prediction has not been fulfilled.

Sub-division of the survey number legalized.

The permission granted by the new Act to split up the old survey numbers was fully taken advantage of by the Survey Officers at the Revision Surveys, a chief feature of which was the

Result of these provisions.

separation of clubbed occupancies, by which those persons whose names appeared in the records merely as "joint occupants," subordinate to a principal occupant, had their lands separately measured and made either into survey numbers, or, if below the minimum area for a standard survey number, into *pôt* numbers. In 1889, however, the separation of clubbed occupancies was put a stop to by Government on the score of expense, and henceforth sub-division was not done except on application by and at the cost of the rayats.\* This was, it must be admitted, a reactionary measure, however justifiable by reasons of finance.

Sub-division again  
discouraged, 1889.

Some considerable time previous to this date, however, the law of occupancy had been still further revised by the enactment of the Land Revenue Code (Act V of 1879) with which was incorporated, with modifications, the Survey Act of 1865. With the new Act is reached the third stage in the history of occupancy; for it is in this Act that recognition was for the first time accorded in the revenue law to the double system of title to land and of the existence of rights other than those derived from entry in the Government records. It is hardly necessary to state that these rights had existed from the first and were continually being asserted through the medium of the Courts, but, in the eyes of the revenue law, they did not exist unless and until the entry of the right-holder's name was made in the revenue records as either "occupant" or "joint occupant."

In the Land Revenue Code this recognition was accorded by the separation of the two classes of rights under the two heads of "occupant" and "registered occupant." By section 3 (16) "occupant" was defined as "a holder of unalienated land, or, where there are more holders than one, the holder having the highest right in respect of any such land, or, where such highest right vests equally in more holders than one, any one of such holders," while by section 3 (17) "registered occupant" was defined as "a sole occupant or the eldest or principal of several joint occupants whose name is authorizedly entered in the Government records as holding unalienated land whether in person or by his co-occupant, tenant, agent, servant or other legal representative."

\* *Vide* Government Resolution No. 357 of 15th January 1889.

To consider the latter of these definitions first. The "registered occupant" or *khatedar* is quite clearly the "occupant" of the Survey Act in spite of the change—and that not for the better—in the wording of the definition. By sections 136 and 79 he was made primarily responsible for the assessment of the number or share entered in his name; by sections 65–66 he alone might apply for permission to appropriate the number to non-agricultural purposes; by section 71 succession to the "registered occupancy" was regulated in the same terms as those applied to that of the "occupant" in the Survey Act; lastly, by section 74 he alone could pass a formal *rajinama*, either absolutely or in favour of another person. The "registered occupant," therefore, as concealed under the definition of the Land Revenue Code, was in the better wording of the Survey Act "the person whose name is authorizedly entered in the survey papers, or other public accounts, as responsible to Government for payment of the assessment due upon any field, or recognized share of a field."

Opposed, or rather complementary to the registered occupant, was the "occupant." Now, it is true that the definition of "occupant" is confused and not easy to understand, but, eschewing legal technicalities, it is sufficient for the present purpose to state that the term was meant to apply to those persons who had possessory rights in the land but whose names were not "registered" in the Government records, *e.g.*, a mortgagee with possession of part of a number, or a part heir to the previous "registered occupant" who was not the eldest son or principal heir. Such persons were still, by Rule 96, granted the privilege of being registered on application as "co-occupants" on the same terms as the "joint occupant" of the Survey Act; but those who did not trouble to apply and so remained unregistered were all included under the definition of "occupant." By the provisions of the Land Revenue Code such persons were for the first time given a status in revenue law. So far as the *use* of the land was concerned the occupant was granted all the general rights and subjected to all the general obligations laid down in the Code, *e.g.*, with respect to the guarantee of the assessment, the right to construct farm buildings, the upkeep of boundary marks (*vide* sections 65, 68 and 123), etc. But in all *formal* relations he was made subordinate to the registered occupant. Thus, it was the registered occupant who was directly responsible for the payment of the assessment and the occupant only in his default (section 136);

again, the latter could not relinquish a number or effect a transfer (section 74), while an application for permission to use lands for non-agricultural purposes had to pass through the registered occupant (section 65).

The registered occupant of the Code was in fact the middleman on account of the survey number or share for which his name is registered; the occupant the unregistered man in possession.

The double system of occupancy above described lasted for over 25 years and, in spite of its defects, it had certain advantages. Thus, it saved Government from the trouble of inquiring into the *minutiae* of land possession which tended to become more and more complicated with the increasing sub-division of the land. As a corollary to this, the system of paying the assessment through the registered occupant relieved Government from the necessity of keeping up—and further of keeping up-to-date—an enormous number of small accounts.

Advantages of the  
"khatedar" system  
of occupancy.

But considerations of the trouble saved to Government were far out-weighed by the serious defects inherent in the system. Chief of these was the obscurity into which the whole agricultural situation was cast by the absence of those statistical *data* with which no Indian Government of the present day can afford to dispense. To take for example, such important questions as those relating to the sub-division of the land and the size of holdings; the amount of agricultural indebtedness; the transfer of lands from agriculturists to non-agriculturists, etc.—the answers to which depend entirely upon the fullest information as to the way in which land is held. This fact was noted by the Famine Commission which expressed a strong opinion that such an inquiry into the conditions of land-holding by the preparation of a "Record-of-Right," was essential to proper administration. Now it is true that the preparation of such a record did not necessarily involve the abolition of the *khatedar* system of occupancy, since the Record-of-Rights might have been maintained purely as a statistical register, the revenue system remaining unchanged. In fact, as will be seen subsequently, this was the view taken at the outset, and, had the *khatedar* system continued to give satisfaction, there is no reason why the two should not have existed side by side. But in point of fact, with the progress of time the system conspicuously failed to justify its existence.

Disadvantages of the  
system.

Even in cases where the *khatedar* was a living person having an actual interest in the land standing in his name he was often, particularly in the Konkan, merely one out of a large number of other unregistered occupants between whom no bond existed save that of a fortuitous proximity. In these circumstances it was impossible to regard him as in any way "responsible" for the payments of his co-occupants. But the formalities of the law had to be complied with, and so, in case of any default, it was upon him that the batteries of Government in the shape of notices with the other pains and penalties of the Land Revenue Code, had first to be turned, and only upon his failure to satisfy the demand could recourse be had to the real defaulters. Who these might be, however, was, under the *khatedar* system, a mystery known only to the village accountant. In other ways also, unconnected with the collection of revenue, the *khatedar* system was a nuisance, e.g., in the issue of *takavi*, for which a record of actual possession was essential; the circumlocution involved by the provisions of section 65 which compelled the consent of the *khatedar* before land could be converted to a non-agricultural purpose; and others of a like nature.

But confusion became worse confounded when, as was often the case, the nominal *khatedar* was either deceased or had disposed of any interest that he might have in the land standing in his name. The *khatedar* was in any case a man of straw, and it mattered little to the occupants or to the village accountant whether he existed or not; further, the law imposed no penalty for failure to keep the record up-to-date. Hence it often happened that the *khata* might run on for years, without change, in the name of a dead man. Similarly, so long as the *khatedar*, for whatever reason, neglected to effect a formal transfer by *rajinama* and *kabulayat* in favour of a successor, the law had no power at all to compel him to do so, and, as the name of *khatedar* is in itself something of a social distinction, nothing was commoner than to find individuals who had long lost any real connection with their land clinging desperately to the shadow of their former glory, and obstinately refusing to surrender it.

For these and similar reasons the *khatedar* system had out-  
grown its usefulness long before it was  
The Record-of-Rights. actually abolished. It was not, however,  
till the "Record-of-Rights" had been working for some years  
that the facts of the case were properly realized in the new  
light thereby thrown upon them. The necessity of such



a record had, as previously noted, been strongly urged by the Famine Commission, and in 1901 two officers were deputed to the Punjab to study on the spot the long-established system of that province; and, as a result of their report, an "Act to provide for the preparation and maintenance of a Record-of-Rights in the lands of the Bombay Presidency" was placed before Council on the 8th September 1902. In introducing the Bill the Honourable Mr. (now Sir James) Monteath made the following remarks as to its object and scope:—

"I need scarcely dilate upon the advantages of a correct Record-of-Rights in land, but it may be well to allude to them. These advantages are almost inestimable. The security and certainty of title which such a record gives, raise the value of land and at any rate check forced sales of it for utterly inadequate prices, from which large numbers of cultivators now suffer much loss; they induce loans to be made at reasonable interest instead of the ruinous rates so common; they minimize the occasions of litigation regarding land which now too often lead to hopeless bankruptcy, and make such litigation, as it is undertaken, more speedy and less expensive. If such a record were prepared, it would almost certainly be followed by a system of public transfer, which according to Sir Henry Sumner Maine was the primitive method in this as in other countries, which has now been adopted almost throughout the Continent of Europe and which that eminent authority has characterized as the greatest legal discovery of the age. That system would be especially beneficial in the greater part of this Presidency where one of the contracting parties is generally unable single-handed to protect his own interests, and the aggregate of the time, trouble and money which would be saved by the substitution of public registration for cumbrous and ambiguously worded conveyances would be enormous. It is also manifest that such registration would check forgery and perjury much more effectively than our present system of registration of assurances, which was designed mainly for that purpose. The utility of the record in administration will be in some respects not so great in this Presidency as in zamindari provinces, but in other respects it will be even greater. Sub-letting of land is foreign to—is indeed a departure from—the *rayatwari* system, and so far as that system is maintained rent cannot be the basis of the assessment. But the systematic registration of the terms on which such land as is held by capitalists is sub-let, will afford valuable

Advantages of such a record.

indications of the incidence of the assessment and will greatly assist Government in the proper regulation of it. It is of paramount importance that Government should know how far the cultivators are really in beneficial occupation of the land, or how far that occupation is passing into the hands of capitalists or speculators—from whom in default of the registered occupant the assessment is equitably due—who have a claim to consideration in unfavourable seasons, and who have not, and in what cases and to what amount *takavi* loans can be properly granted; and in many other details of administration it is necessary to know what are the interests in the land actually subsisting. The facts connected with these points are at present ascertainable, and indeed have to be ascertained, but it will be of great advantage to have them regularly put on record instead of making special inquiry as occasion arises. The advantages I have enumerated will, of course, only be attained in full when the record is perfectly correct, but they will be attained in part even if it is in some respects defective and in increasing proportion as it gradually approximates correctness."

The Honourable Member next proceeded to discuss the question from the revenue point of view and, after pointing out the discrepancy between the real and nominal occupancy with certain disadvantages arising therefrom, remarked: "The first method of obtaining a correct Record-of-Rights which was considered was, as one might expect, the enlargement and alteration of the revenue accounts so as to make them shew all interests and to embody in the Land Revenue Code, as there has been embodied in Land Revenue Acts applied in other parts of India, provisions for the purpose. To this course there appeared insuperable objections. We cannot without upsetting the whole Survey system disregard the demarcated field as the units of assessment or abandon the practice of holding the person who has formally undertaken the liability to be primarily responsible for the assessment, and although the desire to retain the names on the Collector's books when all substantial right to the land has been lost is perhaps little more than a sentiment, it is a sentiment which in justice should be respected."\*

For these reasons it was decided that the "Record-of-Rights," as brought into operation by Act IV of 1903, should be kept as a purely statistical

Record to be purely statistical.

\*Proceedings of the Council of the Governor of Bombay, Vol. XL, p. 234, 1902.

record, the *khatedar* system being still retained for revenue purposes. Into the form of the record it is unnecessary to go closely. It will be sufficient to state that it provided for an inquiry into and registration of title separately in the case of *khatedars*, occupants—including under that head all those having a possessory title to land—and tenants. In the case of survey numbers held by several occupants the area in the possession of each was entered approximately without measurement. The Act also made provision for keeping the record up-to-date by means of a Mutation Register, in which all changes were to be entered as they occurred, the duty of reporting all changes being laid upon land-holders under penalty for failing to do so. These mutations were to be incorporated into the record after due certification, the whole record itself being re-written and brought up-to-date at such intervals as might be necessary.

Introduced under this form the record undoubtedly promised in theory to be a useful piece of work and to throw a considerable light upon the conditions of land-holding throughout the Presidency. Not five years had passed, however, before the question of abolishing the *khatedar* system of occupancy and of establishing the record as the basis of revenue system was once more brought into the field of practical politics, chiefly through the advocacy of Mr. Curtis, the Settlement Commissioner. Mr. Curtis' views on this important question were detailed in two notes on the subject, the first entitled "the Record-of-Rights: its true position in our system" (attached to Government Resolution No. 388, dated 13th January 1908), and the second a "Note on the Record-of-Rights in the Bombay Presidency." He pointed out therein that unless and until the Record-of-Rights was made the Record of Liability also, it would never be anything more than "a statistical incubus: a useless piece of work to be got through as soon as possible and, when finished, to be put away and forgotten with all possible speed." This revolution in revenue methods, he maintained, was necessary in the interests, not merely of the record, but also of the revenue system itself. That system was both antiquated and absurd. Actually the survey numbers, by a long process of sub-division, had become partitioned among a multitude of holders who were really responsible for the Land Revenue, yet the only person with whom the revenue authorities could deal primarily under the revenue law was the so-called "registered occupant," i.e.,

Failure of the statistical record.

the individual whose name happened to be registered in the records as the holder of the number—and that, although he might be dead or have long lost all connection with the land or at best be merely one among several joint holders, all in practice equally responsible. The result of this system was that the actual occupation of the land was obscured, a large amount of time and trouble wasted at the time of revenue collection, and great powers placed in the hands of the village accountant at times of remissions and suspensions which were certain to be abused. The policy now advocated, it was pointed out, had been the policy of the Revision Surveys up till 1899, since, previous to that year, it had been the practice of the Survey Department to convert every separate occupancy into either a survey number or recognized share. In 1889, however, that policy, for reasons of economy, had temporarily been put into abeyance. It should now be revived and the Record-of-Rights and the Record of Liability made once for all to coincide.

These proposals were submitted to Government who directed the Commissioners of Divisions and the Settlement Commissioner to discuss the questions involved in conference. Finally orders were issued by Government directing—

(a) the amalgamation of the Record-of-Rights Act with the Land Revenue Code ;

(b) the amendment of the revenue law so as to make the actual holder of land primarily responsible for the Land Revenue.

The changes proposed were subsequently embodied in the Land Revenue Code by Act IV of 1913. By this Act the following important alterations were made in the revenue law :—

(1) The “registered occupant” was abolished and “occupancy” made to depend upon possession by the following definitions :—

‘6. (h) *Occupant* means a holder in actual possession of unalienated land other than a tenant: provided that where the holder in actual possession is a tenant, the landlord or superior landlord, as the case may be, shall be deemed to be the occupant.

‘*Occupancy* means a portion of land held by an occupant.

'To occupy land means to possess or to take possession of land.

'Occupation means possession.'

(2) The primary liability for the payment of Land Revenue Liability for Land was diverted from the original "registered Revenue. occupant" and laid upon the new possessory occupant, as follows:—

'67. (i) In the case of unalienated land the occupant . . . . . shall be primarily liable to Government for the payment of the land revenue including all arrears of Land Revenue in respect of the land. Joint occupants and joint holders who are primarily liable under this section shall be jointly and severally liable.'

(3) These two reforms necessarily involved a third, viz., the recognition of a new unit of holding. By the old law the only sub-division of the survey number recognized had been the "recognized share"—a term including the *pôt* number. This, however, was a survey unit and under the old system could only come into the Revenue accounts by way of the survey records after actual survey and map correction. Such an area could obviously not serve as the new unit of holding, which was to be based upon possession and not upon entry in the Survey Records. Hence it was necessary to create a new type of unit, the "sub-division," which was defined as follows:—

'6. (c) *Sub-division of a number* means a portion of a survey number of which the area and assessment are separately entered in the land records under an indicative number subordinate to that of the survey number of which it is a portion.'

The term "recognized share of a survey number" was abolished and *pôt* and *phulni* numbers, under the amended Act, are included under the head of "sub-divisions."

As has already been noted, however (*vide* p. 177), in process of time *pôt* and other subordinate numbers will be eliminated from the land records, though not from the survey records.

(4) The splitting-up of the survey number into such sub-divisions was, at the same time, authorized by section 117A.

Splitting-up of survey numbers into sub-divisions authorized.

(5) The sub-division so constituted as the unit of holding became necessarily the unit of relinquishment also in place of the survey number or recognized share of the old law and under the provisions of section 74 any whole sub-division could be relinquished by giving notice to the Mamlatdar before the 31st March.

The "sub-division" as the unit of relinquishment.

By this provision the old "relinquishment in favour of a specific person" by *rajinama* and *kabulyat* which was necessary to constitute the transferee a "registered occupant" was abolished, since, by the amended law, occupation depends, not upon mere entry in the records, but upon possession and is therefore constituted simultaneously with the transfer.

(6) In the interests of revenue administration, however, it was found necessary to impose a certain limit upon the right of relinquishment in the case of sub-divisions. Had the right been conceded unconditionally occupants might relinquish sub-divisions which their co-occupants might refuse to take up. The result would be that small areas of Government waste might be scattered about within the survey number inviting encroachment. For this reason it was found necessary to guard against the disintegration of the survey number by establishing joint and several liability for the occupation of survey numbers held by joint occupants by providing, by section 117B, that if a sub-division is relinquished or forfeited, then if it be not taken up either by the co-occupants or any other person the co-occupants have to pay the assessment thereon proportionately to their share in the number.

The Sub-division as the unit of assessment.

(7) Further, the sub-division was made the real unit of assessment—

(a) by extending the guarantee against increase of assessment during the currency of the existing settlement to sub-divisions by section 56.

(b) By permitting, under section 74, the resignation of sub-divisions after a new settlement on the same terms as those granted by the old law to survey numbers by the necessary addition to section 104.

(8) Finally, as the foundation of the whole new system the Record-of-Rights Act IV of 1903 was repealed and amalgamated with the Land Revenue Code as Chapter X-A,

Amalgamation of the Record-of-Rights Act with the Land Revenue Code.

and, as the sole register containing the record of holdings, became *ipso facto* the Record of Liability also. It may, however, be pointed out that though the Record-of-Rights is also the Record of Liability, actual liability for the payment of the Land Revenue does not depend upon entry in this or any register. Such liability is by law imposed on the "occupant" and "occupancy" depends upon "possession," not "registration" as was the case under the former system.

Though, however, "occupancy" and entry in the Record-of-Rights are by no means necessarily synonymous, it is obviously all important that the record of occupation should be as complete and accurate as possible.

Measures for ensuring the accuracy of the record of occupation.

The chief measures by which this object is sought to be obtained are the following:—

- (1) First and most important is the measurement and mapping of all sub-divisions within the survey number.

(1) The measurement of sub-divisions.

Without such a measure as this the proper identification and record of sub-divisions must be impossible, particularly in districts such as the Konkan where the number of such sub-divisions to the survey number is extraordinarily large and their area extremely small. A purely descriptive record of sub-divisions without a map involves in fact the same difficulties as those experienced by the early Survey Officers before the evolution of the village map.

With this object, therefore, the measurement and mapping of all such sub-divisions has been undertaken, and since the work proposed is for the benefit of the occupants, by section 135G of the Land Revenue Code the cost of preparation has been made recoverable from them.

- (2) It is provided by law that individuals acquiring rights by succession, inheritance, survivorship, etc., are to report their acquisition of rights within three months to the village accountant (section 135C) under penalty up to Rs. 25 for default (section 135F).

(2) Obligatory report of changus.

- (3) Use of the record in civil suits. (3) Section 135H further directs—

(a) the production in civil suits regarding land of a certified copy of entries in the record relating thereto under penalty of rejection until the necessary copy be produced;

(b) that the Courts are to communicate to the Collector all errors discovered in such entries.

(4) By section 135J "an entry in the Record-of-Rights and a certified entry in the Register of Mutations shall be presumed to be true until the contrary is proved or a new entry is lawfully substituted therefor,"

thus compelling the land owner in his own interest to see that entries in the record are correct, since otherwise they might be used to his disadvantage at any time in a revenue or civil proceeding.

(5) Publicity of changes made in the record. (5) Publicity of all changes made in the record is ensured—

(a) by providing for notice being given to all concerned and publication of the new entry in the *chavdi* [section 135D (2)],

(b) by requiring each new entry to be certified by an officer not lower in rank than a Mamltdar's first karkun [section 135D (6)].

#### SUMMARY.

By the operation of these important reforms the Bombay *rayatvari* system may be said to have reached its logical and perhaps its final conclusion: logical because by the term "*rayatvari*" is meant that the State deals direct in matters of Land Revenue with the individual landholder and only now has that idea been realised, and final, because the course of evolution is now complete. Previous to the introduction of these reforms the introduction of the true *rayatvari* system had remained in abeyance for two main reasons, first, the heritage of the system of occupancy conceived by Wingate, and secondly the subordination of the interests of occupancy to those of survey, the occupant to the survey number. Both these misconceptions have been cleared away by a gradual process of evolution—

(1) firstly by the recognition of joint occupancies and so of recognized shares in the Survey Act of 1865;

(2) then by the permission accorded by Act IV of 1868 to split up original survey numbers both on partition and at Revision Survey;

(3) by the recognition for the first time in the Land Revenue Code (Act V of 1879) of the "possessory" as distinct



from "registered" occupation of land, though the old system still struggled on in the person of the "registered" occupant ;

(4) the final disappearance of the system of Wingate and the establishment of the true *rayatvari* system of occupancy under Act IV of 1913 by the abolition of the "registered occupant" and the foundation of occupancy upon possession, and by the establishment of the sub-division as the true unit of holding and assessment.

## CHAPTER XI.

### THE RIGHTS AND OBLIGATIONS OF THE OCCUPANT.

IN the previous chapter the history of occupancy has been dealt with with reference to the question "who is the occupant?" *i. e.*, the person responsible to Government for the payment of the assessment. It now remains to treat the same subject with reference to the rights secured to and the obligations imposed upon the occupant by law. The nature of both rights and obligations has varied from time to time; the list detailed below is, therefore, given as it stands under the present Land Revenue Code.

In dealing with this question two classes of tenure have first to be distinguished, differing in certain respects with regard to the rights incidental to them. These are, firstly, the Old or unrestricted tenure, and secondly the New or restricted tenure.

The two classes of Occupancy tenure.

#### A.—THE OLD TENURE.

The Old tenure is that of the Joint Report, one of the main objects of which was "to afford the greatest facilities for its (the land's) conveyance from one party to another," with the design of "preventing the land becoming the inheritance of a pauper, or at least poverty-stricken peasantry." It is this characteristic of "transferability" which distinguishes it from the "New tenure," by which, for reasons to be explained under that head, the power of transfer is restricted.

Under the Survey tenure the rights and obligations of the rayat according to the Land Revenue Code are as follows:—

<i>Rights—</i>	<i>Section of Code by which secured.</i>
(1) Of inheritance .. .. .	73
(2) Of transfer .. .. .	73
(3) Of resignation .. .. .	74
(4) Of constructing farm buildings ..	65
(5) To unenhanced assessment during the period of guarantee.	106
(6) To the enjoyment of all improvements .. .. .	107
(7) To trees .. .. .	40
(8) To the enjoyment of alluvial formations .. .. .	64

<i>Obligations—</i>	Section of Code by which secured.
(1) To pay assessment .. .. .	68
(2) To pay cesses, .. .. .	105
(3) To attend and give information to Survey Officers .. .. .	96
(4) To furnish flag-holders for Survey purposes .. .. .	97
(5) To construct boundary marks and keep them in repair .. .. .	122
(6) To report acquisition of rights.	135C

The scope of these rights and obligations in detail is as follows :—

### *Rights.*

(1) *Of inheritance and (2) of transfer (section 73).*—By section 73 an occupancy is declared to be heritable and transferable property, subject to the obligation to pay Land Revenue under the provisions of section 68.

Any person acquiring such rights save by virtue of a registered document is bound by section 135C to report the acquisition to the village accountant within three months under penalty under section 135F of fine up to Rs. 25 except he be a minor or otherwise disqualified in which case his guardian is bound to make the report.

(3) *Of resignation (section 74).*—By section 74 an occupant may relinquish his land in favour of Government, subject to the rights of third parties, by notice to the Mamlatdar or Mahalkari before the 31st March or other prescribed date: provided that only whole survey numbers or sub-divisions are relinquished.

By section 104 an occupant who is dissatisfied by the increase of assessment imposed on his land by a Survey Settlement may, if he resigns any survey number or sub-division under section 74 in the year next following the settlement, receive a remission of the increase.

If it is a sub-division which is resigned under section 74, then by section 117B it is to be offered to the occupants of the other sub-divisions in order, and in event of every one of them refusing to take it up they are held liable for the payment of the assessment thereupon in proportion to their holdings, until the sub-division is disposed of by the Collector.

By section 77 if a person relinquishes land, the way to which is through other land which he retains, the right of way through the land retained is secured to the future holder of the land relinquished.

By section 82 the right of relinquishment enjoyed under section 74 may be suspended by the Governor in Council and other rules brought into operation by order of the Commissioner.

(4) *Of constructing farm buildings (section 65).*—By section 65 an occupant is entitled to construct farm buildings, wells or tanks and to make all other necessary improvements to his land for purposes of agriculture, but if he wishes to make use of it for any other purpose whatever, e.g., to erect a dwelling house or a factory or to store timber for purposes of trade or to dig earth for brick-making or other purposes, he is bound to obtain permission from the Collector who may require the payment of a fine in addition to any other assessment leviable under section 48.

(5) *To unenhanced assessment (section 106).*—By section 106 enhancement of assessment is forbidden until the expiration of the period of guarantee given under section 102.

(6) *To the enjoyment of all improvements (section 107).*—By section 107 improvements made by or at the cost of the occupant are not to be taken into consideration in revising assessment of land revenue.

(7) *To trees (section 40).*—By section 40 the rights of Government to trees in unalienated land are conceded to the occupant except that—

(a) in the case of settlements completed before the passing of Act I of 1865, this provision is not to apply to teak, blackwood or sandalwood unless expressly granted ;

(b) in the case of other settlements the right of Government is not conceded in such classes of trees as may have been or may be reserved by notification.

(8) *To alluvial lands.*—By section 64 an occupant of any bank or shore has the right to the temporary use of alluvial land forming thereupon unless or until the area thereof exceeds one acre.

By section 63 he has the right to the first refusal of the occupancy of such land when it exceeds one acre.

By section 47 an occupant has the right to remission of assessment in cases of *diluvion* when the area of the land lost is not less than half acre.

*Obligations.*

(1) *To pay the assessment (section 68).*—By section 68 the right of use and occupancy of his land by the occupant is made “conditionally on the payment of the amounts due on account of the Land Revenue for the same” under penalty of forfeiture of the occupancy (section 153) or distraint and sale of moveable (section 154) or immoveable property (section 155).

(2) *To pay cesses (section 105).*—In addition to the Land Revenue fixed under the provisions of section 105, cesses may be imposed—

(a) for purposes of local improvements, such as schools, roads, wells, tanks, etc.;

(b) or for water rates fixed under section 55 of the Land Revenue Code or under the Bombay Irrigation Act of 1879.

(3) *To give information to Survey Officers (section 96).*—By section 96 landholders are bound to attend and give information to Survey Officers on the publication of a general or special notice.

(4) *To furnish flag-holders (section 97).*—By section 97 landholders are bound to furnish flag-holders for measurement and classification work and, in the event of a necessity for employing hired labour, the cost may be assessed on the lands surveyed.

By section 135G (a) the powers conferred by sections 96–97 may be exercised by village accountants in connection with the preparation of maps or other records for the Record-of-Rights except the power of assessing the cost of hired labour under section 97.

By section 135G (b) the power of assessing all costs of the preparation of such maps, etc., upon the land to which they relate is conferred upon all Revenue Officers not lower than an Assistant or Deputy Collector.

(5) *To construct boundary marks (sections 122-123).*—By section 122 landholders are required to construct such boundary marks for their survey numbers or sub-divisions as may be required by a Survey Officer and by section 123 they are made responsible for the maintenance of such marks.

(6) *To report acquisition of rights (section 135C).*—As explained above—*vide* “Inheritance” and “Transfer”.

Further, by section 135E persons acquiring rights in land are bound on requisitions to give all necessary information to a Revenue Officer within one month under penalty of fine up to Rs. 25 (section 135F).

## B.—THE NEW OR RESTRICTED TENURE.

The so-called New or "Restricted" tenure was originated in the year 1901. It was introduced into the law by the insertion of a new proviso to section 68 of the Land Revenue Code, by the amendment of section 73 and by the enactment of a new section 73A of the Code. Previous to its amendment section 73 ran as follows :—

"The right of occupancy shall be deemed an heritable and transferable property, subject to the provisions contained in section 56" (*re* the payment of Land Revenue) "or otherwise prescribed by law and shall immediately pass to the person whose agreement to become occupant shall have been accepted by the Collector." This section, as revised by Bombay Acts No. VI of 1901 and No. IV of 1913, became as follows :—

"73. An occupancy shall, subject to the provisions contained in section 56, and to any conditions lawfully annexed to the tenure, and save as otherwise prescribed by law be deemed an heritable and transferable property."

The new section 73A is in the following terms :—

"73A. (1) Notwithstanding anything in the foregoing section, in any tract or village to which Government may, by notification published before the introduction therein of an original survey settlement under section 103, declare the provisions of this section applicable, occupancies shall not after the date of such notification be transferable without the previous sanction of the Collector.

(2) Government may, by notification in the *Bombay Government Gazette*, from time to time exempt any part of such tract or village or any person or class of persons from the operation of this section."

The proviso to section 68 is worded as follows :—

"Provided that nothing in this or any other section shall make it, or shall be deemed ever to have made it, unlawful for the Collector at any time to grant permission to any person to occupy any unalienated unoccupied land, for such period and on such conditions as he may, subject to rules made by the Governor in Council in this behalf, prescribe, and in any such case the occupancy shall, whether a survey settlement has been extended to the land or not, be held only for the period and subject to the conditions so prescribed."

The result of this addition to the law was to produce a variant of the old Survey tenure consisting in a restriction upon the power of alienation.

The proximate cause which led to this amendment of the Origin of the new law was the doubt which had arisen as to the power of the Collector under the Land Revenue Code to grant an occupancy for a limited period in land to which a Survey Settlement had been applied or to impose a condition in the grant of the occupancy of any land that might not be alienated. Previous to the year 1901 the existence of this power had been taken for granted, and Collectors had been accustomed to give out lands both for short periods and on conditions comprising the restriction of the power of alienation. Leases of this last type had been granted chiefly to wild tribes in Thana, Kanara and Khandesh, with the object of safeguarding their lands against falling into the hands of the *savkar*—a result which would inevitably have followed had freedom of transfer been allowed.\*

The law officers of Government had, however, expressed the opinion that leases on conditions other than those under the full Survey tenure—which included the power of free transfer—were illegal, as there was no provision under the law by which they could be granted. It, therefore, became necessary to legalize the leases already granted and to make provision allowing such action to be taken in the future. Further, in view of the fact that, as is explained in the "Statement of objects and reasons," "In certain tracts to which the Survey Settlement has not yet been extended, the cultivating classes are so imperfectly civilized as to be incapable of protecting their own interests", the additional power was taken of notifying tracts or villages, at the time of Original Settlement, within which occupancies might be declared to be inalienable, though without restricting the heritable rights of the occupants.

Owing, however, to peculiar circumstances, the introduction of the Bill at this particular time assumed an aspect of great importance. The years 1900-1901 covered the period of perhaps the worst famine that the Presidency has experienced in modern times. The arrears of Land Revenue in Gujarat averaged about 50 per cent. of the total demand, while in Poona, Bijapur, Sholapur, Satara and Nasik they ranged from 20 to 40 per cent. Under the provisions of the Land Revenue

\* Vide the correspondence re this question in SS. No. CCCXXIV, Villages of Nandurbar, Shirpur and Shāhadadpur.

Code, the lands for which assessment could not be paid were liable to forfeiture on account of the arrears, upon which they would become the property and at the disposal of Government. Such lands would, of course, at the close of the famine period, be leased out again to occupants for the purpose of cultivation. But, under the existing law, such leases could only be granted on the old Survey tenure which comprised as one of its conditions the power of unrestricted alienation. Government, therefore, determined to seize the opportunity afforded by the amendment of the law at this particular time "of taking an important step towards the solution of that momentous problem of a remedy for agricultural indebtedness".

As the Honourable Member, Mr. (now Sir) Monteath, explained in his speech introducing the Bill "the recent trend of official opinion has been towards the conclusion that the grant of unrestricted property in land, subject to the payment of assessment, has been the main cause of embarrassment and that the remedy most likely to be effectual is a restriction on the transfer of land".\*

The power of alienation, as he shewed, was not an innovation due to the British Government, since *miras* land in the Deccan was always considered to be transferable as well as a heritable property, but it was only under the British Government that the questions connected with alienation became a serious social problem. This was due to two chief causes, viz., the difference in legal procedure, and the large increase in the value of land. With regard to the first cause, under the Indian Governments payment of a debt was seldom enforced by the State, whereas "now unfortunately our Courts are largely occupied with ordering the sale of land in execution of decrees". At the same time, the large increase in the value of land had made it a desirable object of acquisition to the *savkar*, with the result that year after year more of the agricultural land was passing into the hands of people "who use their capital to get possession of the land; they use none for the improvement of it".

In these circumstances Government determined to forfeit the lands on which there were arrears and to re-grant them to occupants, subject to the condition that the occupancy would lapse if the lands were alienated without permission. In adherence to this policy, large re-grants of forfeited lands were made in the districts affected.

---

\*Proceedings of the Council of the Governor of Bombay, Vol. XXXIX, p. 178.



With regard to the general administration of the new tenure Administration of the the principles to be observed were laid down in Government Resolutions No. 3875, dated 22nd April 1909, and No. 599, dated 19th January 1912, and may be summarised as follows:—

(1) The new tenure is generally suitable to the backward classes of cultivators only and not to the more advanced classes.

(2) It is necessary to note carefully that the basis upon which the new tenure stands is essentially different (a) in areas which have been notified under section 73 (1) of the Land Revenue Code and (b) other areas.

(a) *Areas notified under section 73 (1).*—In these areas the condition of non-transferability becomes attached automatically to all occupancies on the publication of the notification. The only way by which any class of occupancies can be exempted from this condition is by the special orders of Government granting the exemption, either to special tracts or to classes of persons or to individuals.

In these areas the character of the tenure follows the status of the holder, i.e., land authorizedly transferred from a non-exempt to an exempt person automatically becomes free from the condition of non-transferability, but when transferred from an exempt to a non-exempt person the condition is automatically imposed.

Similarly with respect to the grant of new occupancies by the Collector: if the granted is non-exempt, the condition is *ipso facto* attached, but, if exempt, the grant is free of the condition.

(b) *Other areas.*—In other areas the condition can only be attached to new occupancies granted by the Collector and cannot be imposed on existing occupancies. It must only be imposed in the case of the backward classes and the Collector is precluded from attaching it to a grant made to a member of the intelligent classes.

It may be added that suggestions have at times been made for the relaxation of the terms of grants on the new tenure with the object of allowing a restricted power of alienation on certain conditions, but Government have consistently refused to agree to such proposals as a matter of principle (*vide* Government Resolution No. 8708, dated 28th September 1910). It has, however, been ruled that sanction to reasonable alienations should be readily given (*vide* paragraph 9 of Government Resolution No. 7730, dated 19th August 1912).

Finally, it may be noted that, by section 70 of the Land Revenue Code, a transfer of land held on the new tenure made by the order of a Civil Court without the sanction of the Collector is declared null and void, and the Court is bound, on receipt of a certificate from the Collector to the effect that the occupancy is non-transferable and that sanction to transfer has not been granted, to cancel its order of attachment, sale or other form of transfer.

---

## CHAPTER XII.\*

### INAM TENURES.

By the common law of India all land is liable to the payment of Land Revenue to the State. This right is asserted by the earliest as well as the latest Bombay enactment on the subject, *viz.*, Bombay Regulation XVII of 1827 (Chapter I, section 2) and the Land Revenue Code of 1879 (section 45) respectively, and that in terms practically identical

“Nothing <sup>contained in the preceding clause</sup> <sub>in this Act</sub> shall be <sup>understood</sup> <sub>deemed</sub> to affect the <sup>right of Government</sup> <sub>power of the legislature</sub> to <sup>assess to the public revenue</sup> <sub>direct the levy of revenue on</sub> all lands under whatever title they may be held whenever and so long as the exigencies of the State may render such <sup>assessment</sup> <sub>levy</sub> necessary.”

But this power of the State also involves another power—that of alienating the right to receive assessment in favour of individuals; and it is to the, sometimes prodigal, use of this power in the time of preceding Indian Governments that the class of “alienated” or *inam* lands is largely due. At the present day the right of making such grants is reserved for the Government of India; but, as Colonel Etheridge shews, during the troublous times preceding the British rule, when the whole country was in confusion and when every robber-chief might aspire, and often with success, to carve out for himself a kingdom and render himself independent, “to confer grants and pensions was, of all other rights of sovereignty, *the* privilege which the new ruler jealously exercised and by which he knew he could best make the arm of his authority felt, as well as retain that authority for any length of time.”

The result was that any petty, semi-independent chief considered himself competent to alienate lands in order to consolidate his own power and, though the validity of such grants was strictly dependent upon the will of the constitutional Government as soon as it could re-establish its authority, yet even then prescription would work in favour of the grantees who would in time consider themselves and be considered by the people as *Inamdars*, however faulty their title may have been in origin.

\* *Note.*—The substance of this chapter is taken from Colonel Etheridge's *Narrative of the Inam Commission*, 1873.

But further, this power was assumed, not simply by persons who might at any rate be considered to be wielding powers of State, however unlawfully gained, but also by farmers of the revenue and executive officers of all grades, even down to Patels; indeed, in Gujarat, a large proportion of the alienated lands were comprised under the heads of "vechania" and "girania" or Government lands sold and mortgaged by Patels to individual cultivators.

In such circumstances it is not to be wondered at if, while a proportion of claims to *inam* were undoubtedly genuine, being founded upon valid or semi-valid grants, a still larger proportion were fraudulent and in derogation of the rights of the State.

During the first 23 years of British rule (1818-1841) the enormous extent of the claims to hold lands as *inam* seems not to have been realised. Collectors and Judges were left to deal with such questions on their own authority, the result naturally being that their decisions were very conflicting, varying from harshness to tenderness in the treatment of such claims in accordance with individual opinion. It was not in fact till 1841 that the question of alienations was taken up with vigour, when it was revived through the energy of Mr. Goldsmid of the Civil Service, the Superintendent of the Southern Maratha Survey. During the course of his operations in Dharwar and Belgaum he was startled to find the extraordinary number of claims to alienated land, amounting, even in the case of Government villages, to more than half the whole area. He thereupon made close inquiries and discovered the surreptitious and fraudulent character of the large proportion of such claims.

In the result two important measures were taken in hand, *viz.*, the re-organization of the Poona Daftar and the appointment of a Committee of two in 1843 to enquire into the alienated lands of the Southern Maratha Country.

By the "Poona Daftar" is meant the Government records of the Maratha administration, which cover a period of 88 years—from 1729 to 1817—with a blank of seven years from 1757 to 1763, the records of which were destroyed by the Moguls. This record was naturally an invaluable source of information in connection with the subject of alienations, but previous to Mr. Goldsmid's inquiries, its importance had not been realised and its resources had remained unused.

The inquiry under the Committee appointed in 1843 proceeded for a period of nine years, till 1852, when the Committee was transformed into the Inam Commission by the Act, XI of 1852. Inam Commission and its proceedings given a legal status by Act XI of 1852—"An Act for the adjudication of titles to certain estates claimed to be wholly or partially rent-free in the Presidency of Bombay." By this Act Government were empowered to appoint Inam Commissioners with Assistant Commissioners "to investigate..... the titles of persons holding or claiming against Government the possession or enjoyment of *inams* or *jaghirs*, or any interest therein, or claiming exemption from the payment of Land Revenue."

The rules which were to guide the Inam Commission in coming to a decision on any claim were as follows :—

*Inams* were divided into four classes, *viz.*, Personal, Devasthan (for the support of mosques, temples, etc.), Hereditary Service and Political, which were to be adjudicated upon severally according to the following principles :—

The classes of inams and system of settlement.

(i) *Personal Inams.*

(a) *Inams* declared either by the British Government or by a *sanad* issued or recognized by competent authority to be hereditary were to be continued according to the terms of the declaration or *sanad*.

(b) *Inams* held uninterruptedly for 60 years previous to the establishment of the British Government and in authorized possession of a male descendant of the original grantee were to be continued to the male descendant of the incumbent tracing his lineage through male heirs only.

(c) When the period was 40 years in similar conditions the *inam* was to be continued till the death of the last surviving son of the incumbent.

In the two last cases the claimant was not required to prove any specific grant: his assertion was taken as sufficient evidence of claim—subject of course to proof of length of holding—unless there were evidence to the contrary.

(d) *Inams* not continuable under those rules were to be resumed on the death of the incumbent.

(ii) *Devasthan Inams.*

All lands held for the support of mosques, temples or similar institutions, of the permanent character of which there could be no doubt, were to be continued permanently even though their permanent continuance might not have been expressly provided for when they were granted.

In such cases also the *onus probandi* was, by the rules, laid on Government.

(iii) *Hereditary Service Inams.*

Under this head were included *inams* "authorizedly held by an official tenure, which it is evident from local usage were meant to be hereditary." It did not include "emoluments continued for service performed to the State, such as the service *vatans* of Desais . . . Patels, Kulkarnis, Mahars, etc." Such *inams* were to be continued permanently, but proof was required that the holding was of an official character and not merely temporary.

(iv) *Political Inams.*

The rules for the first three classes of *inams* were declared not to be necessarily applicable to *jaghirs*, *saranjams* or other tenures for service to Government or tenures of a political character which were to be dealt with "under such rules as Government may find necessary to issue from time to time."

In addition, however, to inquiry into the title of *inam* holdings in land, the Commissioners were also subsequently authorized to investigate claims to cash and grain allowances which were to be settled upon the same principles as in the case of *inam* lands, though with this difference that, whereas in the case of land the *onus probandi* was made to rest fully and completely upon Government, in that of cash and grain it was laid upon the claimant.

Investigations under this Act proceeded steadily for a period of 11 years in Khandesh, the Deccan and the Southern Maratha Country, during which time a large number of claims were disposed of. The system of inquiry under the Inam Commission had, however, two defects—

(a) Its operations were too slow and cumbrous and it was not calculated to attain the end for which it was designed within a reasonable time.

(b) The Act applied only to the Deccan and the Southern Maratha Country and not to Gujarat. In order, therefore, to carry out the same system in the latter districts it would be necessary to appoint a special Commission which would have all the defects of its Deccan prototype.

It was finally decided, therefore, to abolish the system of detailed inquiry and to substitute a system of "Summary Settlement" to be extended over the whole Presidency. The main principles underlying this settlement were—

The Summary Settlement Acts, 1863.

(a) The conversion of all Personal Inams, whether adjudicated by the Inam Commission or not, into transferable freehold.

(b) The imposition of a quit-rent or *nazarana* upon such lands on account of such conversion.

The rules under which this settlement was to be carried out were embodied in the two Summary Settlement Acts—No. II of 1863, which applied to the so-called "New Provinces" of the Deccan; Khandesh and the Southern Maratha Country, and No. VII of 1863, which was applied to the "Old Provinces" of Gujarat and the Konkan. Under these Acts the amount of quit-rent was to be—

(a) under Act II of 1863, 4 annas for every rupee of the full assessment, plus a *nazarana* equal to an additional one anna in the rupee;

(b) under Act VII of 1863; 2 annas in the rupee without *nazarana*.

By the provisions of these Acts the class of "Terminable Inams," i.e., those which had been adjudicated to be not continuable hereditarily but only for a life or lives, were excluded from the benefits of this settlement. By Government order No. 2900, dated 1st August 1864, however, a special measure of relief was given to these holdings by which *inams* held for two lives were subjected to one-half or two-thirds the assessment if in the possession of the original incumbent or his son; and if held for three lives, then to one-third, one-half or two-thirds the assessment according as they were in the possession of the original incumbent, his son or grandson. *Inams* which had already expired were not revived nor was relief given if the *inam* had been granted for the life of the incumbent only.

The terms of the Summary Settlement Acts applied to the cases of Personal and Devasthan Inams only, the two other classes, viz., Service Settlement of Service and Political Inams.

and Political, being expressly excluded from their operation and reserved for separate treatment. The settlements carried out in these cases were as follows :—

(i) *Service Inams.*

By a "Service Inam" is meant a holding of land or a right to receive cash payments or to levy customary fees or perquisites in return for the performance of certain duties either to Government or the community. The holders of Service Inams, or Vatans as they are called in the Deccan, are divided into the following classes :—

(1) District Officers.

(2) Village Officers—

(a) useful to Government,

(b) useful to the village community,

(c) useless both to Government and the community.

(1) *District Officers.*—This class comprises the old hereditary officials such as Desais, Deshmukhs, Deshpandes, etc., who were the chief instruments for the collection of revenue under the Peshvas, but were superseded by the British. Theoretically these officers might have been deprived of their emoluments on cessation of service, but this was not done, and a settlement was arrived at by Commissions appointed, one for Gujarat and the other for the rest of the Presidency. The principle adopted was that of "commutation for service," by which the zamindars, as they were called, were allowed to retain the greater part of their allowances, a levy of from 3 to 8 annas only in the rupee being made as commutation and also as a cure for a possible defect of title.

(2) *Village Officers.*—These officers are divided into three classes according as the functions attached to their offices were such as are either useful to Government or the community, or have nowadays become useless to both.

(a) *Village Officers useful to Government.*

The two officers coming under this head are the hereditary Patel and, in the Deccan, the hereditary Village Accountant or Kulkarni. The principle of settlement in these cases was to provide adequate remuneration for that member of the family in which the office was hereditary who was actual officiator for the time being.



The sources of income were generally three, viz.—

- (i) land, for the most part exempt from rent ;
- (ii) direct levies in cash and kind from the rayats or compensation in lieu thereof ;
- (iii) cash payments from the Government treasury.

The true value of the income derived from these sources taken in the above order was determined and adequate remuneration for the officiator provided from them when sufficient ; when insufficient, an assignment from the treasury made up the deficiency ; when more than sufficient, the land in excess was assessed at one half the revised Survey rates.

The above description gives the broad general principles upon which this *vatan* settlement was effected. The methods by which the actual settlement was worked out in detail, however, are very complicated and are, therefore, described in Appendix IV.

(b) *Village Officers useful to the Village Community.*

These comprise village servants, such as Kumbhars, Sutaras, Lohars, etc., who still perform services to the village community. The settlement arrived at in these cases was as follows :—

(i) In the Old Provinces—the lands held were assessed at either half or quarter of the Survey assessment according as the service performed was more or less useful to the community.

(ii) In the new Provinces—the land held was assessed at a quarter the assessment.

The holdings of this class, being still subject to service, were made non-transferable.

(c) *Village Officers useless both to Government and the Community.*

This class consists of those servants whose offices have become obsolete, such as the Potdar, who, besides being the village silversmith, used to assay all the money paid, either to Government or to individuals—an important office in the days when the currency was as yet unestablished ; and the Chaugala, who was a kind of assistant to the Patel and also had care of the Kulkarni's records. The land held by this class of servants was treated as follows :—

(i) In the Old Provinces—the full Survey assessment was imposed.

(ii) In the New Provinces—an assessment of half the full Survey rate was taken.

In both cases, as there was no longer any service to be performed, the lands were converted into transferable freehold.

(ii) *Political Inams.*

Under this head are comprised the class of *inams* called "Jaghirs" and "Saranjams"—the former a word of Mahomedan, the latter of Maratha origin. Both, however, have the same signification, *viz.*, a grant by the State for the performance of civil or military duties, or for the maintenance of the personal dignity of nobles and high officials. Some of these had been guaranteed by special treaty between the holders and the British Government, but such as had not been so guaranteed were inquired into and settled by the Inam Commission. The principle of settlement was the same as that adopted in the case of Personal Inams, *viz.*, they were continued hereditarily for one or more generations according to the date at which the original grant had been made.

---

## CHAPTER XIII.

### MISCELLANEOUS TENURES.\*

THE Land Tenures of the Deccan and Southern Maratha Country, with the exception of occasional instances of the Sarakati tenure, are all comprised under the classes described in the last two chapters. In Gujarat and the Konkan, however, there are a large variety of tenures which cannot properly be included under these heads. The majority of such tenures are found in Gujarat where the history of that province is written in the Talukdari, the Mehvasi, the Narvadari and other tenures. In the Konkan the only important tenure of this class is the Khoti.

#### A.—GUJARAT.

1. *The Talukdari Tenure.*—The Talukdari tenure is one of the most important in Gujarat. It prevails in the districts of Ahmedabad, Kaira, Broach and the Panch Mahals, the greater number of estates held under this tenure being situated in the Western Talukas of Ahmedabad adjoining Kathiawar, viz., Dhandhuka, Dholka, Gogha and Viramgam.

The Talukdars of Gujarat are historically identical with the ruling families of Kathiawar and other Agencies and their loss of political power is generally ascribed to the geographical accident of their estates being situated in the *rasti* (settled) portion of the province which was brought under the direct rule of the Paramount Power, while their kinsmen in the *mulkgiri* (unsettled) portion continued to be treated as tributaries. The Talukdars comprise men of varying position, ranging from Jurisdictional Chiefs holding Talukdari villages in British districts and the holders of recognized Chieftainships such as Sanand, Gamph, etc., to the holders of a few acres in a co-parcenary estate, who are fast being converted into yeomen cultivators. With the exception of a few Mahomedans, Kathis and Charans, they are all of pure or mixed Rajput descent, embracing Vaghelas, Chudasmas, Jhalas, Parmars and others. The lower *strata* include the Koli Thakardas of Viramgam and Parantij. Molesalams, the descendants of Rajput converts to Islam of the Broach and Kaira Districts and of Ranpur in the Ahmedabad district, retain their status and rights as Talukdars.

---

\*Note.—This chapter is taken from S. S. No. DXXIV, Character of Land Tenures in the Bombay Presidency.

The leading characteristic of Talukdari tenure is that a Talukdari estate is held neither in gift from the Crown (*i.e.*, "alienated") nor in occupancy (*i.e.*, "unalienated"), but with full proprietary rights antedating the advent of British rule and including ownership of mines, minerals and trees. Exceptions to this rule are the Naiks of the Dohad taluka in the Panch Mahals district and the Kasbatis of the Viramgam taluka in Ahmedabad, who though included in the definition of Talukdar (section 2 of Bombay Act VI of 1888) are considered to hold their estates as permanent lessees under certain conditions.

All Talukdari estates are held subject to the payment of *jama* (Land Revenue) to Government, which may be either *udhad* (fixed in perpetuity) or fluctuating. The estates in Kaira and Broach are mostly held on *udhad jama* or quit-rent fixed under the Summary Settlement Act, while those in Ahmedabad pay *jama* which is liable to Revision on expiry of a term of settlement not exceeding 30 years. Legally (section 22 of Bombay Act VI of 1888) the fluctuating *jama* may be equal to the full survey assessment of all the lands comprised within the estate; but in practice the Government demand was originally limited to about 60 per cent. of the assessment on cultivated land and 35 per cent. of that on waste, while, in special cases, a maximum of 70 per cent. of the total assessment of the estate was allowed, enhancement beyond 50 per cent. of the existing *jama* being forbidden in any case. In Government Resolution No. 2263, dated 22nd March 1904, Government came to the conclusion that a proper valuation of the land was essential for a just determination of the liability of the talukdars, and observed that in fixing that liability there should not be included in the demand any claim on account of waste land, that Government might claim up to the amount of half the rental and that the full assessment might be so low as not to amount to half a proper rental. These orders were designed to secure the fixation of a fair *jama* and it was intended to depart, if necessary, from the rule regarding the levy of 60 per cent. of the assessment. Specific legal provision is under consideration for the revision of *jamas* and the levy of existing *jamas* while the revision is being made, for limiting the *jama* to such portion not exceeding three-fifths, or 60 per cent., of the aggregate of the survey assessment of the lands comprised in a talukdar's estate as Government may from time to time direct, and for fixing the *jama* so ascertained for a period of not less than

thirty years. The talukdars are exempted from the payment of *jama* as regards certain classes of land alienated by them before the passing of Bombay Act VI of 1888, and as regards other classes of such lands they are required to pay as *jama* 50 per cent. of the proceeds derived by them therefrom. The talukdari estates of Ahmedabad (except those of the Prantij taluka) have been surveyed twice (in 1864 and 1889) for the purpose of fixing the Government demand; and a detailed Survey has lately been extended to the Broach, Kaira and Panch Mahals estates also.

An important operation undertaken in connection with the Survey is the preparation under section 5 of Bombay Act VI of 1888 of the Settlement Register which is intended to serve the purpose of a Record-of-Rights in talukdari estates, which have been exempted from the operation of the Record-of-Rights Act.

All talukdari estates (except the villages held on a fixed *jama* by the Thakor Sahab of Limbdi in the Dhandhuka taluka) are liable to local fund cess at the usual rate; but under the recent orders of Government the local fund cess is levied at the rate of one anna in the rupee on the full survey assessment on occupied land, whether *darbari* or alienated (*vide* Government Resolutions, No. 8920, dated 14th September 1909, and No. 937, dated 29th January 1914).

Nearly all the more important estates, such as Sarand Gamph, Gangad, etc., observe the rule of primogeniture, but the bulk of smaller estates are held by co-sharers whose increasing number threaten the estates with rapid disruption. Except where repeated sub-division of shares has forced the Talukdar to the plough, he lives upon the rent of the land and regards manual labour as degrading. The rents are taken in kind or cash, the levy of the former being generally fixed by *dharo* (custom) of the village which is recorded in every case. The division of landlords' and tenants' share is made either by *makhal*, i.e., actual weighing out of the crop in the common grain-yard, or by *dhal* i.e., appraisalment of the standing crop. The rent levied by the Talukdars in kind or cash varies in different estates and even in different villages of the same estate within very wide limits. In some cases it is less even than the Government assessment, and in others it may be as much as two or even three times the assessment. Probably the general average would be from  $1\frac{1}{4}$  to  $1\frac{1}{2}$  times the assessment.

Rents are levied in cash in all the estates of the Kaira and Broach districts, but the crop-share system prevails in most

of the estates of Ahmedabad. Cash rents based on the Survey assessment are being gradually substituted for crop-share in estates brought under Government management.

The tenants are invariably tenants-at-will, but eviction is rare and in many cases the tenants retain the same holding for generations.

Talukdari estates contain large areas of land given to cadets, widows of the family and other relatives for maintenance and to village servants and others either in reward for past services or as remuneration for services still being performed. Service lands falling within the last category are resumable at will, and in other cases the Talukdar has a right of reversion on the failure of male heirs. These inferior holders generally contribute little to the estate though in some cases a small quit-rent is chargeable.

Other distinctive features of estates held on the Talukdari tenure are the following :—

(1) Under section 31 of the Gujarat Talukdars Act (Bombay VI of 1888) a Talukdar cannot encumber his estate beyond his own life-time without the permission of the Talukdari Settlement Officer, and cannot alienate the same without the sanction of Government.

(2) A Talukdar is liable for the cost of the village police-force employed in his village.

(3) No Civil Court can entertain a suit for the partition of Talukdari estates, such applications being tried by the Talukdari Settlement Officer subject in certain cases to appeal to the District Judge.

(4) Government do not interfere in the internal management of the estates, but the latter may be taken under management under the following conditions :—

(a) For apprehended injury to the well-being of inferior holders or breach of the peace ;

(b) while partition is being effected ;

(c) on the application of the Talukdars ;

(d) under the operation of the Land Revenue Code, Court of Wards Act, Civil Procedure Code and other enactments enabling public officers to assume charge of private estates.

In the case of (a) and (c) the managing officer is entitled to call upon all creditors of the Talukdar to submit their claims with accounts within the period of six months and to negotiate for a settlement.

2. *The Vanta Tenure.*—The *vanta* (divided) tenure (in contradistinction to *talpad*, paying full assessment) prevails more or less in certain villages all over Gujarat north of the river Tapti. *Vantas* held by Talukdars differ in no way from whole villages owned by that class. The origin of the *vanta* is generally ascribed to the action of the Mahomedan invaders of Gujarat who deprived the original Chiefs of all but one-fourth of their possessions which took the name of *vanta* (divided). In some cases the *vantas* were held free, but in the majority of cases a quit-rent was imposed sooner or later by the Paramount Power. No holder of *vanta* land has any documentary evidence to prove his title before the enactment of the Summary Settlement Act (VII of 1863) under which some of the *vanta* holders accepted *sanads* and converted their former lump quit-rent into a *numberer salami* under Act VII of 1863. Other *vantas* still continue to pay *udhad jama*. A few villages exist in which the lands are divided into two portions, called respectively *vanta* and *talpad* separated by some fixed boundary, a river, road or stream, the village site itself being also divided. *Vanta* holders are generally, but not invariably, Talukdars.

3. *The Mehvasi Tenure.*—In some parts of Gujarat, viz., on the banks of the river Mahi in the Kaira district and the Parantij taluka and Modasa mahal in the Ahmedabad district, certain villages known as Mehvasi villages are held by the descendants of Mehvasi Koli or Rajput Chiefs, once great freebooters and the terror of the country. In Parantij and Modasa their tenure is exactly similar to the tenure of the Talukdari villages of the Ahmedabad district, that is to say, the *jama* is subject to revision and the holders are considered proprietors. The villages on the Mahi in the Kaira district are held on the *udhad jama* tenure, that is to say, the *jama* is fixed and is not liable to revision. The principal shareholders are generally Thakors, and are called *muksh bhagdars*, the sub-sharers being known as *peta bhagdars*, as in villages held on the *narva* tenure. Most of these villages were originally held rent-free or subject to a small tribute. Conditions were generally attached to the tenure, such as the police management of a small portion of the country, the keeping open of certain roads infested by robbers, or forbearance from plundering on the part of the holders and their fraternity. Under British rule and a better system of police these conditions are, of course, unnecessary, and the villages are held subject to the payment of the *jama* only. Of late years, Talatis (village

accountants) have been introduced into some attached Mehvasi villages, and the *jama* collected from the shareholders, who sub-let their lands either on cash or grain rents. The steps which were taken in 1877 to introduce the Revenue Survey into these villages were rendered futile by the destruction by fire of the Survey Records at Surat in 1887, but some of the villages have recently been re-surveyed and they are to be treated in the same way as Talukdari villages as regards the imposition and levy of a *jama*, which will be proportioned to their Survey assessment and will be liable to revision at the end of a term of years.

In the Kalol taluka of the Panch Mahals district the headmen of 23 villages with their sharers under the name of Mehvasi Patels claim certain privileges amounting to a distinct tenure. It was decided (1887) that this tenure did not correspond exactly with the *narvadari* or *bhagdari*, but more nearly approached that of the Talukdari villages in the Ahmedabad Collectorate, and that the villages undoubtedly fell within the category of those described in section 8 of Regulation XVII of 1827 as held by shareholders settling hereditarily. It was not, however, until 1887 that a settlement was arrived at. The tenure has now been recognized in 21 villages, and its more important conditions are that the Patels have a lien on their waste lands on condition that they limit their demands on their tenants to the Survey assessments and pay as *jama* certain proportions of the assessments of the cultivated lands held by themselves and their tenants. The proportion varies according to the area of forests reserved in the villages, and the forest rights of Government in the waste lands have been maintained, though liberal privileges have been conceded. The Patels (headmen) employ their own Talatis (accountants), but are under obligation to keep accounts and furnish statistics.

4. *The Maleki Tenure*.—In the Thasra taluka of the Kaira Collectorate is a clan of Mahomedan yeomen known as the "Maleks," who hold their villages on a special tenure, the origin of which is as follows:—

Nearly four centuries ago Mahomed Begada, Sultan of Ahmedabad, granted as a reward for military services, at the taking of Pavagad (a celebrated hill fort near Champaner), 12 villages to certain Musalman families, known as Malekjadas. On the introduction of British rule these 12 villages had, by the founding of new hamlets, increased to 17. They are now 27 in number, into all of which the new settlement has been



introduced. These villages seem to have been originally rent-free, and so continued for 2½ centuries. About 150 years ago the Maleks were compelled by the Marathas to pay a fixed tribute (*udhad jamabandi*) on their villages. Soon after (about 1769) the *Mulkgiri* army of the Gaikwar levied an additional tribute, called *ghasdana*, which was continued till the introduction of British rule, when this exaction was commuted and paid by the British Government to the Gaikwar. Besides this, several Maleki villages were subjected to a tribute payable to the Babi of Balasinor, which was also commuted and paid by the British Government to the Babi. To meet the Maratha tribute (*udhad jamabandi*) demand the Maleks levied from their cultivators a poll-tax (*karam vero*) and a tax in kind (*waje*), amounting to one-third of the produce of the land.

In 1865 the Maleki villages were measured and valued by the Revenue Survey, and a settlement introduced, which has since been confirmed by the grant of *sanads* to the different Maleks. Under the settlement the management of the villages is in the hands of Government. The Maleks nominate the *Talatis* who are appointed by Government. The revenue of the villages is shared between the Government and the Maleks whose shares vary from 7 to 9 annas. Besides, the Maleks hold rent-free *gharkhed* lands.

5. *The Udhad Jamabandi Tenure.*—In some whole villages, or parts of villages, *vanta* lands entered as sarkari or Government are held on *udhad jamabandi* tenure, which means that they are liable to a fixed cess (*jama*) only, such *jama* remaining intact even at a general revision of assessment, there being a "right on the part of the occupants in limitation of the right of Government in consequence of a specific limit to the assessment having been established and preserved." Other villages, not *vanta*, are also held on this tenure. These villages have been surveyed in the lump only, and the fixed assessment has remained intact. A few, however, in the Kaira Collectorate, which have been under the management of the Collector and of the Talukdari Settlement Officer as embarrassed estates, have had and are now having their lands surveyed and classed in detail, with a view to the Survey Settlement being introduced.

6. *The Narvadari and Bhagdari Tenures.*—These two classes of tenures are in themselves of great historical interest, because, as is explained in detail in Appendix I, they probably are the survivals of the old joint form of village community from which the present severalty type has evolved. Under present

conditions the peculiarity of these tenures is that they involve joint responsibility for the payment of the Government revenue. The first named tenure prevails chiefly in the district of Kaira, a few villages being also found in Ahmedabad and Surat, while the latter is confined to the Broach Collectorate.

(a) *The Narvadari Tenure.*—The lands of *narva* villages consist of certain main divisions (*muksh bhag*), containing sub-shares (*peta bhag*), which, in their turn, are up to a fixed limit divided into fractional parts. The head of each estate or main division is called a *muksh bhagdar* and is responsible for the payment to Government of the assessment leviable on the whole share. Similarly the holders of sub-shares of a main division (the *peta bhagdars*) are collectively responsible for that portion of the assessment which has been allotted to their several sub-shares. All sub-sharers have equal rights, are called *patidars*, and are descendants of the old proprietary cultivators. The shares or divisions, great and small, are sometimes of equal and sometimes of unequal amounts, but always in well-known and recognized proportion, so that the assessment due by the whole village is exactly apportioned among them. As the *narvadari* and *bhagdari* tenures had been acknowledged and preserved under Act V of 1862, special arrangements were required for the settlement of villages in which these tenures existed.

The register of existing shares was accepted and the lump sum due from the village (with the exception of the assessment on certain common (*majmun*) land which was excluded from the *narva*) was apportioned among the different shareholders according to the rules entered in the register of *phalavni* or rate of apportionment. It is seldom that the whole of the land of a *narva* village is included in the *narva*. There is almost always a portion of *vighotia* lands, i.e., survey numbers, on which the assessment is levied individually and not in the lump as in the case of *narva* lands.

Land common to the whole *narva* is known as *gao majmun* and land common to one or more *bhags* is known as *bhag majmun*. The assessment on *majmun* lands is distributed among the various sharers in proportion to the amount of assessment for which they are liable on account of the numbers included in their respective shares.

The *narva* villages are not all constituted precisely alike; there is for example—

(1) The perfect *patidari*, in which all the lands are held in severalty by different proprietors, each person managing

his own land and paying his fixed share of the assessment, the whole being jointly responsible if one sharer cannot fulfil his engagements. This is the ordinary *narvadari* tenure which exists in a large majority of the villages.

(2) The imperfect *patidari*, in which part of the land is held in common and part in severalty, the profits from the common land being first appropriated to payment of the Government revenue made up according to the rate on the several holdings. The peculiarities of each have been upheld by the new settlement.

Under the Survey system many *narva* village communities have been allowed, at their own wish, to divide their respective responsibilities for the revenue according to the assessment of their respective shares, instead of according to the old symbolical division (*phalavni*) of the lump assessment originally entered in the register of the *narva*.

(b) *The Bhagdari Tenure.*—The *bhagdari* tenure differs from the *narvadari* in one important particular only, *viz.*, that in the former there was always a fixed *bighoti* assessment on each field; and although the assessment of each share (*bhag*) was not the aggregate of the assessment of the several fields, which the share comprised it was the amount of the total field assessment of all *bhagdari* lands, divided according to the register (*phalavni*). In the *narvadari* tenure, on the other hand, there was never a separate field assessment, the revenue being fixed in the lump. It will be seen that, although the *narva* and *bhagdari* tenures have been reserved in their integrity by the Survey, yet the amount of revenue to be paid in the lump has been ascertained by a field assessment; so in the event of a contingency arising, such as is contemplated by clause 2 of section 8 of Regulation XVII of 1827 (reversion to Government on account of non-payment of revenue), the Survey rates could at once be introduced in exactly the same way as in ordinary Government (*senja*) villages.

In *narvadari* and *bhagdari* villages all persons cultivating *narva* or *bhagdari* lands, whatever rights they may have, are tenants, not of Government, but of the *bhagdars*, who are alone responsible for the revenue. They are—

- (1) tenants-at-will, holding at the pleasure of the *narvadars*, who can eject them, or increase their rents at discretion;
- (2) customary tenants, who cannot be ejected so long as they pay the customary rental, which is either a fixed share

of the produce or more commonly the customary *bighoti* rates, which are generally recorded in the village books.

Soon after the introduction of the Survey Settlement a "record" is prepared, setting forth the respective rights of the superior and inferior holders. These records have not, however, the force of judicial decisions.

7. *The Sarakati Tenure.*—A few villages in different parts of the province are held on what is called *sarakati* tenure. The term *sarakati* is derived from the Arabic, meaning "a partner." In these villages Government is entitled to a certain proportion of revenue, and the holders to the balance; the proportion of the respective shares varies from 10 to 6 annas. It is not unlike what the Maleki tenure has now merged into, the holders having in both cases the right of occupying and sub-letting all their lands subject to the payment of the fixed proportion of revenue to Government.

#### B—THE KONKAN.

(1) *The Khoti Tenure.*—Forms of tenure called "*khoti*" exist both in the Northern and Southern Konkan, but the similarity of nomenclature is unfortunate as there is no connection between the two classes which have to be carefully distinguished:—

(a) *The Northern form.*—The Khots of the Northern Konkan are leaseholders (though more commonly called farmers) of a certain number of villages, several being generally held in one family, and they obtained their land in all cases from the British Government, though at an early period. They have never claimed to be the proprietors of the soil, and the title and rights of those who hold land under them are in no way affected by the fact of these Khots having their villages in lease. Most of the *khoti* villages have been measured, and the Survey Settlement introduced, and, therefore, in all such villages the Survey tenure is in force. The former rights of the tenants, which are distinguished as *suti* and *chikli* or *gatkuli* are only in force now in the few villages not yet surveyed.

(b) *The Southern form.*—In the Kolaba (excluding the talukas of Panvel and Karjat which were transferred from Thana to Kolaba in 1883 and 1891 respectively and which nonetheless still belong to what is called the Northern Konkan) and Ratnagiri Collectories the Survey tenure is quite the exception. It prevails generally in the two northern talukas of Kolaba, but in the remainder of that district and

in the whole of Ratnagiri it is found only in those villages which happen to be Government property (*khalsa*) and in surveyed *khoti* villages where there are *dhara* lands and *kowli* lands held on new leases. In the northern part of Kolāba there are a few villages held on the *izafat* tenure already described. Otherwise the *khoti* tenure is the prevailing one, though there are a number of proprietary rights in all these villages independent of, and in some cases older than, those of the Khots.

With regard to the *khoti* tenure, its principal features are undisputed, or nearly so. Though most people believe the Khots to have been at first, and not more than about 350 years ago, simply farmers holding on leases for the improvement of the country, yet it is now generally conceded that they must be considered as limited proprietors. Theoretically their position is very much that of Bengal Zamindars without the permanent settlement, for it has never been doubted that they are liable to increase of assessment. But owing to the smallness of their estates and to the fact that their villages, having descended in most cases by the Hindu law of inheritance, are held by a large number of co-sharers, it is much safer to ignore the superficial resemblance which exists between them and the Zamindars. The chief undisputed points of this tenure are as follows:—

1st.—The right to hold their villages on payment, in instalments, of the lump assessment fixed on all the village lands by the Settlement Department: provided that, subject to certain rules under the Khoti Settlement Act I of 1880, the members of the *khoti vatan* authorized so to do, agree on the nomination of a managing Khot for the year. On failure of payment, or in the event of the members of the *vatan* being unable to agree on a nominee, the village is liable to attachment; but is restored on payment of any loss that may have been caused to Government by the default of the Khots in addition to the fixed assessment. If such payment be not made within 12 years from the date of attachment the village is ordinarily held to have lapsed to Government.

2nd.—The right to lease land, in which there are no rights of permanent occupancy, at whatever rents they may arrange with their tenants.

3rd.—The right to collect customary rents from permanent occupants other than *dharekaris*. Under the Khoti Settlement Act I of 1880 rents in kind from such tenants can

in certain circumstances be commuted into cash payments of definite multiples of the assessment.

4th.—The right to all lands which may lapse owing to the absence or failure (either temporary or permanent) of permanent occupants.

5th.—It is the duty of the Khots to collect the assessment from all permanent occupants who are *dharekaris* (and therefore pay only Survey assessment) without remuneration, but they receive assistance from Government as superior holders.

(The *khoti* tenure is said to have originated in the Subhedari of Dobhol, which extended from the Vashishti to the Devgad river, and which is nearly co-terminous with the district occupied by the Chitpavan Brahmans. Certainly south of the Devgad river, though Khots are still found, their powers are allowed to be much less than those of the Khots farther north.)

*Khoti Tenants.*—There are several classes of *khoti* tenants, the most important of whom is the *dharekari*. The *dharekaris* pay only the Survey assessment, which is liable to increase only at periodical revisions of rates ordered by Government, and are now in no respect dependent on the Khots, though formerly no doubt they paid various cesses to them. They have the same rights of alienation as Mirasdars, and, wherever the Survey Settlement has taken place, the *dhara* tenure has been merged into the Survey tenure.

In the Khed and Dapoli talukas of the Ratnagiri Collectorate there are a number of proprietors under the names of *dupatkari*, *pavani*, *dupatkari* and *daspatkari* which are known under the Khoti Act as *quasi-dharekaris*. These, however, differ only from the *dharekaris* in that their payments to the Khot, though fixed, are somewhat higher than the Survey assessment; their rights in their land being in all respects similar to those of the *dharekaris*.

(There are also a certain number of occupants generally known as *watandar kuls*) or under the Khoti Act as occupancy tenants, who, it is acknowledged, cannot be dispossessed by the Khots, and whose rights are heritable, but not transferable, unless they can prove that such right of transfer has been exercised independently of the consent of the Khot within the thirty years ending with the revenue year 1864-1865. They continue to hold their lands conditionally on the payment of the rent from time to time lawfully due by them to the Khot. (These are supposed to be the descendants of those cultivators who

held the villages before the Khots obtained their grants.) The remainder of the cultivators where the Survey has not been introduced held their lands on payment of a proportion of the crop, the proportion being  $\frac{1}{2}$ ,  $\frac{1}{3}$  or  $\frac{1}{4}$ , according to the custom of the village and the nature of the crop. Under the Khoti Act all these tenants, other than occupancy tenants, continue to hold their lands subject to such terms and conditions as are agreed upon between the Khot and themselves, and in the absence of specific agreement they pay rent to the Khot at the same rates as are paid by occupancy tenants in that village.

The Survey Settlement has substituted for this proportionate payment in kind a fixed cash assessment as the Government share, and under the Khoti Act the rent payable to the Khot by privileged occupations is as follows :—

(1) By a *dharekari* the Survey assessment of his land.

(2) By a *quasi dharekari* the Survey assessment of his land, and, in addition thereto, amounts of grain or money, respectively, set forth in the schedule annexed to the Khoti Act.

(3) By an occupancy tenant such fixed amount, whether in money or in kind, as may have been agreed upon between the Khot and the said tenant, or on the expiry of the term for which such agreement shall have been made; or, if no such agreement have been made, such fixed share of the gross annual produce, not exceeding one-half in the case of rice land, or one-third in the case of *varkas* land, and such share, if any, of the produce of the fruit-trees on the said tenants' lands as shall be determined to be customary amount hitherto paid by the occupancy tenants in that village.

(2) *The Shilotri Tenure.*—*Shilotri* lands are lands that have been embanked and reclaimed from the sea, and the permanence of which is dependent on the embankments being kept up. These reclamations are commonly known as *khars*. The tenure is of three varieties—first, *shilotri* proper under which the *khar* belongs to the person by whom it was reclaimed or his representatives. The Shilotars are considered to have a proprietary right; they let out these lands at will, and according to old custom levy a maund of rice per *bigha*, in addition to the assessment, for the repair of the outer-embankment. These lands were surveyed and re-assessed at the Survey in the same way as Government lands. The second class of *shilotri* lands is that in which either Government reclaimed the *khars*, or became possessed of them by lapse. The cultivators of these

*khars* hold their land just as other Survey tenants do ; but an extra assessment, which is supposed to represent the *shilotri maund* mentioned above, is appropriated to the repairs of the embankments. The third class of *shilotri* lands is that in which reclamations were made by associations of rayats on special terms made with Government. This variety of tenure is distinguished from the *shilotri* tenure proper by the term *kularg*. In *kularg khars* the tenants carry out repairs of embankments jointly, each having a share of the land and assessment recorded against his name.



## CHAPTER XIV.

### CITY SURVEYS.

THE necessity for the Survey of towns and cities as an adjunct to municipal administration is sufficiently obvious, and such survey were, as a matter of fact, undertaken at an early date in the history of British rule. Thus, the Revenue Survey of Gujarat which took place in the early part of the 19th century was extended to the towns also, Surat being surveyed in 1821 and Ahmedabad in 1824. Like the accompanying survey of agricultural lands, however, these City Surveys also were a practical failure and for the same reasons that they were not accompanied by any definite settlement of rights nor was any provision made for the future upkeep of the maps and records. It was not in fact till the year 1863 that City Surveys of the modern type were introduced. In that year the

The first City Surveys.

The City Survey of Ahmedabad, 1863.

Collector of Ahmedabad, Mr. (afterwards Sir) T. C. Hope, called the attention of

Government to "the very large number of open spaces within the city-walls, some with traces of Mohomedan buildings on them, others without, some claimed by various parties, others not;" while he added that "the prosperity of the city is such as to cause a great demand for building sites, houses are springing up in all directions on ground to which the builders have very doubtful titles or often none at all, cases of encroachment take up a good deal of time of both revenue and municipal authorities and can rarely be decided satisfactorily, and it is to be feared that many important ones are never reported at all, and at the same time the insecurity of tenure and chance of being proceeded against acts as a check on the increase of the city." He suggested, therefore, that "In order to remove the latter and also secure to Government all its right, it appears very desirable to settle definitely the title to all land; if private, to secure it from interference, and if public, to lay an adequate assessment on it with provisions for redemption at the option of the holders." To achieve this object he proposed that "the map, shewing the land of Chotti Daskroi, which the Revenue Survey Department have made, should be completed for the whole city by some competent officer, who should decide in communication with the Collector and Magistrate, or subject to his confirmation, what land is required, or what should be reserved for streets or squares, and what the tenure of all the remaining open spaces. • This done,

the land declared to be Government or subject to *salami* should be assessed at suitable rates according to whether it is cultivated or built upon, and permission should be granted to redeem the Government demand on it at so many years' purchase." He further recommended that the right of occupancy of vacant land should be put up to auction and the sale proceeds ceded to the municipality, to be devoted "exclusively to the improvement of the thoroughfares of the city."\* The proposals made were sanctioned and the Survey commenced.

Two years later the Survey was extended to Surat, Bulsar and Broach, and to Rander in 1871.

At the beginning of the year 1867 an important Code of The City Survey Rules, 1867. Rules with reference to the work of Inquiry into Titles, drawn up by Mr. Hope, was sanctioned by Government Resolution No. 86-E., dated 28th February 1867. These rules form the basis of all future inquiry work, but need not be detailed here, as they became obsolete on the passing of Act IV of 1868. At the end of the same year a scheme was put forward by Messrs. Hope and Beyts for the purpose of re-organizing the Gujarat City Surveys and putting them on an effective basis, which was sanctioned by Government Resolution No. 3921, dated 14th November 1867.

In the next year was passed Act IV of 1868—"An Act to make further provisions regarding the application of (Bombay) Act I of 1865 to Towns and Cities; and to restrict the application of (Bombay) Acts II and VII of 1863" (the Summary Settlements Acts) "in Towns and Cities." The short title of this Act was "the Act for City Surveys and amendment of the Bombay Survey and Settlement Act, 1868." By this Act Acts I of 1865 and—with modifications—II and VII of 1863, were applied to lands in towns and cities and rules and regulations were laid down for the general conduct of Survey operations, the inquiry into and settlement of title to lands and the issue of *sanads*.

The Land Revenue Code Act V of 1879. This Act was subsequently incorporated with the Land Revenue Code—Act V of 1879—as Chapter X.

It may be noted that previous to the year 1892 it was the practice for the work to be carried out at the joint cost of

\*Letter from Mr. Barrow Ellis, the Revenue Commissioner, attached to Government Resolution No. 3944, dated 9th September 1863.

Government and the municipality. The result of this system, however, was constant friction, and in the extension of the Ahmedabad City Survey which took place in 1894 the work was done by Government alone, and this has been the rule ever since.\* The funds for carrying out these operations are provided by way of an advance on the same principle as the advance for the repair of boundary marks, and recoveries are effected by Survey fees in the same way†.

The foregoing is a short account of the way in which City Surveys originated in the Presidency and of the various Acts by which they have been regulated. The remainder of the chapter will be devoted to a general description of the operation incidental to a City Survey and of the rules under which these operations are conducted.

The main objects of a City Survey are two in number, viz.—

(i) The survey of all lands within the site of the area to which the Survey has been extended, including all occupied and unoccupied areas, roads, tanks, etc., with a view to provide a map for administrative purposes.

(ii) An inquiry into the title upon which all land is held within these limits, to determine encroachments upon Government lands and to issue *sanads* in confirmation of title to landholders.

The general course of the operations is as follows:—

#### A—PRELIMINARY.

The Governor in Council has first under section 95, Land, Revenue Code, to issue an order, directing the Survey "of the lands other than those ordinarily used for the purpose of agriculture within the site" of the particular village, town or city.

The determination of what lands are included "within the site" of any particular village, town or city rests, under section 126, with the Collector or a Survey Officer acting under the general or special orders of Government, and under the terms of the section the site may be extended to any limit desired.

#### B—SURVEY.

By section 131, the Survey operations are to be conducted under Chapters VIII and IX of the Land Revenue Code except

\*Government Resolution No. 4605 of 28th May 1894 and No. 11953 of 4th December 1907.

†Government Resolution No. 9789 of 26th October 1910.

that sections 96, 97, 101, 104 and 118 are not to be considered, applicable in towns or cities containing more than 2,000 inhabitants. The general course of the Survey operations is as follows:—

(a) A Main Traverse is first made of the whole area to be surveyed.

(b) The whole area is then divided into smaller blocks, which are surveyed on Minor Traverses.

(c) The measurement is next undertaken of all roads and unoccupied lands, whether open or covered with buildings, within each block separately. The actual amount of measurement work done may vary according to circumstances. It may consist of—

(i) a purely Topographical Survey, which would be merely a record of streets and open spaces, the property of Government and the municipality, but would shew the built-over area in block and not in detail: or

(ii) a Cadastral Survey including, in addition to the record of roads and open spaces, an exterior measurement only of all properties held separately by individuals: or

(iii) a Cadastral Survey comprising, in addition to the above, a detailed interior measurement of all individual properties including that of all separate buildings contained therein.

During the course of the measurement operations the measurers have to prepare the rough draft of the Survey Register by making inquiries into the names of the owners or occupiers of individual properties.

(d) The results of these operations are finally incorporated in the City Survey Maps. The nature of these maps, differs, of course, according to the character of the Survey, but they usually comprise an outline map of the whole area on a small scale and detailed maps for each block on a larger scale.

### C—INQUIRY.

The work of inquiry may be divided into three parts, viz., (i) the actual work of inquiry into title, (ii) the determination of Survey fees and (iii) issue of *sanads*.

#### (i) *The Inquiry into Title.*

This work is to be conducted according to the following

rules prescribed by Government Resolution No. 995, dated 4th February 1910:—

*The duties and procedure of the Survey Settlement Officer  
(called the Inquiry Officer) in City Surveys.*

The operations of a City Survey must be regulated according to the provisions of Chapters VIII and IX (Land Revenue Code, section 131), and in those chapters the section with which the Survey Officer appointed under section 18 of the Land Revenue Code (commonly called the Inquiry Officer) is mainly concerned is section 108 which imposes on the Survey Officer the duty of preparing the Settlement Register.

2. (i) The Settlement Register is to contain a record of lands held free of assessment and of lands subject to assessment with their assessments.

(ii) The policy of Government is to impose no new assessment upon lands within the sites of towns and cities which are found to be authorizedly on occupation free of assessment at the time of the introduction of the City Survey. The legal right to impose assessments upon such lands still exists in cases where no claim to exemption could be established, but the right is not exercised.

(iii) Lands the property of Government, which have been disposed of as building sites before the introduction of the City Survey or are so disposed of after such introduction, are usually assessed under the provisions of Rule 36 (iv) under Bombay Land Revenue Code, section 214.

3. The application of sections 128 and 129 is specifically limited to towns and cities which had been dealt with under the old Act of 1868, and these sections do not apply to any cities surveyed under the provisions of section 131, Land Revenue Code. In a Survey carried out in accordance with the last-named section, the Inquiry Officer cannot legally make any decision under section 129, Land Revenue Code.

4. The Inquiry Officer in a Survey directed under section 95 or section 106 has to inquire whether the person found in occupation is or is not authorizedly in occupation free from the payment of Land Revenue and whether he holds under any grant or lease from Government; and in the case of each person, to record the fact of authorized occupation free from payment of Land Revenue, or the terms of the grant or lease, as the case may be.

5. The rough draft of the City Survey Register is prepared in the field by the Surveyors who are doing the house

measurements, and their work in this respect is checked and tested by the supervising Survey staff. After confirmation by the Inquiry Officer, it becomes the final and approved city Survey Register.

6. For the purpose of such confirmation the Inquiry Officer will test the maps and registers in the field and will give notice to the holders concerned in accordance with the rules to be prescribed for each town or city by the Settlement Commissioner in consultation with the Collector. In carrying out this test the Inquiry Officer should satisfy himself by summary inquiry that—

(a) the name of the owner or registered occupant of each holding within the town site has been correctly recorded ;

(b) the area of the holding has been correctly mapped and recorded ;

(c) entries in accordance with paragraph 4 have been correctly made ; and

(d) all lands which are the property of Government have been properly recorded as such.

It may be added that, under the provisions of section 37, Land Revenue Code, the order of the Inquiry Officer regarding a claim to property made either on behalf of or against Government, promulgated after formal inquiry, of which notice has been given, is final, and a suit to set aside such an order is barred by limitation after one year, either from the date of the order or, if appeals have been made, then from the date of the order passed by the final appellate order as determined by section 204, Land Revenue Code. (*Vide* in this connection as important Government Resolution No. 995, dated 4th February 1910.)

(ii) *The determination of the Survey-fees.*

(a) Under section 132 Survey-fees are assessable only in the case of towns or cities with a population of more than 2,000 inhabitants.

(b) Under the same section the Survey-fee is assessable upon "each building site or any portion thereof held separately." The meaning of the term "building site" is defined in section 3 (9) as "a portion of land held for building purposes, whether any building be actually erected thereupon or not, and includes the open ground or courtyard enclosed by, or adjacent to, any building erected thereupon."

(c) The maximum Survey-fee which may be demanded is fixed by section 132 at Rs. 10. Under the old section the maximum was Rs. 5 and the 12 towns and villages to which a City Survey had been extended were divided by Rule 81 into two classes with maximum rates of Rs. 5 and 3 respectively with sub-rates of Rs. 4, 3, 1-8 and 0-8 in Class I, and of Rs. 2, 1-8 and 0-8 in Class II laid down in Rule 82. But under the new rules as ordered to be introduced by Government Resolution No. 7859, dated 23rd August 1913, Rules 81 and 82 were abolished. The two classes disappear and a maximum of Rs. 10 is alone fixed, the determination of the rate in each particular case being left to the Survey Officer. The method according to which these rates are to be determined is one of "aggregate to detail," for, by Rule 83,

(i) the total amount of Survey-fees payable must be arranged so as to cover the cost of the entire Survey :

(ii) the Survey-fees of individual properties are to be fixed in accordance with "the position, value, rental and area," subject to the maximum of Rs. 10.

(d) The Survey-fees so fixed is to be paid under section 132 within 6 months from the date of a public notice by the Collector after the completion of the whole or any part of the Survey.

### (iii) *The issue of Sanads.*

(a) Under section 133 the holder of a building site is entitled, on payment of the Survey-fee, to receive a *sanad* in the form of Appendix H to the Land Revenue Code, or to the like effect, containing a plan and description of his holding.

(b) In cases where the *sanad* is not applied for at the time of paying the Survey-fee or within 6 months of the issue of the notice under section 132, an extra fee of Re. 1 may be demanded for each such *sanad*.

### *Maintenance of the Survey Records.*

The work of maintaining the records may be divided into two parts, firstly, that of keeping up to date the Survey Records proper by entering in the maps all changes due to such causes as sales of land by the municipality, the acquisition of land, e.g., for set-backs, by the same authority, the erection of new buildings, public or private, and so on; and secondly, the maintenance of the Register of owners of building sites

As has been ordered in the case of the Ahmednagar City Survey (Government Resolution No. 968 of 8th March 1913) this work is usually put in charge of the Mamlatdar of the taluka under the superintendence of the Prant Officer. For the maintenance of—

(a) *the Survey Records* : he is provided with such number of Surveyors and Karkuns as may be necessary, though in a small town such as Ahmednagar one man can usually do the whole of the Survey and clerical work ;

(b) *the Register of owners* : the municipality is directed to send in a monthly statement of the changes in the names of holders in building sites, for, as the Commissioner, Central Division, remarked, "it is important that the record should be as accurate as possible in order that it may eventually constitute a Register of Title."