profits. Since then owing to the rapid spread of cultivation and irrigation and the contemporaneous rise of prices, the profits of the landowners of the district have been increasing by leaps and bounds, their scale of expenditure and standard of comfort have rapidly risen, and we find it now impossible suddenly to raise our assessments even to the half-net assets standard without endangering their prosperity, especially in the case of those peasants, numerous in some parts of the district, who cultivate their own lands and make no distinction between the expenses and the profits of cultivation. As shown in Appendix VII, the final assessment as now fixed will absorb about a seventh of the value of the gross grain produce of the district, (besides which there is a very large income from cattle) or about 78 per cent. of the half-net profits of the landowners, and this is perhaps as high as it is at present safe to go. In some parts of the district the people thought the increase unduly severe and 87 estates appealed to the Commissioner who accepted the appeal and granted some reduction in 38 cases; 18 further appeals were made to the Financial Commissioner, but only one of these was successful, altogether Rs. 4,027 were reduced on appeal.

71. In the Assessment Reports I have compared the revenue rates in Comparison with neigh-bouring districts. detail with those employed by other Settlement Officers in neighbouring districts, and it seems unnecessary to repeat the detailed comparison here. To be of use it must be made circle by circle, and soil by soil. The assessment of Jhang on the south was made about 1877, of Dera Ismail Khan and Bannu on the west about 1875, of Jehlam on the north about 1880, all before export on a large scale to Europe had commenced and before the present high range of prices had been established. They were therefore all founded on lower prices, and generally speaking the rates employed by the Settlement Officers of these districts were distinctly lower than those adopted by me in the adjoining circles of this district. The districts of Gujrát and Gujránwála on the east have been under assessment at the same time as Sháhpur, and the tahsils adjoining this district were assessed after the orders on the Bhera Assessment Report were passed, so that in framing their assessment . proposals the assessing officers took the Bhera rates into consideration and made proposals for assessing their tahsils of Phália and Háfizábad, respectively, at a somewhat similar pitch to Bhera. In the case of Phália the assessment sanctioned was considerably less than that proposed by the Settlement Officer so that its pitch is appreciably lower than the final demand for the Bhera tahsíl will be, unless, as is probable, a more rapid extension of cultivation in Bhera lowers the incidence in that tahsíl. I have not seen the orders on the Háfizabad Assessment Report, but I understand that the riverain of that tahsil has been assessed at a somewhat lower pitch than the opposite Chenáb Circle in Bhera. As regards the comparison with recent assessments in the Punjab, I may be permitted to quote the opinion expressed by the Lieutenant-Governor (Sir Dennis Fitzpatrick) to the effect that, although my assessments in Shahpur are not fairly chargeable with going up nearer to the half-assets estimate than it is safe to do, having regard to the problematical nature of that estimate, they do appear to be somewhat fuller than those of other officers. On the question of safety it is perhaps sufficient to point to the comparison with the incidence of last settlement calculated in wheat, made in the last paragraph, and to the broad facts that notwithstanding a year of excessive drought and another of excessive rainfall, and exceptionally severe calamities of floods, locusts, fever, and cholera the enhanced assessments have been hitherto realised in full, except about 7 per cent. of one year's demand; and that the market value of proprietory rights in the land is about fifty times the new land revenue assessment.

72. In submitting my first Assessment Report I recommended that the Period of settlement assessment of the whole district should be made for a period of ten years only, so that the State might the sooner secure the further enhancement to which it would certainly be entitled. In view however of the large increase taken the orders of Government were that the assessment should be announced for a period not less than 20 years, and this period was accordingly announced to the people throughout the district. The question again came up for discussion in connection with the assessment of the Khusháb tahsíl, and the Government of India agreed with the reasons given by the Punjab

Government for maintaining the period of 20 years as announced, which chiefly were that the enhancement now taken was sufficient and that there was no justification in this instance for putting the people to the expense and harassment of a revision of assessment ten years hence. I trust that this decision will be extended to the whole district, and that no shorter period than the twenty years announced will now be sanctioned. Not that I think the fixing of a shorter period would interfere appreciably with the development of the district or the feeling of security of the people, for the peasantry have full confidence in the moderation of the State's demand-witness the rapid development of cultivation that has been going steadily on while the district was being re-assessed. Nor do I think that, with our thorough knowledge of the district now acquired and put on record, and with our excellent system of crop statistics now in good working order, the people would be put to any appreciable expense or worry by a re-assessment, unaccompanied by a revision of the record. But to shorten the period now would seem to the people of the Sháhpur district like a breach of faith on the part of the Government, than which no greater error of administration is it possible to commit. At the same time there is no reason, except that of theoretical symmetry, for lengthening the period in the case of any circle, and I recommend that for the whole district the period of assessment be fixed for exactly twenty years from the harvest from which it came into force. In that case the settlement will expire as follows :--

Tabsíl.				Assessment circle.	Harvest from which the re-assessment came into force.	Harvest with which the period of settlement will expire.		
Bhera .		•		 	 	Chenáb	Kharif 1889	Rabi 1909.
						Bar and Jehlam	Rabi 1891	Kharíf 1910.
Sháhpur				 	 	Whole tabsil	Kharíf 1892	Rabi 1912.
Khusháb		•••• C*		 · #!	 •••	Plains portion	Rabi 1893	Kharíf 1912.
			r			Hill	Kharíf 1891	Rabi 1911.

I recommend also that re-assessment operations be commenced not later than the year 1908. In this country at all events the share in the increased profits of cultivation, which is the due of the State, is much more likely to fructify in the hands of Government than in the pockets of the people.

Deferred assessments. 73. Care was taken in distributing the assessments to make full allowance for the expenditure of capital on the construction of wells by allowing a reduction of assessment on each new well up to a period of 20 years from the date of its construction, and on each well repaired up to a period of 10 years from the date of repair. Altogether 1,059 wells out of the 6,865 used for irrigation have been granted reductions of this nature, and the total amount of revenue deferred on this account is now (1894) Rs. 15,312, an average of Rs. 14 per well. This sum will gradually be added to the existing revenue demand as the periods of exemption for the different wells expire.

A considerably larger sum has been deferred in order to break the suddenness of the enhancement in many villages, the details for the different assessment circles being as follows :---

Tahsîl. S	Assessment circle.	Number of estates in which revenue deferred.	Amount of revenue deferred.	Term for which deforred.	When realisable.	
		1.4.1.3	Rs.			
(	Chenáb	43	5,655	Five years Not more than five	Kharif 1894. When Government	
Bhera }	Bár	37	5,170	J years.	pleases.	
0	Jehlam	60	14,930	Five years	Rabi 1896.	
Shåhpur	Bár	1	800	Not more than five	When Government	
	Jehlam	36	8,945	J years.	pleases.	
Total district	and the second second	177	35,500	Service and the service of the servi		

As regards the Chenáb Circle the Financial Commissioner has agreed to a suggestion of the Commissioner that before these enhancements are realised the ability of each village to pay the increased revenue should be specially. considered and reported on; and I recommend that the same rule be made to apply to all such cases throughout the district, a comparison being worked out between the statistics on which I assessed the estate and the latest statistics available, especially as regards total cultivated area, average harvested area, number of wells at work, number of cattle, and amount of alienation of land. It should be remembered that the enhancement was not calculated on an estimated improvement of resources to take place after the date of assessment, as was the. case with most of the progressive assessments in former settlements, on the contrary, I announced the full assessment as calculated on the existing resources of the estate, and then granted a temporary reduction solely on the ground that the enhanced revenue, if imposed at once, would give too large and sudden an increase. Should it be found therefore that the resources of one of these estates have not improved since I assessed it, this of itself is no reason for not imposing the enhancement due; the only good reasons for not taking the enhancement would be an actual deterioration in the condition of the estate or evidence that I had overestimated its resources as compared with the other estates of the assessment circle. If for any other reason than these, the enhancement is remitted in whole or in part, the result will be that these estates will be permanently and unfairly assessed at a lighter pitch than their neighbours, which got no such temporary reduction. It is important however that the enhancement should not be introduced after a poor harvest, but deferred until the harvest is at least a fair one. This present rabi harvest is a bumper everywhere, but the Bár and Chenáb circles are just recovering from the effects of the very severe drought and mortality of cattle in 1891-92, and the Jehlam circles from the damage done by the flood of July 1893, and it is not advisable to realise any part of the progressive enhance-ment with this instalment. I think however it will be found, if a comparison of resources be made as above indicated, that none of the estates under deferred assessment has suffered such a deterioration as to justify the remission of any of the amount deferred, and that, should the coming kharif harvest be about average or better, the enhancement may safely be realised with the kharif instalment of 1894 in almost every one of these estates in the district, except those in the Bhera-Jehlam Circle, in which it is not realisable until rabi 1896.

Including the amount deferred on new wells, altogether Rs. 50,812 of the new demand have been postponed for the present, so that the actual present demand (1894) including assigned revenue is Rs. 5,94,052 fixed land revenue, to which should be added Rs. 33,200 as the present estimate of water-advantage revenue, making a total present demand of Rs. 6,27,252, an increase of 46 per cent. over Rs. 4,31,963, the total demand of the last year before revision.

72. During the currency of the settlement period recently expired, a Future enhancements. Very large increase of cultivation had taken place owing to the construction of innundation canals partly at the cost of the State, and the land thus broken up for cultivation had for years escaped payment of any land revenue assessment other than the nominal sum which had been imposed upon it in a state of waste. In order to avoid a similar loss to the State in future, it has been made a condition of this settlement that all land irrigated from canals, whether State or private, shall pay, in addition to the assessment which has now been imposed upon it in its unirrigated aspect, a water-advantage or owner's rate at a uniform rate of eight annas per acre (except on the Chenáb, where the rate is four annas per acre), to be taken only once in the year, and to be remitted in proportion to any remission that may be granted of water-rates (occupier's rate) for failure of crop. This wateradvantage revenue is credited as fluctuating land revenue, and a book credit is given to the Irrigation Department for the share due to State Canals, lambardárs' patwárís' and local rates are also charged on it. ' It is estimated at present as likely to average as follows :---

	Tabsíl.			Assessment circle.						Average income from water-advantage rates.		
	na Sinta Sinta											Rs.
					(	Chenáb						200
Bhera				*	}	Bár	'					1,500
					l	Jehlam		•••				10,000
		1.10			5	Bár				••••		500
Sháhpur				•	·~ {	Jehlam				•••		20,000
Khusháb						Jehlam						1,000
and Factor and		al and		Angel and					Fotal			33,200

The total actual income under this head in 1892-93 was Rs. 39,609, but this year it will be much less owing to the damage done by the great flood of July 1893. It will however rapidly increase as irrigation from State canals is extended under schemes now being worked out.

Another condition of settlement made with a similar object is the following, which applies to the whole district : "All land now recorded and assessed as uncultivated shall, when it becomes irrigated by any canal, be liable to pay, in addition to water-rate and water-advantage rate, an unirrigated land revenue rate equal to the rate sanctioned for the circle on canal-irrigated land in its unirrigated aspect, less any rate that may have been assessed on it as waste land." This rule is not to be acted on in any village where the resulting extra assessment would be less than Rs. 50 per annum. As canal irrigation is likely to extend rapidly, the fixed land revenue roll will gradually increase under the operation of this rule.

75. Impressed as I was with the great leniency of the assessment and Assessment of alienated with the consequent loss of revenue to the State, I land. pointed out in the Sháhpur Tahsíl Assessment Report that, although it would not be safe at present to enhance the demand to a higher pitch as regards lands cultivated by peasant owners, there was no reason why the State should not take its full half net assets demand from lands which had been bought or taken on mortgage as a mere money speculation, and in the great majority of cases by men of the shop-keeping classes I proposed therefore that it be made a condition of the settlement for the whole district that all land, the possession of which has been acquired by the present owner or mortgagee or his representative in interest since the regular settlement, or shall be acquired hereafter, by sale, gift, or mortgage, or otherwise than by inheritance or partition, shall pay an assessment 25 per cent. higher than other similar land in the village, the fact of possession being determined by the alienees being entitled to receive the rent or laudlord's share of the produce, or to eject the cultivating owner or tenant. The orders of Government on the report however held that a question of this sort must be reserved for consideration in connection with the general question of agricultural indebtedness. From the point of view of the Government revenue it may be mentioned that, had the condition been sanctioned for this district, it would have resulted in a further large immediate enhancement of revenue at the expense of the class who are well able to afford it, and without danger to the prosperity of the true peasant class. I have shown in paragraph 26 that 13 per cent. of the land revenue of the district is paid by mortgagees; and at least five per cent. is paid by persons who have acquired land by sale or grant since regular settlement, making a total of 18 per cent. paid by alienees or about Rs. 1,08,000 per annum. If this assessment were increased by 25 per cent. as proposed in the above rule, the immediate enhancement of Government revenue would be Rs. 27,000 per annum, and this would increase with every new alienation of land.

76. The total assessment for each estate having been determined, and Distribution of the as. announced, the next step was to decide how it should be distributed over the holdings composing the estate, so that

each of the landowners in the estate should know for what portion of it he was personally responsible. This is one of the most important parts of a Settlement Collector's duties, for the prosperity of the poorer peasantry and the fairness of the incidence of the assessment depend far more on the internal distribution over holdings than on the amount that may be assessed on the estate as a whole: and if this part of the assessment work were left to subordinates, it would probably be done in too mechanical a manner, and the poorer peasant and the poorer soils would be apt to be relatively overassessed. Accordingly the mode of distribu-tion of the assessment over holdings (bichh) was in every case determined by myself at the time of announcing the assessment, after explaining to the owners. the mode previously in force and asking them how they would wish to distribute the new assessment. They generally gave a somewhat vague answer, such as that, they wished the cháhi rate to be double the báráni rate, or that the hail, maira and bárání rates should stand to each other in the proportion of 3, 2 and 1. I then myself calculated rates which would on the soil areas give approxi-mately the total assessment required, and which would stand to each other approximately in the proportion desired by the owners. But in order to secure simplicity of accounts (a most important object) I did not insist upon the rates bearing any exact proportion to each other, or bringing out the exact assessment. For instance, if the total assessment were Rs. 600, and the owners desired that the cháhí rate should be double the bárání; and I found that a cháhí rate of ten annas per bigha (the local unit of area), and a bárá i rate of five annas per bigha would give less or more than Rs 600, I would raise or lower either rate by half or quarter of an anna to get the proper sum; and if the rates so fixed give one or two rupees less or more than the Rs. 600 required, I did not introduce a more complicated fraction in order to get the exact sum, but ordered that the difference should be made up from, or added to, the malba or common fund of the village. Only in a very few cases was it found necessary to have in the rates any fraction of an anna less than a quarter, and the rates are everywhere so simple that an ordinary peasant can check the calculation of his revenue for himself.

Where I thought the soils should be assessed in different proportions from those desired by the landowners I discussed the matter with them, stating my reasons and suggesting rates for them, and where they differed among themselves I endeavoured to suggest rates which would satisfy their objections and bear a fair proportion to the true value of the soils.

Where the owners expressed a wish to have more distinctions of soil taken into account than were shown in our measurement papers I sent an official to the spot to reclassify the soils according to their wishes, and myself passed orders on any objections made to his classification, in some cases inspecting the land myself for the purpose. For instance, in the Salt Range in some villages, the *hail* was divided into two or three classes and the *maira* into two to meet the wishes of the villagers, and I fixed the rate for each sub-class, after consulting the villagers and the Tahsíldár. In short I myself directly controlled the internal distribution over the holdings in every case.

As regards the assessment of land irrigated from wells, in the Ara circle of the Shahpur tahsil, where the cultivation is almost entirely dependent on wells, and the ownership is by wells and land attached to them, the distribution was generally made by putting a lump sum on each well and its block of land, this sum being distributed over the owners of the well in proportion to their shares in the ownership. In making this distribution, which requires a minute local knowledge, I found the services of the inámdárs verý useful, as they were generally able to suggest a distribution which seemed fair and satisfied the people. In a few other estates, such as Bhera, Shahpur, and Sáhiwál a similar principle was followed, the classification being made by the Tahsildár on lines laid down by me, and objections decided by myself after local inspection.

Elsewhere the distribution on well lands was almost everywhere made in accordance with the mode previously in force and with the wishes of the people, by a rate per *bigha* on the land recorded as *chihi*. This is not an absolutely fair method of distribution, as, notwithstanding the care taken at

measurements and attestation, the area recorded as chahi is not always in proportion to the true capabilities of the well. But it is perhaps as fair as any other attainable method, and it has the important advantage of being approved and understood by the people. When the new assessment on holdings had been made and explained to the owners, only a very few objections were made to the areas recorded, and these were decided after local inspection by an Assistant Collector. In a few cases on the Jehlam the people asked that the wells should be assessed in different classes according to their position and the value of their crops, and this was done for them. But generally speaking, they asked for only one rate on all chahi land, and, although in some villages the difference in quality of chahi is considerable, it seemed better to accede to their wishes than to give rise to disputes and heart-burning by attempting a more elaborate system of distribution. Asland irrigated by canals will pay a water-advantage rate of 8 annas per acre, it was in all cases assessed in the distribution at unirrigated rates. In most estates the villagers expressed the wish that uncultivated land still held in common should be left free of revenue in the distribution, and this was accordingly done in those villages, uncultivated lands owned by individuals being generally charged with a low rate. In some estates in which the uncultivated area is large and the income from it considerable, especially in the Bár, its exemption from assessment in the distribution results in a seemingly high rate on cultivation. At regular settlement in the Bár villages a portion of the assessment was generally charged on the houses, and another on the cattle of the village, but now that rights in the land have become better defined and more valuable, this mode of distribution was no longer desired by the people, and in all cases, in that tract the whole assessment has now been charged on the owners of the land. In the Thal however it is still the general custom to charge a portion of the assessment on the cattle, the usual mode being to charge all the cropped area of the year at the uniform rate of two annas per bigha, except melons, which are in some villages exempted and in others charged one anna per bigha, and the remainder of the revenue and cesses is spread over all the cattle of the village, whether owned by landowners or others, in the following proportion-camel 16, buffalo 8, cow or bullock 4, sheep or goat 1.

The rates used in the internal distribution will be found in the village note-books. All through in fixing the mode of distribution, attention was paid first to the wishes of the revenue-payers, second to the custom of the village, and lastly to what seemed the relative capabilities of the soils. And here too, as in the distribution of assessment over estates, we have certainly, with the fuller and more accurate statistics at our command, spread the total assessment over the land much more fairly than it had previously been distributed.

77. The figures given so far are those for the total land revenue including Revenue assigned and that portion which has been assigned by Government to massigned. private persons. Of the total present assessment (1894) of Rs. 594,052, Rs. 41,145 are assigned in jágír or máfi, and Rs. 8,509 have been conferred as *ináms* or service allowances on leading landowners, so that the total amount at present assigned is Rs 49,654 or 8 per cent. of the present total assessment, and the balance realisable by Government is Rs. 5,44,398, which is the amount entered in the sanctioned Revenue Roll for 1893-94 (for details see Appendix IX). As shown in paragraph 34, this is an increase of 38 per cent over the demand of 1389-90, which may be taken as the last year of regular settlement, besides which there is the new income of Rs. 33,200 approximately from water-advantage rate, the whole of which will be credited to the State, so that the total net annual increase at present to the State due to the revision of assessment is about Rs. 183,000, besides Rs. 50,812 of ° deferred assessment to be hereafter imposed, of which at least Rs. 40,000 will be the share of the State.

# CHAPTER V.

### REVISION OF THE RECORD.

78. When it was decided that the assessment of the Shahpur district should be revised, it was at the same time determined that

there should be a special revision of the records, which had not been very accurate to commence with, and had now become much out of dates One of the first points to be decided in this connection was what unit of area should be adopted. At the regular settlement the linear standard of measurement employed was the double pace (karu or kadam) of 66 inches. This is known and used by the people themselves all over the district, and was therefore adopted as the unit of linear measurement at the recent remeasurements. The measures of area were—

9 square kadams	 =1 marla	=1 English pole.
20 marlás	 =1 kanál	=half a rood. •
8 kanáls	 =1 ghumáo	=1 acre exactly.

But throughout the district it was found that the people themselves used as their unit of measurement the bigha, equal to four kanáls or half an acre exactly, and this bigha was accordingly adopted as the unit of area at the recent resurvey, and all areas in the records of rights and village note-books were entered in bighas. The bigha is divided into four kanals, and to avoid unnecessary elaboration, the mention of marlas or poles was forbidden in all revenue records. In the great unirrigated tracts of the Bár and Thal, no account was taken of fractions of a kanál; elsewhere no account was taken of any fraction less than a quarter of a  $kanál = \frac{1}{3.2}$  of an acre, *i. e.*, any area less than one-eighth of a kanál was omitted and anything from one-eighth to a quarter kanál was reckoned a full quarter : so that the error caused by this rule was nowhere greater than  $\frac{1}{64}$  of an acre, which even on land assessed so high as Rs. 3 per acre means an error of less than an anna on the field. Similarly all through the record all mention of pies in money calculations was forbidden except in special cases, and calculations made only in quarter annas or sometimes in even annas. These two rules in themselves immensely reduced the work of measurement and record without appreciably affecting its accuracy or the interests of a single peasant.

79. The scale of the old maps of regular settlement, so far as they could scale of maps. be said to have a scale, was generally 50 *ladams* to the

inch in the Bhera and Shahpur tahsils, settled by Mr. Gore Ouseley, and 60 or 120 kadams to the inch in Tahsil Khusháb settled by Captain Davies. It was decided that in making remeasurements the scale adopted for the map should be either 30, 60, or 120 kadams to the inch. The scale generally adopted was that of 60 kadams to the inch = 16 inches to the mile; but where the fields were small, the scale of 30 kadams to the inch was adopted, and in the Thal generally, where the fields are large and land of little value, the scale of 120 kadams to the inch was thought sufficient. In a few estates in the Bár, maps were drawn up on the smaller scale, but it was found to be too minute, and the 60 kadam scale was generally followed there also. I am inclined to think that for the fully cultivated estates in the river valleys and the Salt Range, 40 kadams to the inch = 24 inches to the mile would have been a better scale, and I recommend that this point should be considered when new maps . have to be made.

80. It was at first hoped that at least some of the maps of regular settle-Resurvey of entire dis- ment would be found sufficiently correct to be adopted trict ordered as the basis of the revised record, and a careful check of typical maps in different parts of the district was instituted in order to test this point. It was found that nowhere were the old maps correctly drawn to scale, and that in the Bhera and Shahpur tahsils the measurements were very inaccurate and the maps merely a rough sketch indicating the hape and relative position of the fields. After considerable discussion it was agreed that resurvey was necessary throughout the district; and that it should be conducted on the square system in the plains, and by means of the planetable and sight in the hills, in accordance with the rules laid down in the Punjab Mensuration Manual. It was afterwards decided that the whole of the State lands also should be resurveyed. We have accordingly surveyed and mapped anew every acre in the district. Where the measurements were made on the square system, the length of the side of the squares laid out on the ground was everywhere 300 kadams. This distance was often found inconveniently great, and I recommend that in future squares with a base of 200 kadams be generally adopted.

81. The Settlement Establishment began to arrive about April 1887, and their energies were first directed towards attesting mutations

Progress of measurements. in the records so as to bring them up to date and checking the annual record of the year so as to make it a trustworthy basis for the new record of rights. Nearly another year was taken up in teaching the patwárís and the supervising staff the method of measurement by squares, which was new to most of them, and in further correcting the old record, and it was not until about October 1888 that measurements began in earnest. The progress of the resurvey is shown by the following figures :--

Yeat.			1. 1.	at Life		•	Area surveyed in acres.
1887-58		 					136,505
1888-89	· · · · · · ·	 and the					666,783
1889-90		 			····		1,163,466
1890-91		 	· · · · ·			1	535,720
1891-92		 				·	318,197

The survey was made mainly by the patwaris themselves, and seeing that they had to carry on their current work at the same time and that the survey work proper was often interrupted by crop inspections, di-alluvion work, assessment of canal rates, preparation of annual records, census, enumeration of cattle, &c., the progress made in surveying such a large area is satisfactory enough. At an early stage of the operations I pointed out that the number of patwaris in the district was very small in comparison with the work to be done, and obtained permission both to increase the number of patwaris and to employ a number of assistants of the patwaris' class. It would, I think, have been true economy and good policy to allow a larger temporary staff of assistants than I was permitted to employ, as the work would have been done more rapidly without any sacrifice of accuracy and would have cost less to supervise.

82. In 1886 and 1887 the tri-junction points of nearly every village in Comparison with Profes. the district were traversed by the Professional Survey sional traverse Survey. Department, and I was supplied with the traverse data and 'a copy of the skeleton map showing the tri-junction points. When the patwarís' map of a village had been completed the direct distances between each pair of tri-junction pillars were measured on his map and compared with those given in the traverse data. These distances generally agreed within 1 per cent., and where the difference was more than 2 per cent., enquiry usually showed that the actual tri-junction point taken by the professional surveyor was different from that finally decided to be the correct point. Such discrepancies seldom occurred in the older settled parts of the district where the boundaries are fixed and well-known, but are numerous in the Bár and Thal and along the river beds where the boundaries were until the recent survey very uncertain and where in many cases a wrong point had been shown by the people to the professional surveyor as the tri-junction point. Where ascertainable, we have shown on our maps the point taken by the professional surveyor, even where that was not a true tri-junction piont, but in many cases this could not be done, and before the . patwaris' maps can be utilised for the correction of the topographical maps of the Survey of India, it will be necessary to supplement the traverse data by again traversing those points which were not correctly given to the surveyors.

83. A professional revenue survey, showing village boundaries and Comparison with Pro. total areas, had been made about the time of regular ressional Revenue Survey. settlement between 1854 and 1864; and I took the opportunity of comparing the areas of villages as given by that survey with those given by the present measurements. In most cases the difference was less than 2 per cent., and where it was more a comparison of the maps showed that since the professional survey of 35 years ago, the boundary of the estate had been changed. For the whole district the professional survey gives an area of 4,697 square miles, and the patwárís' survey gives 4,737 square miles, a difference of less than 1 per cent. In the case of individual estates the patwárís' measurements of regular settlement often gave a difference of more than 5 per cent. for the total area of the estate as compared with the professional survey of the same period, and the comparison at all events shows that our maps and measurements are much more correct than those of regular settlement.

84. In drawing up the new record of rights we were guided by the Preparation of the re. Punjab Land Revenue Act of 1887 and the Rules thereunder especially Rules 68-86 and 200-205 of the edition

under, especially Rules 68-86 and 200-205 of the edition Briefly the procedure was as follows :- Before commencing the field of 1892. measurement of any village a correct khatauni was drawn up from the previous year's annual record corrected up to date, showing the names of all owners and tenants and the shares of each in each separate holding. This was arranged in accordance with the genealogical tree of the owners which was also brought up As each field was measured, its area, soil and means of irrigation were to date. entered in the khatauni of the holding to which it belonged, a copy of the entry being made at the same time in the copy of the khatauni which was given to each owner and tenant. When the measurements of the estate had been completed, a record of rights (jamabandi) was drawn up by copying the khataunis in proper order, and this was carefully attested by an Assistant Collector at or near the village in presence of all the persons interested, care being taken that every one understood the entries that had been made regarding all fields in which he had an interest. The people, as a rule, aided the patwaris to the best of their ability in measurement and record work and very few complaints were made either by the peasants or the officials. The landowners everywhere express themselves thoroughly satisfied with the accuracy of the measurements and of the new record, and were especially grateful for the rule requiring attestation to take place at the village itself, contrasting the ease with which they got through their share of the work with the delay and worry caused them at regular settlement when the records were attested at tahsil head-quarters. The records now comwhen the records were attested at tahsil head-quarters. piled have been carefully checked both on the field and in the office, and although they are by no means perfect, I believe it will be found that there are few mistakes of any importance or which are likely to injuriously affect any man's interests. They are at all events very much more accurate than those they have superseded, partly because the old record was founded on a much less accurate survey and because it had not kept pace with the rapid development of the district.

The standing record.

85. The papers forming the revised record of rights, or "standing record," of each estate are as follows :--

- (1). A preliminary proceeding showing the authority under which and the Collector by whom it has been prepared, the documents comprised in it, and the date of its commencement and completion.
- (2). The genealogical tree of the landowners of the estate.
- (3). The detailed list of holdings (jamabandi) showing the owners and tenants in order with the fields owned and occupied by each, their numbers on the map, areas and classes. of soil, and the revenue and rent payable on each holding, together with copies of the following statements :--
  - (a) Register showing yearly totals of transfers.
  - (b) Yearly register of area.
  - (c) Yearly revenue account.
  - (d) List of revenue assignments and pensions.
  - (e) Statement of rights in wells.

- (4). The order of the Collector determining the assessment and orders of higher authority, if any, modifying the same; with which is combined.
  - (5). The order of the Collector distributing the assessment over the holdings.
    - (6). Statement of customs respecting rights and liabilities in the estate.
    - (7). The field map, being the original map made on the field.

The register of mutations has in some cases been bound up with the standing record, but where it was bulky has been separately filed. The field books and *khataunis* do not form part of the standing record and have been separately filed.

As the measurements and attestation were completed in different years for different estates, the standing records do not all represent the statistics of the same year throughout the district. Where the *jamabandi* of the year of measurement was finally attested by the Assistant Collector in that year, that *jamabandi* is made the standing record, but where, as often happened, that *jamabandi* was not complete and ready for the Assistant Collector's attestation until the following year, a new *jamabandi* was drawn up, incorporating all the changes which had taken place since measurements (except as regards cultivation by tenants-at-will), and this new *jamabandi* was after final attestation made the standing record. In short the *jamabandi* of the standing record is that of the year in which the final attestation was made by the Assistant Collector.

86. Where the standing record was not completed before the new Revenue payable on each assessment was announced and distributed over holdings, the holding. jamabandi shows only the revenue payable on each holding according to the new distribution. But where it had been completed before the new assessment had been announced, the standing record shows in black ink the revenue due on each holding in the year of attestation, i. e., by the old assess-ment. In such cases, for the sake of completion, we have added in red ink the amount of revenue due on each holding by the new assessment and distribution. In calculating out the assessment on holdings held joint we have divided the total assessment due on the whole holding into the portions due by each sharer in it and entered it opposite his separate holding, so that each landowner may see the total amount of revenue due from him and how much is due from him for each holding in which he owns a share. As regards land held in common by the whole village but cultivated by individual shareholders, each co-sharer ought according to theory to pay a full rent on his cultivation to be shared by all the village owners in proportion to their shares in the village common; but as a matter of fact, it is the almost universal custom in this district for the cosharer cultivating common land to pay only the land revenue and cesses due on that land. We have accordingly calculated the land revenue due on such

cultivation exactly as if it were separately owned property, and entered it as payable by the co-sharer cultivating it. Where the custom was different, we have followed the custom.

87. The rights of irrigation from each well used for that purpose have been stated in detail in the statement of rights in wells

Rights of irrigation. attached to the *jamabandi* of the standing record. Regarding rights of irrigation from canals, both State and private, a separate map and file have been drawn up and attested for each canal, (except the New Sáhiwál Canal now in process of development), but this has not been made part of the standing record of the villages concerned. A very important class of rights of irrigation is found in the villages in the Salt Range and along its base, where the cultivation is almost entirely dependent on the drainage from higher ground or on the torrents from the hills above, and rights in the water are much more important and valuable than rights in the land. At regular settlement Captain Davies carefully recorded these rights, and at the present revision we have followed his example in paying special attention to the correct record of all rights in torrents or in drainage water in this part of the district. In the case of most of the welldefined torrents the water is divided in accordance with traditional shares by erecting long, embankments of stone and earth in the bed of the torrent scon after it debouches from the hills so as to divert the proper share of the whole water of the torrent towards the fields of those entitled to a share. These fields are sometimes situated miles away from the point where the torrent is first divided, and on the way to them the water is divided into smaller and still smaller shares, until in many cases the share in the total volume of the torrent falling to a particular owner is only a very small fraction, and yet is necessary for the irrigation of his field far out in the plain. These rights are of the utmost importance and have been very carefully attested and recorded in the administration paper of each village and also in the list of holdings (*jamabandi*). They are often the cause of feuds and riots, and any attempt to infringe them should be severely punished under the Penal Code. In the case of the smaller torrents generally and of drainage water flowing downwards in no well-defined cliannel, the usual custom is that the owner of the higher field can turn the whole of the water on to his field, and only when he has had enough or his embankment is breached by the accumulation of the water, is his neighbour lower down entitled to irrigation ; and so from terrace to terrace the water passes down the slope until it has all been absorbed. In the list of holdings.

88. The village administration paper had been carefully drawn up at village administration regular settlement, and all we had to do was to bring it up paper. to date in the manner prescribed in Revenue Rule 203, omitting all matters which are now determined by law or rule, and wherever there was a dispute, simply repeating the entry of regular settlement. A general clause was inserted in every administration paper stating that all minerals including kankar, whether known to exist or hereafter found, belong to the State.

89. A complete report on the various cesses realised in the district was submitted with my No. C. 42, dated 20th September 1892,

and has been separately printed. In some 30 estates in the north of the Khusháb tahsíl a special rate of 5 per cent. on the land revenue was imposed by Captain Davies on outsiders who had obtained a proprietary footing in the estate and conferred on a selected headman under the name of hak ála lambardári in addition to his ordinary remuneration of 5 per cent. as headman. By Government's No. 196, dated 8th October 1893, it was held that this is not a cess at the disposal of Government but a *tálukdári* due belonging to the whole proprietary body. The orders accordingly were that unless the proprietary body wished to have a special entry made in the administration paper saying that these *tálukdári* dues are to be made over to a headman to be nominated from time to time by Government, then no entry whatever beyond the entry providing for the levy from the inferior proprietors of the talukdári due should be made. In no case did the proprietors agree to leave this income to one headman to be selected by Government, and it has therefore simply been stated in the administration paper of these estates that the due is leviable from the inferior proprietors (málikán kabza) without stating to whom it is payable. It is to be feared that this vagueness of decision may lead to troublesome litigation in some estates. I have generally advised the proprietors to allow this income to be included in the malba or fund for the common expenses of the As regards the village watchman cess it was held that as it is regulated village. by the Rules under the Punjab Laws Act it is not a matter to be decided in connection with the settlement. Accordingly all mention of the arrangements for the appointment and payment of the village watchman has been cut out of the administration paper and the question left for separate discussion, An early opportunity should be taken of revising the present arrangements which are in many respects unsuitable and out of date.

90. In 1850, shortly after annexation, it was reported that in this district as elsewhere in Northern India a custom prevailed by which the village artisans either made a small payment in money or rendered some service in the line of their own particular occupation

to the proprietors of the village in which they resided. In Sikh times the proceeds of this tax were realised as part of the income of the State; but the British Government relinquished it to the landowners. At regular settlement it was recorded as levied in 393 of the 667 estates in the district, and in almost all those estates it is still in force. It is ordinarily charged on weavers, washermen, butchers, cobblers, carpenters, blacksmiths, potters, silversmiths and barbers, but not on Brahmans, musicians, shopkeepers or sweepers. It is in fact a tax on artisans and is called kamiána from kammi, a worker. Moreover when a man of the artisan class gives up his caste occupation and becomes an agriculturist he is exempted from the tax. The rates charged vary considerably in different villages, but the most common rate is two rupees per annum payable half-yearly by each adult male working at a trade, boys and old men being let off with a lower rate. The total realisations for the whole district amount to about Rs. 11,000 yearly. The tax is generally realized by the village headmen through their private accountant (dharwai) and applied to the payment of the village watchman's salary, or credited to the fund for common village expenses, or in some cases appropriated by the headmen or the landowners of the village. It is in many villages strongly objected to by the artisans who are generally led on by the weavers, and is evidently felt as a galling poll-tax, realised by the landowning class as a mark of superiority from the artisan class. I recommended that the opportunity should be taken to make rules under Section 145 of the Land Revenue Act to recover from the landowners the proceeds of this tax, and apply them to the general good of the village by making them the nucleus of a common village fund, which is badly wanted for sanitation and other purposes. It was however decided that no list of village cesses should be drawn up at present under Section 145 of the Act, and all that we have done is to repeat in the administration paper the entries of regular settlement on the subject and leave things as they are.

91. Malba is the name given to the fund for common expenses of the village, and the malba cess is a cess levied for common

purposes from the revenue-payers in proportion to the land revenue payable by each. At regular settlement in all the papers of villages settled by Mr. Ouseley one uniform condition was recorded to the effect that only the following items should be chargeable to the village, viz., fees on warrants e for realisation of arrears, the patwári's writing materials, cost of feeding indigent travellers, and expenditure incurred by headmen when employed on business connected with the village,-the total expenditure not to exceed 5 per cent. Captain Davies on the other hand entered the malba at a fixed percentage on the assessment of the estate, generally at the following rates, viz., 5 per cent. where the assessment does not exceed Rs. 500; 4 per cent. from Rs. 500 to Rs. 1,000; 3 per cent. from Rs. 1,000 to Rs. 2,000; and 2 per cent. where the assessment exceeds Rs. 2,000. In these estates settled by Captain Davies the practice was for the headmen to realise the percentage fixed at settlement, and spend it pretty much as they liked. Dissatisfaction with the administration of the common fund is frequently expressed, and it is difficult to check the accounts. I recommended that the malba cess should be realised at a uniform rate of 3 per cent. unless for special reasons with the special sanction of the Collector a higher or lower rate be fixed, and together with other common income expended only on common purposes of the village by a committee, generally consisting of the village headmen, acting under the control of the Collector. It was, however, held that this plan would not work and that it was not advisable to interfere with long standing custom, and the previous arrangements were allowed to stand, the former entries regarding malba being repeated, with the addition that the headmen are bound to keep an account of the income and expenses of the common fund with some shopkeeper in the village which shall be open to the inspection of every revenue-payer, and every half-year to explain the accounts of the common fund to the whole body of revenue-payers. The only exception to this action was that in some estates in which the percentage fixed was not in accordance with the general scale, or for other reasons was unsuitable, a different percentage was fixed as the maximum rate to be collected.

92. In 86 villages of this district a sort of octroi tax, called *dharath*, is Other village cesses. levied on all sales of village produce to outsiders, and oh all purchases of outside produce by residents of the village, the most common rates being a quarter of a sér per maund (= 10 annas per cent.) or sales of grain and one paisa per rupee (= Rs. 1-9-0 per cent.) on the value of other articles. It is usual for the headmen to give a contract for the year to some shopkeeper in the village (dharwai) who pays them a sum agreed on for the monopoly, and charges fees at the customary rates on all sales, the sellers being bound to come to him for weighment, and he in return being bound to weigh their goods for them. The income from this source aggregates about Rs. 2,800 per annum and is generally credited to the common fund or spent on such public objects as improving the village well or supplying oil and tobacco to the village, mosque or guest-house. In 57 villages a custom exists by which the landowners realise a tax, varying from Re. 1 to Rs. 7 on each marriage of a daughter of a non-proprietor. It is paid by the bridegroom's father and is called *jhajhri* or sometimes bakri as it is often paid in the form of a goat or a sheep; and is appropriated by the owners of the land on which the bride's father lives or by the landowners on whom he is dependent. I recommended that these two cesses should be formally disapproved by Government and omitted from the list of village cesses to be drawn up under Section 145 of the Act, so that it might not be recoverable by suit in any court; but, as already said, it was decided that no such list of village cesses should be drawn up at present and these customs were simply recorded in the administration paper as they were found to exist.

93. Boundary disputes have given an unusual amount of trouble at this Boundary disputes. Boundary disputes.

aries in many parts of the district. This was especially the case on the rivers and with reference to the waste lands reserved at regular settlement as the property of the State, portions of which were afterwards granted on long leases to individuals, many of whom more or less wilfully encroached on the lands of their neighbours. For the decision of a boundary dispute the first requisite is a correct map, and I made it a general rule that no dispute should be decided until accurate maps had been compiled and drawn to scale for the land on both sides of the disputed boundary. As regards the villages on the rivers the chief trouble was caused by the fact that at regular settlement both the patwaris' maps and the maps of the professional survey only took in the land down to the edge of the river on either side, leaving the bed of the river unmapped. During the years after settlement, the river shifted its bed and the unmapped portion becoming culturable formed the subject of a dispute between the adjoining estates on either side of the river; and a summary decision was given by the Revenue officer of the time, who generally drew a boundary roughly dividing the disputed land between the contending villages, but this boundary was not accurately mapped, and if it was marked out on the ground, the action of the river soon obliterated the marks. At the present resurvey we found a boundary dispute going on between almost every pair of villages on the rivers and no accurate maps to assist us in deciding them. On the Jehlam river, where the boundaries of estates and holdings once fixed are not altered by changes in the deep stream, our endeavour was to lay down over again the boundary which had already been authoritatively decided, and one very important aid to this end, which should also prove very useful in the prevention and decision of future disputes, was attained by requiring each patwári measuring an estate on the river to carry his squares right across the bed and include in his map a portion of the permanent bank with several permanent marks on the other side; so that the boundary now mapped can be laid down in future from either side of the river. To assist in doing this, and also in the ordinary di-alluvion measurements, the sides of a square in each estate on the edge of the permanent bank have been marked on the ground by stone pillars, from which the patwári can start in making his measurements and laying down the bound-aries of fields in the river bed in accordance with his map. Having in this way obtained a correct map laid down from both sides of the river, we had an accurate basis for decision, but it was by no means easy to find out where the boundary laid down by former Revenue authorities was intended to run. Where possession was clear and of long standing and did not differ much from the decided boundary we accepted that as the basis of our decision ; but where, as often happens on the rivers, possession was very shifting and uncertain, we had to do as best we could and lay down a boundary as nearly as could be ascertained according to the decision of former officers, taking great care that the maps on either

side of the river exactly agreed, and that no land was either omitted from, or included in, both maps. It is probable that for some time these disputes may recur after the annual subsidence of the river, but now that the boundary fixed can at any time be laid down with ease and accuracy from either side of the river from the maps now carefully drawn to scale, it is probable that the landowners will soon get to know and accept that boundary, and that these frequent and troublesome disputes, which often lead to rioting and litigation, will become a thing of the past. Where the river separates this district from the districts of Jehlam and Jhang care was taken to obtain the concurrence of the Collectors of those districts in the decision and to have their maps corrected in accordance with the common boundary agreed on.

On the Chenáb the barbarous and inequitable rule still prevails by which the proprietary right in the land changes with changes in the deep stream of the river, so that here it was not possible to lay down a permanent boundary. But on this river also, by arrangement with the Settlement Collector of the opposite district of Gujránwála, we took care that our maps should show accurately the boundary of the year and should agree the one with the other, so that no land was included in, or omitted from, both maps. Here too the preparation of accurate maps, coinciding the one with the other will narrow the area of future disputes and afford a safe basis for their decision, and hasten the time when this barbarous custom shall be abolished and the boundaries between estates finally fixed without regard to the vagaries of the river.

In the Bhera and Shahpur tahsils at regular settlement about 1856, the uncultivated land which was reserved as State property was not measured or mapped by the patwari establishment, and the only maps of this land made at that time were those made by the Professional Revenue Survey Department, drawn to scale and showing the boundaries of the different blocks or *chaks*. Those boundaries were probably never very clearly marked on the ground, but at all events the marks soon disappeared, and nothing was left to show the boundaries of the State lands except these Revenue Survey maps. Not only was this the case with the State lands, but the uncultivated parts of village lands, which often adjoined State lands, were also left unmeasured by the patwaris and here also the only maps available were those of the old Revenue Survey. Theoretically then the Revenue Survey maps were to be adopted as giving the true limits of the State lands.

In course of time as cultivation extended, and more especially where canal irrigation was introduced, the owners of the village lands extended their cultivation up to what they considered their boundary, and in some cases either stopped short of the boundary shown by the Revenue Survey map or crossed it and took possession of land belonging to the State. Again, grants of land were from time to time made by the State from the different blocks or *chaks*, generally in the form of a grant of so many acres. In such cases the Revenue officials working with the small scale Revenue Survey map, endeavoured to lay down the outer boundary of the *chak* in accordance with that map, and to mark out an area equal to that granted on lease. But, as already said, there were no marks left on the ground and their measurements were by no means correct, so that often they failed to mark out the outer boundary correctly, and also failed to mark out a total area exactly corresponding to the amount intended to be granted. Moreover, several of the grantees, more or less knowingly, took advantage of the looseness of the procedure to extend their cultivation beyond their proper boundaries and take possession of land to which they certainly had no right.

Now, for the first time since those Revenue Survey maps were made, a general remeasurement has been undertaken and complete maps drawn accurately to scale. Starting from fixed and identifiable points the old Revenue Survey boundaries were marked out, and maps drawn up showing those boundaries and also the boundaries according to present possession. It was found that almost everywhere possession did not exactly correspond with those boundaries, and in many cases the village owners or the lessees had extended their cultivation beyond their proper boundaries. It was necessary for the completion of the new Revenue records to decide where the boundaries should be taken. It would obviously have been unfair to take present possession as the boundary, for in that case the unscrupulous would have got more than their proper area of land at the expense of the State or of their weaker or more careless neighbours. Moreover, in some cases, the boundary of present possession was doubtful. The Revenue Survey boundary, which was the only true boundary of rights, had to be taken as the basis of the decision. I accordingly laid down the following principles on which the decision should proceed :--

I.—Where the boundary is between village lands and lands held by grantees under long leases, or between lands held by two such grantees—(a) if both parties agree upon a common boundary, that boundary should be adopted for purposes of Revenue Record, (b) where there is a dispute and the boundary is shown on the Revenue Survey map, that map should be followed, and (c) where the boundary is not shown on the revenue survey map, e. g., where it is between two grantees within the same chak, then present possession should be followed.

11.—Where the boundary is between village land or leased land on the one side and land still held by the State on the other, then the Revenue Survey map must be followed, or where there is no boundary shown on the Revenue Survey map, then present possession.

The Revenue records have been completed in accordance with these principles, and as regards State land held by lessees, recommendations have been made in my report on the subject of these grants to compel the lessees to give up possession of the land on which they have encroached and confine themselves within their proper boundaries. Where the boundary is between lands privately owned and possession does not agree with the boundary laid down, it may take some time and some litigation before the question is finally decided and the rights finally settled. Meanwhile we have supplied an accurate map drawn to scale as a basis for the settlement of the dispate, and marked out the boundary on the ground in accordance with that map; and in our Revenue records land held by the residents of one estate, but now found to belong properly to another estate, has been included in the map of the latter estate and entered in its standing record as owned by the owners of that estate and occupied by the residents of the former estate on the footing of tenants-at-will.

As regards land boundaries also, care has been taken to compare our maps with those of neighbouring districts all round, and, in consultation with the Collectors of those districts, to arrange so that the boundaries adopted coincide everywhere. The common boundary agreed upon has been carefully marked out on the ground by permanent pillars built at intervals, and by cutting a clear line through the scrub along the boundary, and here too a considerable advance has been made towards putting a stop to troublesome boundary disputes.

94. Similar trouble was experienced in deciding the boundaries between proprietary holdings within estates, especially in the great Rin rillower which had been for the most much uppelling

Internal boundaries. Bár villages, which had been for the most part uncultivated and very roughly measured and mapped at regular settlement. In many of those estates land held in common at settlement had been afterwards divided between the owners, but the officers making the partition had to guide them only the very inaccurate map of regular settlement, which was often five per cent. or more wide of the truth; the measurements made by the patwaris at partition were even more inaccurate and care was not taken to mark out boundaries on the ground corresponding to those made on paper. Accordingly when we came to make a complete and accurate map we frequently found that the separate owners were in possession of land neither corresponding with their proper shares nor with the boundaries shown on the partition maps. Numerous disputes were pending, and there had been no means of deciding them until the accurate map was made. In one or two cases the owners wisely agreed to have the whole partition done over again, and this was done for them; but where they did not all agree, it was held that we had no power to revise the partition, but must confine ourselves to laying down on the ground the boundaries which had been settled at partition. Where present possession nearly coincided with that boundary we accepted present possession, but where it differed considerably we laid down on the ground and on the map the boundary which had been fixed at partition and entered land held contrary to that boundary as being owned by the person to whom it had been awarded at partition, and occupied as a tenant-at-will by the person in possession. It will possibly require some time and some litigation before these encroaching individuals are induced to give up to its rightful owners the land they have usurped, but our accurate maps and records will be a great help to the weaker proprietors towards recovering from their stronger or more unscrupulous neighbours the land that rightfully belongs to them. Even then, owing to the great inaccuracy of the maps on which the partition was originally made, many owners will be left in proprietary possession of more or less land than they are entitled to under their original shares in the formerly joint holdings. But I do not see how any Court, Civil or Revenue, can cancel the old partition and make a new one, so that this inequality, like many others that have come down from the past, must continue. The matter should however be borne in mind when any land that still remains joint comes to be divided.

95. When settlement operations commenced a number of heavy partition cases were pending, and a large number of owners took

Partitions. advantage of the new measurements to apply for partition of their joint holdings. In order to avoid repetition of the mistakes above described, I made it a rule not to grant partition until the new map of the estate had been completed, so as to give us an accurate basis for the proper division of the land in accordance with the shares. The work of partition has been no small part of our labours during this settlement, as the cases were often complicated and much disputed and involved the partition of very large areas of village common land. During the six years ending 1893, areas aggregating 274,472 acres and paying an aggregate revenue of Rs. 74,360 or about an eighth of the total land revenue of the district, have been divided between the individual owners, the number of new holdings constituted being 18,689. This rapid separation of rights in the land is a marked feature in the progress of the district. It is, generally speaking, a great advantage, as an owner put in separate posses-sion of his share of the land is likely to develop it much faster and cultivate it much better than he did when other shareholders might claim the portion of the joint holding in his possession. It has its drawbacks however, the chief being that it makes alienation easier, and that it leads to enclosure and the exclusion of the non-proprietors from the enjoyment of the undefined but often valuable privileges they exercised over the land when it was held in common.

In the division of joint holdings held in defined shares, generally based upon the rules of inheritance, each owner was given at partition an area of the common land proportioned to his share in the holding. But as regards the land held common by the whole village the rule of partition entered in the administration paper of regular settlement generally was that each shareholder in the estate was entitled to a share in the common land proportioned to the amount of land revenue he paid (*hasb rasad khewat*). This rule, which had to be followed in partitioning such land, requires complicated calculations before the exact fraction to which each owner is entitled can be ascertained; and I have been forced to hold that the quotas of land revenue which regulate the share of each owner in the common land must, in case of dispute, be taken to be those entered in the record of regular settlement when the share of each owner was fixed for all time, and is not liable to be altered by an alteration in the distribution of the revenue due on the separate holdings.

In a considerable number of estates a clause was entered in the administration paper of regular settlement saying that the whole or a defined portion of the common land should not be considered liable to partition, but should always be kept common property, for the grazing of the cattle of the whole community. In some cases, circumstances have so altered, more especially where canal-irrigation has been made available, as to make it highly desirable, in the interests of the village and especially of the landowners, that a portion of this reserved land should be divided and brought under cultivation. But both Revenue and Civil Courts have so far practically held that the clause referred to forbids the owners to divide the land until all interested agree to the partition—an almost impossible condition. In some cases the injury done to the community by this condition, and the obstacle it offers to the development of desirable cultivation, are so serious that unless some other way be found out of the difficulty it may become necessary to cut the knot by legislation. On the other hand, it is so general a practice for energetic and unscrupulous sharers in the common land to take possession of a portion of it and exclude from it their weaker neighbours, that frequent use should be made of the powers conferred by Section 150 of the Land Revenue Act in order to prevent such encroachments.

96. As regards proprietary rights in the land our action was based on Proprietary rights. the entries in the record of regular settlement and was confined to bringing that record up to date by giving effect to the changes which had taken place since owing to inheritance, partition, alienation or judicial decision. The total number of proprietors which at regular settlement was 33,641 was 54,023 in 1893, an increase of 61 per cent., or much the same as the increase in the total population of the district. The number of separate proprietary holdings which was at regular settlement 29,813 had increased in 1885 to 38,714 and in 1893 to 53,569—this great increase being chiefly due to partition and alienation.

In the Thal owing to the small value of the land a peculiar custom exists by which in most estates all residents, whatever their position or antecedents, are recorded as owners of the land they happen to cultivate. At this revision in those estates, by common consent of the whole body of proprietors, all residents cultivating land or paying grazing dues on cattle were admitted to be proprietors in the estate on almost equal terms with those who were entered as proprietors at regular settlement. In many of the Bár estates a similar rule seems to have existed at regular settlement, and almost every cultivator, whatever his caste or position, was then entered as owning the land he cultivated, but now in that circle rights in land have become so valuable that the former owners nowhere agreed to admit new-comers to an equality, and in that circle, as elsewhere throughout the district, only those men have been recorded as owners who derived a title in the ordinary way from the owners of regular settlement.

Each owner, mortgagee, and tenant with right of occupancy in the district has been given an extract of the entries in the standing record regarding his holding, showing the fields it contains with their areas and soils, the nature of his rights, and the land revenue or rent payable by him. By making a more accurate map, by dividing joint holdings and otherwise by defining rights more accurately, our proceedings have so greatly added to the value of proprietary rights in the land that their market price is likely to continue to rise, notwithstanding the fact that the land revenue of the district has been enhanced by more than 50 per cent.

97. As already stated, the number of tenants' holdings has increased from 21,335 at Regular Settlement to 60,537 in 1893. Tenants with rights of occupancy are comparatively few in number,

and hold in 4,315 holdings only 16,526 acres on tenures conferring that right. At attestation their rights were carefully defined and recorded, but no attempt was made to classify them under the different clauses of the Tenancy Act. In the great majority of cases they either pay rent in kind (3,588 acres) or in terms of the revenue rate with or without malikana (12,351 acres), and except in the few cases in which a regular suit for enhancement was brought, no change was made in the rent except that in the latter case the tenant was made responsible for the new revenue due on his land with malikana on it at the old percentage. As in most cases the revenue due and with it the malikana receivable by the landlord have been substantially enhanced, suits for enhancement of the malikana percentage are not likely to be numerous and should be charingly granted.

Of the area held by tenants without rights of occupancy 21,029 acres pay rent in terms of the land revenue with or without  $m\acute{a}lik\acute{a}na$ , and here also the old rent has been recalculated in terms of the new land revenue. This form of rent is chiefly prevalent in the Bár and Thal uplands, and as the value of rights in the land increases, is likely rapidly to make way for rent fixed in kind or in cash without reference to the land revenue. It is a relic of the days when the burden on the land was so heavy that the owners were glad to get any one to share it with them. Of the whole cultivated area of the district 40 per cent., almost entirely held by tenants-at-will, pays rent in kind. As regards such holdings care has been taken to record in the list of holdings and the administration paper the share taken by the landlord of the grain and straw of different crops, the customary deductions from the common heap before division between landlord and tenant and allowances regarding fodder, &c., so as to afford a guide to the ccurts in deciding disputes regarding rent. Some account of these customs will be found in paras. 45 to 47 of this Report, and in the corresponding paragraphs, of the different Assessment Reports. Regarding special crops special rates prevail: for instance, where wheat, bdira and cotton pay half produce as rent, tobacco and china, as requiring more irrigation and care, generally pay two-fifths or one-third.

98. Qwing partly to partition, partly to alienation and partly to increase Number of holdings and in the number of tenants, the number of separate holdingsfields. a "holding" being a parcel of land held, whether in one place cr in different parts of the estate, by the same owner and the same tenant with the same rights—is rapidly increasing. In 1887 the number of such holdings was returned as 111,381, and in 1893 as 138,914. On the other hand the number of "fields" has been reduced by revision operations from 563,913 to 509,678-a "field" or survey number being a parcel of land lying in one place in the occupation of one person or of several persons holding jointly and held under one title. At regular settlement and in the annual papers before revision it was usual to find a field so held divided up into several survey numbers owing to its having been divided by its cultivator into several plots for convenience of cultivation. This cousolidation of survey numbers has perhaps been carried too far especially in the case of large areas attached to wells in the Ara circle, but on the whole it will certainly reduce the patwári's labours and the bulk of his annual records. In the case of large tracts of waste land, the square has generally been adopted as the most convenient survey number. For the whole district the average size of a survey number is about six acres,but of course it is very small in the highly cultivated parts of the district-and the average size of a "holding" is about 22 acres or four survey numbers.

99. The	number of "	estates	" in	the d	istrict	, i. e.,	of area	s fo	r whic	h a
Number of estates.	separate		of	rights	has	been	made,	is	now	as

	N	NUMBER OF ESTATES.						
Tahsil.	Held by private persons.	Held by the State.						
Bhera	 .290	38	328					
Shahpur	 268	48	316					
Chusháb •	 149	66	215					
Total District	 707	152	859					

During the present re-measurements a number of new estates have been constituted, chiefly by making separate estates of separate grants of State land made out of one block and hitherto entered under the heading of that block. As these grants have no connection with each other it is much better that each grant of any considerable size should be made a separate estate. On the other hand, where two estates were held by the same body of owners on the same tenure, they have in a few cases been combined into one estate.

Of the 707 estates owned or held by private persons 49 are owned by the State and held by lessees, 56 are held on a joint *zamindári* tenure, and 602 are

held on the *pattidári* or *bhaiyachára* tenure, that is, the common land is owned on shares either according to fixed fractions or proportioned to the revenue paid by each individual owner.

100. A village note-book or register of statistics is kept up by the patwári for each estate in his circle, and a copy of this is maintained by the tahsíl kánúngo. An English copy has

also been made for each estate in the district, and kept up to date, so that it shows for each of the last eight years the whole of the statistics relating to the soil, crops and revenue administration of the estate. In this English village note-book I have entered an account of the constitution of the village, the character of its soil and its capabilities and resources as compared with the average of the assessment circle in which it has been placed, the reasons for fixing the assessment announced and the mode in which it has been distributed ; in short everything of interest and importance regarding the agricultural history and general characteristics of the estate. These notes will be found useful in appreciating the circumstances of the estate, and more especially as a guide to the suspension and realisation of the land-revenue. I have recommended the appointment of a clerk paid from the Patwári Fund to continue to maintain these important registers in English, and trust that this will be done, and that the Collector will consult them in the course of his district tours and continue to note in them anything that may come to his notice which is of importance to the revenue administration of the village.

101. A record of tribal custom regarding inheritance, marriage, adoption and other matters referred to in Section 5 of the Punjab Laws Act, 1872, has been drawn up after careful attestation by the leading men of all the more important, tribes before the Revenue Assistant Collector and myself; but as this will be published in a separate volume nothing more need be said of it here.

### CHAPTER VI.

#### MISCELLANEOUS.

102. At the time of announcing the assessment of each estate to the assembled villagers I asked them what proportion of the year's demand they wished to pay at the kharif and rabi

respectively, and generally accepted their wishes except where they seemed clearly inconsistent with the proportion of crops ordinarily reaped at each harvest. In the Riverain Circles the proportion of the kharif to the rabi instalment is almost everywhere two-fifths to three-fifths; in the Ara Circle it is generally one-third to two-thirds, in the Bár three-fourths to one-fourth, or half and half; in the Thal the whole revenue is payable in the kharif; in the Mohár the proportion is generally half and half; and in the Hill Circle twofifths to three-fifths. For the whole district the kharif instalment for the current year is Rs, 2,31,698 and the rabi instalment Rs. 3,12,700. The relative proportions of the areas harvested in each estate vary greatly from year to year, but on the whole the proportion of the instalments now fixed is that which will best suit the convenience of the revenue-payers in an average year.

The dates on which the instalments fell due had previously been as follows :--

Kharif instalment	-Throughout the district	Half on 1st December. Half on 1st February.
	Plain portion of the district	{ Half on 15th June. Half on 15th July.
Rabi instalment.		(Half on 15th July.
	Hill Circle only	"Half on 15th August.

I pointed out that the earlier date in each case did not allow sufficient time for the peasants to dispose of their crops, or for the Collector to inspect the villages and decide regarding the suspension of revenue or the realisation of suspended revenue; and that it led to unnecessary complication of accounts both in the tahsil and in the village to have two instalments for each harvest. I accordingly recommended that there should be only one instalment for each harvest and that the dates should be fixed as follows :—

Kharif instalment ... ... Throughout the district,-15th January.

Plain portion of the district,-1st July.

#### (Hill Circle,-15th July.

These dates which were sanctioned should allow ample time for selling the produce and arranging about suspensions. Fluctuations of price at harvest time hitherto seem to show that there is no danger of the general demand for cash to pay the revenue causing prices to fall unduly, and it is to be remembered that ordinarily less than a seventh of the gross produce need be sold to get enough money to pay the revenue. One constantly recurring difficulty in this district is that in the unirrigated tracts, especially in the Bár, Thal and Mohár, it is common for the peasants, especially in dry years, after reaping their rabi crops to leave their villages during the hot months and take their families and cattle to where water and fodder are easier to get, only returning or after the monsoon rains have fallen. In such cases a discretion should be allowed to the Tahsildár of not pressing for payment of the rabi instalment, which in such villages is generally small in amount, until the rains have commenced.

103. In the Assessment Report of the Shahpur Tahsil I pointed out that Assessment of diallo. the existing system of assessing lands affected by the vion. annual rising of the rivers was not sufficiently elastic, and that the plan of using the settlement sailáb rate of each individual estate for assessing new land added to that estate by river action led to inequalities of

Rabi instalment

assessment. After discussion of the subject at a conference of Settlement Officers presided over by the Commissioner, the following rules were sanctioned by Government's No. 184, dated 10th October 1893, for the four districts of the Ráwalpindi Division then under settlement, the rates however being different for the different districts :--

#### Rules for assessment of dialluvion.

- (1). When by river action land assessed as cultivated is carried away or rendered unfit for cultivation, or land assessed as pasture is carried away or rendered unfit for grazing, the assessment charged on it shall be remitted.
- (2). New uncultivated land added by alluvion which is fit for grazing, unassessed land which has by the action of the river become fit for grazing, and assessed cultivated land which has by fiver action ceased to be fit for cultivation but is fit for grazing, shall be ordinarily assessed at the rate of two annas per acre.

#### Exceptions :--

- (a). When the produce is very poor, the assessing officer may for reasons recorded assess at one anna per acre.
- (b). Where the produce is very good or valuable, e.g., near towns, the assessing officer may for reasons recorded assess at four annas per acre.
- (3). Land which was assessed at settlement as cultivated shall continue to pay the revenue at which it was then assessed, unless and until its assessment is reduced for deterioration. Thereafter it shall be treated as if it were new land.
- (4) New cultivated land added by alluvion, land not cultivated at settlement, but since brought under cultivation, and land, cultivated at settlement which has since had its assessment reduced for deterioration and has again become cultivated, shall ordinarily be assessed at the maximum rate stated in rule 9 when growing first class crops, and at half that rate when growing inferior crops.
  - (a) First class crops are :--

Sugarcane.	Wheat.
Turmeric (bajwát).	Vegetables (other than fodder).
Maize.	Tobacco.
Cotton.	

(b) Second class crops are all other crops.

- (5). No assessment shall be imposed on sown crops which are likely to return less than the seed sown, and if the outturn is likely to be very poor, e.g., not more than twice the seed sown, half the rate due under rule 4 shall be imposed for that year.
- (6). Land which under the above rules has been assessed at less than the maximum rate shall in subsequent years be assessed at the maximum rate so soon as the class and character of the crop shall justify such imposition.
- (7). Land which was assessed at settlement as cultivated, or has since been assessed at the full rate, should not ordinarily have its assessment lowered, unless it is found that such land has been injured by a flood or sand deposit, in either of which cases it shall be treated as new land and be dealt with in accordance with the above rules.
- (8). Where the assessing officer finds that any considerable area of land which was assessed at settlement or since at the full sailab rate has, owing to a change in the course of the river or from other causes, become out of reach of the ordinary river flood

and has for that reason ceased to be cultivated as *suiláb* land, he shall submit a full report on the circumstances of the case to the Collector for orders. The Collector shall then, if necessary, distribute the fixed assessment over the existing cultivation, or having, if advisable, suspended the current demand, report the case for sanction to put the whole area under fluctuating assessment or to reduce the fixed assessment of the estate.

(9). The maximum rates, which are founded on the sanctioned circle rates, are as follows :---

River.		Tahsil.	Circle.	Rate per acre.				
	and the second			Rs. A. P.				
Chenáb		Bhera	 Chenáb	 1 2 0	)			
Jehlam		Bhera	 Jehlam	 2 0 0	1			
Jehlam	•	Shahpur	 Jehlam	 1 12 0	)			
Jehlam		Khusháb	 : Jehlam	 1 12 0	1			

The reason why the Shahpur tahsil rate is higher than the sanctioned circle rate of Re. 1-9, is that the latter was kept low to allow for *sailáb* land at a distance from the river which is seldom flooded. With reference to rule 6 I have required the assessing officer every year to place with the file a list of all fields assessed at less than the maximum rate, that attention may be drawn to them.

104. In the Hill Circle of the Khusháb tahsíl there are several land-Assessment of submerged locked basins, the lowest part of which is covered by lakes areas in the Hill Circle. formed by the surplus drainage from the surrounding hills. The area covered by these lakes varies considerably according as the year is wet or dry, and as the water recedes cultivation extends towards the bottom of the hollow, and is driven back again in wet years by the rising of the water. The following figures for the three chief lakes will show the extent of the fluctuations :—

				AREA	SUBMERGED IN ACRI	es.	
Lake.		Е.		At Regular Settle- ment about 1864.	At recent re- measurements about 1890.	In 1893,	
Uchháli	•		 	1,425	1,128	2,550	
Khabakki			 	260	146	676	
Jáhlar			 	44	46	84	

The rainfall of 1892-93 was the heaviest within living memory and the area covered by the lakes in that year is not likely to be exceeded. At the reassessment of 1891 the lakes were perhaps smaller than the normal and cultivation had been extended to their margin over land which has since been submerged. The whole of this cultivation was assessed as cultivated and charged at full cultivated rates in the distribution of assessment over holdings. When the land was submerged by the greatly increased volume of water in 1892-93, I pointed out that where the land is so minutely subdivided as it is in this Salt Range tract, it is impossible to ask the peasants to pay land revenue on their submerged fields, and obtained sanction to the remission of the revenue due on the land then under water, which amounted for the year to Rs. 2,201. For the guidance of the Collector regarding further remissions of the same nature the following rules were sanctioned by Financial Commissioner's No. 1570, dated 1st March 1894:—

- (1) The assessment shall stand on the fixed rent-roll as announced at settlement, relief being given when necessary in the form of remission of fixed land revenue.
- (2) No land which was left unassessed at settlement shall be liable to assessment until the term of settlement expires.
- (3) At the time of the kharif girdáwári every year the patwári will make an extract from his field map showing the limit of the lake as then existing, and will draw up a field register in the form of an extract from his field inspection register showing all fields, assessed at settlement, which have failed to produce a crop owing to the overflow of the lake. These extracts he will correct and bring up to date at the time of the rabi inspection; and he will then draw up from them a register of holdings in the form of the jamabandi showing for each holding the area of land which was assessed at settlement and which has, owing to the overflow of the lake, failed to produce a crop either in the kharif or rabi harvest, with the amount of assessment due on such land.
- (4) After check by an Assistant Collector report will be made in the prescribed form for the remission of the land revenue assessed at settlement on all land which owing to the overflow of the lake has failed to produce a crop either in the kharif or rabi harvest.

105. In the Assessment Report of the Shahpur tahsil I pointed out that Finctuating assessment in the Ara Circle, where the cultivation depends almost on wells in the Ara Circle. entirely on wells, it was advisable to lay down rules which would grant immediate relief when any well fell out of use. I proposed liberal rules founded on those previously in force in eight villages of the circle and on

rules founded on those previously in force in eight villages of the circle and on those in force in the similar tract in the adjoining district of Jhang, and recommended that they should be extended to the whole circle. My proposals were however thought too liberal and likely to diminish to a dangerous extent the incentives to thrift and industry, and the following rules were sanctioned by Government:—

### Rules regarding the assessment of the estates in the Ara Circle.

Any village within the circle may, if it desires it, be brought under the following system of fluctuating assessment, provided the election is made at settlement and is made for the whole term of settlement.

- (1) Whenever, owing to the abandonment of a well, the land attached to it remains uncultivated, the assessment imposed on the well and land shall at once be reduced to the sum given by a rate of half an anna per acre on the whole area of culturable land attached to the well (fixed in even rupees).
- (2) When such a well has been again set to work, or another well made in its place, the assessment charged on it at settlement shall be reimposed either at once or after a period of exemption not exceeding three years as the Collector may order: provided that the three years' exemption shall only be given where the well has been practically renewed.
- (3) The land attached to a well constructed after settlement shall be assessed at a fixed sum to be determined by the Settlement Officer and to be based on rates somewhat lower than the circle well rates, and shall be liable to pay such assessment three years after the construction of the well, provided that any unirrigated rate previously assessed upon the land shall be merged in the well assessment and not levied in addition. An

assessment of the same amount shall ordinarily be levied on land irrigated from an old well repaired, but in this case the period of exemption shall extend for one year only from the date on which the well is brought into use.

But where a new well is constructed, or a well not in use at settlement is repaired and the undertaking is substantially a new one and not a mere substitute for a well abandoned since the settlement was made, the more liberal exemptions granted by the general rules regarding protection certificates should apply subject to the sanction of the Commissioner.

I understand the last clause to mean that the well should be assessed at half rates for 20 or 10 years as the case might be. For the purpose of rule (3) I would fix Rs. 20 as the amount to be assessed on a new well, the average assessment per well for the circle being Rs. 27.

At the time of announcing the assessment I explained these rules carefully to the people, and gave them the choice of accepting them. But so light did they consider the assessment announced and so great is their faith in the future that only two estates, *viz.*, Wala and Rakh Fatahwála, accepted these rules, and the whole of the rest of the circle has been assessed under the ordinary conditions.

106. In the Assessment Reports of the Bhera and Shahpur tahsils the question of canal rates both on State and private Canals was fully discussed. Some account of the canals will be found in paragraphs 15—18 of this report. On the State Canals taking out from the left bank of the river Jehlam the water-rates (or occupier's rates) previously in force were as follows:—

		Rs.	Α.		
Rice	 	 4	0	per acre.	
All other flow irrigation	 	 2	8	,,	
Lift irrigation	 	 16	0	per jhalar.	

6 ......

except on the Macnabbwah and old Sáhiwál Canals (now about to be abandoned in favour of the new Sáhiwál Canal) where the general rate was Re. 1-8 per acre. After full discussion the following rules were sanctioned for all State Canals in the Bhera and Shahpur tahsíls.

Rules for assessment of lands irrigated by State Canals in the Bhera and Shahpur tahsils.

(1) All irrigation from State Canals shall be chargeable with water-rate as follows :--

· ····································			Ra	te p	er ac	re.
Flow irrigation.				Rs.	. A.	
Rice	 			3	. 8,	
All other crops	 			2	8	
Grass lands	 	in.		1	4	
Lift irrigation.						
All crops	 			1	4	

- (2) The assessing officer shall have discretionary power to remit, in whole or in part, the water-rate on lands which have taken water, but on which the crops have failed or been very poor.
- (3) He shall also have discretionary power to remit not more than half the water-rate on land assessed at *châhî* or sailâb rates.
- (4) When the water-rate is remitted in whole or in part, a proportionate remission of the water-advantage rate will be granted.

The third of these rules is founded on the following considerations. In a typical canal village land attached to a well and within reach of ordinary irrigation from it is assessed at Rs. 2 per acre, and land (it may be close by) not irrigable from a well, but from the canal only, is assessed at 8 annas per acre. Suppose both fields to be irrigated from the canal. Hitherto the rule had been that in both cases the full water-rate should be taken; and under that rule the chahi land would pay Rs. 2 fixed land revenue, Rs. 2-8 water-rate and 8 anna

water-advantage rate, making Rs. 5 per acre in all; while the nahri land would pay 8 annas land revenue, Rs. 2-8 water-rate and 8 annas water-advantage rate, making Rs. 3-8 only. It is not unusual for land which has been rightly assessed at settlement as cháhi, to be for some harvest irrigated by the canal only, and its crop for that harvest can fairly pay only a nahri rate ; and it is to meet such cases that rule 3 is intended, viz., that a discretion is allowed of remitting half the canal rates, i. e., half of the Rs 2-8 water-rate and the 8 annas wateradvantage rate, or altogether Re. 1-8, leaving the total assessment on that land for that harvest Rs. 5, minus Re. 1-8, equal to Rs. 3-8, or the same as the total charge on similar pure nahri crops adjoining. It would not, however, be fair . to make this a hard-and-fast rule, for land which can be irrigated both from well and canal generally produces much better crops and gives higher net assets than land irrigable from a canal alone, and should therefore pay a higher total assessment. If the *cháhi* land has been irrigated by both well and canal, and the crop is an excellent one, the assessing officer should not remit any part of the water-rate, as such land can well pay altogether Rs. 5 per acre against Rs. 3-8 paid by the pure *nuhri* land. The owner of the *cháhi* land, if he does not like these terms, need not take canal water but can irrigate his land from his well alone. If, however, his chuhi land benefits from canal-irrigation it should pay a water-rate to the canal, whether or not it is assessed at the chohi rate. On general grounds also it is not good policy to encourage cultivators to use up the canal water available on lands already protected by wells, instead of on lands not so protected, and this can only be discouraged by charging water-rates on water so used. Regarding the application of this rule I have issued the following instructions to assessing officers :--

"When any irrigator objects that his field has been assessed at  $ch\acute{a}hi$  rates, and should therefore be granted a remission of canal rates, the Assistant Collector should decide the objection with regard to the outturn. If the field has in that harvest been irrigated both from the canal and well and the crop is very good, then no remission should be given; if the crop is not better than an ordinary  $ch\acute{a}hi$  crop, then one-fourth of the water-rate and water-advantage rate should be remitted; and if the crop is about equal to that of ordinary canal-irrigated land, then hal! the water-rate and water-advantage rate may be remitted. It should also be remembered that in some villages the  $ch\acute{a}hi$ assessment rate is much below Rs. 2 per acre, and it is not so necessary to grant a remission of canal rates on such lightly assessed  $ch\acute{a}hi$  land. The same principles apply to land assessed at sailáb rates, *i.e.*, the question whether any portion of the canal rates should be remitted on such land depends on the character of the outturn."

On the Corbynwah Canal in the Khusháb tahsíl the same rules apply except that there the sanctioned water-rates are as follows :---

			Per acre.
Flow Irrigation,			Rs. A.
Crops of all kinds	 J		1 8
Grass lands "	 	· · · ·	0 2
Lift Irrigation.			
Crops of all kinds	 		0 12

The soil on this side of the river is very inferior to that on the other side, the grass lands in particular being very poor and much impregnated with salt, and the supply of water is precarious, hence the lower rates fixed.

On private canals from the Jehlam the canal owner generally takes as the price of the water one-fourth of the gross produce of the land irrigated, both grain and straw, after making the usual deductions for village menials. The accounts of the Kálra estate under the Court of Wards show that the average value of this income is about Rs. 2-6 per acre irrigated, or very nearly the same as the flow-rate of Rs. 2-8 per acre on the State Canals. Indeed on State Canals it is common for the cultivator to make over one-fourth of the gross produce to a speculator of the shop-keeping class who in exchange agrees to pay the canal rate of Rs. 2-8 per acre. For lift irrigation the owners of private canals generally charge from Rs. 16 to Rs. 22 on each *jhalar* or Persian wheel erected on the bank of the canal. In some cases the owners of the land through which a private canal passes are entitled to the irrigation of a certain area free inreturn for their having given the land over which the canal passes—a source of frequent dispute and litigation.

On the small private canals from the Chenáb river, the canal owners usually take a water-rate in cash at the rate of Re. 1 or Re. 1-4 per acre, the soil being inferior and the canals less advantageously situated than on the Jhelum side.

107. I have already in paragraph 55 given an account of the water-advantage rate, which corresponds to owner's-rate and is levied on

Water-advantage rate. all land irrigated by canals, whether State or private, at the uniform rate of eight annas per acre on the Jehlam and four annas per acre on the Chenáb Canals; the land revenue on such lands having been fixed and announced at unirrigated rates. On canal-irrigated lands on the Jehlam the average net value of the total divisible produce is about Rs. 10 per acre actually harvested, and after deduction of the Rs. 2-8 paid as water-rate on State Canals, or the fourth of the gross produce paid on private canals, the landlord gets as rent 22 per cent. of this, so that half his rent comes to Re.  $1-1\frac{1}{2}$ per acre actually harvested, or to Re. 1 per acre returned as *nuhri*. The fixed land revenue has been assessed on such lands at from 6 to 8 annas per acre, so that the eight annas per acre fixed as water-advantage rate, which is really fluctuating land revenue, is fairly due from the landlords of canal-irrigated lands, whether those lands pay the water-rate at Rs. 2-8 in cash, or at a fourth of the gross produce. Were the water-advantage rate not taken as a fluctuating land revenue, the fixed land revenue on canal irrigated lands ought to be raised to 12 or 14 annas per acre.

This water-advantage rate is to be realised on the same land only once in the year, although the land may have borne two crops, and it is to be reduced in proportion to any remission of the water-rate granted for poorness of crop or other reason. On grass land and lift irrigation assessed at the half rate of Re. 1-4 per acre only half water-advantage rate or 4 annas per acre should be realised.

108. The question of royalty rate may fitly be disposed of here, although it is not in any sense land revenue. Government had, from

Royalty rate. time to time, announced its intention of realising a portion of the profits of the owners of private canals, as being lord of the waters of the great rivers, and I was instructed to assess this due on all private canal owners. I showed that the net income from the State Canals averaged Re. 1-11 per acre irrigated in the Bhera tahsil and Re. 1-6 in the Shahpur tahsil, and the Kálra accounts proved that on the Kálra Canal the net profits were Rs. 2 per acre, and on the Piranwala Canal Re. 1-7 per acre. I therefore proposed a royalty rate of eight annas per acre irrigated. It was however thought sufficient to charge four annas per acre actually irrigated as royalty to the owners of private canals from the Jehlam, and two annas per acre on the inferior canals from the This rate is charged on all land actually irrigated by private canals, Chenáb. whether the land be owned by the canal owner or not, and is payable by the owners of the canal out of their profits as such, apart altogether from their profits as landlords. It should be remitted for failure of crops in the same way as the water-advantage rate.

The owners of private canals were required to execute an agreement to the following effect :---

We agree for the term of settlement to the following conditions :---

- (1) We agree to pay a fluctuating royalty rate of two annas per <sup>o</sup> bigha (equal to four annas per acre) on all land, whether belonging to ourselves on others, irrigated from our canals.
- (2) So long as the present assessment continues in force, we agree, unless with the special sanction of Government, not to charge for water other persons irrigating their land from our canals more than the present rates, which are: for flow irrigation one-fourth of every kind of produce, including straw and grass

besides 2 sérs per maund of uncleaned cotton and 2 topás per maund of grain as *muhassili*, &c., and for *jhalárs* on the canals belonging to Malik Hákim Khan and Malik Khuda Bakhsh, Rs. 20 per *jhalár*.

- Provided that in special cases, for instance, if the water be applied to uncultivated land or by the fault of the irrigator the water be wasted or the produce be less than it should be, we shall be considered entitled to realize whatever in similar circumstances Government realizes on State Canals.
- (3) We agree to continue, as far as possible, to give water to land at present irrigated from our canals; but our own land shall have a preferential right to water; and we shall be entitled with the sanction of the Deputy Commissioner to stop the supply of water to any land in circumstances under which Government would have stopped the supply of water from a State Canal.

This agreement has been executed by the owners of all private canals except the Chillwála, regarding which a separate report has been made.

109. The rules for the assessment of all canal rates have been made very elastic, and a large discretion has been allowed to the Assessment of canai That discretion should be liberally rates. assessing officer. exercised, as the rates are pretty high as compared with those on inundation canals elsewhere and Government can afford to be lenient on canals which pay, as these do, more than 20 per cent. on their capital cost. That they are not too high is shown by the eagerness with which new canal irrigation is taken up by the people as soon as it is made available. One vexed question that has come up for discussion is that of the assessment of involuntary irrigation, whether owing to the bursting of the canal bank, or the flooding of low land by canal water without any action on the part of the cultivator. On this subject the rule at present in force is that laid down in Secretary to Government's No. 329, dated 23rd March 1881, viz., that where land has been benefited by the accidental bursting of a canal, water-rates may fairly be charged. In applying this rule of late years care has been taken to charge water-rates only on land which has clearly benefited, and on which the crops are good. From their very nature these canals cannot always be kept within bounds, and it is impossible, at all events where the canal passes through low ground, to direct the course of the water so certainly as it is in the case of a large canal passing over comparatively high land. It would be impossible to get the thousands of irrigators on these canals each to send in a separate application for water before the irrigating season, and it would be easy for any cultivator to make a breach in the banks. take water for his fields and then refuse to pay canal rates on the ground that he had not applied for the water. The only possible way of assessing waterrates on these canals is to charge all land that has actually been irrigated and has benefited from the irrigation, whether the cultivator applied for the water or not, and without regard to the question whether or not the irrigation was voluntary.

At the same time it is incumbent on us to improve our canals, so that there may be as little involuntary irrigation as possible. Much has been done lately in this direction by strengthening the banks and providing sufficient channels for the discharge of the water through recognised openings. Still more has been done to remove the grievance by the recently sanctioned closing of the Old Sáhiwál and Macnabbwáh Canals which flowed largely through low ground and often flooded the fields of cultivators who could not prevent the water from flowing over their lands. Further it is proposed to issue general rules to prevent as far as possible the assessment of lowlying land near the heads of the canals which is apt to be irrigated without any voluntary act on the part of the cultivators. These charges will greatly reduce the grievance complained of. It will not, however, be possible to throw the burden of proving voluntary irrigation on the Canal Department, and it will still be necessary to maintain the general rule that land which has benefited from irrigation must pay canal rates.

110. The areas in this district subject to a more or less fluctuating assessment are therefore (1) a narrow strip along the rivers subject to river action and annually assessed under the

di-alluvion rules; (2) the two estates of Wala and Rakh Fatahwala which are the only two estates that accepted the system of fluctuating assessment on wells sanctioned for the Ara Circle; (3) a limited area in the Hill Circle subject to submer-sion by overflow of the lakes; and (4) canal-irrigated lands everywhere as regards the water-advantage rate. In my report on secure and insecure areas I have classed as secure (1) the strip of estates lying along the Chenáb river and benefiting from river floods; (2) the whole of the Jehlam assessment circles in all three tahsils; and (3) the greater part of the Hill Circle in the Salt Range. Past experience has shown that it is only in very exceptional years that estates in these tracts require suspensions, the riverain tracts being protected by wells and by river floods and inundation canals which are fairly certain in their operation, and the Salt. Range estates by their generally sufficient rainfall and comparatively cool climate. None of these tracts however is absolutely secure. An unprecedented flood in the Jehlam last year did so much damage as to render suspensions necessary in a large number of riverain villages. The inundation canals may fail to flow satisfactorily owing to low floods or bad management. The rainfall may fail even in the Sún valley of the Salt Range. But such calamities are quite exceptional and can hardly fail to be noted when they occur.

111. The tracts I have classed as insecure are (1) the Bár and Thal tracts where cultivation and the growth of grass, which

supports the flocks and herds, are dependent almost entirely on a very uncertain rainfall. In these upland tracts the produce is extremely variable from year to year, and although the assessment is light, suspensions will often be advisable in years of drought. (2) The estates in the Chenáb circle distant from the river, and the Ara Circle in tahsil Shahpur. In these two tracts cultivation is largely dependent upon wells and is therefore not so variable as in the highlying Bár and Thal; but here also failure of rainfall means a large contraction of the area sown and the consumption by the well bullocks of a large proportion of the crops grown, so that here too a year of serious drought, especially if protracted over the winter season, often calls for suspensions. The assessment of the Ara Circle is however light. (3) The Mohár circle along the foot of the Salt Range, where the cultivation is entirely dependent on the local rainfall and on the torrents which rush down from the hills after rain. Both rain and torrents are very variable, and as in good years the produce is excellent, the assessment of these estates is pretty high; so that when, as happens after drought, the crops almost entirely fail suspensions are urgently necessary. Indeed I consider that this Mohár tract requires more careful watching than any other tract in the district, and more especially the villages to the north-east of Khusháb whose catchment area is small. (4) The Pail valley in the Salt Range and a few other villages in the Hill Circle, viz., Khúra, Kaleál and Shakarkot, which have a smaller catchment area than their neighbours and are apt to require suspensions in years of drought.

112. In paragraph 104 of my Assessment Report for the Shahpur tahsil Gnide to suspensions of I submitted a scheme for the working of suspensions which I have found very useful as a guide, to suspensions and realisations of suspended revenue during the last four years. It is worked in this way--

1.—In each village note-book I have had entered in red ink the average area cropped during the last four or five harvests, so as to give an idea of what may be considered an average harvest for the village. A fresh average should be struck every time the estate is specially attested.

11.—Every harvest the patwári in his remarks column of the crop abstract notes separately the following matters :—(1) whether the area cropped this harvest is above, below or about average; (2) whether the outturn per acre is above, below or about average; (3) the condition of the grass and cattle; (4) the revenue instalment and its incidence per bigha of cropped area; (5) the amount given by applying fluctuating assessment rates to the area cropped in the

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Secore areas.

present harvest. These fluctuating assessment rates have been calculated in the manner described in paragraph 101 of the Shahpur Tahsíl Assessment Report, so as to bring out on an average of years approximately the same assessment as has been announced as a fixed assessment. They are as follows per acre :--

Tahsi	L. Marine	Ci	rcle.	C	)hál	ni.	N	ahı	ri.	S	tilál	ь.	B	áráv	ni	Na	ilád	ár.	Rar	dár
				Rs	. a.	<u>р.</u>	Rs.	a.	p.	Rs.	a.		Rs	. a.	p.	Rs	. a.	p.	Rs.	a. p
19-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	est (	Chenáb		 1	12	0	0	8	0	1	8	•0	1	0	0				-	
BHERA		Bár		 1	8	•0	6	s	0				1	0	0					
		Jehlam		 2	8	0	0	8	0	2	8	0	1	0	0				10	•
Sederal Salah Kabupatèn Kabu	· 	Bár	1995. (1997) 199 <b></b>	 1	4	0	0	8	0				ı	0	0					
SHAHPUR	{	Ara		 1	4	0	部						ı	10	0				kesi Mart	•
		Jehlam		 2	0	0	0	8	0	2	0	0	1	0	0	•				•
	C	Jehlam		 1	12	0	0	4	0	1	14	0	0	6	0			1	and the second s	
		Thal		 									0	6	0					1.00
KHUSHAB		Mohár		 - Will		1							0	8	0	1	10	0	1	1 0
Carllin Contra The Contra	ł	Hill		 TI	ne K	Che	wat	ra	tes	of	tlte	Es	tate	e.						

III. The Tahsíl Kánúngo draws up at each harvest a list of all the estates in the tahsíl showing the amount in arrear, (if any) the instalment of the harvest and the total revenue due, also the sum given by applying these fluctuating assessment rates to the area cropped in this harvest and the same sum increased by 50 per cent. This statement is placed before the Tahsíldár who compares the total amount due with the fluctuating assessment estimate increased by 50 per cent., and if the latter exceeds the former, there is generally no reason to think suspension necessary, as the rates fixed are generally well below half net asset rates and as a rule the latter figure does not represent so much as three-quarter net assets for the current harvests. Should however the latter figure fall short of the total amount due the Tahsildár is required to report specially regarding that estate as to whether there is not need for suspension.

This system of course furnishes only a rough guide capable of directing attention to cases which call for special enquiry. Where the fluctuating assessment estimate increased by 50 per cent. falls short of the total revenue due a number of other considerations have to be taken into account: (1) the fluctuating assessment estimate for the previous harvest should be compared with the actual realizations for that harvest, for it often happens that when one harvest has been a very good one, a smaller area than usual is sown for the following harvest; or the instalments may not be in exact proportion to the areas harvested; (2) the history of the harvests for the past two or three years should be taken into account; (3) it should be considered whether the estate is or below the average of the circle, and whether its fixed assessment is above above or below circle average; (4) in the Bár and Thal it should be remem-bered that a large proportion of the assessment is charged on the waste land and payable from cattle produce, and the condition of the grass and cattle should be specially taken into account; (5) in estates depending chiefly on wells care should be taken in years of drought to deduct from the areas used for the fluctuating assessment estimate the portion of the crops which has been consumed as fodder by the well bullocks; (6) regard should be had to the range of prices, the character of the outturn, and the general condition of the people. No scheme can be devised which will work automatically or dispense with the necessity of a local inspection and a careful consideration of all the circumstances of the estate, but the scheme above sketched out will be found very

useful in directing attention in the first instance to cases requiring special consideration, and in affording a guide as to the extent to which it is safe to realise revenue under suspension.

As a general rule, when a suspension is granted to an estate it should be either the whole instalment or three-fourths, half or one-fourth of the whole instalment, and the realisation of suspended revenue should be made in similar fractions, which are easily understood by the people. It is generally impossible, except where there is a complete system of fluctuating assessment in force, to go into the circumstances of each holding separately, and any attempt to do so only leads to confusion and heart-burning. The only safe plan, unless in exceptional circumstances, is to treat the estate as a whole and grant each owner the same measure of suspension. Of course, if it comes to a remission of revenue, endeavour should be made to apportion the relief to the needs of the individual owners.

113. As already stated the total amount of assigned revenue is Rs. 49,654 or 8 per cent. of the present total assessment. Of this amount Rs. 8,509 are paid in the service allowances described in the following paragraph, and the sum assigned in ordinary jágír and muáfiis Rs. 41,145. Of this sum again Rs. 34,771 or about five-sixths are held by 220 persons in perpetuity or during pleasure of Government, and the rest is held for life or lives by 79 persons. Each case has been carefully enquired into, the area held compared with the area sanctioned, the assessment of each plot made separately by me, and the register of assignments brought up to date. The principal assignments are as follows :--

- Malik Fatah Sher Khan Tiwána, Khán Bahádur, holds a perpetual jágír in two villages, the present value of which is Rs. 4,753. He also holds a life jágír of the value of Rs. 3,610 for mutiny services.
- (2). 'His brothers and nephews hold perpetual jágírs as follows-Malik Ahmed Khan, Rs. 1,699, Malik Alam Sher Khan, Rs. 2,081, and the sons of Malik Sher Bahádur Khan, Rs. 1,286.
  - (3). Malik Dost Mubammad Khan, son of Khán Bahádur Malik Sher Muhammad Khan, the head of the other branch of the Tiwána clan, holds a perpetual jágír of the present value of Rs. 7,411, and a life jágír in consideration of his father's mutiny services of the value of Rs. 724.
  - (4). The Biloch family of Sahiwál hold a perpetual jágír in five villages of the present value of Rs. 3,372.
  - (5). Sardárs Hari Singh and Gián Singh hold a perpetual jágír in Naushera of the present value of Rs. 4,458.
  - (6). The Mahant of the monastery of Koh Kirána holds a number of small muáfís in 14 villages of the aggregate value of Rs. 1,377, to be held so long as the religious services are performed.

A number of smaller grants are held for the maintenance of institutions or in consideration of mutiny and other services.

1 have recently drawn attention to the manner in which some of the older *jágírs* are being split up among the descendants of the original grantee, and recommended that steps should be taken in the interest of the families concerned and of the country generally to confine the succession to one representative of the family in each generation.

114. At regular settlement certain allowances were given to leading members of the agricultural community in the form of a percentage on the assessment of the estates with which they were connected, to be deducted from the land revenue before payment into the Treasury. In return for these allowances they were expected in a general way to use their influence in their own and neighbouring villages in order to put down crime and aid in the general administration. When I took charge of the district in 1886 I took advantage of the powers given by Revenue Rule 174 define their duties and fix their responsibilities by putting each inámdár in charge of a circle of villages and requiring him to perform all the duties of a zaildár within that circle. I have found the system of great advantage in all branches of the local administration. Now that for every village in the district there is some leading agriculturist living in the neighbourhood who is personally responsible for assisting the officers of every department in carrying out their duties as regards that village, it has become much easier to get things done than it was when there were only the village headmen to apply to. And the eagerness shown not only by the inámdárs themselves, but by candidates for the post among the more influential village headmen, to distinguish themselves by assisting the various officers of Government who come into their neighbourhood, has rendered work of all sorts among the villages much more thorough and satisfactory. The improvement in the criminal administration is perhaps most noticeable, and I ascribe much of the decrease in crime which has undoubtedly taken place since 1886 to the aid given to the police and Magistrates by these inámdárs in the detection and suppression of crime in their respective circles. I therefore recommended that the system should be extended with some modifications, and my proposals were sanctioned. The main features of the system are now as follows:—

> (1). The total amount to be expended on these ináms or service allowances has been fixed for the term of settlement at Rs. 8,500, or about 1<sup>1</sup>/<sub>4</sub> per cent. on the total final assessment of the district, including assigned revenue and water-advantage rate. (A temporary excess of Rs. 9 has been sanctioned in order to avoid reducing the previous emoluments of three of the inámdárs, and this will lapse on their promotion, death or dismissal.)

in the second	TAHSIL	BHERA.	TARSIL S	HAHPUR.	TAHSIL K	HUSHAB.	TOTAL D	ISTRICT.
Annual value of inám.	Number of ináms.	Total value.	Number of ináms.	Total value.	Number of ináms.	Total value.	Number of inams.	Total value.
		Rs.		- Rs.	i davi	Rs.		Rs.
Rupees 200 .	. 4	800	3	600	2	400	9	1,800
.,, 150	. 6	900	6	900	5	750	17	2,550
., 100 .	11	1,100	9	900	14	1,400	34	3,400
" <b>•</b> , 50 .	4	200	6	300	5	250	15	750
Total .	25	3,000	24	2,700	26	.2,800	75	8,500

(2). The total sum of Rs. 8,500 has been distributed as follows :--

- (3). The inámdárs have been graded and each man receives the allowance of his grade in the form of a deduction from the land revenue of some one estate in his circle, usually one in which he is himself a headman. (His remuneration no longer varies with variations in the land revenue assessment of his villages.)
- (4). The rules applicable to the appointment and dismissal of inámdárs are those contained in Revenue Rules 372 to 174.
- (5). An inámdár may be reduced in grade for gross neglect of duty with the sanction of the Commissioner.

- (6). On a vacancy occurring in any grade, an inámdár of a lower grade may be promoted to that vacancy, the successor to the *inám* of the vacant circle being given an allowance of a lower grade, each inámdár of course continuing to draw his *inám* from the revenue of a village in his circle, and the total number of *ináms* of each grade in each tahsíl not being exceeded.
- (7). On first appointment no inámdár is to be placed above the Rs. 100 grade without the Commissioner's sanction.
- (8). Inámdárs' circles are not to be altered without the Commissioner's sanction.

I have selected and graded the 75 inámdárs, and my selections have been sanctioned by the Financial Commissioner. Before making them I drew up an account of each respectable land-owning family in the district, and of its prominent members, the position they hold in their neighbourhood and the services performed by them in aid of the local administration, the motto of the system being "*Khidmat se izzat.*" I declined to grant any of these allowances to wealthy landowners or to men enjoying valuable assignments of land revenue on the ground that these *ináms* were meant for men who enjoyed no other privileges (except those of village headmen) and who would appreciate the money value of the allowance as well as the honour. I selected and graded the men chiefly with reference to their local influence and usefulness, but I also took care to spread the *ináms* over the district, so that no locality should be without its inámdárs. This consideration made it necessary in some cases to pass over deserving men in villages already possessing an inámdár in favour of less worthy men in parts of the district hitherto unrepresented. For instance some of the inámdárs in the Bhera tabsíl are distinctly inferior in character and merit to some unsuccessful applicants in the Khusháb tahsíl, who had to be denied *ináms*, because the number for that tahsíl is limited.

The district has been divided into circles, the boundaries of which coincide as far as possible with those of the patwárís' circles, and each of these circles has been placed in charge of an inámdár, who has been required to perform within it all the duties of a zaildár under the Revenue Rules. These circles include as far as possible villages having a connection with each other or with the inamdar, but in some cases the connection is little more than that of neighbourhood, for this district is not so much held by well-defined tribes as some others. I recommend that for some time to come sanction be readily given to an alteration of the boundaries of these circles for good reason shown; for instance, if on the death of an inámdár no fit successor be found within the circle, I would give the mam elsewhere, and divide the circle among the neighbouring inámdárs. Nor should it be considered necessary that every inámdár should have a circle of his own; more especially the men holding allowances of the lowest grade might be left without any definite circle of villages to assist the inamdar in whose circle they live. On the other hand I have excluded estates belonging to wealthy landowners from the circles of the ordinary Inámdárs, and required those landowners to perform the duties of a zaildár in their own estates, but without remuneration. Each inámdár will be given a sanad specifying his grade, his circle of villages and his duties therein, and a register of inamdars will be drawn up in which from time to time notes should be recorded regarding the conduct and qualifications of each inámdár and candidate for the post. These appointments are highly prized and cost the Government a large sum of money annually. No hesitation should be shown in calling upon the inámdárs to perform the duties imposed upon them by the rules and in punishing neglect by reduction or dismissal. If properly made use of they will be found a most important aid in the local administration, and a valuable . link between the Government and the people.

115. At regular settlement, especially in the Khusháb tahsíl settled by Captain Davies, a systematic plan was carried out for reducing the number of village headmen, which had in the

summary settlements been allowed to increase with hardly any check, to a reasonable figure, so that they might form a class possessed of some weight

and authority in the country. The opportunity of the present revision was taken by large numbers of the men who were then brought under reduction or their representatives to push their claims to re-instatement, and several hundreds of applications from such men and from new claimants demanding an increase in the number of headmen were presented. Very few of these were accepted, as it is undoubtedly an advantage to the administration to have the power, influence and responsibility of the village headmen confined to as few hands as Where the number was increased it was on the ground that some possible. well-marked division of the village landowners had been hitherto unrepresented, and was important enough to deserve a separate headman of its own, I also appointed headmen in a number of new estates where none had hitherto been appointed. On the other hand in some villages the number of headmen had not been reduced at regular settlement and was decidedly larger than the circumstances of the village required. In such cases I have noted in the Village Note-book that when a vacancy occurs the opportunity should be taken to obtain sanction to a reduction in the number; and in a few cases in which the desired vacancy has occurred during the last seven years the Financial Commissioner's sanction was obtained to reduce the number by abolishing the vacant post. I recommend that whenever a vacancy occurs in any estate in which there are more than three headmen, or more than one headman to every Rs. 500 of revenue, the Collector should consult the Village Note-book and consider whether it is not desirable to abolish the vacant post. Such cases will, however, be few, for the total number of headmen in the district is now less than 1,500, and averages about two to each estate, and about one to every Rs. 400 of land revenue. The average income of a headman from fees on land revenue, water-advantage rate and water-rates is about Rs. 23 per annum. The question of increase or reduction of headmen should not be confined to the period of revision of assessment, but should be considered whenever a vacancy occurs, although of course no change in existing arrangements should be proposed without good reason.

116. The great increase in cultivation and irrigation has necessitated Patwáris a considerable increase in the number of the patwáris; and the increase in the assessment has máde it possible to raise their number and rates of pay without increasing the rate of patwári cess. At regular settlement the patwári was paid by the proceeds of the cess in the estates of his circle, and the rate varied from circle to circle from 3 to 64 per cent. But for the last ten years the income from the cess has been funded and the patwáris placed in grades and paid from the general Patwári Fund; so that there is now no reason for having various rates for the patwárí cess. It has accordingly been sanctioned at 4 per cent. on the land revenue and water-advantage rate throughout the district. The income of the Patwári Fund is estimated as follows :—

Source.	Amount.	Income at 4 per cent.
	Rs.	Rs.
Fixed land revenue	 5,94,052	23,762
Water-advantage rate	 33,200	1,328
Leases of State lands	 £5,000	2,600
Total	 6,92,252	27,690

but this income is likely to increase as the deferred assessments fall due and canal irrigation extends, so that it will probably rise to about Rs. 30,000 during the next five years.

Previous to the commencement of revision operations the total number of patwári circles was 142 and the number of patwáris and assistants was 145. Shortly after operations commenced I pointed out that this number was totally inadequate and obtained sanction to increase the number of circles to 157 and the number of men to 162; and the arrangements have now again been revised, and the total number of circles raised to 183, and of men employed to 198. The sanctioned grades of patwaris are as follows :--

and a far fare	lector de la	Number of	patwárís.		Rate of	Total	Total ·
a itair	Bhera.	Sháhpur.	Khusháb.	Total.	pay per mensem. Rs.	cost per mensem. Rs.	annual cost. Rs.
ialinger Inini Inini	18 26 26	12 24 24	12 23 23	37 73 73	$\begin{array}{c} 15\\12\\10\end{array}$	555 876 730	Ausgi alto paie apecta
Total	65	60	58	183	an a	2,161	25,932

The 15 assistants will reteive pay at the rate of Rs. 7 per mensem each, a total cost of Rs. 1,260 per annum. They will not be attached to particular circles, but will be employed, 6 in the Bhera tahsíl, 5 in Shahpur, and 4 in Khusháb, under the orders of the Tahsíldár, who will depute them to assist any patwári whose work is unusually heavy, and who will find in them trained men ready to take up the work of any circle that falls vacant. The total cost of the patwári establishment will therefore not exceed Rs. 27,192 per annum.

It has also been arranged that the cost of patwárís' stationery and other contingencies, which used formerly to be realised from the land-owners by the patwári, shall hereafter be defrayed from the Patwári Fund. If this expenditure be estimated at Rs. 1,308, the maximum total annual expenditure from the fund will be Rs. 28,500, but there are certain to be savings, and as already said the income of the fund will shortly increase to Rs. 30,000 per annum. Meanwhile the balance at the credit of the fund is Rs. 24,077, so that the fund is more than solvent. I have proposed that a portion of this large balance should be expended in providing official residences for patwárís, but this question has not yet been decided.

The patwárís' circles throughout the district have now been reconstituted in accordance with the above arrangements, the distribution being made on two main principles, (1) that the work of all kinds done by the patwárís, including di-alluvion and assessment of canal rates, shall be as nearly as possible equal for each circle, and (2) that the boundaries of former circles should not be altered without good reason, so as not to lose the advantage of the existing patwári's knowledge of his villages.

The new patwárís and assistants have been appointed from among the accepted candidates for the post of patwári, and are all passed and qualified men. All but 35 are residents of this district and almost all have actually assisted in the remeasurement work of the present revision, so that they are well acquainted with survey work and with the duties of a patwári. Of the patwáris formerly appointed a considerable number of old and inefficient men have been weeded out in the course of settlement operations and the remainder have all been thoroughly trained in their duties. Almost every man has had his pay raised under recent arrangements, and the rates of pay are now liberal. Strict performance of the patwárís' duties should now be required, and especially no excuse should be received for the patwári's not residing within his circle. There is no lack of candidates for the post, and there are 37 passed and qualified candidates on the register. I have made it a rule not to accept any candidate unless he belonged to the peasant class, or was a near relation of a patwári or kánúngo, or had passed the Middle School Examination; and I recommend that this rule be adhered to in future. Of the 183 patwárís, 20 have passed the Middle School Examination; and 17 belong to the agricultural class. But altogether 137 are Hindús and no fewer than 43 belong to Bhera town.

117. The existing supervising staff consists of the District kánúngo, four office kánúngos, and seven field kánúngos. I have recommended that the number of field kánúngos be increased to nine, three for each tahsíl, but sanction has not yet been received. The kánúngos are all passed and qualified men who have worked as kánúngos in settlement operations, and are fully acquainted with their duties; they are, with one or two exceptions, good men. The record work is well up to date, there being only 935 mutations unattested in October 1893, and with the largely increased staff of fully qualified and experienced patwarís and kánúngos there should be no difficulty in keeping the system of record in good working order.

118. The cesses realised on the land revenue and water-advantage rate are now as follows throughout the district-lambardári 5 Cesses.

per cent., patwári 4 per cent., local rate Rs. 10-6-8 per cent., total Rs. 19-6-8 per cent.—an increase of about 8 per cent. since regular settlement when the local rates amounted to only 2 per cent. on the land revenue. In calculating out the cesses on individual holdings the local rate was calculated at  $1\frac{2}{3}$  anna per rupee of land revenue, and the village officer's cess, which includes the lambardári and patwári dues, at  $1\frac{1}{2}$  anna per rupee, the slight increase this gives over 9 per cent. being credited to the village common fund.

. Ce	185.	(gertange 2)		Percentag revenue	e on total land of the district.
Local rate Lambardári Patwári Watchman, &c., (say) Malba	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	· … · …	  Total		5 0 0 4 0 0 2 9 4 3 0 0

and as the new land revenue does not exceed four-fifths of a full half net assets assessment, *i. e.*, 40 per cent. of the total net profits of the landowners, the cesses at 25 per cent. of the land revenue equal about 10 per cent. of the total net profits, and the total demand of land revenue and cesses of all kinds does not exceed the total value of the half net profits, leaving the other half to the landowners of the district.

119. Of the total area of the district 823,048 acres, or more than a fourth, is recorded as the property of the State. Of this

area again 51,106 acres have been granted at various times to 102 lessees on long lease for cultivation and the remaining 771,942 acres are managed by the Collector with the aid, as regards portions of it, of the Forest Officer. Some 4,000 acres of the latter area are granted out annually for cultivation and the right of taking grass and sajji in the remaining area is annually leased to contractors generally selected from among the leading peasants of the surrounding villages. The income of all kinds from State lands shortly after regular settlement was about Rs. 23,000. For the last five years it has been as follows :—

	Long leases	Annual	GRAZING LEA	ASES ON AREA		a series and	invelger"
YEAR		cultivating leases.	Under Forest De- partment.	Under Deputy Com- missioner.	Sajji leases.	Other in- come.	Total Income.
1888-89 1889-90 1890-91 1891-92 1892-93	 Rs. 16,460 15,800 16,099 16,573 17,921	Rs. 6,132 5,412 5,540 3,403 6,587	Rs. 34,057 36,032 34,530 21,051 28,110	Rs. 18,815 19,562 21,176 16,152 25,516	Rs. 10,220 10,273 10,217 5,407 7,046	$\substack{\substack{8,141\\4,208\\3,568\\10,366\\225}$	Rs. 93,82? 91,287 91,130 72,955 85,405
Average	 16,571	5,415	30,756	20,244	8,633	5,301	86,920

The sudden diminution of income in 1891-92 was due to the severe drought of that year which caused a great mortality among the cattle. For ordinary years the income exceeds' Rs. 90,000, and this figure will probably be again attained for the current year. The whole of this area, excluding that granted on long lease, is now being put under Forest settlement and will form the subject of a separate report.

120. As already said, 51,106 acres of land owned by the State are held on long lease by 102 lessees. Those grants of which the

term of lease had expired have now been re-assessed, and their total assessment, which is included in the total of land revenue for the district, is now Rs. 16,772 plus Rs 1,860 imposed as málikána to mark that the proprietary right in the land still belongs to the State. I have recently submitted a separate report on these grants dealing with each case separately. Briefly I have recommended that peasant grantees should be given an inalienable occupancy right in the land, the proprietary right remaining with the State ; and that the holders of large areas should be given the proprietary right in their grants on favourable terms. Orders on this report however have not yet been passed. The question is an important one, as the proprietary right in this land is now worth about fifteen lakhs of rupees.

Regarding future grants of State land I have pointed out that the history of these leases shows that unless great care is exercised very valuable rights are apt to be alienated, more or less unconsciously, for much less than their real value, and that the interests of the surrounding population are apt to be sacrificed to those of individual grantees. To prevent similar errors in future I have recommended that the following rules be laid down regarding future grants of land in this district, in addition to those prescribed as general rules for the Punjab :--

#### Rules for grants of land in the Shahpur District.

- (1). No grant to be made on any terms west of the Jhelum.
- (2). No grant to be made of land required for fuel and fodder reserves, especially of land situated on the main road, or near the Civil Station, or of Rakhs Miáni, Bhera, Sáhnú or Pindi Jaurí.
- (3). No grant to be made until it has been considered whether the land should not be kept as a fuel and fodder reserve.
- (4). No grant to be made unless as a special favour, until the Canal Officer has certified that he can immediately supply water enough to irrigate at least half the area.

(5). No grant to be made without the special sanction of Government.

The need, and the advantage, of fuel and fodder reserves may be gathered from the fact that the right of grazing on 181 acres of land near the Civil Station sold this year for Rs. 1,051, an average of nearly Rs. 6 per acre, besides which the lessees pay Re. 1-8-0 per acre for water-rate and water-advantage rate.; and the timber standing on this area is worth probably Rs. 5,000.

121. In their forecast made in 1886 the Financial Commissioners esti-Cost and duration of mated that settlement operations would be completed in five methement operations. years at a cost of 23 lakhs of rupees which would be repaid by the increase of assessment in less than two years. The actual cost of the settlement operations has been Rs. 2,91,786, but from this should be deducted Rs. 10,463 expended on the measurement and demarcation of State lands and properly chargeable to the Forest settlement, and Rs. 9,055 which will be realised from revenue assignees as their share of the cost of settlement, so that the . actual cost to Government of the revision of assessment and record has been Rs. 2,72,268 or almost exactly the estimated amount. On the other hand, as stated in para. 77, the immediate net increase to the State of land revenue and water-advantage rate due to the revision of assessment is about Rs. 1,83,000 per annum, so that the total cost of settlement operations is more than covered by one-and-a-half year's increase of revenue.

The Settlement establishment began to arrive in the district in April 1887 and the last men left the district in April 1894, so that settlement operations may be said to have lasted for seven years instead of the estimated five, but for at least a year of that time the full Settlement establishment was not at work. The length of the operations was greatly due to the fact that much of the work was carried out by the ordinary District staff of patwaris, kanungos, Tahsildars and Revenue Assistants, and that I had to carry on the whole administration of the district at the same time that I supervised the work of settlement. Had a separate officer been, as is usual, placed in charge of the settlement, it would probably have been finished in a shorter time and at less cost, and the increase of assessment would probably have been secured earlier by the State; and on the whole I think it would have been better to appoint a separate Settlement Officer, especially as an entire resurvey of the district had to be carried out. However this would have caused a greater breach in the continuity of the revenue administration of the district than has actually occurred, and in judging of the length of the operations let it be remembered that we have not only carried on the ordinary work of the district and reassessed with great advantage to the State every estate and every holding, but that we have carefully remeasured every acre and re-attested every right throughout the district to the great advantage of the agricultural community.

122. The probable revenue realisable by the State for the next five years may be roughly estimated as follows, though it cannot be said with certainty when the great bulk of the deferred assessment will be first realised. The basis of the calculation is the land revenue roll for the year 1893-94, which amounts to Rs. 5,44,398.---,

ras fills	Finan	cial ye	ar.	Land revenue proper.	Water-advantage rates.		Total.
				Rs.	Rs.		Rs.
1894-95				 5,50,000	25,000	1.0	5,75,000
1895-96				 5,65,000	35,000		6,00,000
1896-97				 5,80,000	40,000	1.1.1	6,20,000
1897-98				 5,82,000	43,000		6,25,000
1898-99				 5,85,000	45,000		6,30,000

The water-advantage income this year will be less than the average owing to the great damage done by the flood of July 1893; but it is certain to increase rapidly, as canal irrigation is being rapidly extended. When it is remembered that the land revenue roll for the last year before revision was Rs. 3,94,596 and that but for the revision of settlement it would not now have exceeded four lakhs, the advantage to the State from the settlement operations will be appreciated.

123. I held charge both of the District and of the Settlement from October 1886 to November 1893, with the exception of periods of leave

aggregating about a year. In November 1893 I was relieved of the office of Deputy Commissioner by Mr. Bridges and left at leisure to wind up the work of the Revenue settlement and commence that of the Forest Settlement. If the revision of the assessment and record has been satisfactorily completed, this is owing to the aid rendered by an exceptionally good staff of subordinate officers. More especially credit is due to Khán Bahádur Mián Ghulám Faríd Khan who has all through held charge under me of the settlement operations as Revenue Extra Assistant Commissioner. His great experience in revenue and settlement work, his knowledge of detail, his industry, fairness and common sense, have made him a most intelligent and trustworthy adviser on all points that came up for decision, and the supervision of the details of survey and record work has all through been chiefly in his hands. The people have the greatest confidence in his judgment and impartiality, and I have no hesitation in saying that he has proved himself one of the best Revenue officers in the Province.

Lála Ganga Rám has all through held charge of the settlement operations of the Khusháb tahsíl, and has acquitted himself remarkably well. He is an indefatigable worker, and his painstaking enquiries are always characterised by thoroughness and intelligence. I was especially struck by the ability and care with which he attested the complicated rights to irrigation in the Salt Range and classed the soils for the purpose of internal distribution of revenue, delicate tasks which he accomplished in such a manner as to satisfy even the litigious Awán landholders. He has now been put in charge of the Khusháb tahsíl and has been accepted as a candidate for the post of Extra Assistant Commissioner. He will make an excellent Revenue officer.

Chaudhri Alláh Bakhsh has all through held charge as Tahsíldár both of the ordinary and settlement work of the Bhera tahsíl—a heavy task which he has fulfilled with credit. His thorough knowledge of his tahsíl and the confidence with which he has inspired the people made him a useful and trustworthy superintendent of the record work and adviser as to the assessment and collection of the revenue. He has been accepted as a candidate for the post of Extra Assistant Commissioner, and will make an efficient Revenue officer.

Pandit Rám Naráin, Tahsíldár of Shahpur, exercised a general supervision over the settlement work of that tahsíl in addition to his duties as Tahsíldár, and his settlement experience made him a useful superintendent. He also himself performed a considerable share of attestation work and aided me greatly with his local knowledge in distributing the assessment.

Bakhshi Ghani Shám Dás, as Settlement Tahsíldár, performed the heaviest portion of the settlement work in the Shahpur tahsíl with great energy and success. He is thoroughly well acquainted with settlement procedure, and will make a very efficient Tahsíldár.

Bábu Muzaffar Ali was at first Settlement Clerk in my office, but was afterwards sent into the field, where he did survey work with his own hand, and after learning the work of the various grades was promoted to be Settlement Tahsíldár of the Bhera tahsíl, where he displayed great industry and judgment in completing the work of attestation. He also will make an efficient Tahsíldár.

Among the Deputy Superintendents Maya Dás and Desráj and among the Náib-Tahsíldárs Táj Dín, Chuni Lál and Charan Dás did a fair share of settlement work as Assistant Collectors and supervised their subordinates efficiently and well.

Munshi Mahbúb Alam, Settlement Clerk, has been of the greatest assisance to me in office work and especially in all the details of assessment calcultions. He is an excellent clerk and will fill most efficiently the post of District Kánúngo, to which he has been appointed. But he is more than an office hand and is well acquainted with field work and well fitted for the post of Tahsíldár for which I recommend that he be accepted as a candidate.

I may mention that in the course of settlement operations we have trained in settlement work several Assistant Commissioners, Náib-Tahsíldárs, candidates for that post and kánúngos sent to us from other districts for training. In all these cases I required the pupil to begin by working as a patwári, mapping a village with his own hands, and drawing up all the settlement and annual papers. He was then promoted to the duties of a kánúngo and afterwards of an Assistant Collector, so as to make him familiar with all stages of settlement work.

J. WILSON,

Collector.

27th April 1894.

Appendix I.-Average market value of land per acre in rupees.

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TAHSIL.	A	ssessm	ent Ci	ircle.		Cháhi.	Nahri.	Sailáb.	Náládár.	Raridár.	Báráni.	Banjar.
	Chenáb				·	Rs. 23 pe			A.			
BHERA }	Bár Jehlam	***	***			the second s	Contract Part of States of States	Contraction of the second s	***		n	
	Bár	•••	***	***		Rs. 60	Rs. 40	Rs. 60			Rs. 20	Rs. 10
SHAMPUR }	Ara	***		•••	***	Rs. 10 pe 1			***	***	***	
SHANPUR 7	Jehlam		***		***	Rs. 20 pe	The second s			•••		
1. C. S. S. S. S.		***		***	***	Rs. 50	Rs. 40	Rs. 50	1. States 1. 1. 1.		Rs. 20	Rs. 10
	Jehlam			***		Rs. 60	Rs. 40	Rs. 50	444	***	Rs. 15	Rs. 8
KHUSHAB	Thal					Rs. 7 per	· cultiva	ted acre	***			
anconad )	Mohár					Rs. 40	Rs. 40	Rs. 40	Rs. 30	Rs. 20	Rs. 10	Rs. 2
and les (	Hill					Rs. 100 pe	rcultiva	ted acre				

Appendix II .- Instructions regarding principles of assessment approved by the Government of India in 1890.

(1). The general principle of assessment to be followed is that the Government demand for land revenue shall not exceed the estimated value of half the net produce of an estate.

(2). In assessing the estates contained in a tract under settlement the method of framing the primary estimate of the land revenue assessable on each estate and upon the tract as a whole shall be as follows :-

The tract under settlement shall be divided into as many circles as may be required by broad existing differences of fertility, propriety or tenure; and there shall then be framed for each circle as many revenue rates as may be necessary to distinguish the main classes into which land is locally divided in respect to soil and system of agriculture, irrigation or want of irrigation, so far as such distinctions are clearly apparent in marked differences of value of net produce, or are clearly recognised in prevailing rent rates. These circle revenue rates shall be so framed as to represent approximately the estimated average annual half net produce of an acre of each such class of land in the circle.

(3.). In estimating the net produce of cultivated lands of any class, whether occupied by landowners themselves or by tenants, the rents paid in money or in kind on an average of years by ordinary tenants-at-will for such lands in the assessment circle to which the estate belongs shall be the principal guide.

(4). But when by the custom of any tract certain expenses fall on the landowner which can properly be set against the rents above referred to (as for example the cost of maintenance of wells, or of clearance of canal channels, losses on advances to tenants, &c.), full allowance will be made for such expenses, and in the case of lands, the rents or net produce of which have been increased by wells or other works of improvement cons-tructed at private expense, care should be taken not to tax unfairly the capital invested in the improvement, and to altogether remit for the period allowed by the special rules on the subject any part of the assessment which may be due to the increase of rent or net produce caused by such improvement.

(5). In assessing land irrigated by State canals the Settlement Officer, unless otherwise directed by the Local Government, will assess such lands as nearly as may be at the same rates as land of similar quality and advantages in the same tract or district which is not irrigated, leaving the advantage derived by the landowner from canal irrigation to be realized by canal owner's rates.

When revenue rates on classes of land for each circle and estimated gross (6.) assessments for the same have been framed by the Settlement Officer on the principles above indicated, they will be reported to the Financial Commissioner for preliminary sanction. But in the assessment to be finally adopted, full consideration must be given to the special circumstances of each estate.

For example, in finally assessing each particular estate the assessing officer shall take into consideration, in addition to the estimate obtained from the revenue rates, all circumstances directly or indirectly bearing upon the profits and rents of the land-owners, especially such circumstances as the following :--

Rents actually existing in the estate, or, if these are not ascertainable, on (i). neighbouring estates where the conditions are similar, if such rents appear to be higher or lower than the average rent rates of the circle.

- All profits derived from the land, whether cultivated or uncultivated.
- (ii).
- The husbandry and average produce of the estate. The habits and character of the land owners and tenants. (iii). (iv).
- Proximity of markets, and facilities of communication, and for disposal (v).of produce.
- (vi). Incidence and working of previous assessments.

And, so far as is justified by these circumstances, the assessing officer is authorised in the assessment of each estate to depart from the revenue rates of the circle.

### Appendix III.—Notifications regarding Settlement.

#### No. 92, dated 7th March 1888.

Under section 49 (1) of the Land Revenue Act, 1887, it is hereby notified with the sanction of the Governor-General in Council, that a general re-assessment of the land revenue of the Shahpur District is about to be undertaken.

#### No. 344, dated 25th May 1891.

Whereas it appears to the Honorable the Lieutenant-Governor that the existing records of rights for the estates included in the district of Sháhpúr require special revision, the Lieutenant-Governor, in exercise of the powers conferred upon him by section 32 of the Punjab Land Revenue Act, 1887, hereby directs that the records of rights of all these estates shall be specially revised.

No. and date of Noti- fication.	Person invested with powers.	Powers conferred.
No. 307, dated 27th April 1887.	<ol> <li>Farzand Ali,</li> <li>Ináet Husain,</li> <li>Thákar Dás,</li> <li>Imám Shah, Deputy Superintendents of Settlement in the Shahpur District.</li> </ol>	Powers of a Tahsildár in respect of mutation of names and partitions of land as defined in Chapter I ( <i>ii</i> ), clauses 7 and 8 of the rules under the Punjab Land Revenue Act XXXIII of 1871.
No. 414 and 415, dated, 15th June 1887.	<ol> <li>Pandit Rám Naráin.</li> <li>Lála Ganga Rám.</li> <li>Munshi Budh Singh, Superintendents of Settlement in the Shahpur District.</li> </ol>	<ul> <li>I.—Under the provisions of Section 51 of the Punjab Courts Act, 1884,—invested with the powers of a Tahsíldár of the 2nd class under the said Act and Punjab Govern- ment Notification No. 809S., of 18th Octo- ber 1884, for the purpose of trying original suits of the classes mentioned in the 2nd group of Section 45 of the said Act, such powers to be exercised within the limits of the Shahpur District.</li> <li>II.—All the powers conferrible upon a Tahsíl- dár under Act XXXIII of 1871, or under the rules made thereunder for the conduct and decision of revenue cases and proceed- ings under the said Act, proceedings for the collection of revenue and arrears of revenue being excepted.</li> </ul>
No. 641, dated 20th September 1887.	<ol> <li>Fazl Iláhi,</li> <li>Mazhar Husain,</li> <li>Ghaníshám Dás,</li> <li>Amar Singh,</li> <li>Mír Alam, Deputy Superintendents of Settlement, in the Shahpur District,</li> </ol>	All the powers of a Tahsildár in respect of mutation of names, as defined in Chapter I ( <i>ii</i> ), clause 7 of the rules under the Punjab Land Revenue Act XXXIII of 1871.
No. 208, dated 11th April 1888.	<ol> <li>Fazl Iláhi,</li> <li>Ghanisham Dás,</li> <li>Farzand Ali,</li> <li>Ináyat Husain, Deputy Superintendents of Settlement, Shahpur District.</li> </ol>	
No. 287, dated 30th May 1889.	Des Ráj, Deputy Superin- tendent of Settlement, Shahpur.	All the powers which may be exercised by an Assistant Collector, 2nd grade, under Chapter IV of the Punjab Land Revenue Act, 1887.

No. and date of Noti- fication.	Person invented with powers.	Powers conferred.
No. 636, dated 2nd December 1889.	Bábu Muzaffar Ali, Settle- ment Clerk, Shahpur.	All the powers which may be exercised by an Assistant Collector, 2nd grade, unde Chapter IV of the Punjab Land Revenu- Act, 1887.
No. 179, dated 25th March 1891.	Mayá Dás, Deputy Super- intendent of Settlement, Shahpur.	All the powers which may be exercised by an Assistant Collector, 2nd grade, under Chapter IV of the Punjab Land Revenue Act, 1887.
No. 331, dated 22nd April 1893.	Lála• Ganga Rám, Offg. Extra Assistant Com- missioner, Shahpur.	Appointed Assistant Collector of the 1st grade, under the Punjab Land Revenue Act 1887.
No. 414 A., dated 1st June 1893.	Khán Bahádur Miyán Ghulám Faríd Khan, Extra Assistant Com- missioner, Shahpur.	All the powers of a Collector under the Punjab Land Revenue Act, 1887 (with the exception of Chapter VI thereof).
No. 414 B., dated 1st June 1893,	Khán Bahádur Miyán Ghulám Faríd Khan, Extra Assistant Com- missioner, Shahpur.	All the powers of a Collector under the Punjab Tenancy Act, 1887.
No. 523 A., dated 17th July 1893.	Khán Bahádur Ghulám Faríd Khan, Extra Assistant Commis- sioner.	In supersession of Punjab Government Noti- fication No. 414 A., dated the 1st of June 1893, and in exercise of the powers con- ferred by sub-sections (3) and (4) of Section 6 of the Punjab Land Revenue Act, 1887, the Honorable the Lieutenant-Governor is pleased to appoint, and hereby appoints Miyán Ghulám Farid Khan, Khán Bahádur Extra Assistant Commissioner, Shabpur, to be an Assistant Collector of the 1st grade.
No. 523 B., dated 17th July 1893.	Khán Bahádur Ghulám Faríd Khan, Extra Assistant Commissioner.	In supersession of Punjab Government Noti- fication No. 414 B., dated 1st June 1893, and in exercise of the powers conferred by clause (b) of sub-section (4) of Section 77 of the Punjab Tenancy Act, 1887, the Honorable Lieutenant-Governor is pleased to specially empower and hereby so empowers Miyan Ghulám Faríd Khan, Khán Bahádur, Extra Assistant Commissioner, Shahpur, and Assistant Collector of the 1st grade to hear and determine the suits mentioned in the first group in sub-section (3) of Section 77 of the said Act.
To, 941 C., dated 20th December 1893.	Mr. J. Wilson, Deputy Commissioner, on special duty, Shahpur.	All the powers of a Collector under the Punjab Land Revenue Act, 1887 (with the exception of Chapter VI thereof). Mr. Wilson not being subject to the control of the Collector.
No. 942 (1), dated 20th December 1893.	Mr. J. Wilson, Deputy Commissioner, on special duty, Shahpur.	All the powers of a Collector, under the Punjab Tenancy Act, 1887. Mr. Wilson not being subject to the control of the Collector.

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		DEC.			1330	AVERA	GE OUT	TURN I	N MAU	NDS PER	ACRE	HARVE	STED.	
						Bhera.		£	Shahpu	r.		Khu	sháb.	(bands) (bands)
Crop.		Sor	L.	2000 2000	Chenáb.	Bår.	Jehlam.	Bár.	Ara.	J ehlam.	Jehlam.	Thal.	Mohár.	Hill.
			•				1.1.1							
	ſ	Cháhi			10*	10	12	10	10	10	10	7	8	1
•		Nahri and Sa	iláb		7	8	8	8		8	8		8	1
	1	Nákdár											8	
Wheat		Hail												ÌÌ
,		Raridár											6	
	I	Maira	***											
	l	Báráni			5	6	6	5	5	5	5	2	4	14
						12								-
		Cháhi	****		15		12	10	10	10	10	7	8	1
		Nahrl and Sa		•••	•••	8	8	8		8	8		8	
Dealors		Náladár				•••							8	
Barley		Hail										•		
	1	Raridár	•••										6	
	1	Maira									m			
	C	Báráni				6	6	5	5	5	5	2	4	1
- California - Cal	(	Cháhi Nahri	and S	Sailáb	6	8	8	7	7	7	7			
STREES.		Náladár											6	
Gram	1	Raridár											5	
		Báráni			6	8	8	5	5	. 5	5		4	·
		1			1			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1			Same a			
Opium		Cháhi and Na	hri				6 sérs			6 sérs	6 sérs		6 sérs	
Tárámíra Sarsháf,	a n d	All soils			1000 - 1000 			3	3	3	1	1	1	
		Cháhi			Rs. 16	Rs. 20	Rs.	Rs.	Rs. 16	Rs.	Rs.		Rs.	
Vegetables	}	Cháhi Unirrigated			10	10	20 10	16	10	16	16		10	•••
				•••				10		10 e	10			
	• [	Châhi			6	10	10	8	8	8	8	***		
		Nahri				7	7	6		6	6	•••	•••	
a line Bie		Sailáb			6		7	5	5	5	5			
Bájra		Náladár											6	•
		Hail	•••						1					
		Raridár e	•••										4	
		Maira		•					•					
	1	Báráni			6	6	4	5	5	5	4	2	э	

### Appendix IV.-Estimated average outturn per acre harvested in maunds in all the Assessment Circles of the Shahpur District.

Appendix IV.-concluded.

	E. Catalanton (C)		1910	Bhera.	1.201	1 8	Shahpun		1	Khu	sháb.	
Crop.	Soil.		Chenáb.	Bår.	Jehlam.	Bår.	Ara.	Jehlam.	Jehlam.	Thal	Mohár.	10.00
<u></u>				-								-
	( Cháhi		5	6	6	7	8	• 6	6			
	Nahri and Sailáb Náladár		5	5	5	4	4	4	5			
Jawár	TT-11						•••				5	
Jawar	Devidin											
	Water											
	Báráni •			4		*					3	
	Cháhi		5	. 6	6	4			4	• •••		
	Nahri			5	* 5	3		8				
The second	Sailáb				4	3		3				
Cotton	Náladár										3	
	Raridár								•		2	
	Báráni			4	4	2	2	2			1	
•	Cháhi		12		12			10				-
	Sailáb		6		8							
Maize	Hail								•			
	Maira											
	Báráni											_
Rice	. Cháhi, Nahri and	Sailáb		·	12			10	10			_
Til	All soils		•	1		1	1	1			- <b>1</b> 11	
Chína	. Cháhi							10				
.Moth	. Báráni				'					8	8	
Múng	Hail, Maira and B	áráni										
Sugarcane	. Chábi		Gur 20		Gur 20			Rs. 80				-
Mahdi	Nahri				Rs. 40			•	]			-
THE.	Cháhi		Rs. 8	Rs. 5	Rs. 10	Rs. 10	Rg. 10	Rs. 10	Rs. 10	Rs.	Rs. 	ī
	Nahri		8	10	10	10		10	10			
	Sailáb		8		5			5	10			
Other Con	Náladár										5	
Other Crops	Hail					*						
	Raridár	`	•								4	
1	Maira											
	Báráni	•••	8	5	5	5	5	5	5	1	2	

						<i>Ta</i>	hsil Bhe	era,	Tah	stl Shah	pur.	T	ahsil K	husháb	•
	•	ass of a	soil.			Chenáb.	Bar.	Jehlam.	Bår.	Ara.	Jehlam.	Jehlam.	Thal.	Mohar.	Hill.
Cháhi	•••					81	31	41	25	25	40	39			4
Nahri							22	25	22		22	44		•••	4
• Sailáb				.,.		36		44		• •••	44	44			
Náladár		•							•••		ii.		,,,	86	123
Raridár		• •••	<b>`</b>	·τ χ •••			a.							34	•••
Hail										÷				·	31
Maira			•	anti i com	•	• • • •	ulariyan Tinga								3
Báráni						35	31	39	30	30	40	36	30	31	3

# Appendix $\mathbf{V}$ .—Percentage of gross produce actually received by the landlord.

### Appendix VI.—Half Net Asset Soil Rates per acre.

			2.4	Tai	hs€l .	Bher	a.			Ta	hstl	Shah	pur.				Tah	sil K	hush	áb.		
CLASS OF SOIL.		L.	Chenáb.		Bár.		Jehlam.		Búr.		1	714.	Jehlam.		Jehlam.		Thal.		Mohar.		Hill.	
			Rs	i. a.	Rs	. a.	Rs	. a.	Rs	. a.	R	e. a.	Rs	. a.	Ro	. a.	Rs	. a.	R	i. a.	Rs	ı. a.
Cháhł		/*	1	12	1	6	3	0	1	0	0	10	1	12	2	0					5	10
Nahrí		•••		•••	1	1	1	8	1	0			1	•	1	0 '				•••	• 5	10
Sailáb			1	Ę		•••	2	8					2	0	2	4	:					
Náladár	•••	• •••		••••	•••									:		•			1	0		
Raridár		•			•••									-		•••			0	10		
Hail			••••	••			::::::::::::::::::::::::::::::::::::::							:		•••					2	3
Maira						e							.5.					•••			1	5
Báráni		•••	0	13	0	12	0 1	10	0	10	0	8	0	10	0	6	0	3	0	6	0	14

Tansıl.	CIRCLE.		Total value of gross grain pro- duce after deduction of fodder, &c.	Value of landlord's share of pro- duce of cultivated land.	Half net assets estimate.	Final assessment as actually imposed.	Percentage of final assessment on half net assets.
			· Rs.	Rs.	Rs.	Rs.	
r in the second	Chenáb		7,50,929	2,50,000	1,25,000	98,642	79
Внева	Bár		2,69,049	80,702	50,000	36,923	74
	Jehlam	•••	8,58,176	3,32,704	1,60,000	1,19,554	•70
	Total Tahsíl		18,78,154	6,63,406	8,35,000	2,55,119	76
ſ	Bár•		51,029	12,466	8,000	5,090	64
SHAHPUR }	Ara		2,03,392	54,720	28,000	22,179	79
: Will	Jehlam*		12,18,581	4,59,504	2,30,000	1,67,234	73
	Total Tabsíl	·	14,73,002	5,26,690	2,66,000	1,94,503	73
in the p	Jehlam		3,45,876	1,40,536	. 70,000	• 59,074	84
KHUSHAB	Thal		* 29,073	8,602	15,000	11,970	80
	Mohar		8,90,798	1,38 710	75,000	68,975	92
	нш		4,05,234	1,48,698	75,000	55,223	74
	Total Tahsíl		11,70,976	4,49,046	2,30,000	1,95,242	85
	Total District		45,22,132	16,39,142	8,31,000	6,44,864	78

## Appendix VII.-Half Net Assets Estimates.

## Appendix VIII.-Sanctioned Revenue Rates per acre.

17-				TAI	ust I	BHE	RA.	TAHS	IL SHAHPI	UR.	TA	HSIL KHI	ивнав.	
CLASS O	F S011	L.	Chenáb.	-	Bár.		Jehlam.	Bár.	Ara.	Jehlam.	Jehkm.	Thal.	Mohår.	II.II.
			Rs.	a.	Rs.	a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. n.	Rs. a.
Cháhi •			1	8	1	0	2 6	0 10	0 8	1 7	1 14	 *		4 0
Nahri					0	8	0 8	0 7		0 6	0 6			4 0
Sailáb			1	2	• …		2 0		.:.	1 9	1 12			
Náládár			•••										. 1 0	
Raridár			•••										0 9	
Hail										t.				1 12
Maira														1 2
Báráni			0	9	0	8	0 6	0 7	0 6	• 6	0 6	0 4	05	0 10
Culturable	waste				0	1		0 0}			{	Rs, 2 per 100 acres.	Rs. 2 per 100 acres.	} *

Nore .- In the Hill Circle, by orders of Government, the result of these rates was reduced by 10 per cent.

		Тлняі	L BHERA.			TAUSÍL S	HAMPUR.			TAI	nsíl Knu	ISHÁB.	+	
DETAILS.	Chenáb.	Bár.	Jehlam.	Total Tahsil.	Bår.	Arta.	Jehlam.	. Total Tahsfi.	Jehlam.	Thal.	Mohár,2	HIII.	Total Tansíl.	Total District.
fotal assessment	98,642	36,923	1,19,554	2,55,119	5,090	22,179	1,67,234	1,94,503	59,074	11,970	68,975	55,223	1,95,242	6,44,864
Málikána		490	270	760	60	70	791 ø	921		20		242	262	1,943
Total revenue proper	98,642	36,433	1,19,284	2,54,359	5,030	22,109	1,66,443	1,93,582	59,074	- 11,950	68.975	54,981	1,94,980	6,42,921
DEFERRED For a term of years. Ou wells	5,655 2,439	5,170 868+11 Málikána	Málikána.	25,750 + 5 Málikána. 6,724 + 26 Málikána.	800 104 i	 2,402	8,945 5,227	9,745 7,733	 587			 242	 829	35,495 + 1 Málikána. 15,286 + 20 Málikána.
Total	8,094	6,038+11 Málikána.	18,342 + 20 Málikána.	32,474 + 31 Málikána.	904	2,402	14,172	• 17,478	587			242	829	50,781 + 31 Málikána.
Jalanco	90,548	30,395 + 479 Málikána.	1,00,942 + 250 Málikána.	2,21,885 + 729 Málikána.	4,126 + 60 Málikána.	19,707 + 70 Málikána.	1,52,271 + 791 Málikána.	1,76,104 + 921 Málikána.	58,487	11,950 + 20 Málikána.	68,975	54,739+242 Málikána.	1,94,151 + 262 Málikána.	5,92,140 + 1,91: Málikána.
(Inám	1,600	400	1,000	3,000	- 50	400	2,250	2,700	550	. 200	1,159	900	2,809	8,50
Muáfi	554	925	3,315	4,794		730	8,302	9,032	8,562	987	12,518	5,252	27,319	41,14
Total	2,154	1,325	4,315	7,794	50	- 1,130	10,552	11,732	9,112	1,187	13,677	6,152	30,128	49,65
alance Khálsa	88,394	29,070	96,627	2,14,091	4,076	18,577	1,41,719	1,64,372	49,375	10,763	55,298	48,587	1,64,023	5,42,48
lálikána		479	250	729	60	70	791	921		20	÷	242	262	1,91
Total	88,394	29,549	96,877	2,14,820	4,136	18,647	1,42,510	1,65,293	42,375	10,783	55,298	48,829	1,64,285	5,44,39

# Appendix IX.-Revised assessment as it stands in 1893-94.

# Appendix X .- Glossary of Vernacular Terms.

Васни	and the second		and a look	Distribution of according to any 1, 12
BÁJEA			••	and the second se
BAKKARI O		RAKKAR		
Bár			· ··	11-1 1 ··· ·
Bazár	19.98 and			Manhat
Вилуасны				A form of laud tenure.
BHUSA				Wheat stream
Вібна -		e la compañía de la c		The measure of area in common use, exactly equal to half an acre.
BUDDHI			1.52	A depended along a fitte sizes
•Снак				4 11 at at State land
CHÍNA				
DARBÁR				Count
DHARATH				Wages paid for weighing.
DHARWÁI				A mainhau
GHI			ž.,	Clarified butter.
GHUMÁON				Exactly equal to one acre or two bighas.
GIRDÁWARI				Crop inspection.
GUR				Consolidated but unpurified juice of sugarcane:
HAQ ALA LA	MBARD	ÁRI		The dues of a superior lambardár.
HASE RASD	KHEW.	AT		According to the proportion of revenue paid by each owner.
Inám				A grant of land revenue to a rural notable.
Inámdár				An inám-holder.
Jágír				Assigned revenue.
JAMABANDI				A detailed list of holdings of a village.
Jawár	·			Great millet (Holcus sorghum).
JHAJJRI				A village cess.
JHALÁR	· ···			A Persian wheel used for irrigation from a canel, river or tank.
JHALÁRI				Land irrigated by a Jhalár.
KALDAR				Land impregnated with salts.
KAMIÁNA				The customary payments made by village menials.
KAMÍN				A village menial.
KANÁL				$\frac{1}{4}$ of a bigha or $\frac{1}{8}$ of an acre.
Kárdár		•••		An Agent, a Governor.
KARU OR KA	ADAM	***		A double pace = $66$ inches.
KHÁLSA		•••		Revenue due to Government.
Кнага́ва	•••			Failed crop.
KHARÍF				The autumn harvest.
ΚΗΛΤΑÚΝΙ			•••	A list of fields.
KHIDMAT SE	IZZAT			Honour from service.
MAHANT		•••		The head of a religious institution.
MALBA	-	••••	§	Common village expenses.
Málikána			***	Proprietary due. Owners of their own plots only.
Málikán-Qai	BZA	1.4.4.4	•••	A measure of area $= \frac{1}{160}$ of an acre.
MARLA			••••	A measure of area $\equiv \frac{1}{160}$ of an acre. Assigned revenue.
Muífi				A pulse (Phaseolus mungo).
Muse		•••	•	Village accountant.
PATWARI				A lease.
Раттан			•••	A form of land tenure.
PATTÍDARI		KT -		The spring harvest
RABI	(* • • • • ) 2	***		Barilla.
SAJJI TATGOIDÍRI				Rights of superior ownership.
TALOQÁDÁRI	•••			A loan for agricultural purposes.
TAQÁVI Tárámíra		•••		An oilseed.
TARAMIRA				An oilseed (Sesamum).
Тора				A measure of capacity $= 2$ sérs $= 4$ lbs of wheat.
ZAILDAR	***			A rural notable.
ZAMÍNDÁRI				A form of land tenure.
ANINDAL				National Library.
				· Calcutta-27.
				•