
FINAL REPORT OF THE REVISION OF THE SETTLEMENT
OF THE UNA TAHSIL OF THE HOSHIARPUR
DISTRICT, 1914.

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FINAL REPORT
OF THE
REVISION OF THE SETTLEMENT
OF THE
UNA TAHSIL
OF THE
HOSHIARPUR DISTRICT,
1914.

By
H. L. SHUTTLEWORTH, Esquire, C. S.,
Settlement Officer.

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FROM

THE HON'BLE MR. H. D. CRAIK, I.C.S.,

Revenue Secretary to Government.

Punjab and its Dependencies,

TO

THE JUNIOR SECRETARY TO THE FINANCIAL
COMMISSIONERS, PUNJAB.

Dated Lahore, 10th August 1916.

Revenue and Agriculture.

Revenue.

SIR,

I AM directed to acknowledge the receipt of your letter No. 14, dated 5th January—19th February 1916, forwarding the final reports of the settlement of the Hoshiarpur District, prepared by Mr. Humphreys and Mr. Shuttleworth, together with the Commissioner's review thereon.

2. The whole district enjoys the advantages of an abundant rainfall and in the three western tahsils the soil is exceptionally fertile. There is consequently little need for artificial irrigation, and of the total cultivated area of over 700,000 acres, only some 65,000 are watered from wells, inundation canals or hill torrents. Of this area over 23,000 acres are irrigated from the Shah Nahr Canal in the Dasuya Tahsil, which has been considerably improved and extended in recent years. Well irrigation is practically confined to the Hoshiarpur and Garhshankar Tahsils, where the area of *chahi* land has doubled since last settlement. Cultivation is for the most part careful and intense, maize, sugarcane, rice and wheat being the principal staples, and after making liberal allowances for failed crops (14 per cent.), 115 acres of crops are successfully raised on every 100 acres of cultivation.

3. The tract is a purely rural one without any large towns and the people are in the main dependent on agriculture for a livelihood, though certain sections enlist freely in the Army and other branches of the public service, and an increasing number seek to better themselves in the Far Eastern ports, Canada and America, whence they remit or bring back considerable savings to their homes. Except in Una, the level of industry and agricultural efficiency is decidedly high, and is steadily improving. Though the census figures for 1901 and 1911 show a large decline in population outside Una, the pressure on the cultivated area is still severe, and the average proprietary holding varies from 5 acres of cultivated land in Dasuya to 3 acres in Hoshiarpur.

4. In these circumstances, little expansion of cultivation was to be expected, and the increase over the whole district since the last settlement of 30 years ago has only been 1·4 per cent. On the other hand, the prices of agricultural produce have greatly increased, the rise being estimated at 50 per cent. in the three western tahsils and 35 per cent. in Una. The value of cultivated land has also enormously appreciated. In no tahsil has it less than doubled, while in Una it has quadrupled, and it now represents from 100 to 200 times the revenue demand prior to reassessment. Cash rents have on an average at least doubled since last settlement and rents in kind also show an upward tendency. Though Una Tahsil is still somewhat inaccessible, communications

throughout the rest of the district have been substantially improved by the recent opening of the Jullundur-Hoshiarpur Railway, and will be further improved when the lines connecting Jullundur with Dasuya and Mukerian and Phagwara with Garhshankar and Jejon are completed, while several of the more important roads are being metalled. The general standard of agricultural prosperity in all tahsils but Una is high, in spite of the excessive fondness of the people for litigation, and the figures for mortgages and sales of land show that there is little serious indebtedness. The co-operative movement, which is now well established in the three western tahsils, has undoubtedly been of great economic advantage to the cultivators, while the grant of a large number of squares in the Chenab and Lower Bari Doab Colonies has provided a profitable outlet for the surplus agricultural population and indirectly benefited many of those who did not themselves emigrate.

5. At last settlement the view taken was that the district had reached its full development, and that for various reasons stagnation, if not retrogression, was to be anticipated. The result was that the land revenue demand was fixed with extreme caution and represented an increase of only 9 per cent. on that fixed 30 years earlier soon after annexation. For 30 years the people have enjoyed this lenient assessment which has been paid with ease, suspensions and remissions being almost unknown. The pessimistic views as to the damage to be anticipated from the action of hill torrents, which were largely responsible for the imposition in 1884 of so light a demand, have happily been falsified, and in the three western tahsils at any rate the measures taken in recent years by Government with the co-operation of the people have been most successful in checking erosion and reducing the damage done by the chos. There was thus ample scope for a substantial enhancement of the land revenue assessment. Cash rent rates, which are fairly common over the district, applied to the whole cultivated area indicated a theoretical half-net assets demand of Rs. 44,66,000 as against one of Rs. 35,17,000 based on kind rents. The latter estimate appears to the Lieutenant-Governor to err on the side of excessive caution, the commutation prices being in certain instances unduly low. The price assumed for wheat, for example, was 30 annas per maund in Una and 32 annas elsewhere, but Mr. Humphreys has pointed out (paragraph 31 of his report) that since 1905 the harvest wholesale price at Hoshiarpur has never fallen below 38 annas. A sum of Rs. 36,79,000 has been accepted as the true theoretical demand. Of this sum only Rs. 18,65,861 or just over 50 per cent. is the amount of the assessment actually imposed. This represents an enhancement of 4½ lakhs on the previous demand of Rs. 14,40,426 and just one-eighth of the very cautiously estimated value of the total produce. The incidence of the new demand per cultivated acre is Rs. 2-9-10, and per acre of matured crop Rs. 2-4-4, the total enhancement amounting to just under 30 per cent. The percentage of increase in the various tahsils is 35·7 in Hoshiarpur, 30 in Dasuya, 33·7 in Garhshankar and 16 in Una. The last-named tahsil has been treated with greater leniency than was anticipated in the forecast, but the Lieutenant-Governor accepts the view that this is justified by existing agricultural and economic conditions. Owing largely to its remote position and the character of its population, this tahsil is unquestionably the weakest in the district. The new assessments which have now been in force for a year or more were well received by the people. Out of 2,179 estates, only 50 appealed to the Commissioner against the assessment—16 successfully—and there were only 7 further appeals to the Financial Commissioner.

6. Though the proportion of the half-net assets which is being taken is low and the assessment cannot be considered otherwise than lenient, the enhancement of the demand has been considerable, and His Honour agrees with the Settlement Officers, Commissioner and Financial Commissioner that, in view of the smallness of holdings and the impossibility of any expansion of cultivation, the term of settlement should, as in the previous settlement, be fixed at 30 years, except in the case of the Hoshiarpur Mandi, for which the term should be 10 years.

7. Settlement operations were expected to last for three years and to cost Rs. 5,06,000. Owing to a variety of causes, explained in paragraph 12 of the

Commissioner's review, the forecast proved in these respects to have been unduly optimistic. The actual cost was slightly over Rs. 5½ lakhs, and the settlement took 4½ years to complete. The enhancement of the demand is Rs. 4½ lakhs or Rs. 65,000 more than was anticipated, and the cost of settlement operations will be recovered in 1½ years. The Lieutenant-Governor is satisfied that in the difficult circumstances caused by the unavoidable changes of Settlement Officers, the work was accomplished with as much expedition and economy as possible.

8. The Lieutenant-Governor agrees with the Financial Commissioner that the experiment of putting two parts of the district under different Settlement Officers has not been successful and should not be repeated. The drawbacks of the system are many, and not the least of them is that the account of the operations is contained in two separate reports. So far as Government is concerned, the difficulty of having to pass orders simultaneously on two different reports has been greatly minimised by Mr. Fagan's excellent and comprehensive review, in which the leading features of both reports have been most clearly marshalled. But the officers charged with the future revenue administration of the district will certainly be put to considerable inconvenience.

9. The late Fakir Sayad Iftikhar-ud-din, C.I.E., was mainly responsible for the settlement of the Hoshiarpur and Dasuya Tahsils, and displayed in that task the experience and shrewd judgment for which he was noted. By his untimely death the Provincial Service lost one of its most distinguished officers. His successor, Mr. Humphreys, took charge of the settlement at a critical stage and displayed great energy and sound judgment in bringing it to a successful conclusion. His final report dealing with the three western tahsils is an admirable production, complete, concise and interesting, and should be of the greatest assistance to future district officers. Mr. Shuttleworth's report on the Una Tahsil, is a thorough and careful record, and it is evident that he exercised the most conscientious industry both in his record and assessment work. Practically the whole of the tahsil had to be remeasured, a difficult task in any hill tract and doubly difficult in the present instance owing to the imperfect nature of the previous maps and the inefficiency of the subordinate staff. The village-to-village assessments and the all-important work of distributing the new demand over holdings were carried out with care and discrimination, and though no great enhancement of revenue was possible, many inequalities of assessment were corrected. Throughout the operations both the Financial Commissioner and Government derived very valuable assistance from the Commissioner's (Mr. Fagan) thorough knowledge of the district and the people.

The Lieutenant-Governor endorses the commendation bestowed by the Commissioner and Financial Commissioner on the two Extra Assistant Settlement Officers, Mirza Amin Ullah Khan and Malik Zaman Mehdi Khan.

I have, &c.,

H. D. CRAIK,

Revenue Secretary to Government, Punjab.

No. 14.

FINANCIAL COMMISSIONERS' OFFICE :

Dated Lahore, the 5th January 1916.

FROM

J. M. DUNNETT, Esquire, I.C.S.,

Junior Secretary to the Financial Commissioners, Punjab,

TO

THE HON'BLE MR. J. P. THOMPSON, I.C.S.,

Revenue Secretary to Government, Punjab.

The Hon'ble Mr. A. H. Diack. C.V.O.

SIR,

I AM directed to forward the final reports of the settlement of the Hoshiarpur District prepared by Mr. Humphreys and Mr. Shuttleworth together with the Commissioner's review, and to say that Mr. Fagan's review is in this case more than usually important both because of his peculiarly intimate knowledge of the district and because of the function which it admirably fulfils of affording a single complete view of the operations undertaken. The Financial Commissioner does not consider it necessary to discuss the reports in detail.

2. For the calculations preliminary to assessment, namely, the ascertainment of the full theoretical demand, the materials were ample. Kind rents and cash rents alike are sufficiently numerous to form the basis of separate estimates. The Commissioner regards the estimate based on the latter as of little value by itself, though useful as a check on the produce estimate. But in view of the increasing vogue of cash rents which are paid on an area almost if not quite as great as the area under rents in kind, and of the fewer assumptions involved in the evolution of the cash rent estimate, the Financial Commissioner is inclined to attach greater importance to the latter. The commutation prices used in framing the estimate from cropping have been proved by the experience of the past ten years to be very lenient assumptions, and the Financial Commissioner is satisfied that true half-net assets have not been over-estimated. The cost of necessities, the smallness of holdings and, in Una, the low level of agricultural efficiency on which Mr. Shuttleworth dwells, are among the general considerations which affect the amount of the assessment. They do not affect the accuracy or suitability of the scale of commutation prices. They are among the causes determining the pitch of rents in kind, but where the landlord's share has been ascertained from a sufficiently considerable percentage of the cultivated area to be capable of application to the whole they cease to be of further importance for the purposes of the calculation.

3. Mr. Shuttleworth's deduction from his produce estimate (paragraph 31), that it shows the gross produce to be sufficient to provide only Rs. 12 *per annum* for each individual, or, allowing for all possible under-estimates, Rs. 3 *per mensem*, invites two criticisms. First, the average family consisting of 5 members, the allowance would be Rs. 5 *per mensem* as a minimum, and more probably Rs. 10 *per mensem* for each family. Secondly, the deduction

is based not on those directly dependent on the land,—the landowners, tenants and menials,—but on the gross population, including shop-keepers and others, who have other means of subsistence. Taken as a whole the district is certainly self-supporting, as calculated by Mr. Humphreys (paragraph 8), and it may be gathered from paragraphs 12 and 13 of Mr. Shuttleworth's report that he does not really consider Una to be otherwise.

4. The pitch of the demand has been determined very largely with reference to general considerations. The circumstances justifying the enhancement of the existing demand are stated in paragraph 4 of the Commissioner's review, and to them the Financial Commissioner would add the leniency of the expiring assessment due to an unnecessarily gloomy forecast and the increase of the share of the gross produce which the proprietor is able to secure to himself. It is remarkable that the pessimistic view of the course of the action led to the limitation of the enhancement at last settlement to 8 per cent. in the three richer tahsils, while as much as 15 per cent. was taken in Una. Yet Una has suffered from the erosion east of the Siwaliks, and remains exposed to it, while west of the range erosion has been arrested and land has been reclaimed as the result partly of the work of the people themselves in planting *kharkana* in the beds of the streams, and in maintaining the spontaneous growth of shisham along their banks, and partly of the special measures of conservation taken in the hills by Government during the last ten years. Thus an assessment which was lenient to start with became more and more so in these three tahsils as time went on. Mr. Diaok agrees in the conclusion that the new assessment, absorbing only a half of the due of Government and one-eighth of the total produce, is in itself moderate, and although the ratio of enhancement in the western tahsils is considerable, progressive enhancements and protective leases will do much to soften the effect. In Una much of the work of re-assessment was a redistribution between villages, the old demand being lowered in some, maintained in others, and in others increased as much as 38 per cent. This in part accounts for the new demand embracing only 28 per cent. of net assets. The deduction given by Mr. Humphreys on account of the damage caused by roadside trees is probably more generous than the rules require. When the assessment proper for the estate has been determined with reference to its normal cropped area it is usually unnecessary to do more than reclassify in the *bachh* land under the shade of trees. A reduction of the village demand is not called for.

5. Both Settlement Officers notice difficulties in the distribution of the assessment over estates due to changes of officers. The Financial Commissioner agrees with Mr. Fagan that the work has been well done. Mr. Shuttleworth's distribution is based on personal inspection of each estate, and in the tahsils for which assessment proposals were framed by Fakir Sayad Iftikhar-ud-din, Mr. Humphreys had the ample materials described in paragraph 40 of his report. The number of appeals lodged has been very small and the assessment has been well received.

6. In Una the new record is based on complete remeasurement. Elsewhere, except in the riverain, map correction has been sufficient. The greater part of the remeasurement in Una was done by triangulation. The Commissioner and Settlement Officer think that off-setting from a traverse supplied by the Survey Department would have been preferable, but measurement work was finished in Una before the plan of employing a skeleton survey was, under the orders of the Financial Commissioner, given a trial in the other tahsils settled by Mr. Shuttleworth. The system has been adopted from the first in the three tahsils of Kangra now under settlement and in the Simla District, and gives accurate results, though in the matter of saving time the result, in Palampur at any rate, has been disappointing. In all tahsils the numbers of mutations decided are very large, and it is apparent that the revision of the record as well as of the maps was fully due. The necessity of keeping mutation work up to date, on which stress is laid in paragraph 18 of Mr. Humphreys' report, must be borne in mind by the Commissioner and the Deputy Commissioner. The soil record may appear unduly elaborate, but all

recorded soils have been employed by the people in the distribution in Una, and in the other tahsils also a full use of the soil classification has been made for this purpose. The new record room at the district head-quarters has now been constructed, and the records should be transferred there at the earliest opportunity.

7. The numerous miscellaneous matters dealt with by both Settlement Officers have been described in their reports, and summarised in the Commissioner's review, and Mr. Humphreys has drawn the Deputy Commissioner's attention to matters of special importance. The Financial Commissioner has recently had occasion to consider the ordinary working of the revenue administration in connection with the question of the district establishment, and he has pointed out to the Commissioner the importance of directing the supervision of the Revenue Assistant where it is most required from time to time, and the advisability of employing as Revenue Assistant an officer of active habits.

8. The orders of Government regarding the management of the Shah Nahr which had not been passed when the Commissioner wrote his review have been communicated to the local officers, and the hand-book of instructions referred to in paragraph 54 of Mr. Humphreys' report can now be brought up to date. Mr. Humphreys' volume on customary law is a valuable one in a valuable series. Mr. Shuttleworth devoted equal

Paragraph 56.

care to the preparation of a work for the Una Tahsil, which, however, has not been printed.

9. Mr. Humphreys has not prepared a scheme for the reduction of lambarbars, though, to judge from the average revenue per lambarbar given in paragraph 57, which the Financial Commissioner thinks should be Rs. 800 or more, some reduction in their number appears to be called for. That is the view taken in Una (paragraph 46) by Mr. Shuttleworth, who has let a scheme for the guidance of the Deputy Commissioner. The matter should receive the attention of the district officer on suitable opportunities arising in the other tahsils also.

10. The boundary dispute between Batarla and Awankot referred to in paragraph 22 of the Una report has been before the Financial Commissioner on appeal, and the Commissioner has been directed to refer the case with a view to Government being moved to pass an order under section 101-A of the Land Revenue Act.

11. Useful information about the assignments of the district is given in paragraphs 50 and 45 of the two reports. The institution of committees of management of temple funds referred to in the latter has not been referred to the Financial Commissioner and is, he understands, a non-official arrangement.

12. When the forecast report was submitted, it was expected that the settlement would last three years, cost Rs. 5,06,000, and yield a 25 per cent. increase or Rs. 3,60,000. The actual duration has been $4\frac{1}{2}$ years, it has cost roughly $5\frac{1}{2}$ lakhs, and the enhancement obtained is 30 per cent. or Rs. 4,31,000. The increase in cost and duration is due chiefly to the changes of Settlement Officers which were unfortunately necessary, but partly also to the settlement establishment having been permitted to do their field work first and elaborate their records afterwards instead of required to complete both operations village by village. Thus it appears from paragraphs 19 and 23 of Mr. Shuttleworth's report that while field work was completed in 18 months, no less than 15 months more were devoted to compiling the resulting records-of-rights. The settlement has, however, been remunerative, and the total cost will be recovered within two years.

13. The term of settlement should be 30 years, for the reasons given by the Settlement Officers in paragraphs 63 and 53 of their reports, and accepted by the Commissioner, except in respect of the Hoshiarpur Mandi for which the period is limited to 10 years. If this proposal is approved, the term will expire with the kharif harvest of 1943 in Una and with the rabi

charif and wheat or wheat and gram the main crops of the rabi. Double cropping on manured lands is common, the chief combination being maize followed by wheat. The proportion of the kharif and rabi mature crop areas in the three western tahsils is approximately 2 : 3; while in Una, as might be expected from its more hilly character, it is nearly equal. The proportion of land sown to area varies from 11 per cent. in Garhshankar and Dasuya to 14 per cent. in Hoshiarpur and 16 per cent. in Una.

3. Under Mughal rule a fairly definite revenue system was in force with a regular cash assessment based on a division of the tract into *mahals* or *parganas* and *tappas* or *talukas*. The Una Tahsil appears to have been for the most part under the immediate control of more or less petty feudatory Rajput Chiefs, the most important of which were the Rajas of Jaswan, Datarpur and Kahluar (Bilaspur). On the dissolution of the Empire the district shared the fate of the rest of this part of the Punjab in falling a prey to the depredations of the Sikh confederacies under their petty Chiefs and Sardars, though their domination did not extend over much of the Una Tahsil. By 1806 Maharaja Ranjit Singh had established his authority over the plain portion of the district, but it was not until 1815 with the subjection of the Jaswan Raja that it was extended to the hill tracts of Una. The more important Sikh Sardars and the Rajput Chiefs of Una were maintained in the position of jagirdars under obligations of military service, while the rest of the district was administered as Khalsa. The usual system of batai collections, which left little or no margin between the cultivators' share and that taken by the State, was enforced, the right of actual collection being generally farmed to sahukars who realised in kind from the cultivators and paid cash to Government. From 1832—1839 the district with the rest of the Doab had the good fortune to pass under the just and mild administration of Mir Rup Lal which contrasted favourably with the oppression and rapacity of the Shoikh Governors who had preceded him for a brief period. The Diwan's revenue assessments were carefully framed and intelligently worked, and appear to have been paid with comparative ease. In 1839, shortly after the death of Maharaja Ranjit Singh, the unpopular and oppressive Sheikhs managed to regain charge of the Doab which they held until annexation in 1846. Under them the revenue system degenerated into little else than an organised system of plunder. In the few weeks immediately succeeding the introduction of British rule in 1846 a summary settlement of the district was carried out by Mr. (afterwards Lord) Lawrence.

It worked well in the Dasuya and Hoshiarpur Tahsils, but broke down in Garhshankar and in the south-east corner of Una known as the Jandbari Taluka. Immediately after the summary settlement arrangements were made for carrying out a regular settlement. This was conducted by different officers in various parts of the district. The parganas of Hariana, Hoshiarpur and Garhshankar corresponding to the present Hoshiarpur and Garhshankar Tahsils with the southern part of Dasuya and the Jandbari Taluka of Una were settled by Mr. P. S. Molvill; Pargana Mukerian, comprising the northern part of Dasuya, by Mr. (afterwards Sir Richard) Temple; while the rest of Una, with the hill portion of Dasuya, was dealt with by Mr. Barnes who was also at the same time engaged on the first regular settlement of the Kangra District. The settlement was completed in 1852. The pitch of the assessment imposed does not appear to have been fixed with reference to any definite share of the assets. Allowing for assigned revenue the total assessment was somewhat above that of the summary settlement. No maps nor detailed records were prepared by Mr. Barnes of the tracts with which he dealt; but this work was carried out successively by Mr. C. A. Roe and Mr. W. M. Young between 1866 and 1873. The assessment worked well throughout the term of settlement, except in the Mukerian Pargana, where considerable reductions had to be allowed in a large number of villages between 1855 and 1860. The first revised settlement was conducted by Captain Montgomery, operations lasting from 1879 to 1884. His assessment, which yielded an enhancement over the whole district of 9 per cent. on the previous demand, was framed with extreme moderation. Though there had been no increase in cultivation since the pre-

vious settlement, prices had risen, communications had been improved and the general standard of prosperity was higher. On the other hand the apprehension of increasing damage from chos, the litigious spirit of the people and the progressive partition of holdings were treated as factors demanding moderation. The incidence of the new assessment on cultivated area varied from Rs. 2-7-11 per acre in the Hoshiarpur Tahsil to Rs. 1-11-7 in Una, and the proportion of enhancement on the previous demand from 15 per cent. in the latter tahsil to 5 per cent. in the former. Much attention was paid to removing inequalities of assessment as between different tracts and estates. The settlement has worked extremely well, the demand having been paid with ease and without the grant of any suspensions except a small sum in 1904-02.

The assessment imposed at the various settlements are collected below in a comparative form :—

| 1 | 2 | 3 | 4 | 5 | 6 |
|-----------------|---------------------------|----------------------------|--------------------------------------|---------------------------------------|--|
| Tahsil. | Summary Settlement, 1846. | Regular Settlement, 1852.* | First Revised Settlement, 1879—1884. | Second Revised Settlement, 1910—1914. | Increase per cent. of column 5 on expiring demand. |
| | Rs. | Rs. | Rs. | Rs. | |
| Dasuya ... | 3,50,210 | 3,82,244 | 4,01,219 | 5,32,830 | 30 |
| Hoshiarpur ... | 3,33,287 | 3,62,127 | 3,76,678 | 5,03,669 | 35 |
| Garhshankar ... | 3,76,251 | 3,54,781 | 4,06,114 | 5,10,422 | 34 |
| Una ... | 2,88,214 | 2,58,032 | 2,87,488 | 3,20,000 | 16 |
| Total | 13,52,962 | 13,57,184 | 14,71,499 | 18,65,891 | 30 |

*Exclusive of assignment.

The closing demand of the settlement which has just expired was Rs. 14,40,426 which is only 6 per cent. above the demand of the regular settlement imposed 63 years ago.

4. The increase in cultivated area during the 30 years which have expired since the last revised settlement has been practically nil, amounting to only 1·4 per cent. for the whole district. The increase is in fact confined to the Hoshiarpur Tahsil, there having been slight decreases in Garhshankar and Una, while in Dasuya there has been no change. Well irrigation, though not an agricultural factor of great importance in this district, has undergone a considerable increase in the Garhshankar Tahsil, but not elsewhere, while there has been a large expansion in the area irrigated by the Shah Nahr Canal in the Dasuya Tahsil. There has been no remarkable change in cropping since last settlement. The population of the district has been as follows at the successive census which have taken place :—

| Year. | Population. |
|-------|-------------|
| 1881 | 920,562 |
| 1891 | 1,011,629 |
| 1901 | 989,782 |
| 1911 | 918,631 |

Between 1881 and 1901 there was an increase of 7½ per cent., but in 1911 owing to the intermediate ravages of plague the population receded practically to the figure of 30 years before and was 7 per cent. below that of 1901. The decrease between 1891 and 1901 was largely caused by emigration to the colonies. The Una Tahsil has suffered far less from plague than the others, so that it shows a more or less steady increase in population which for the period between 1891 and 1911 amounted to 11 per cent. In spite of the effects of

plague and emigration the pressure of population in cultivated area is as already noticed heavy. During the period of settlement there has been no marked development of communications within the district, though it has of course shared in the benefit resulting from their expansion in the Province generally. A railway has, however, recently been opened between Hoshiarpur and Jullundur and another under construction will shortly connect the latter place with Dasuya and Mukerian, while the metalling of important roads in the district is in progress or under consideration. The great rise in the prices of agricultural produce has been the most noticeable feature in the development of the district. In the three western tahsils it has been close upon 50 per cent., while in Una it has not been less than 35 per cent. Concurrently there has been an enormous increase in the value of cultivated land which according to the figures amounts to nearly five-fold in Una and to double or treble in the other tahsils, while the price or mortgage money obtainable varies from 100 to 200 times the revenue payable prior to reassessment. Cash rents, which are paid by tenants-at-will on an appreciable proportion of the cultivated area, have on an average at least doubled since last settlement. Even if allowance be made for the fact that the great rise in land value is due largely to growing capital seeking investment in land, the facts noticed above indicate that there is ample scope, for an enhancement of the land revenue assessment. In the three western tahsils of the district the general standard of agricultural prosperity is on the whole satisfactorily high and would be higher but for the litigious character of the people. The proportion of cultivated area under mortgage is not large, well over one-half of it being in the hands of members of agricultural tribes, while the area now annually redeemed generally exceeds the fresh area mortgaged. The same remarks apply to Una, where, however, the proportion of mortgaged area is greater and the degree of prosperity somewhat lower. Throughout the district agricultural incomes are largely supplemented by earnings obtained from service and other sources by temporary emigrants from the district. The strong growth which the co-operative credit movement is displaying in the district, more especially among Muhammadan tribes, is a most encouraging sign.

5. The produce estimate and the factors involved therein have been dealt with at great length by Mr. Humphreys and more succinctly by Mr. Shuttleworth. The selected cycles of years adopted for the two settlements were respectively the 10 years ending with 1909-10 omitting the abnormally bad year 1907-08 and with the same omission the six years ending 1910-11. The former was practically a true normal; while the latter was, if anything, slightly below. The rates of yield of mature crops assumed for the three western tahsils were generally full, being considerably higher than those used at the previous settlement with reference to some areas, while those adopted for the Una Tahsil may be fairly characterised as moderate. The deductions for kamins' dues averaged about 5 per cent. of the gross produce as against 10 per cent. which was the proportion adopted at last settlement, the reduction being justified by general changes in the economic relations of the kamins to the village community. The commutation prices sanctioned for the three western tahsils are in no case lower, but in several cases higher than those adopted in the recent settlements of Ludhiana, Gurdaspur and Karnal, while except as regards maize and gram they are lower than those assumed in Ferozepore. As a whole they are very little higher than the average of rural prices which have prevailed since last settlement. For Una a slightly lower scale of commutation prices has been adopted, the difference being justified by the greater distance from railway communications. Except as regards moth the prices sanctioned are lower than the average rural prices of the 15 years—1896-97 to 1910-11. On the whole, it seems unlikely that during the term of the new settlement actual prices will fall below the commutation prices which have been used in obtaining the half-net assets estimate which for the whole district amounts in round figures to Rs. 35,17,000. This is probably as near an approximation to the true figures as is allowed by the exclusive nature of the factors involved.

6. As already remarked, cash rents paid by tenants-at-will have at least doubled since last settlement. This is the result indicated by the most recent statistics after exclusion of abnormal rents, and it may, I think, be accepted without question. The estimate of half-net assets framed by applying cash rent rates to the whole cultivated area and amounting to Rs. 44,66,000 in round figures is, however, by itself of very little value, though it seems to indicate that the estimate based on produce calculations is moderate. After modifying that estimate by reference to the cash rent estimate and an estimate based on the transfer value of cultivated land the final estimate of "true" half-net assets which has been accepted in the discussion of the assessment reports is Rs. 36,79,000.

7. The following table shows the assessments which have been actually imposed and compares them with estimated "true" half-net assets and the total produce :—

| Tahsil. | Expiring demand. | Estimate of "true" half-net assets. | Assessment sanctioned in detailed village statement. | Per cent. of half-net assets, column 4 on column 3. | Per cent. of column 4 on value of total produce. | INCREASE, COLUMN 4 ON COLUMN 2. | | INCIDENCE PER ACRE OF NEW ASSESSMENT ON | |
|-----------------|------------------|-------------------------------------|--|---|--|---------------------------------|-----------|---|-----------------------|
| | | | | | | Amount. | Per cent. | Cultivated area. | Area of matured crop. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | Rs. | Rs. | Rs. | | | Rs. | | Rs. A. P. | Rs. A. P. |
| Dasuya ... | 4,10,908 | 10,13,000 | 5,32,830 | 53 | 12.2 | 1,21,922 | 30 | 2 10 5 | 2 3 8 |
| Hoshiarpur ... | 3,71,549 | 10,14,000 | 5,02,009 | 50 | 13 | 1,20,360 | 35 | 3 1 8 | 3 13 7 |
| Garhshankar ... | 3,81,722 | 10,79,000 | 5,10,422 | 47 | 11.8 | 1,28,700 | 34 | 2 12 8 | 2 6 4 |
| Una ... | 2,76,147 | 5,76,000 | 3,20,600 | 56 | 13.3 | 44,453 | 16 | 1 14 5 | 1 10 8 |
| Total .. | 14,40,426 | 36,79,000 | 13,65,861 | 51 | 12.5 | 4,25,435 | 30 | 2 9 10 | 2 4 4 |

* Fixed Rs. 5,13,230.

(Estimated fluctuating Rs. 19,600.

The difference between the figures in column 4 and those given in paragraph 48 of Mr. Humphreys' report is due to some small reductions made on appeal after the report was written. The total enhancement of assessment is somewhat in excess of the 25 per cent. accepted by the Government of India as the forecast for the whole district; on the other hand, in Una the enhancement is only 16 per cent. as compared with a preliminary estimate which varied from 20 to 24 per cent. The assessments sanctioned and actually announced for the various circles have been dealt with at length in the two reports and it seems needless to traverse the same ground again here. The gradation of the pitch of the assessments between the four tahsils as measured by the incidences given in column 9 of the above table is the same as that obtaining at last settlement when the corresponding rates were—

| | Rs. A. P. |
|--------------------|-----------|
| Dasuya ... | 1 15 4 |
| Hoshiarpur ... | 2 7 11 |
| Garhshankar ... | 2 3 3 |
| Una ... | 1 11 7 |
| Total District ... | 2 1 3 |

As compared with the other three tahsils Una has been leniently treated, but this result is in accord with existing agricultural and economic conditions.

For the district as a whole it can, I think, be fairly claimed that the revised assessment, absorbing as it does only one-quarter instead of one-half of the net assets and one-eighth of the total produce, is moderate, though the enhancement taken is probably quite as high as is desirable in view of the small average size of holdings and the degree to which agricultural prosperity is dependent on supplementary income from service and other extraneous sources. The number of objections to the detailed village assessments presented to the Settlement Officers was 589, of which only 23 related to the Una Tahsil. Reductions to the amount of Rs. 2,730 were allowed in 36 cases. The correct number of appeals preferred to the Commissioner was as follows:—

| <i>Tahsil.</i> | | <i>Total.</i> | <i>Rejected.</i> | <i>Accepted.</i> |
|----------------|--------|---------------|------------------|------------------|
| Dasuya | | 9 | 4 | 5 |
| Hoshiarpur | | 26 | 18 | 8 |
| Garhshankar | | 4 | 2 | 2 |
| Una | | 11 | 10 | 1 |
| Total | | 50 | 34 | 16 |

The total reduction allowed in appeal was Rs. 625. In seven cases there were further appeals to the Financial Commissioner, of which all but one were rejected. In the latter case no reduction was given, but rates were adjusted. The new demand has been well received and is on the whole probably less than was anticipated by the people. This was certainly the case in Una. In the three western tahsils approximately Rs. 58,000 or about 14 per cent. of the enhancement imposed is deferred, nearly the whole of it for five and the small balance for ten years. ●

8. It was unfortunate that as a result of the enforced retirement owing to ill-health of Fakir Sayad Iftikhar-uddin from the charge of the settlement early in 1913, the distribution of the sanctioned assessments of the Hoshiarpur and Dasuya Tahsils had perforce to be carried out by an officer other than the one who had done the preliminary detailed village inspections. With the help, however, of material left on record by his predecessor, Mr. Humphreys did all that was possible under the circumstances, while bringing much care and judgment to bear on difficult work. The result has I think been satisfactory. In Garhshankar, where he carried out the work of assessment from start to finish, the result is no doubt more entirely reliable. In Una village inspections and the detailed assessment were very carefully and thoroughly carried out by Mr. Shuttleworth. The all-important work of the distribution of the new demand over holdings received much attention and was carried out with care and discrimination, especially in Una, where the wide and frequent divergencies of soil presented unusual difficulties and where in no less than 75 per cent. of the estates the *bachh* was made at soil rates. In the other tahsils the all-round rate was the favourite method. Very few appeals in regard to the internal distribution have been instituted before me and in no case have I found it necessary to interfere.

9. The subject of the revision of the record-of-rights has been dealt with very fully in Chapter III of both the reports, and it is needless to pursue it in any detail here. The quality of the field maps prepared at the previous settlement in the three western tahsils was such that out of 1,648 estates concerned map correction was found to be practicable and sufficient except in 111, of which 108 were situated in the Sutlej and Beas riverains. In Una, on the other hand for reasons explained in Mr. Shuttleworth's report, complete remeasurement was found to be indispensable in all but 42 of the 531 estates concerned. Owing to the broken nature of the area to be dealt with in that tahsil, remeasurement was carried out in some estates by triangulation and in others on the square system, while in others again both methods were adopted. I agree with Mr. Shuttleworth in thinking that a preliminary traverse skeleton survey in which the

Survey Department would have laid down fixed points (chandas) on the method which is being pursued in the Kangra District would have been of great use and would have accelerated measurements. The mutation work of the settlement was very heavy as will be apparent from the following figures of cases decided in the course of the operations :—

| <i>Tahsil.</i> | | | | | <i>Cases decided.</i> |
|----------------|-----|-----|-----|-----|-----------------------|
| Dasuya | ... | ... | ... | ... | 72,636 |
| Hoshiarpur | ... | ... | ... | ... | 71,184 |
| Garhshankar | ... | ... | ... | ... | 70,671 |
| Una | ... | ... | ... | ... | 73,749 |
| Total | | | | | 279,190 |

Other case work was also heavy. The revision of records actually commenced in all four tahsils towards the end of 1911 and was completed about the middle of 1913, except in Garhshankar, where it continued until towards the end of that year. The work as it progressed was systematically checked by the various grades of supervising officers, and though final attestation occasionally fell behind the completion of field work, a satisfactory degree of accuracy may, I consider, be fairly claimed for the revised record. The determination and mapping of riverain boundaries received much attention, and this important matter has now I think been placed on a proper footing.

10. Periodical revision of assessment on account of diluvion-alluvion

Miscellaneous matters. changes caused by the rivers or by the numerous chos running across the district is a matter of great importance in the Hoshiarpur District. The existing rules on the subject were carefully examined and a revised set for the whole district has been drawn up and sanctioned in which the defects which experience has brought to light in those hitherto in force have as far as possible been removed. Their application will require very careful attention from the Collector and the Revenue Assistant. The numerous revenue assignments which exist in the district, many of them very petty ones, have been subjected to a thorough revision and new registers embodying the results have been prepared. In the case of small village mufais for the term of settlement the instructions contained in paragraph 196 of the Land Administration Manual have generally been applied. The zaildari and sufedposhi arrangements have been entirely revised and the system of graded inams has been introduced throughout the district. The sufedposhi inams are complicated by the existence of a certain number which are semi-hereditary, a legacy from the time of the first regular settlement. Provision has been made for the conversion of these under certain contingencies into ordinary inams. It may be noted that the ala lambardar has disappeared from the district except in 14 cases in the Una Tahsil. The patwari and kanungo staff has been carefully overhauled, with the result that 16 patwaris have been added in Una, 6 in Dasuya and 1 each in the other two tahsils, while 9 additional assistant patwaris have been sanctioned. The pay of the three grades has at the same time been fixed at Rs. 14, Rs. 12 and Rs. 10 per mensem, respectively. There has been an addition of one field kanungo in each tahsil. The circumstances and system of the management of the Shah Nahr and of the private Natha Singh Canal came under consideration and full reports containing certain proposals were prepared by Mr. Humphreys. These were submitted to the Financial Commissioner in September 1914, but no orders have as yet been received regarding the Shah Nahr. The proposals for the Natha Singh Canal have however been sanctioned.

No regular scheme of suspensions and remissions have been drawn up, as past experience of the district shows that they are never likely to be required on anything like an extensive scale in this submontane tract. Mr. Shuttleworth's remarks regarding forests in paragraph 48 of his report merit attention, while it is to be hoped that the many important matters specified in the useful summary contained in paragraph 64 of Mr. Humphreys' report will not be neglected by the Deputy Commissioner.

11. The first revised settlement of the district was sanctioned by the Government of India in 1890 "for a period of 30 years terminating in the case of the Una Tahsil in the spring of 1912 and in the other three tahsils in the spring of 1915." The assessment of the latter has thus been completed in ample time and the new demand will take effect from kharif 1915. In the Una Tahsil it was introduced in rabi 1914. I fully concur with both the Settlement Officers in recommending 30 years as the term of the new settlement.

12. The progress of the settlement operations has been a somewhat chequered one, and it is perhaps advisable to notice the matter in some detail here. In October 1910 the charge of the settlement of the Una Tahsil was added to that of the Dera and Hamirpur Tahsils of Kangra which had been started under Mr. V. Connolly in the previous spring, but owing to paucity of staff, the Census, the Delhi Darbar and to the fact that the Extra Assistant Settlement Officer did not join until June 1911 very little progress was made up to end of that year. Operations may be said to have fairly begun late in the winter of 1911-12. Mr. Connolly had most unfortunately to be relieved of his duties in May 1912 owing to ill-health which necessitated medical leave to Europe. He was succeeded by Mr. Shuttleworth who carried on and completed the settlement. The assessment report was submitted in August 1913 and orders were passed on it in the following December. The settlement of the tahsil thus occupied nominally about three and-a-half years, but in reality somewhat over two. In the three western tahsils it was considered desirable to begin operations in October 1910, or nearly five years before the current assessment expired, as staff was available. The late Fakir Sayad Iftikhar-ud-din, C.I.E., of the Provincial Service, was placed in charge, but no Extra Assistant Settlement Officer was appointed until August 1911. The assessment report of the Hoshiarpur Tahsil was submitted in September 1912 and that of Dasuya in the following January, but then once more ill-health necessitated a change of Settlement Officers with the added misfortune that the change occurred at a far more critical stage of the operations than was the case in Una. Fakir Sayad Iftikhar-ud-din was compelled by ill-health, which shortly resulted in his lamented death, to relinquish charge of his duties in March 1913. He was succeeded in the following month by Mr. Humphreys who, as already stated, carried the settlement to a successful conclusion, including the complete assessment of the Garhshankar Tahsil and the framing of the detailed village assessments in Hoshiarpur and Dasuya. Orders on the assessment reports of these two tahsils were passed in April and July 1913, respectively. The Garhshankar Assessment Report was submitted very promptly by Mr. Humphreys, in the beginning of 1914 or nine months after he took charge, and orders were passed on it in July of that year. Settlement operations in the three western tahsils lasted from start to finish about $4\frac{1}{2}$ years, but nearly one year of this was occupied in preliminary work, while the change of Settlement Officer at a critical stage was naturally productive of some delay. The cost of settlement operations was as follows :—

| | Rs. |
|--|--------------------------|
| Tahsils Dasuya, Hoshiarpur and Garhshankar ... | 4,15,954 |
| Tahsil Una | 1,38,139 (approximately) |

or approximately $5\frac{1}{2}$ lakhs. Owing to the combination of the settlement of the Una Tahsil with that of the Dera and Hamirpur Tahsils of Kangra the separate cost of the former cannot be stated with complete accuracy, but it may be noted that the above figure does not include anything on account of the salary and allowances of the Settlement Officer of Una. The total expenditure incurred on settlement operations for the whole district is less than the enhancement of revenue which will be secured in one and-a-half years. The expenditure would no doubt have been less had all four tahsils been dealt with by one officer; but nevertheless the settlement has been highly remunerative from a financial point of view.

13. Fakir Sayad Iftikhar-ud-din was somewhat hampered in the early

Notices of Officers.

stages of the settlement by the absence of an Extra Assistant Settlement Officer, so that the fact that it was successfully started was the more creditable to him. His experience, tact and shrewd judgment were at that stage particularly useful, while his assessment work has already received the commendation of Government. It is a matter for regret that his health did not allow him to carry to a completion the work which he had so well begun. As already remarked, Mr. Humphreys took charge of the settlement at a critical stage, but has been very successful in dealing with the difficulties of the situation, and in doing so has displayed great energy, care and sound judgment. The prompt completion of the settlement, including the entire assessment of one tahsil and a portion of that of the other, is most creditable to him. His final report is complete, well-written and interesting. Mr. Connolly, who started the Una settlement, also had to contend for some time with difficulties due to the absence of an Extra Assistant Settlement Officer. The ill-health which compelled him to take leave was mainly due to the assiduous and conscientious care which so prominently characterised all his work and the results of which were of much assistance to his successor. Mr. Shuttleworth, though perhaps occasionally overburdened with a consciousness of the difficulties of his task, displayed the greatest and most conscientious care and industry in his work, while insisting generally I think with success on exacting a full tale from his subordinates. His assessment work was characterised by good judgment and a sound knowledge of the tract with which it was concerned. His final report is a full one dealing adequately and perspicuously with the settlement in all its aspects. Mirza Amin Ullah Khan, Extra Assistant Settlement Officer, in the three western tahsils performed the large amount of work falling to his share industriously and intelligently, while Malik Zaman Mehdi Khan, Extra Assistant Settlement Officer in Una, has not spared himself and well deserves the commendation bestowed on him by the Settlement Officer. The services of the other officers favourably noticed in the reports also merit recognition.

P. J. FAGAN,

Commissioner, Jullundur Division.

The 22nd June 1915.

Final Settlement Report of the Una Tahsil of the Hoshiarpur District.

Page 16, paragraph 32.—In the table showing the rates per acre cultivated against Defasli of Bit Circle, the correct figure is 5-10-1 (not 5-10-11) as given in the table under paragraph 81 of the Assessment Report of this tahsil.

Page 17, paragraph 32.—In the table showing the rates of average cash rents the correct figure under Ghar Circle against Ekfasli II as given in the table below paragraph 83 of the Assessment Report is Rs. 1-8-3 and not Rs. 4-8-3 as given in the Report under reference.

Page 17, paragraph 32.—The true half-net assets taken by the Financial Commissioner, Punjab, are 5,76,000 as given on page 8 of his Review of the Assessment Report and not 5,78,000 as given in the Final Report.

Page 18.—Column 4 of the table given in paragraph 34 would appear to be incomplete.

Errata.
CHAPTER I.

| Page. | Para. | For | Read |
|-------|-------|----------------|----------------|
| 1 | 2 | bit | Bit |
| | 3 | adjacents | adjacent |
| 2 | 3 | beds, | beds |
| | 3 | pebbly | pebbly |
| 3 | 5 | Kotlebr | Kutlehr |
| | 5 | hold | bold |
| | 5 | above in them | above. In them |
| 4 | 9 | shade, betwe n | shade between |
| | 10 | ston | stone |
| 5 | 11 | slopes ; | slopes, |

SETTLEMENT REPORT

OF THE

UNA TAHSIL

OF THE

HOSHIARPUR DISTRICT,

1910-14.

CHAPTER I.—SCOPE OF THE REPORT AND GENERAL DESCRIPTION OF THE UNA TAHSIL.

1. The second revised Settlement of the Una Tahsil, though carried out concurrently with that of the other three tahsils of the Hoshiarpur District, formed together with the adjacent Hamirpur and Dera Tahsils of the Kangra District the charge of a separate Settlement Officer. The present report is only concerned with the Una Tahsil, while a second one deals with the Hamirpur and Dera Tahsils.

2. Una Tahsil comprises most of the eastern and sub-montane part of the Hoshiarpur District, of which it, with an area of 690 square miles, is the largest tahsil. Its greatest length north-west to south-east from Sikri on the borders of Dera and Dasuya Tahsils in the north, to Garbhaga, nearly opposite Rupar on the Sutlej in the south, is almost 70 miles. Its greatest breadth is a little under 16 miles and its narrowest, by Churru, barely $6\frac{1}{2}$. It lies between Long. 76° and $76^{\circ} 43''$ and Lat. $31^{\circ} 52''$ and 31° . The western boundary follows the watershed of the Siwaliks, except in the bit to the south-west of Una town, where it also includes the outward slopes of the Siwaliks, towards the plains. To the north-west, a small tongue of Dasuya enters Una. On the east it is bounded by the Dera and Hamirpur Tahsils of Kangra as far south as the Sutlej, and then by Kahlur or Bilaspur State. The south-east corner abuts on Nalagarh State. Thence to near Rupar, the Ambala District is separated from it first by the Luhund Khad and then the Sutlej.

3. The Una Valley, or Jaswan Dun, is a long regular trough, lying between two parallel ranges or hill systems and receiving the drainage of their inner slopes. The three parts into which this valley naturally falls are—

- (1) the small north part of Una, north of Dungoh and Daulatpur, which drains into the Beas by the north Swan Naddi ;
- (2) the Jaswan Dun proper, from the watershed of the two Swans, along the south Swan Naddi as far south as Bhalan, near where the Naddi joins the Sutlej ; and
- (3) the Sutlej Bet and its adjacent tracts.

The south Swan Naddi is the most characteristic feature of the tahsil. It has a length of some 50 miles and a breadth in places of over a mile. Normally its huge sandy bed contains two or three shallow trickles of water on the surface, though there must always be a considerable subterranean flow. After heavy rain in the Bharwain hills, in the Siwaliks and neighbouring Kutlehr ranges it becomes a rushing sea of yellow waves, impassable for some hours, during which it often cuts away much of its banks. After the torrent has subsided its ever-shifting quicksands render its passage hazardous. Its fall is 778 feet in its straight 50 miles course. A few water-mills are worked by it, but its chief use is in keeping moist the adjoining alluvial lands which are of excellent quality. Its northern namesake, with only 5 miles of course in this tahsil, but with a fall of almost 300 feet in that distance, does little harm or good, as its stony channel is deep and well defined. The short and steep *khaals* from the dry and poorly afforested Siwaliks largely composed of very friable sandstone beds, and in places covered with hard round stones, bring down large quantities of sand and rounded boulders but little soil. They do considerable harm and little benefit to the land they pass through. The *khads* from the eastern, or Sola Singhi system of hills, have longer courses, a less violent slope and, starting from better wooded hills with more retentive soil on a hardish sandstone base, often bring down valuable deposits and generally contain perennial streams, used for irrigation as well as for numerous mills. As regards the Sutlej it is enough to say that, after issuing from its fine gorge between the Ramgarh and Naina Devi hills, just outside this tahsil, it has fairly high banks and a pebbly course, or rather courses, with frequent rapids, to a little south of Kiratpur whence till it is narrowed in by the Siwaliks, it has all the vagrant and sluggish characteristics of a normal plains river.

4. The general features of the arid and sandy Siwaliks are too well-known

The Siwaliks.

to require much remark. To a little south of Gagret, their upper slopes contain some forests of poorish *chil* (*pinus longifolia*). Behind Daulatpur their summits are rounded, slopes gentle and cultivation extends to the watershed, as is the case in the adjacent part of Dasuya. South of Gagret to the Sutlej with the exception of the Bit Manswal plateau, in the Una and Garhshankar Tahsils, and its vicinity, the summits are usually sharp and serrated, the upper slopes steep, with little vegetation but occasional *garna*, *mendar* and other bushes and stunted trees, and producing *chil* in only a few spots. Any cultivation on the upper slopes is in extremely poor, stony fields, tilled by Gujars, who really live on their large flocks of goats and other animals.

About 2,200 feet is the greatest elevation of the Siwaliks in this tahsil. This is near Bankhandi. As the elevation of Una town is 1,314 feet and that of Daulatpur on the watershed of the two Swans, 1,768 feet, the Siwaliks of which the mean height is somewhere between 1,700 and 1,900 feet, are but a low range, crossed by easy foot tracks and even mule paths at many points.

5. The Sola Singhi system of hills runs parallel to the Siwaliks to the east

Sola Singhi hill system.

of Una. The watershed of its northernmost range, which may be called the Chintpurni or Jaswan Dhar, forms its boundary with Dera. The western slopes contain the Una Hill circle, which is divided into two sharply contrasting portions by the Gagret-Bharwain road. The north section, in Panjal Tappa and part of Lohara, consists of very stony, rounded hills, with a fairly regular slope towards the Dun except just as they reach it, where they terminate in abrupt cliffs. The rounded summits of the main ridge and spurs are generally cultivated, but contain no *chil* trees. The whole of the lower slopes is covered by the dense *chil* forest of Panjal, or Ban Sirkar, and its adjacent *shamilat* forests. The *khads* are stony, with sandy beds lower down and generally bearing some water. The south portion, containing all Dharui Tappa and most of Lohara, has a very different formation. From the watershed to a distance of about two miles there is a steep and in places sheer drop. Here there is little cultivation, but good *chil* forests. The *sal*, which is not, I believe, found in the Punjab much to the north of this,

also thrives in several localities under this descent. From here to the top of the cliffs, that overlook the Dun, the slope is slight and the ground usually level or gently undulating, often cultivated and well wooded. The layer of soil on the sandstone is, however, very thin. This region is, as has been well described by Mr. Roe in his Una Forest Report, cut up into numerous blocks by very deep *khads*, with vertical rock sides which the water has cut straight down. They make travelling from north-west to south-east arduous for man and in most places impossible for laden animals. Some of the villages on the Dera border, with such gorges on either side, are among the most difficult of access in the tahsil. The depth of some of these *khads* in their upper courses must be over 450 or even 500 feet.

South of this the main portion of the steep Ramgarh Tilai range is within Kotlehr, in Hamirpur Tahsil, though the water from their western slopes and also from the Deonsa hills behind the Chauki Miniar valley joins the Swan. The bare and ravined foot hills form the east Una Ghar; of this tract the small Bangarh range, reaching from just south of the Una-Pir Nagahah road to the Sutlej, is a prominent feature. The Jandbari *ilaga* to the south of the Sutlej in the same way includes only the foot hills of the hold Naina Devi range, except in the case of the two villages of Shamla and Paharpur which extend to the watershed. The lower slopes of these hills are dry, stony and bare in the extreme, even more so than the Ghar tract. This area, as far as the old high river bank, which towards the Kiratpur becomes a steep gravel cliff, is known as the Changar. The *khads* are deep and few of them contain perennial streams of any size.

These three ranges average well over 3,000 feet. Their highest points, Tipri near Chintpurni, Kila Ramgarh behind Una, and Naina Devi, behind Anandpur Makkhowal, respectively, 3,341, 3,398 and 3,595 feet in elevation, are all just outside Una Tahsil. The little hill station of Bharwain, on the Dera border, is 3,202 feet high.

6. The vegetation of the hills has been touched on above in them where there is water near, the plantain and at least two species of bamboo flourish, but they are planted and not spontaneous. The mango of which the local varieties are numerous and the fruit generally poor, not only forms the roadside avenues in the Dun, but is found at considerable elevations, springing out of very stony ground by the *khads* near Bharwain and more especially all over the Una Bit plateau. The medicinal *harar* is plentiful in the north of Una, where also lac-producing *ber* trees abound. The *drek* grows in poor ground at the mouth of *khads*. Most of the ordinary trees of the Punjab plains are represented here, while in the Bet the date palm is common. The *kharkana* or *sarkanda* grass flourishes in the Dun valley and is as useful for thatching and such purposes as it is for protection against water action, for which purpose *shisham* trees are also planted. Pages 8 to 12 of the Gazetteer give a full account of the vegetation.

7. The fauna resembles that of the adjacent parts of Kangra. Panther, hill pig and the monkey are the worst enemies of the zamindar in the hills. Antelope, jackal, hyena and a few wolves are found here with the ubiquitous hare and fox. The large mongoose is numerous, more so than his enemy the snake, though the large Goh lizard, smaller varieties of lizard and in places scorpions abound. Below Kiratpur in the Sutlej is to be found the long-nosed fish-eating crocodile. The otter also flourishes. *Mahseer* are common in the higher reaches, while the pools of the perennial hill streams abound with small fish. Of birds the main inhabitants are pea-fowl, hill pheasants, *kolasa*, *chikor* as well as the common small birds and the larger predatory kinds. The demoiselle crane and the usual varieties of geese and duck are annual visitors. The species of butterflies in the hills are numerous and some extremely fine.

8. As is to be expected, the rainfall of this sub-montane tract is heavy, though the length and broken nature of the tahsil prevents the amount and distribution given by any one rain-gauge from being really applicable to more

than the adjacent portion of the tahsil. At Una the average annual fall for the 28 years, 1885-86 to 1912-13, amounts to 39·4 inches.

The monthly distribution is as follows :—

| Average of 28 years. | KHARIF RAINFALL. | | | | | | RABI RAINFALL. | | | | | | | | |
|----------------------------|------------------|------|-------|-------|---------|-----------------------|----------------|----------|-----------|-----------|----------|-----------|--------|-----------------------|-------------------|
| | April. | May. | June. | July. | August. | Total of 5 months. | September. | October. | November. | December. | January. | February. | March. | Total of 7 months. | Total of year. |
| 1885-86 to 1912-13. | ·45 | ·61 | 2·94 | 10·21 | 12·50 | 26·72 | 4·82 | ·21 | ·23 | 1·13 | 2·58 | 2·14 | 1·48 | 12·69 | 38·41 |

This annual average is almost 2·75 inches more than at Hoshiarpur, but nearly 14 inches less than at Dera, only 8 miles from the border of the Una Pahar circle where the fall is some 3 or 4 inches more than at Dera. In the Una Assessment Report were also given figures for the Sirhind Canal head-works gauge at Rupar, which, being hardly a mile from the south of Una, gives the approximate rainfall of the adjacent Una Bet and south Ghar as about 14 inches less than at Una. District Board gauges have recently been erected at Nurpur, Bharwain, Gagret and Bankhandi. The rainfall recorded at Una varies from the minimum figure of 17·8 inches in 1887-88 to the maximum of 74·38 inches in 1906-07. In a largely hill tract, entirely dependent on rainfall, the distribution is, perhaps to a greater extent than elsewhere, more important than the gross amount. In fact, heavy rainfall may be positively injurious by rushing down the slopes, and carrying the thin surface soil along with it, instead of soaking slowly in. A prolonged, gentle drizzle is preferable to a shorter but heavier downpour. A comparison of the rainfall figures with those for harvested crops shows that the best results at Rabi are obtained by about 26·1 inches of rain in the period from September to March, with some 16 inches of it in September, little or none from October to December, then 5½ inches in January, 3½ in February and 1¾ in March. The Rabi rainfall has varied from 3·09 inches to 29·45. Similarly at Kharif the best crop follows on a rainfall of about 24½ inches from April to August, the average being 26·6 inches. The most favourable distribution seems to be $\frac{3}{4}$ of an inch in April, $\frac{1}{2}$ in May, 2 in June, 13½ in July and about 8 in August, followed by a fairly dry September and drier October. The total for this period has varied from 12·6 inches to 44·28 but the average variation is not as great as is that of the other period.

9. The temperature, for which there are no records, is on the whole more equable than that of the plains, but even at Bharwain at an altitude of some 3,200 feet, the thermometer frequently exceeds 100 Fahr. in the shade, between May and the breaking of the monsoon, while the heat during those months in the arid Siwaliks is even more trying than at a lower elevation.

10. Only 2 per cent. of the cultivated area is irrigated. In the Pahar circle and the adjacent parts of the Dun there is some irrigation from hillstreams, but the water supply is often uncertain and fails when most required. In the lowlying parts of the Dun and in the Sutlej Bet, there are a good many wells, worked by the *charsa*, but little used, when rainfall is normal. Along the Swan Naddi, where water is near the surface, there are numbers of *dhinglis*, usually on the lands of Bahtis or Sainis. Sometimes these are of masonry or lined with roughly shaped blocks of stone but most of them are unlined. In the last ten years their number has varied between 1,090 and 1,891. The smallness of the average well irrigated area, just above an acre for a well and about one-third of that for a *dhingli* shows how unimportant such irrigation normally is. It may be said that many of the existing wells are primarily intended for domestic purposes. The bulk of the best crops of cane and wheat-gram in the Dun and Bet owe their superiority to natural moisture from the Swan and Sutlej floods.

11. *People*.—Una, with a population of 4,178, and Anandpur with one of 4,041 in 1911, can alone claim anything of the status of towns. The population of the tahsil is almost entirely rural and dependent on agriculture. In addition to the resident population of the tahsil, 231,857 in 1911, there are large numbers of Una Rajputs serving in the Indian Army and Police, of Brahmans, following the occupations of clerks or cooks and of Bahtis, working as labourers in other districts. This over-flow of population, probably not less than 25,000, is the natural economic result of the pressure of the population on the cultivated area, which is 865 to the square mile in the tahsil and as high as 1,053 in the hills. Emigration is so not much due to the spirit of enterprise and search after wealth, that take the Jats of the central Punjab plains to foreign lands. Seventy-six per cent. of the population is Hindu, while Sikh and Muhammadan only supply 12 per cent. each. More than one-sixth of the population consists of Brahmans. Second in numerical strength come the Bahtis, who represent the best agricultural element of the tahsil. Only third come the Rajputs, who hold more land than any other tribe. Next come the Jats and Gujars. Both Brahman and Rajput have little agricultural ability and are handicapped by habits of extravagance and the strict seclusion of their women folk. The Brahman, when literate, at once leaves the plough for the pen, the Rajput naturally takes up the sword when chance offers. There are still Rajput families, who boast that they have not yet handled the plough. The Jats of this tahsil are rather disappointing agriculturists, who are often deep in debt. The Gujar is at the best only a fair cultivator. The humble Chumar, though often forgotten, is a diligent and successful husbandman. Sainis are as industrious as elsewhere, but very few. So on the whole, the population is somewhat weak agriculturally, though it should be remembered that no small part of the land they have to till is so inferior that no plains Jat would look at it.

TRIBAL DISTRIBUTION.

| Number. | Tribe or caste. | Number in 1911 | Religion. |
|---------|---|----------------|--------------------------|
| 1 | Brahman ... | 40,835 | Hindu. |
| 2 | Bahti (including Chhang and Ghirth) ... | 24,336 | Hindu, few Sikhs. |
| 3 | Rajput ... | 27,499 | Mostly Hindu. |
| 4 | Jat ... | 23,821 | Hindu, a few Sikhs. |
| 5 | Gujar ... | 22,385 | Musulman, some Hindu. |
| 6 | Khatri ... | 8,140 | Hindu and Sikhs. |
| 7 | Saini ... | 6,180 | Hindu, few Sikhs. |
| 8 | Konait ... | 1,813 | Hindu and Sikh. |
| 9 | Chuhars and other Kamins ... | 53,316 | Miscellaneous. |
| 10 | Others ... | 18,430 | Idio. |
| | Total ... | 231,805 | Hindu, Sikh, Muhammadan. |

iron. The health of the population is good, though small-pox epidemics are not uncommon and goitre is prevalent in some hill villages. Plague has only affected the south of Una; it has never established itself in the scattered hamlets in the hills.

The non-agricultural part of the population consists of Brahmans, Khattris, including the important Anandpur Mukkhawal Sodhis, and the Suds. The Sud, in his own village despised by the Rajput and usually illiterate, often goes abroad and by his astuteness and parsimonious economy accumulates considerable wealth.

Only 4·5 per cent. of the population is literate and especially in the hill parts the standard of comfort is lower and the people are more backward and superstitious than in the plains. Of real crime there is little and that little is chiefly confined to the south-east Sikh portion of the Anandpur thana. But, even in the Punjab, there are probably few tahsils where the litigious habit is so widespread and extends to so trivial matters. Partly the minute size of holdings and fields narrows the mental outlook, but thousands of cases are directly

In the south, the houses are of the ordinary flat roofed plain type, grouped together into fair sized villages. In the north in the hills, the houses are smaller and are thatched and are seldom collected together, so as to form more than small hamlets, such as are common in Kangra. The large Dun villages, stretching from the Siwaliks to the Swan usually contain three separate groups of houses; that of the Gujars towards the crest of the hills, that of the Rajputs or Brahmans on the lower slopes; immediately above the level lands, and that of the Bahti or Jat tenants in the alluvial lands towards the Swan. Fires are frequent in the thatches and the more well to do are roofing their houses with Kaniara slate or with corrugated

due to the standing warfare, that is carried on between the usually Rajput, or sometimes Brahman owners, and the Bahti occupancy tenants of the villages along the Swan. Thirty-five per cent. of the cultivated area is encumbered with occupancy rights and only a trifle over a third of the cultivation is in the hands of the owners. This discounts the fact that there are over four and half acres of cultivation to an owner. The average holding is less than an acre but frequently the same man owns land in several.

12. *Cultivation.*—In Una are to be found the characteristics of both the hills and plains. The spring and autumn crops are almost equal in area. The best land, apart from irrigated, is the highly manured and enclosed double cropped area by the homesteads, known as *tahri* in the hills, and the rich moist lowlying unmanured land by the Sotlej and Swan, which gives only one crop, but that a heavy one. The worst land is the uncleared occasional cultivation, called *behand banjar*, only sown with the hardier pulses, when rainfall is favourable and even then producing a meagre outturn. Almost one-third of the cultivated area is sown twice annually. Almost 14 per cent. of the sown area has failed in the last 29 years.

The main autumn staple is maize and the main spring crop is wheat mixed with gram and wheat alone. The main irrigated crops are sugarcane, rice and wheat. Little cotton is grown, some of it on good land, some of it on the poorest. It is of inferior quality. The only other crops worth mention are the pulses, such as *moth*, *marsh* and *mung* at kharif and a little gram by itself in the poorer lands at rabi. Most of the produce is consumed locally and there is no considerable export of food stuffs.

13. *Markets and Communications.*—The tahsil has no large market towns, no railways and no metalled roads. There are some 315 miles of unmetalled roads, which are now fairly good on the level between torrents, but which are bad in the hills and disappear at places among the boulders of the torrents and sand of the Swan, which are great inconveniences to communications. The Swan and Sotlej cut the tahsil in two. The only two good cart roads from the plains are those from Hoshiarpur to Bharwain and on to Dharm-sala, and to Una and on to Mandi. But carts cannot go far east of Una on this last road, which is used by thousands of mules and some camels, which bring *charas*, potatoes, wool goods, violets and other hill products down to the plains and take up cotton fabrics, salt and *gur* in exchange. The other roads are shown in the map. The best of them are the hill road from Amb to Jowar and the roads on either side of the Swan and Sotlej. The nearest rail is at Hoshiarpur, 24 miles from Una and 16 from Gagret. The telegraph now serves Una, Anandpur, Gagret and Bharwain. Most of the roads are flanked by avenues of mango trees, more useful for their shade than for their fruit. The pilgrim traffic to and at the Sikh shrines at Kiratpur, Anandpur and Mairi in Una, the Hindu temple of Chintpurni on the edge of district and to the Hindu shrines at Jowala Mukhi, Naina Devi and Devat Sidh, not far beyond its eastern border, is considerable and a source of some gain to the villages on the lines of route or near to the shrines. But, as elsewhere the local residents really care more for their innumerable local shrines and cults, than for these more famed resorts.

CHAPTER II.—POLITICAL AND FISCAL HISTORY.

14. Pages 19 to 25 of Mr. M. Roe's Hoshiarpur Report and pages 10 to 19 of Mr. Roe's Una Report should be referred to for a description of the political and fiscal arrangements of these parts previous to the first detailed Settlement in 1850-52. It is unnecessary here to go into the histories of the various Rajput Rajas, Ranas, and Rais, nearly all of whom have survived Mogul and Sikh rule. Under the former they were treated with special consideration, but under the latter the intruding and unwelcome Sikh Jagirdar, especially in the south, exercised the real power, while the Rajput chieftains, though provided for by revenue or taluqdari assignments, were reduced to impotence. The Sodhis of Anandpur, the Khattri Sikh Sirdars of Santokhgarh and the Una Bedis are the main surviving representatives of Sikh influence.

Errata.
CHAPTER II.

| Page. | Para. | For | Read |
|-------|-------|-------------|-------------|
| 7 | 16 | Kotlehr | Kotlehr |
| 7 | 17 | even, | even |
| 7 | 17 | consumption | consumption |
| 7 | 18 | harvest. | harvests. |

15. The organised depredation and oppression of the Sheikh Nazims of the Doaba on Maharaja Ranjit Singh's death wrecked the well adjusted and

Regular Settlement

administered revenue system of Misr Rup Lal, whose assessment largely served for the basis of Mr. Barnes' Settlement operations in 1850-52. Mr. Barnes' Regular Settlement of Una, as of Kangra, was really a careful village to village assessment, without the help of any rates (except a very rough general *taluga* rate.) No maps were made and no soils were classified. Mr. Melville's more regular treatment of the Jandbari *ilaga*, east of the Sutlej, which had been successively in Ludhiana and Ambala before its transfer to Hoshiarpur, resulted in a decrease of 34 per cent. on the summary demand, which on the top of Sikh exactions, and the rapacity of the revenue assignees, accompanied by constant warfare, had broken down the proprietors of several estates and weighted with debt those of the rest. The numerous changes in the proprietary bodies of many villages, that then occurred, instance this.

The Regular Settlement for the present Una Tahsil gave a total demand of Rs. 2,58,032, a reduction of 10 per cent. on the summary *jama* assessed by Mr. (afterwards Lord) Lawrence.

16. Between 1869 and 1873 Mr. C. A. Roe and his predecessor Mr.

Mr. Roe's mapping and record work, 1869-73.

W. M. Young, prepared the first maps and the first detailed records for Una

and its adjacent hill tracts in Hoshiarpur but did no assessment, except in the villages of the Kotlehr Raja's old *jagir*, near Santokhgarh, after its transfer to Kangra in 1869.

17. Captain Montgomery commenced his revision of the assessment of

Revised Settlement of 1879-82 and its character.

the Hoshiarpur District by taking up Una in 1879. His new demand, intro-

duced in Kharif 1881, amounted to Rs. 2,87,488, an increase of 7.6 per cent. on the Regular Settlement *jama* as imposed, but of 15 per cent. on it as it stood at the expiry of its term. The greatest increase was taken from the Jandbari Changar and Bet No. 2 circles. Greater enhancement was taken in Una than in any of the more prosperous plain tahsils of the district, but even, after this the average rate on cultivation of Re. 1-11-7 per acre was lower than the district average.

Captain Montgomery's assessment work was conducted under the supervision of Major Wace as Settlement Commissioner. His assessment has proved itself to be easily paid and to be exceptionally sound, though not much can be said for the quality of his revised records and maps.

The absence of suspensions and remissions to some extent shows that the demand was not heavy, but it must be remembered that so many of the Una people take employment outside the district as sepoy, other Government servants, labourers, etc., that their home remittances, small in detail but large in the aggregate, enable some estates to meet with tolerable ease the demand of Government after even a succession of bad harvests, when there is insufficient produce even for local consumption.

18. The land revenue for 1911-12 amounted to a total of Rs. 2,76,147,

Changes since last Settlement.

a reduction of Rs. 11,341 on the original demand entirely on account of diluvion

losses caused by the Swans, Khads and the Sutlej. The physical configuration of the tahsil is responsible for the reason of the normal excess of diluvion over alluvion. In passing, it may be as well to note that the circumstances of Una in respect to torrent action are different from those of the plain portion of the district, traversed by the Western Siwalik chos. On the Una side no organised action has been taken to arrest further denudation of the hill slopes. Probably the measures taken to close the scrub areas to the west of the watershed will lead to the increase of the flocks of goats and other animals in the Una Siwalik villages on the eastern side and so accelerate diluvion in Una. The recorded decrease of cattle since 1898-99 is, I think, only temporary and due to losses by disease, as well as to large sales on account of recent poor harvest. The new assessment will be discussed later. Here it is enough to mention that it is 16 per cent. more than the old demand of 1911-12.

CHAPTER III.—THE REVISION OF RECORDS.

19. The charge of the Settlement of the Una Tahsil was added to that of the Dera and Hamirpur Tahsils in October 1910, but as the Extra Assistant Settlement Officer, sanctioned from that month, did not arrive till June 1911 and as the full complement of staff was not made up till much later, work can scarcely be said to have got properly under way till late in the winter of 1911-12 when the employment of several of the settlement officials at the Delhi Durbar again checked progress. The census operations early in 1911 delayed the then available staff from giving their full time to settlement work for fully 3 months.

20. *The previous record.*—Mr. Roe's Records were accurate when made but in 40 years numerous changes had taken place, more especially on account of sub-division of holdings and torrent action. Generally it may be said that the record of proprietary and tenancy rights was very careful and exact but the soil classification had received little attention, as there was no assessment depending on it. The areas of compact blocks of cultivation were accurate enough, but not so those of waste areas and scattered cultivation. The village boundaries in many cases were much out, especially in the Siwaliks and other hill tracts. The faults of measurement were mostly such as are inevitable to the block system without the use of squares or complete triangulation.

Captain Montgomery has in the 147th para. of his Final Settlement Report described the peculiar, cheap and not altogether satisfactory method, by which he had to revise the Una Records. At his Settlement only 8 villages were remeasured. Elsewhere an attempt was made to bring up to date Roe's maps by altering only fields of which the boundaries had been changed; in 83 hill estates unnecessary field numbers were reduced, much as was done in Kangra, but with greater care. Village boundaries seem to have been left alone. A new and somewhat lenient soil classification was done on the basis of Roe's and on the results of a year's cropping. In some few cases new maps were made on tracing cloth, but in most cases only tartimmas were made for the portions changed. Those with the patwaris are usually in a most piecemeal state, which shows the danger of using tracing cloth for a permanent map.

Captain Montgomery himself only claimed that his records should be viewed as annual papers. One of the great difficulties involved has been that the Una patwaris have always had to work with a double set of records and maps, each set of which was useless by itself. Discrepancies between the two added to the opportunities for litigation. Next to nothing had been done or could be done to keep these maps up to date. At the fixing of the boundary of the Swan villages between 1905 and 1907 great difficulty was experienced in reconciling discrepancies. These boundary operations resulted in the patwaris being given a second set of tartimmas for the numerous estates concerned. The old general scale used was 50 *karams* of 57½ inches each to the inch.

21. Under these conditions almost general remeasurement was essential and the *wajib-ul-arz* and genealogical tables of 1868-70 badly required revision. Accordingly it was at the outset plain that the summary correction of maps and revision of records possible in the other three tahsils of Hoshiarpur and in other recent plain settlements, could not be carried out here.

It was only found possible to revise the maps of the villages remeasured at last Settlement and a few more, where a careful examination of the map by the means of diagonals and offsets showed the old map to be reliable. But this map revision was a somewhat more detailed and thorough process than is generally required elsewhere. In all, map revision was done entirely in 35 estates and in parts of 7 others. In such cases the 50 *karams* scale was perforce continued, as it has been in the other three tahsils. Elsewhere in Una the 40 *karams* to the inch scale has been generally adopted, with perhaps little or no advantage. Where fields were exceptionally small, the 20 *karams* scale has been used. In a few cases, where only a minute portion of a village was remeasured and the rest terminated, the old 50 *karams* scale was kept throughout.

22. New measurements have been according to three systems as the nature of the country necessitated; from fixed points given by the Survey

Errata.
CHAPTER III.

| Page. | Para. | <i>For</i> | <i>Read</i> |
|-------|------------------|---|---|
| 8 | 20 (2 places) | 1907 | 1907, |
| | 22 | tartimmas | tatimmas |
| 10 | 23 | measurements | measurement |
| 11 | 24 | behind hand | behindhand ; |
| 12 | 25 | lahri and | lahri locally and |
| | | 'submerged or after submer- sion in' | submerged in or after emergence from |

Department in the Sutlej Riverain; from squares in the other more level parts and from triangles in the hills. I shall deal with each of them in this order, but it is to be remembered that there are many villages, in each of which two, if not more different systems were actually used.

In 15 Sutlej villages, adjacent to the Rupar Tahsil, the Survey Department fixed points and provided us with *musavis* upon which those points were plotted. The Settlement Staff had only to measure up the fields with the help of this skeleton provided for them. Such work of offsetting from the traverse was easy and very accurate, as errors could not be progressive. These survey points were meant to be temporary and need not be maintained. However the *musavis* also show squares, with sides of 5·71 inches, which can be relaid from base squares, some way back from the river, marked at three corners by solid stone pillars. Similar base squares have been laid out on the opposite Rupar bank. Each side of the squares (1,092½ feet) is equal to 228 Una *karams* (57½ inches) and 230 Rupar *karams* (57 inches). The Survey Department also provided mapping sheets on the same scale, showing the discrepancies in the boundaries of the Una maps of Roe's Settlement and of the Rupar maps of Mr. Kensington's, which were of great use in deciding boundary questions, all of which have been disposed of, except the case of Batarla-Awankote, which is before the Financial Commissioner. When the Rupar villages are remeasured, they should be done on the same framework. Stone *sihaddas* and *burjis* have been erected in the few pieces of high lying ground containing the boundary between Una and Rupar estates, where they did not exist before. *Musavis*, showing the decided line, as well as the discrepant boundaries, have been left in the Sadr Kanungo's office.

The ordinary square system of measurement has been used in all the level parts of the tahsil along the Swan and in the parts of the Bet, not adjacent to Rupar. Common base squares of 200 *karams* sides have been employed for contiguous villages and such base squares have been marked out with stone pillars for future restoration of the map, when alluvion or diluvion on a large scale takes place. This employment of a common base for groups of villages reduced the danger of discrepant boundaries escaping detection.

The greater part of the measurement had to be done by triangulation with the plane table. This gives an accurate enough skeleton in a small compact village. But in a large long and narrow estate, unless the inevitable error, that occurs, when the last triangle is fixed, is reduced to a minimum and is then carefully distributed over the whole set of triangles, the mapping of the part of the village near that last triangle will be considerably out. The work done is probably as good as the system permits, but probably accuracy, as well as economy and expedition, would have been better served, had the Survey Department given the patwaris points to work from. In many cases it was necessary to link up squares and triangles, but this usually gave little difficulty.

The following table shows the number of villages, in which each or more than one method of measurement was employed:—

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------------------|--|--|--|---|--|---|---------------------------------|--|
| No. of villages. | No. of villages in which <i>Chandabandi</i> was done by Survey Department. | No. of villages in which <i>Chandabandi</i> was partly done as in No. 2. | No. of villages measured by square system. | No. of villages partly measured by square system. | No. of villages measured by triangulation. | No. of villages partly measured by triangulation. | No. of villages done by termin. | No. of villages partly done by termin and partly by new measurement. |
| 531 | 14 | 1 | 129 | 149 | 201 | 149 | 35 | 7 |

23. At the beginning of the Settlement hardly any of the *amla* had previous experience of the plane table

Progress of the work and difficulties encountered. and they took much longer to master its use, than they did to learn square laying. The large number of fields, now 828,260, and their irregular shapes made measurements far more arduous than in the plains. It probably takes about three times as long to measure a quarter acre field in the hills, as it does to measure a two acre one in the plains.

This large amount of new measurement in a long and cut-up tahsil with bad communications at once necessitated a considerable addition to the existing weak patwari staff and made supervision difficult.

As many as 150 settlement patwaris were at times employed; also 37 field kanungos and 7 naib tahsildars. When supervision was slack, record work invariably got behind hand in 1912 it was found necessary to strengthen the naib tahsildar and kanungo staff and to appoint a temporary tahsildar for the north of Una, since the one settlement tahsildar was found unable to control the work adequately. I was kept informed of the progress of work in each estate by the receipt of weekly postcards from kanungos and naib tahsildars, the information from which was incorporated into a register on the Ludhiana and Ferozepur model, that was kept by me.

Naib-tahsildars' final attestations were often unduly prolonged by their previous neglect to clear off all arrears of mutations or indeed to make their patwaris enter up mutations as they came to light. The number of absentee land owners often gave them an excuse for delaying their decisions till the return of interrogatories. In the end, on the Ludhiana precedent, I ordered attesting officers to decide such cases on the evidence before them, without further postponement. A naib tahsildar usually had about six kanungos to look after and a field kanungo the same number of patwaris. This was somewhat too large a charge for all but the best naib tahsildars and kanungos, except when it proved possible to concentrate each kanungo's patwaris near together, which is the only satisfactory method of getting work done rapidly and well in the hills. Where a kanungo's patwaris were working at considerable distances from each other in hilly parts the difficulty of supervision at once showed itself by failure to complete the record together with the measurement. The unpopularity of service in this somewhat out of the way and difficult settlement resulted in men ordered here in many cases successfully scheming to avoid coming to it. The numerical weakness of the available kanungo staff in particular in the first two or three years prevented us from at once eliminating bad bargains, on account of the difficulty of replacing them.

The inking in of the mapping work was done by the kanungos except when specially experienced patwaris had been authorised to do it. Both the original map and the tahsil copy of it were on backed *musavis*. Colouring was done partly by the patwaris and partly by a few special colourists. This work, as that of comparing the field sides and numbers of the measurement maps with their copies, was exceptionally arduous on account of the multiplicity of the small fields. Assessment statistics were compiled by the mahal patwaris. This took fully a month of their time. The mahal patwari candidates were all employed as settlement patwaris and the candidates left on the list have been through this settlement. Many are now working in Kangra and should not be passed over, when their time for promotion comes round. Many of the best of them were rewarded by appointments to the 16 new circles, and to the 3 new assistant patwari posts sanctioned in 1914; a few as a special recompense for good and long service having been placed direct in the second grade, over the heads of permanent men, who had not given satisfaction. A few were made settlement field kanungo candidates.

The whole of the mapping work was completed in June 1913, but *jamabandis* and the *bachh* were not finished till the end of September 1914. The total area of the tahsil by the new measurements is 690 square miles, or 441,560 acres compared with 716 square miles or 456,996 acres before. The decrease is mostly due to the adoption of the method of extracting field areas by diagonal and perpendiculars instead of the old lampet method of multiplying the lengths of 2 opposite sides together.

24. With the Commissioner's sanction, the following soil classification was followed at measurement :—

Soil classification.

- (a) Irrigated ... (1) *Chahi* and *dhingli*, or well lands, (2) *Nahri-abi*, or land irrigated by streams.
- (b) Unirrigated ... (1) Garden, (2) *Dofasli I*, (3) *Dofasli II*, (4) *Ekfasli I*, (5) *Ekfasli II*. (6) *Behand banjar*.

Kharkana belas were recorded separately. Being based more on the cropping than on any permanent qualities of the land, the classification of the unirrigated soils was by no means an easy one to carry out accurately. In some cases it was a matter of opinion as to what the classification should be. The old figures for crops were by no means always reliable. In not a few cases organised attempts were made by zamindars to persuade the staff to classify their land leniently with a view to escaping with a lighter revenue demand. In several villages, inferior crops were deliberately grown during settlement or cultivated land temporarily abandoned. Special attention was given to the soil classification, chiefly on account of the impossibility of doing a fair *bachh* on soils, when those soils are inaccurately recorded. So I did not hesitate to order the revision of the soils in any villages, where the classification, already done, seemed to be open to suspicion.

Usually there is not much difficulty in distinguishing between *dofasli*, and *ekfasli*, though there is some land, generally growing three crops in two years, on the border line between the two. *Dofasli I* is the well manured homestead land, called *lahri* and elsewhere, *niari*, which grows as a rule maize and wheat year after year. The best cane land is also classified as *dofasli I*.

Dofasli II only differs by being further from houses and so getting less manure and yielding lighter crops. The best *ekfasli I* is the rather light alluvial land called "Har" that produces spring crops of *berra* (wheat-gram) or wheat. Other *ekfasli* is the same soil as *dofasli II*, but which gets no manure. *Ekfasli II* is poor, stony, dry land usually on hill sides and sometimes called Ghar, Changar or Rakkar, producing fair crops of pulses and occasional light crops of inferior cotton or wheat. *Behand banjar* has been noticed before. It is very poor hill land, often not cleared of stones and bushes, and not even properly ploughed on the few occasions that it is brought under cultivation. The ordinary rules as to *banjar jadid* and *kadim* cannot properly be applied to such land, which can only be considered to have become *banjar* when for some cause cultivation has become impossible.

This classification is so complicated that it was impossible entirely to avoid mistakes in trying to give effect to it. For assessment purposes three classes of *barani* would have been ample, but it was chiefly in consideration for the wishes of the people that the old classification was continued.

Standing Records.

25. The contents of the Standing Record of Rights are :—

1. *Robkar* referring to sanction for preparation of new record under section 32, Land Revenue Act.
2. Index *redifwar* (sometimes not included).
3. Index of *khasra* numbers.
4. Genealogical Table.
5. *Jamabandi*.
6. List of *mafis*, grants and pensions.
7. Mutations.
8. Statement of rights in wells.
9. *Wajib-ul-arz*.
10. Village cesses.
11. Field map.
12. Settlement Officer's order as to new land revenue.
13. Settlement Officer's order as to mode of *bachh*.
14. *Fard bachh*.

The order distributing the revenue over holding is on the separate *bachh* file and the field map is on *musavis*. The other papers are bound up together, except where the *shajra nash* is so unwieldy that it has had to be kept separate. The *shajra nasbs* are continuous and not in book form. About the middle of Settlement, the index *radifwar* was abandoned, but will be found in the early *jamabandis*. It soon gets out of date and the *shajra nash* serves as an index

for owners' holdings. In cases of large joint holdings the total number of shares is usually given at the outset. In some holdings the exact shares had become woefully confused by faulty mutation orders, as is only to be expected with such intense sub-division. As far as possible notes as to rights of grazing and cutting grass and wood have been given in the remarks column of the *jamabandis*. Before they were checked, the patwaris entered them in the cultivation column, which is not correct, as such rights do not amount to a tenancy, but rather to an easement, encumbering the proprietary rights. In the hill villages, where there is irrigation from streams, shared by several villages, a statement of rights to irrigation has been now drawn up for the first time. This should facilitate the decision of future disputes. It may be mentioned that the measures for area are the *ghumao*, *kanal* and *marla*, as in the rest of the district. The *ghumao* almost equals three quarters of an acre.

The *wajib-ul-arz*, though much briefer than before, is still a formidably lengthy document in Una. It was attested by the Extra Assistant Settlement Officer. Three appeals were made to me. The most disputed entries are those that relate to occupancy tenants' rights in the common lands, to their holdings, when submerged or after submersion in torrents and to their rights as to trees in their holdings.

The number of mutations attested during Settlement is 73,749. Many of these were to show whether a share of the *shamilat* had accompanied land transferred or not.

26. As there is not yet accommodation in the sadr kanungo's office at Hoshiarpur, all the new records have had to be left for the time at Una, where the record room has been enlarged and steel almirahs provided to store the *musavis* in. The new records, apart from the tahsil and patwaris' copies, should be taken to Hoshiarpur as soon as possible.

In addition to the existing *latha* map, it will be necessary for the patwaris of alluvion-diluvion villages to prepare additional *musavi* tracings of the low-lying portions of such estates for their own use. This work and some of the colouring could not be completed during Settlement. Tahsil *mujmili* maps both in English and in Vernacular on the scale of 2 inches to the mile, showing village and other boundaries, as well as roads, *khads*, bungalows, schools, post offices, and *thanas* and other information have been prepared and made over to the Deputy Commissioner.

Note Books. New annual and quadrennial statements were prepared in August 1914 and form the first entry in the new village note books. The Settlement classes of soil will be given only on this occasion. In future the brief classification into irrigated, unirrigated and in the Pahar *behand banjar* need alone be maintained.

Similar books have been started for the six circles and for the tahsil.

New abstract note books have been provided and should be kept in the Deputy Commissioner's office and on no account be sent to the tahsil. The sadr kanungo should fill the necessary entries for the past agricultural year by the end of December. These volumes are leather bound and arranged according to assessment circles. A detailed *mujmili* map of each circle will be found in the first volume for that circle. For each village there is the copy of previous Settlement Officer's notes, a new coloured map, the detailed assessment statement with assessment orders, my typed village note made at inspection, a new form for the next thirty years' statistics and finally a few blank pages for the remarks of the Collector or the Revenue Assistant. I found that it saved much time and trouble to type up the results of my village inspections at once in the villages with the people before me.

Errata.
CHAPTER IV.

| Page. | Para. | <i>For</i> | <i>Read</i> |
|-------|---------------------------|---------------------|------------------------|
| 14 | 28 | benefitted | benefited. |
| | 29 | apppropriate | appropriate |
| | 29 | Bit | Bet |
| 16 | 31 | etc. | etc.. |
| | 32 | tenants-at will | tenants-at will, |
| | 32 | crops, | crops ; |
| 17 | 32 | adjoined | enjoined |
| 18 | 34 | enhancement of 3 on | enhancement of 3 on 2. |
| | (statement, column 4). | | |

CHAPTER IV.—THE REVISION OF THE ASSESSMENT.

27. The expiring demand, which was Rs. 2,87,488, when imposed, had been reduced to Rs. 2,76,147 by 1911-12 on account of losses from diluvion. While the old records of the expiring Settlement showed almost a one per cent. increase in cultivation, the new measurements gave a 2 per cent. decrease, as compared with last Settlement. Actually, if we discount the slightly different results given by the two systems of area extraction, which amount to from 3 to 5 per cent., there has been a slight increase of cultivation. But the land newly broken up, being usually high up on hill slopes and inferior, is by no means a fair equivalent for the rich lowlands that have been washed away. This new cultivation has escaped assessment till now. Owing to increase of cattle the manured area had extended, so that the amount of double cropping had somewhat increased. Apart from the above, there had been no important agricultural changes or developments since 1880. The 11·4 per cent. increase of population since 1881 has probably more than cancelled any slight increase in agricultural produce. It is thus clear that the forecast estimates which put the percentage of increase at from 20 per cent. to 24 per cent. for this tahsil were somewhat over-sanguine. The Government of India eventually accepted the forecast of a 25 per cent. increase for the whole district.

28. In this out of the way tahsil, as elsewhere in the Punjab, there had been a great increase in the prices of agricultural produce and also of land. As this rise provides the main, if not sole argument in favour of an enhancement of the revenue of the Una Tahsil, it is dealt with first. In the inquiry made in 1912 only the prices of ten main crops were considered. The following statement shows the sanctioned commutation prices, as well as the average prices for the previous fifteen years, on which they were based :—

| | KHARIF. | | | | | RABI. | | | | |
|--|---------|----------------|------|---------|-------|-------|--------|-------|-----------------|---------|
| | Maize | Unhusked rice. | Gur. | Cotton. | Moth. | Mash. | Wheat. | Gram. | Wheat and gram. | Sarson. |
| Una Circle Note-book prices 15 years 1896-7 to 1910-11 | 35 | 34 | 69 | 87 | 35 | 49 | 39 | 35 | 37 | 76 |
| Una Zamindari harvest prices 15 years 1896-7 to 1910-11 | 29 | 33 | 63 | 79 | 28 | 42 | 35 | 27 | 31 | 47 |
| Sanctioned prices | 26 | 28 | 58 | 72 | 28 | 35 | 30 | 24 | 26 | 48 |

Since 1880 the general rise in prices, when only the principal four crops of maize, wheat, gram and wheat-gram were considered, and rough allowances were made for difference in areas under them, came to 35 per cent. The actual increases were maize 32 per cent., wheat 48 per cent., gram 29 per cent. and wheat with gram 41 per cent. But though only one set of prices was assumed for Una there actually were and are plenty of local variations on account of the size of the tahsil and the poorness of its communications. For instance the 15 years average price of maize in the Bit Manswal, near the plains, was 39 annas a maund, in the Anandpur Bet 23 annas and in the Pahar 27 annas. Such variations were the rule, whether for separate years or for the averages of series of years. The circle note-book prices had not been kept up very carefully and represented rather what the cultivator would have liked to have got than what he was actually paid for his produce. In fact almost complete reliance had to be put upon the results of the investigation into shop-keepers books at Dharm-sal, Panjaur, Anandpur, Bahrampur, Takhtgarh, Palakwah, Nurpur and Una. The assumed prices are generally somewhat lower than those assumed in the other three Hoshiarpur Tahsils.

For kharif vegetables Rs. 10 was assumed as the cash rent for an acre and for rabi vegetables and tobacco Rs. 15; other such cash rents were Rs. 3 for kharif fodder and Rs. 4, 3 and 2 for miscellaneous crops on *dafasi*, *ekfasi I* and *ekfasi II* respectively.

Both the selling and mortgage prices of cultivated land have risen almost fivefold since last Settlement. The average sale price an acre during the period

1907-8 to 1911-12 was Rs. 181 and the mortgage price Rs. 155. In the Pahar these prices were as low as Rs. 59 and Rs. 65. They are normally highest in the Dun, Bet and the portion of the Changar by Anandpur. Appendix I gives the latest figures for the value of land in 1913-14.

In addition to the rise in the value of land, which is almost general in the Punjab and is to some extent due to the depreciation of the rupee and more to the greater demand for land, in this tahsil the very heavy and still increasing pressure of the population on the somewhat restricted cultivated area and the existence of a large and prosperous class of occupancy tenants, generally ready to buy their holdings outright from their often indebted landlords, is the main explanation of the enormous enhancement of land values. Investment in land, either by way of purchase or mortgage has of late become an increasingly popular substitute for hoarding with the numerous persons, who have returned from other parts with some savings and widened views as to their use. At all events the price of land has risen out of proportion to that of its produce, or even of cash rents which have only doubled.

Apart from correcting previous inequalities of assessment, for the Bit, Changar and east Bet villages as well as a few in other circles were previously somewhat lightly assessed, the main assessment problem in Una was to what extent had this rise in prices been effective. There had been little improvement in the character or quantity of the crops or in the resources of the people, no increase of facilities for communication and no share in foreign export trade. In the assessment report, I expressed my opinion that hardly half that rise had been effective, largely on account of increased cost of all necessities of life other than grain, the smallness of holdings and the low level of agricultural efficiency. This view resulted in the proposal of an increase of 16 per cent. only in the Land Revenue. The reviews and orders on the report brought out clearly that everything was a question of to what extent the small holder had benefitted from the rise in prices, if at all. The Commissioner, Col. Popham Young, strikingly pointed out that the benefit to the farmer had been inconsiderable, but held that the farmer, like every one else, must be called upon to contribute to the growing costs of an administration, that had to provide for his increasing and more costly requirements. The Financial Commissioner, Mr. Fagan, laid stress on to the large miscellaneous income from outside and within the tahsil, the profit derived from a small holding intensely cultivated and the general rise in the standard of living and comfort.

29. The formal assessment procedure followed was that enjoined by the Settlement Manual and not the Assessment Procedure, perhaps more appropriate and elastic

Kangra system. Of the seven old assessment circles four were left unaltered. These were the Pahar, Dun, Ghar and Bit. The old Bit No. 2 was added to the other Bet circle, with the exception of six estates which went into the Changar, to which they more properly belonged. Though generally these circles present different individual characteristics, many of the villages inside any one of them show little uniformity. There are numerous single villages, each of which contains in various portions of it all the characteristics of two or more circles. Assessment statistics were prepared separately for each of these aggregates of villages, but here it will be adequate for brevity, mainly to consider them only for the tahsil. The produce estimate depends for its accuracy on a correct record of crops, grown on each distinct class of soil. Here the existing crop records were of doubtful value, where they were not admittedly erroneous, and all crops grown on the five sub-divisions of unirrigated (omitting 'garden land') were lumped together. They could only be separated by a somewhat elaborate and at the best approximate process of finding out what crops had grown in each soil in the few estates where soil classification had then been done, and assuming that the distribution was similar in all the other villages. Thus the estimate here was even more than usual the result of accumulated assumptions.

30. The five years selected for crop statistics were 1905-6, 1906-7, 1908-9, 1909-10 and 1910-11. They give statistics, comparing as follows with those for the 29 since 1884-5 till 1912-13 and 15 of that series.

Selected cycle of years and yields.

Comparative statement of averages of crops based on various series of years :—

| Years. | KHARIF. | | | | | RABI. | | | | |
|--|------------|-------|---------------|-------|------------------------------------|------------|-------|---------------|-------|------------------------------------|
| | Sown area. | | Matured area. | | Percentage of failed on sown area. | Sown area. | | Matured area. | | Percentage of failed on sown area. |
| | Acres. | P. c. | Acres. | P. c. | | Acres. | P. c. | Acres. | P. c. | |
| 29 years, 1884-85 to 1912-13 ... | 109,253 | 49 | 96,355 | 49 | 12 | 115,516 | 51 | 98,588 | 51 | 15 |
| 15 years, 1896-97 to 1910-11 ... | 113,398 | 49 | 95,39 | 50 | 16 | 117,973 | 51 | 92,148 | 50 | 21 |
| Selected years 1905-06 to 1910-11, minus 1907-08 ... | 113,331 | 49 | 90,458 | 47 | 20 | 110,217 | 51 | 102,108 | 53 | 14 |

The selected 5 years give rather too little matured crops to the kharif and too much to the rabi, but were considered to be about as representative as any other short series would be and, if any thing, slightly below the present true normal.

Yields.—The 71 crop experiments extending over 5 harvests gave a fair amount of material for the determination of rates of yields, when added to the crop experiments of last Settlement. The results of the crop experiments in such neighbouring tracts as the Dera and Hamirpur Tahsils of Kangra, the hill circles of Pathankote and of the adjoining Hoshiarpur Tahsil, were also considered. The outcome was a slight increase on the some of the yields assumed at last Settlement for main staples on *barani* soils such as maize. They are still admittedly fairly moderate and all small increases were justified by the experimental data. Rates of yield and prices were assumed for the principal kinds of straw, unlike last Settlement, when straw was excluded from the produce estimate. I here note the assumed yields of the main staples only in seers per acre on unirrigated soils. For further details as to yields the assessment report may be consulted :—

| | | Dun. | Bet. | Bit. | Pahar. | Ghar. | Changar. | REMARKS. |
|-------------|-----|------|------|------|--------|-------|----------|--|
| MAIZE. | | | | | | | | STRAW OF MAIZE. |
| Dofasli | ... | 360 | 360 | 360 | 300 | 300 | 300 | } Same as gram (price 2½ annas per maund). |
| Ekfasli I | ... | 240 | 240 | 220 | 200 | 200 | 180 | |
| Ekfasli II | ... | 120 | 120 | 120 | 100 | 100 | 80 | |
| WHEAT. | | | | | | | | STRAW OF WHEAT. |
| Dofasli | ... | 280 | 320 | 300 | 200 | 240 | 200 | } 1½ of gram (price 4 annas). |
| Ekfasli I | ... | 280 | 260 | 220 | 160 | 180 | 160 | |
| Ekfasli II | ... | 120 | 140 | 80 | 80 | 80 | 80 | |
| GRAM. | | | | | | | | STRAW OF GRAM. |
| Dofasli | ... | 240 | 240 | 220 | 200 | 200 | 240 | } ¾ of grain (price 3 annas). |
| Ekfasli I | ... | 160 | 200 | 160 | 160 | 160 | 180 | |
| Ekfasli II | ... | 120 | 120 | 100 | 80 | 100 | 120 | |
| WHEAT-GRAM. | | | | | | | | STRAW OF BERAR. |
| Dofasli | ... | 320 | 340 | 320 | 220 | 260 | 220 | } Same as gram (price 3½ annas.) |
| Ekfasli I | ... | 280 | 260 | 240 | 160 | 200 | 160 | |
| Ekfasli II | ... | 140 | 140 | 120 | 80 | 80 | 80 | |

For dofasli sugarcane in the Bet, which is really grown in Sutlej *sailab*, 1,000 seers were assumed, while some experiments gave over double that amount. This is a higher yield than well lands normally produce, for which 880 seers were assumed in the same circle and 480 in the hill circles.

31. The value of the average out-turn of the whole tahsil obtained by the application of the sanctioned prices to the produce given by the yields multiplied by the areas of matured crops on each class of soil, came to almost twenty-four lakhs of rupees (Rs. 23,98,228). This included the value of straw but nothing for (a) *kharkana*, (b) orchards and also (c) not the full value, but only the rental value of the five sets of crops, for which yields and prices could not be employed. If we assume the cash rent to be roughly equivalent to one-third of the entire value of the crop, we must add on account of (a) (b)

and (c) another two and a half lakhs to the above, which gives a gross total of twenty-six and a half lakhs. Thus each of the 231,805 inhabitants of the tahsil is provided with locally grown produce of the average value of not quite Rs. 12 per annum.

This calculation shows either that the estimate is a very moderate one or that imports from outside purchased from extraneous sources of income are large, or more probably both. For if we double the estimate, we only get a mere pittance of Rs. 2 per mensem per head, which is scarcely adequate to support life, even when added to such products as milk, animal flesh, wild fruits, etc.

32. The main object of the produce estimate was to obtain the value of

Theoretical Government share, based on rents in the portion of the produce to which kind and cash.

Government is theoretically entitled, *i. e.* half of the net rent received by the landlord. Only rents in kind, paid by tenants-at-will were of course admissible in this calculation, except where we were compelled to assume cash rents in respect of certain crops, 21 per cent. of the cultivation was with such tenants on rents in kind. The common rates of rent varied considerably for different classes of land and within the different parts of any one circle for one class of land. Half *batai* rents were adopted for *dofasli*, except in the Pahar, where the lower rate of 9/20th was necessary, because there much of the land was on slightly lower rents than half. For other *barani*, lands rent rates of 2/5th or of 1/3rd were used. Allowances of 5 per cent. in 5 circles and 4 per cent. in the Pahar were made for menials' dues from the undivided heap. This allowance, which is liberal, was a compromise in that in many tracts all menials are paid by the tenant and in the few villages, where they are paid before division, they get from 8 to 10 per cent. of the whole produce. The attached table shows the calculation, which gave the Government share in percentage for each circle :—

| Circle. | Deduction for menials' dues. | PREVALENT RATES OF KIND RENTS ACCORDING TO SOILS. | | | | Rent rates. | Resultant Govern- ment half net assets share. | |
|----------------|---------------------------------|--|--|-----|-----|----------------|---|------|
| | | Soils. | | | | | | |
| Bet | 5 per cent. | { | Irrigated, dofasli and ekfasli I | ... | ... | $\frac{1}{2}$ | 24 per cent. | |
| | | | Ekfasli II | ... | ... | ... | $\frac{2}{3}$ | 19 " |
| Dun | 5 " | { | Irrigated, dofasli and ekfasli I | ... | ... | $\frac{1}{2}$ | 24 " | |
| | | | Ekfasli II | ... | ... | ... | $\frac{1}{3}$ | 16 " |
| Bit | 5 " | | All soils | ... | ... | ... | $\frac{1}{2}$ | 24 " |
| Pahar | 4 " | { | Irrigated and dofasli ($\frac{1}{2}$ and $\frac{2}{3}$ ths batai) | ... | ... | $\frac{9}{20}$ | 22 " | |
| | | | Ekfasli I and ekfasli II (including behand banjar) | ... | ... | ... | $\frac{1}{3}$ | 16 " |
| Ghar | 5 " | { | Irrigated, dofasli and ekfasli I | ... | ... | $\frac{1}{2}$ | 24 " | |
| | | | Ekfasli II | ... | ... | ... | $\frac{1}{3}$ | 16 " |
| Changar | 5 " | { | Irrigated, dofasli and ekfasli I | ... | ... | $\frac{1}{2}$ | 24 " | |
| | | | Ekfasli II | ... | ... | ... | $\frac{2}{3}$ | 19 " |

The resultant Government share for the whole tahsil was Rs. 5,90,057 exclusive of gardens and *kharkana*, and Rs. 6,08,030 including every thing, except miscellaneous profits.

The rates per acre cultivated, given by this theoretical Government share were as follows :—

| Soils. | Bet. | Dun. | Bit. | Pahar. | Ghar. | Changar. |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. |
| Chahi | 8 5 11 | 6 6 7 | 15 0 0 | 15 0 0 | 7 3 6 | 6 8 5 |
| Nahvi-abi | 1 8 9 | 3 1 3 | ... | 3 14 11 | ... | 3 14 2 |
| Dofasli | 6 7 9 | 5 7 7 | 5 10 11 | 3 10 2 | 4 1 6 | 4 1 5 |
| Ekfasli I | 1 13 8 | 2 6 9 | 1 14 10 | 0 14 3 | 1 13 8 | 1 8 10 |
| Ekfasli II | 0 11 5 | 0 14 1 | 1 0 9 | 0 5 2 | 0 13 5 | 0 13 11 |

The relation of these rates to each other cannot be entirely relied upon, in view of the difficulty of assigning the correct crops to their proper soils,

mentioned in para. 29. This calculation is entirely based on the assumption that all the cultivated land of each class might be given on the rent in kind, actually paid on a portion of it. This is a legitimate enough assumption normally, but in Una there is much poor land, which is simply cultivated at a bare profit, because the cultivator tills the adjoining land, and which would be almost valueless as a separate tenancy. It may be noted that *zabti* or lump acreage rents are seldom paid, except by occupancy tenants.

Cash Rents.—Almost 9 per cent. of the cultivation is on cash rents. This is more than double the percentage at last settlement, i.e., 4 per cent. The present percentage varies from 5 per cent. in the Changar to 19 per cent. in the Bit. In the Ghar and Dun it is 10 per cent. and 12 per cent. Only in these three circles can much value be attached to cash rents. A good many abnormal rents were excluded at my village inspections. Lump rents for tenancies, comprising several soils, were resolved in the way adjoined in the Settlement Manual. In many cases, such tenancies included *kharkana* and uncultivated land, for which allowances had to be made.

The rates of the average cash rents worked out as follows:—

| Soils. | Bet. | Dun. | Bit. | Pahar. | Ghar. | Changar. |
|----------------|----------|----------|----------|----------|----------|----------|
| | Rs. a p. | Rs. a p. | Rs. a p. | Rs. a p. | Rs. a p. | Rs. a p. |
| Chahi ... | 22 8 0 | 18 3 6 | 19 12 0 | 18 3 0 | 19 12 0 | 22 8 0 |
| Nahri-abi ... | 16 0 0 | 8 14 11 | ... | 7 11 4 | ... | 16 0 0 |
| Dofasli .. | 11 11 8 | 14 3 7 | 9 11 11 | 3 11 10 | 12 1 11 | 10 14 5 |
| Ekfasli I ... | 7 0 8 | 7 0 10 | 3 9 2 | 2 12 1 | 4 5 7 | 4 7 3 |
| Ekfasli II ... | 3 9 10 | 3 9 10 | ... | 1 5 3 | 4 8 3 | 4 5 5 |
| Behand banjar | ... | ... | ... | 0 8 0 | ... | ... |
| Garden | 4 8 0 | 4 8 0 | 4 8 0 | 4 8 0 | 4 8 0 | 4 8 0 |
| Kharkana ... | 3 0 0 | 3 0 0 | 3 0 0 | 0 5 4 | 5 3 4 | 3 0 0 |

Cash rents are collected in full and allowances are not usually made for fallows, except in the initial pitch of the rent. The total cash rental for the tahsil, when these rents were applied to the new soil areas, was Rs. 14,02,278, and the theoretical Government share half that sum, i.e., Rs. 7,01,139. The Financial Commissioner considered that Rs. 5,78,000 might be taken as representing the true half-net-assets, this being a little above the half-net-assets, given by the produce estimate and much below that given by the application of the few cash rents.

The half-net-assets from the produce estimate of last Settlement came to Rs. 3,96,700, but I consider that the factors, on which that estimate was based, were such that the result was considerably below the mark. The leniency of the soil classification was the chief among these factors.

33. A feature of this tahsil, which has in the past rendered by the

Miscellaneous income, debt, mortgage, etc. payment of the revenue demand easier is the large income derived (a) from service of all kinds and (b) from other miscellaneous sources. The first was estimated to amount to Rs. 4,85,194 and the second (including profits from *kharkana*, Rs. 17,137, and from gardens Rs. 10,809, both of which items were directly taken into account in the produce estimate), to Rs. 1,23,148. The other main items included in (b) were income from the sale of *ghi*, of grass and leaves, of cattle, rents of water mills, the sale of lac and other natural products. These estimates were considered to be decidedly on the safe side. As mentioned in para. 31 it is largely by the aid of this extraneous income that the inhabitants of Una are able to supplement their otherwise inadequate resources. It cannot be regarded as a sign of superfluous wealth, except in a few particular cases. In fixing the new assessments, consideration was given to those items of income, which were not directly taken account of in the produce estimate.

Against this, however, had to be set eleven lakhs of floating debt, of which rather more than half was owed to non-zamindars, and approximately three lakhs and twenty thousand rupees of mortgage money, in respect of mortgage with possession of ownership, superior ownership and occupancy rights; 17 per cent. of the cultivation was mortgaged by owners against 13 per cent. at last Settlement, and 5 per cent. of the occupancy land against 1 per cent.

34. Though the theoretical Government share according to the current assessment standard was double the old revenue demand, it was obvious

Sanctioned and actual assessment.
from the first that it would be impossible to enhance the assessment to anything like this extent. The Commissioner recommended an increase of just over 14 per cent. and the Financial Commissioner one of 19 per cent. The Government orders stated that there was not room for much difference of opinion as to the pitch of the new assessment, and that there could be no question of a large enhancement, where the population was so dense, where there had been no expansion of cultivation to speak of since the previous settlement, and where there was no likelihood of future expansion. An enhancement of 16·6 per cent. was ordered, the enhancements in the respective circles being as below. The statement also shows the assessments actually imposed, with their percentages of increase :—

| 1 | 2 | 3 | 4 | 5 | 6 |
|----------------|---------------------|------------------------|-----------------------------------|-------------------|--------------------------------------|
| Circles. | Previous assessment | Sanctioned assessment. | Percentage of enhancement of 3 on | Actually imposed. | Percentage of enhancement of 5 on 2. |
| | Rs. | Rs. | Per cent. | Rs. | Per cent. |
| Bet | 56,647 | 67,000 | 18·3 | 66,083 | 16·6 |
| Dun „ „ „ „ | 1,26,412 | 1,48,000 | 17 | 1,47,804 | 16·9 |
| Bit | 13,813 | 17,000 | 23·3 | 16,999 | 23·1 |
| Pahar | 18,712 | 19,800 | 5·8 | 19,876 | 6·2 |
| Ghar | 44,428 | 51,000 | 14·8 | 50,356 | 13·3 |
| Changar | 16,105 | 19,500 | 21·1 | 19,482 | 20·9 |
| Total | 2,76,147 | 3,22,300 | 16·6 | 3,20,600 | 16·1 |

The sanctioned demand took up only 56 per cent. of the theoretical Government share and about one-eighth of the agricultural produce. That actually imposed was only a trifle below the sanctioned amount. The actually imposed demand, as given above, does not include Rs. 10 remitted on objection, Rs. 100 remitted on appeal and Rs. 77 deducted on account of the conversion of petty village *mafis* from Government to zamindari grants under paragraph 196 (3) of the Land Administration Manual.

The two circles that felt the increase least were the Pahar and Bit, where the percentages of enhancement were the least and greatest. In the Pahar probably a somewhat greater increase was expected on account of new cultivation; in the Bit it was realised that the old revenue was far lighter than anywhere else in the tahsil and a considerable increase was fully justified. Not only was there not a single objection from the Bit, but the announcements were received without any signs of protest. The assessment in the greater part of the Bet was the chief difficulty, as will be gathered from the fact that the assessment is nearly a thousand rupees below that sanctioned. The fact was that the western or Nurpur Bet was quite the most developed tract in the tahsil and also already the fullest assessed. Indeed it is difficult to see any respect in which even a small advance towards prosperity has been made since last settlement. The enhancement which was imposed and which mainly fell on the previously more lightly assessed east Bet estates was, I consider, the maximum that could be reached by a careful consideration of all the circumstances of each estate. It is, perhaps, only in the Nurpur Bet that the future working of the new assessment will require watching. As always, the Dun, which was in reality treated leniently enough, produced the bulk of the objections. There the new assessment should prove no very appreciably additional burden. The Changar and Ghar are now for the first time adequately assessed. Here the announcements were taken very well. The incidence of the

Errata.
CHAPTER V.

| Page. | Para | <i>For</i> | <i>Read</i> |
|-------|------|--------------|---------------|
| 19 | 36 | descirptions | descriptions, |
| 20 | 36 | sugested | suggested |
| 21 | 39 | holdings | holdings. |

new demand on an acre of cultivation and crops throughout the tahsil is Re. 1-14-5 and Re. 1-10-8.

The sanctioned rates of last settlement and this are given in the following statement :—

| CIRCLE. | | IRRIGATED | | UNIRRIGATED. | | | Land under Khark ana. |
|------------|--------------|--------------|-------------|--------------------------------------|------------|------------------------------------|--------------------------|
| | | By wells. | By streams. | Dofasli I and II, also garden. | Ekfasli I. | Ekfasli II. | |
| | | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. |
| Bet | { Former ... | Bet II 5 0 0 | 3 0 0 | 2 7 0 | 1 0 0 | 0 7 0 | 0 4 0 |
| | { ... | Bet I 5 0 0 | ... | 3 0 0 | 1 6 0 | 0 12 0 | 0 4 0 |
| | { Now ... | 5 8 0 | 3 4 0 | 3 0 0 | 1 7 0 | 0 12 0 | 0 6 0 |
| Dun | { Former ... | 5 0 0 | 4 0 0 | 2 12 0 | 1 6 0 | 0 12 0 | 0 4 0 |
| | { Now ... | 5 8 0 | 4 0 0 | 2 14 0 | 1 8 0 | 0 12 0 | 0 6 0 |
| Bit | { Former ... | ... | ... | 2 11 0 | 1 4 0 | 0 10 0 | 0 4 0 |
| | { Now ... | 5 8 0 | ... | 2 13 0 | 1 4 0 | 1 14 0 | 0 6 0 |
| Pahar | { Former ... | ... | 3 4 0 | 2 0 0 | 0 14 0 | 0 7 0 | 0 4 0 |
| | { Now ... | 5 8 0 | 3 4 0 | 1 13 0 | 0 12 0 | 0 6 0 (behand banjar 0 3 0). | 0 4 0 |
| Ghar | { Former ... | 5 0 0 | ... | 2 8 0 | 1 4 0 | 0 11 0 | 0 6 0 |
| | { Now ... | 5 8 0 | ... | 2 8 0 | 1 5 0 | 0 11 0 | 0 6 0 |
| Changar... | { Former ... | 5 0 0 | 3 0 0 | 1 14 0 | 0 13 0 | 0 6 0 | 0 4 0 |
| | { Now ... | 5 4 0 | 3 4 0 | 2 0 0 | 0 14 0 | 0 7 0 | 0 6 0 |

35. While the assessment operations did not yield Government the full enhancement anticipated, they have, I think, done much to distribute the

General results.

burden more equally. In addition to by no means a few individual estates that for some reason or other had hitherto escaped with a relatively inadequate revenue, there were whole tracts, such as the Bit, the villages of the eastern Bet and parts of the Changar and Ghar, which had been similarly lucky. Cases of over-assessment were exceptional. Of course all the inequalities have not been entirely removed, and indeed any assessment in a tahsil, like Una, which gave practically even incidences from village to village would stand self-condemned. The proportion of bad hill land vitiates comparison of the pitch of assessment in Una with that in plain districts. The fact that the cultivated and crop incidences are Re. 1-14-5 and Re. 1-10-8 in Una, while they are Rs. 2-9-0, 3-1-10, 2-12-10, and Rs. 2-2-4, 2-15-1, 2-6-8, respectively in the other three Hoshiarpur tahsils of Dasuya, Hoshiarpur and Garhshankar does not necessarily imply that Una is relatively under-assessed. The cultivated incidences in Hamirpur and Dera, where the new demand is certainly a fairly full one, are Re. 1-5-3 and Re. 1-12-3 respectively. But Una is a better and stronger tahsil than Dera and far superior to Hamirpur, so its fuller assessment is justified.

CHAPTER V.—DISTRIBUTION OF THE DEMAND.

36. In the distribution of the sanctioned demand over individual estates, I had to rely mainly on the information acquired at village inspec-

Village assessments.

tions. In many cases, I had, since those visits, seen something more of probably at least half the estates; this enabled me to revise my previous opinions where necessary. For reasons given elsewhere, circle rates and incidences of various descriptions though not neglected, were not entitled

new demand on an acre of cultivation and crops throughout the tahsil is Re. 1-14-5 and Re. 1-10-8.

The sanctioned rates of last settlement and this are given in the following statement :—

| CIRCLE. | | IRRIGATED | | UNIRRIGATED. | | | Land under Khark ana. | |
|------------|--------------|--------------|-------------|--------------------------------|------------|---------------------------|-----------------------|-------|
| | | By wells. | By streams. | Dofasli I and II, also garden. | Ekfasli I. | Ekfasli II. | | |
| | | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | |
| Bet | { Former ... | Bet II 5 0 0 | 3 0 0 | 2 7 0 | 1 0 0 | 0 7 0 | 0 4 0 | |
| | { ... | Bet I 5 0 0 | ... | 3 0 0 | 1 6 0 | 0 12 0 | 0 4 0 | |
| | { Now ... | ... | 5 8 0 | 3 4 0 | 3 0 0 | 1 7 0 | 0 12 0 | 0 6 0 |
| Dun | { Former ... | ... | 5 0 0 | 4 0 0 | 2 12 0 | 1 6 0 | 0 12 0 | 0 4 0 |
| | { Now ... | ... | 5 8 0 | 4 0 0 | 2 14 0 | 1 8 0 | 0 12 0 | 0 6 0 |
| Bit | { Former ... | ... | ... | 2 11 0 | 1 4 0 | 0 10 0 | 0 4 0 | |
| | { Now ... | ... | 5 8 0 | ... | 2 13 0 | 1 4 0 | 1 14 0 | 0 6 0 |
| Pahar | { Former ... | ... | ... | 3 4 0 | 2 0 0 | 0 14 0 | 0 7 0 | 0 4 0 |
| | { Now ... | ... | 5 8 0 | 3 4 0 | 1 13 0 | 0 12 0 | 0 6 0 | 0 4 0 |
| | | | | | | (beband banjar 0 3 0). | | |
| Ghar | { Former ... | ... | 5 0 0 | ... | 2 8 0 | 1 4 0 | 0 11 0 | 0 6 0 |
| | { Now ... | ... | 5 8 0 | ... | 2 8 0 | 1 5 0 | 0 11 0 | 0 6 0 |
| Changar... | { Former ... | ... | 5 0 0 | 3 0 0 | 1 14 0 | 0 13 0 | 0 6 0 | 0 4 0 |
| | { Now ... | ... | 5 4 0 | 3 4 0 | 2 0 0 | 0 14 0 | 0 7 0 | 0 6 0 |

35. While the assessment operations did not yield Government the

General results.

full enhancement anticipated, they have, I think, done much to distribute the burden more equally. In addition to by no means a few individual estates that for some reason or other had hitherto escaped with a relatively inadequate revenue, there were whole tracts, such as the Bit, the villages of the eastern Bet and parts of the Changar and Ghar, which had been similarly lucky. Cases of over-assessment were exceptional. Of course all the inequalities have not been entirely removed, and indeed any assessment in a tahsil, like Una, which gave practically even incidences from village to village would stand self-condemned. The proportion of bad hill land vitiates comparison of the pitch of assessment in Una with that in plain districts. The fact that the cultivated and crop incidences are Re. 1-14-5 and Re. 1-10-8 in Una, while they are Rs. 2-9-0, 3-1-10, 2-12-10, and Rs. 2-2-4, 2-15-1, 2-6-8, respectively in the other three Hoshiarpur tahsils of Dasuya, Hoshiarpur and Garhshankar does not necessarily imply that Una is relatively under-assessed. The cultivated incidences in Hamirpur and Dera, where the new demand is certainly a fairly full one, are Re. 1-8-3 and Re. 1-12-3 respectively. But Una is a better and stronger tahsil than Dera and far superior to Hamirpur, so its fuller assessment is justified.

CHAPTER V.—DISTRIBUTION OF THE DEMAND.

36. In the distribution of the sanctioned demand over individual

Village assessments.

estates, I had to rely mainly on the information acquired at village inspections. In many cases, I had, since those visits, seen something more of probably at least half the estates; this enabled me to revise my previous opinions where necessary. For reasons given elsewhere, circle rates and incidences of various descriptions though not neglected, were not entitled

to as much authority as guides as they are elsewhere. There could not be anything at all in the nature of a general proportional enhancement, though it may be mentioned in this connection that an all-round enhancement of three annas in the rupee village by village was suggested in 1912 as an escape from the undoubtedly costly process of normal assessment. Cash rents alone rendered considerable help in the assessment of the Bit villages. In an individual assessment of this description it is necessary to have a sound general knowledge of the tract to be dealt with before entering into details of individual estates. But in this case the unfortunate illness of the original Settlement Officer, Mr. V. Connolly, rendered it necessary for me to begin detailed village inspection within two months of my appointment in his place, and to frame my assessment proposals almost as soon as the inspection was finished. Only the working of the assessment can prove what errors have resulted from this cause. In the actual re-assessment the previous demand was reduced in two villages, in one of them by 33 per cent.; in 26 the old assessment was maintained. The greatest enhancement taken amounted to 82 per cent. with the exception of one minute estate, where the assessment was trebled. In other villages the percentage of increase ranged from 1 to 65.

37. Progressive assessments were only granted in 5 cases in all, where the percentage of increase amounted to appreciably more than 33 per cent. The total sum deferred for five years came to Rs. 307. No revenue was deferred for a longer period on this account, so the full demand will take effect from the sixth year of settlement, i.e., Rabi of 1919. Protective leases for various periods, in no case exceeding twenty years, were given for new masonry wells. The whole sum finally remitted on this account in the present year was Rs. 281 on 106 wells, mostly near Santokhgarh in the Dun or near Nurpur in the Bet. The amounts granted in most cases are inconsiderable on account of the small irrigated area. Some of the amounts originally remitted had to be revised after the *khatawar bachh* had been finished.

38. Twenty-three objections were made to me, but I only found it necessary to allow a reduction of Rs. 10 in one case. Eight appeals were made to the Commissioner, who gave a reduction of Rs. 100 to another village. A few of the cases, rejected by the Commissioner, are now before the Financial Commissioner. The comparatively small number of objections was, I think, largely due to the fact that I explained at length to the villagers in each case the reasons for any considerable increase. Here, as elsewhere, the zamindar looked mainly at the actual amount of enhancement. The fact that his village had hitherto been assessed half as lightly as its neighbours was no consolation at all to him, when he had to see the demand of his own village nearly doubled. Conversely a hitherto relatively more than fully assessed estate was quite prepared for some small increase, because in course of time it had got used to paying the old demand.

39. The inquiries into the proposed method of distributing the demand were conducted by the Naib Tahsildars in the villages. Their reports were submitted through the Tahsildar to the Extra Assistant Settlement Officer, who after making what change he considered necessary, put the file for each village up before me immediately after I had fixed and announced its new demand. The proposed mode of distribution was then read out to the people and in cases of unanimity orders were passed at once. In the not infrequent instances, where conflicting interests could not be reconciled, the case was gone into and the people were asked to attend again after a day or two's discussion of the matter. In many cases, the people had arrived at some understanding by their re-appearance before me. Where they had not, I decided the dispute after working out the differences each advocated mode of *bachh* would involve and seeing the old *bachh* files. In a few cases, on subsequent applications my original orders were reconsidered. There were 20 objections. Only one appeal was made to the Commissioner, but it was not accepted. The estates in which the parties could not agree among themselves were

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mostly those in which the owners and hereditary tenants were at loggerheads and neither party would make any advance at all to the other.

Statement showing mode of bachh.

| Circles. | By ancestral shares. | By soils. | All-round rate on cultivation. | No bachh. |
|----------------|----------------------|-----------|--------------------------------|-----------|
| Bet | ... | 79 | 11 | ... |
| Dun | 13 | 133 | 15 | 2 |
| Bit | ... | 9 | ... | ... |
| Pahar | 24 | 67 | 23 | 1 |
| Ghar... .. | 6 | 74 | 6 | ... |
| Changar | 4 | 37 | 27 | ... |
| Total | 47 | 399 | 82 | 3 |

The attached statement shows that the method of *bachh* in the majority of villages was according to soils. In most of these villages, the classification adopted at measurement was followed, but in a few it was necessary to go further. For instance in the Bit estate Kungrat, it was necessary to divide up the village into three blocks and to have a separate range of soil rates for each. The circumstance that so many estates accepted the recorded soils for the *bachh* indicates that the soil classification was generally trusted. In view of the conditions of the tahsil, it is somewhat surprising that so few estates followed the example of Kungrat. Care was taken only to alter the previous mode of *bachh*, which had been fixed at last settlement with great care, when absolutely necessary. However, it was deemed inadvisable to continue, where it occurred in two estates, a preferential *bachh*, so designed as to throw a heavier incidence on the tenants than on the owners. Specimens of the ratio between the different rates adopted for the *bachh* are given below. These figures are the actual acreage incidences in selected estates. Of course the proportion varies slightly from village to village, and the examples given are illustrative.

| Circle. | Chahi. | Nahri-abi. | Dofasi I. | Dofasi II. | Eksasi I. | Eksasi II. | Garden. | Beland Banjar. | Banjar. | Kharkana. |
|----------------|-----------|------------|-----------|------------|-----------|------------|-----------|----------------|-----------|-----------|
| | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. | Rs. a. p. |
| Bet | 4 12 3 | ... | 3 3 0 | 2 6 3 | 1 9 6 | 0 12 9 | 1 9 6 | ... | 0 1 0 | 0 1 3 |
| | 4 8 3 | ... | 3 3 3 | 2 8 9 | 1 14 9 | 1 5 0 | 2 8 9 | ... | 0 2 9 | ... |
| Dun | ... | 2 15 3 | 2 3 6 | 2 3 6 | 1 3 9 | 1 3 9 | 1 3 9 | 0 1 9 | 0 4 0 | 0 7 9 |
| | 3 5 7 | ... | 2 12 0 | 1 11 3 | 1 11 3 | 1 1 7 | 1 11 3 | ... | 0 1 4 | 0 5 3 |
| | 4 10 6 | ... | 3 1 9 | 2 5 3 | 1 8 9 | 0 12 6 | 3 1 9 | ... | 0 1 4 | 0 3 11 |
| Bit | ... | ... | 3 8 9 | 2 6 3 | 1 11 9 | 0 10 6 | ... | 0 5 6 | 0 2 9 | 0 10 6 |
| | ... | 1 5 9 | 1 8 0 | 1 8 0 | 0 5 9 | 0 7 9 | 0 15 9 | 0 2 0 | 0 0 9 | ... |
| Pahar | ... | 1 14 10 | 1 8 8 | 1 2 5 | 0 12 6 | 0 9 3 | 0 9 3 | 0 9 3 | 0 3 4 | 0 3 4 |
| | ... | 3 15 9 | 1 11 6 | 1 4 9 | 0 13 9 | 0 9 3 | 0 9 3 | 0 7 0 | 0 4 6 | 0 4 6 |
| Ghar | 3 13 7 | ... | 2 9 4 | 1 14 9 | 1 14 3 | 0 14 11 | ... | ... | 0 0 8 | 1 5 3 |
| | 2 13 6 | ... | 2 13 6 | 1 14 9 | 1 6 9 | 0 11 9 | 1 6 9 | ... | 0 4 0 | 0 8 0 |
| | ... | ... | 2 4 9 | 1 8 6 | 1 2 6 | 0 12 6 | 1 2 6 | ... | ... | 0 6 3 |
| Changar | 1 13 9 | 1 12 9 | 1 6 3 | 1 6 3 | 0 15 6 | 0 7 6 | 1 6 3 | ... | ... | ... |

It will be observed that, besides the assessment on cultivated, some revenue was thrown on *kharkana belas* and on *banjar* in proprietary holdings

I refused to allow any revenue to be put on *ghair-mumkin* torrent beds and on *shamilat* waste containing trees, the property of Government or the *shamilat*, when the object seemed to be rather to create future rights to the prejudice of some other party, such as the tenants or Government, rather than to effect an equitable distribution of the new demand. Usually 4 to 6 annas a *ghumao* was put on *kharkana* and from one to four annas on *banjar*. Occasionally a light rate was put on grazing lands. In other cases a lump sum was put on one or more of the classes of uncultivated.

From the above description, it will be seen how complicated and full of opportunities for error the *bachh* by soils in Una was, both on account of the large number of soils, the difficulty of their correct record and the existence of conflicting interests in so many estates. Nothing need be said as to the cases where the distribution was by all-round rates, the use of which I usually discouraged to the patwaris' disgust, or by ancestral shares. In a few villages it was found necessary to fix a separate lump assessment for individual *pattis* or *tols* before carrying out the further distribution among the holdings.

40. In the actual working out of the *bachh* it was the kanungo's duty to see that for each estate the patwari was supplied with a correct

Procedure.

table showing the incidence the approved soil rates gave for each area unit, usually a *kanal*, or aggregate of such. Armed with this ready reckoner the patwari distributed the new demand over the holdings in rupees, annas and quarter annas. Small deficiencies were made up from the *shamilat* or other large joint holdings. Where the distribution gave a slight excess on the total new demand, the excess will go to the *malba*, where it not deducted from the *shamilat khata* demand.

41. No special allowances were made for land affected by the shade of roadside trees, as the classification of soils being based on the

Miscellaneous.

actual amount, as well as the kind of crops successfully grown, had already automatically made allowances in all cases where shade from roadside trees had caused much injury in the past. The new detailed village statement was approved by the Commissioner in his No. 6162 of 9th October 1914. The new rent roll can only be finally completed, when appointments are made to the new grades of *zaildars* and *sufaidposhes*. The new demand was collected first for Rabi 1914, while the old demand had expired after Rabi 1912.

The Government and revenue grantees thus lost the enhancement for three harvests, since the revision of the records and new measurement had taken considerably longer than expected at the outset. It may here be noted that, when the method of *bachh* was decided, all villages expressed the wish to pay the *kharif* and *rabi* demand in equal instalments, even though some of them had hitherto paid ten annas of their revenue at *kharif* and six at *rabi*.

CHAPTER VI.—MISCELLANEOUS.

42. The importance of alluvion and diluvion work being properly done in this tahsil is obvious, when it is remembered that as much as

Alluvion-Diluvion Rules.

Rs. 11,000 per annum had to be remitted between the imposition of Captain Montgomery's demand and its expiry. Government has in the past suffered some unjustifiable loss of revenue chiefly because the tahsil officers did not sufficiently closely supervise the patwaris, who were normally more ready to record diluvion than alluvion. The old rules were not quite easy to apply. In particular the rule that, till 5 per cent. of any one *khata* was affected, no action would be taken, produced difficulties. A complete new set of rules has been framed for the whole district, including Una, and was sent up for orders by the Settlement Officer of Hoshiarpur. With some slight modifications, the rules were sanctioned. There is no very great difference between this set of rules and those sanctioned in other recent settlements in respect of the riverain villages. The rules will

Errata.
CHAPTER VI.

| Page. | Para. | <i>For</i> | <i>Read</i> |
|-------|-------|----------------------|-------------------------------|
| 23 | 42 | dafasli | dofasli |
| | 42 | bachh | bachh, |
| 24 | 45 | interests | interest |
| 25 | 46 | ordinary 807 | 807 ordinary |
| | 47 | first and second | second and first |
| 26 | 46 | on parwana | on a parwana |
| 28 | 55 | on operations leave, | on leave |
| 29 | 56 | settlement well 51 | settlement operations well 53 |

be found as an appendix to the Hoshiarpur Settlement Report. Except as regards rates, the riverain rules and annual procedure apply to the southern Swan Naddi villages. In them the rate will be the *dafasli I* or *ekfasli I* soil rate of the village, used in the recent *bachh* except in the case of estates, where there was no *bachh* by soils. In these latter there will only be the one all-round rate. For the riverain estates two fixed rates of Rs. 2-4-0 and Re. 1 will be employed for lands producing superior and inferior crops respectively. In the case of villages, affected by *khads* or *chos*, other than the south Swan Naddi, alluvion and diluvion papers will be prepared every four years, with the detailed *jamabandi*, unless some exceptional calamity should necessitate the Collector ordering a special inquiry in an ordinary year. To encourage the growing of *kharkana* for the arrest of flood action, it has been provided that no new *kharkana belas* will be assessed till next settlement. The only justification for the length of this paragraph is that it is necessary to call the attention of the Collector and Revenue Assistant to the exceptional importance of the annual alluvion diluvion inquiries in this tahsil.

43. Hitherto there have been two *kharif* and two *rabi* instalments, payable on December 15th and February 1st for the *kharif*, and on June 15th and July 15th for the *rabi*. It has now been settled that the *kharif* demand should be paid in one instalment between December 15th and January 15th for all estates, except the cane growing ones of the Dun and Bet, which will pay half their *kharif* demand between the dates given and the second half between February 15th and March 1st. For *rabi* there will only be one instalment for all estates payable between June 15th and July 15th.

Within these dates, it is left to the Deputy Commissioner to fix the exact date, on which each estate is to pay in its revenue, and to revise such dates as he may consider necessary. This expedient, if worked out with care, will lessen the press of accounts and treasury work in the tahsil during the last day or so before the date, by which the demand must be realised. In all cases half the demand proper will be paid at *kharif* and half at *rabi*.

44. The fact that there have been none in the past makes it unnecessary to work out any suspension scheme for this normally secure tract. Suspensions and Remissions. In a tahsil of such varied characteristics, no general rules can be laid down and should any calamity occur in any estate, each case will have to be treated on its merits. Should any such action be necessary, probably the information in the abstract village note-books will be of some use. No suspension need ordinarily be given after the failure of a single harvest in any village with a fairly regular miscellaneous income.

45. The examination of the revenue-free grants of the tahsil was by no means easy, as in many cases the by no means complete registers prepared at last settlement did not elucidate the conditions of grant and in others quite wrongly described the institution in favour of which the grant had been made. In not a few cases, the conditions proposed by the Settlement Officer or Deputy Commissioner were entered, instead of those that had been actually sanctioned by higher authority. The tracing of the original letters, containing the conditions of grant, was very arduous as in some cases no or incorrect references were given in the registers. At last settlement there were 355 grants of various kinds, as given in paragraph 172 of the Settlement Report. As a result of the present inquiry, only 195 grants remain on the registers. But of the 160 grants resumed since last settlement, only 54 have been struck off the Government Registers in the present inquiries. The balance were resumed between the two settlements and consisted almost entirely of lapsed life grants 103 in number. The few others consisted of grants to institutions, which were not properly maintained. New English and Urdu registers have been prepared.

The grants reduced at this settlement were as follows; 15 trivial grants for Rs. 17 in all for term of settlement were discontinued, as the original object of the grant had usually ceased to exist; 17 others, the continuation of which seemed desirable but the amounts involved in which were small, were reduced to the status of village grants, but under paragraph 196 (3), Land Administration Manual, a corresponding deduction was made from the total assessment, for the period of this settlement only. At next settlement, no such reduction will be made. Only Rs. 77 was remitted on this account.

Twenty grants to institutions were resumed as the institutions have entirely ceased to exist or were not properly kept up. Two Garden grants were resumed, as no gardens now exist on the revenue-free plots.

The table given below shows the numbers and value of grants left on the registers. No new grant was proposed :—

| IN PERPETUITY. | | SERVICE TEN- URE JAGIRS. | | ON CONDITION OF MAINTENANCE OF INSTITUTION. | | FOR LIFE OR LIVES. | | FOR TERM OF SETTLEMENT. | | FOR ROADSIDE GARDEN OR GROVE. | | ZAMINDARI INAMS. | | TOTAL VALUE OF GRANTS. | |
|----------------|--------|-----------------------------|--------|---|--------|-----------------------|--------|----------------------------|--------|-------------------------------------|--------|---------------------|--------|------------------------------|--------|
| No. | Value. | No. | Value. | No. | Value. | No. | Value. | No. | Value. | No. | Value. | No. | Value. | No. | Value. |
| | Rs. | | Rs. | | Rs. | | Rs. | | | | Rs. | | Rs. | | Rs. |
| 34 | 23,443 | 13 | 1,728 | 122 | 6,956 | 8 | 3,434 | ... | ... | 8 | 32 | 10 | 668 | 195 | 36,261 |

The largest grant is one, now amounting to Rs. 22,457 and affecting 21 estates in the north half of Una in favour of the Jaswal Raja of Amb, Raja Ragnath Singh. This grant is in perpetuity. The *jagirdar* is a simple assignee of the revenue without any rights of superior ownership. This is due to the lapse of all the old ancestral rights of this family when its possessions were confiscated after the Jaswan Dun rebellion of 1848. The present *jagir* was granted subsequently in 1877 as an act of grace.

Bedi Sujun Singh of Una holds a grant of Rs. 3,007 in three estates near Una. This is but a fraction of what this influential family held before 1848. The conditions provide for a reduction of the grant to half after the demise of the present holder, but paragraphs 188 to 190 of the Land Administration Manual should be referred to for the policy of Government in the treatment of this and the Anandpur Sodhi grants.

The most important grants in favour of institutions are those for the maintenance of the Anandpur and Kiratpur Sikh shrines and for the performance of religious services in them. The various grants amount to over Rs. 4,300. There are probably no other Sikh towns that can show finer collections of grand buildings of such extreme historical and religious interests. The principal of the 8 or so *gurudwaras* in or near Anandpur are the Anandpur Kesgarh, Tegh Bahadar and Manji Tikka Sahib, and of those in Kiratpur the *gurudwaras* of Baba Gurditta Sahib, Takht Guru Har Sahai and Manji Sahib. The survival of large portions of most of them is due to the substantial nature of their architecture. Their ever increasing delapidation is the direct result of entire absence of management and of the appropriation of moneys, which should have been spent on the up-keep of the temples, to the private purposes of numerous hereditary *pujaris*, the majority of whom were habitual absentees. In connection with the revision of grants an attempt has been made in the interest of these institutions to induce these interested to form, with the consent of the *pujaris* and others, a central committee of management, to take over and administer, separately for each temple, such funds as may be available. In 1913 the committee was formed and executive officers appointed, but some modifications still remain to be made in the articles of association before a final change can be made in the conditions of the Government grants. It is intended that the *lambardars* should hand over the revenue to the committee, which will be responsible for the maintenance of the list of active

pujaris and ministrants, and which can be proceeded against by any dissatisfied person. In the past the immense number of co-sharers has entirely diverted all the *gurudwaras* income from its proper objects. The committee merits the friendly and unofficial advice of officers to help it in its difficult and worthy task.

46. The *zaildari* arrangements were entirely revised. One *zail*, that of Palasi, was abolished, and joined with the Bhalan *zail*. It was decided that the Bhabaur *zail*, with a special *inam* of Rs. 100 a year, should only continue for the present Rai's lifetime, and finally be absorbed into the Una and Santokhgarh *zails*. The boundaries of the Jhandian, Lalpur and Nangal *zails* were changed, and slight modifications were made in the Bit Manswal and Bathu *zails*. The new arrangement should effect a considerable improvement in equalising the work of the various *zaildars*, but it still remains for two slight modifications of *thanas* to be made with respect to three estates in the south of the Khad *zail* and one in the north of the Bhalan *zail*, so as to leave no *zail* within two *thanas*. In place of the old *inams*, representing 1 per cent. of the land revenue of each *zail* and varying from Rs. 264 to Rs. 50, the grade system has been introduced for the whole district with *inams* of Rs. 320, 260 and 200. Una will usually have 4 first grade, 8 second grade and 5 third grade *inams*. This revision of *inams* brings up the average Una *inam* from Rs. 145 to Rs. 256, and should result in better work.

The *sufaidposhi* question was considerably complicated by the existence of a large number of semi-hereditary grants. The Financial Commissioners in their Junior Secretary's No. 219 S. of 24th, June 1914 discussed this question and passed detailed orders, which should be consulted on the death of each semi-hereditary grantee. The outcome was that the number of ordinary *sufaidposhes* was reduced from 14 to 10 in Una, and that their pay was fixed at Rs. 100 for 4 and Rs. 60 for the rest. The Deputy Commissioner is not bound to keep any *inam* in any particular *zail*, if the necessity for a *sufaidposh* elsewhere seems greater. The reduction of these 4 *sufaidposhes* was justified by the necessity of increasing the *inams* and by the argument that a fair share of assistance was to be expected by the semi-hereditary *sufaidposhes*. But of the 10 *inams* held by the latter in Una at the time when these orders were received every one of them was actually enjoyed by a man holding the post of or performing the duty of a *zaildar*. The reduction of the *sufaidposhi* strength will have in future to be met by getting more work out of the now better paid *zaildars*.

There are still 14 superior *lambardars*, getting 1 per cent. out of the land revenue of their estates. Each should be resumed as death occurs.

In all there are ordinary 807 *lambardars* for 531 estates. During settlement several casual reductions were made and others have been recommended. A not necessarily exhaustive list, showing in which estates the *lambardars* are, in my opinion, most excessive has been prepared and made over to the Deputy Commissioner. But each case will have to be considered on the death of any *lambardar* in the villages included in it.

47. The *kanungo* and *patwari* arrangements were entirely overhauled and they badly needed it. One addition was made to the existing field *kanungos*; 16 new *patwaris* circles were created, practically the boundaries of all of the old circles were modified, and the assistant *patwaris*, now 8 instead of 5, were posted to the heaviest circles, instead of being left to work in the *tahsil*, as before. The pay of the first and second grades was raised from Rs. 11 and 12 to Rs. 12 and 14. The third grade *patwaris* will get Rs. 10 and the assistants Rs. 8 as before. Eleven allowances of Rs. 2 each have been sanctioned and attached to certain remote or heavy hill or riverain circles. Though the circles are all of them fairly large even now, they are all such that an average *patwari* should be able to get through his crop inspection and

other work, without being compelled to resort to *farzi* entries, to the appalling extent which was the case previously in certain unwieldy circles. The following statement shows the old and new patwari strength and grades, etc. :—

| | | | | | No. of Patwaris | AVERAGE SIZE OF PRESENT CIRCLES. | | GRADING OF PATWARIS. | | | | | | | As assistant at Rs. 8 p. m. |
|--------|-----|-----|-----|-----|--------------------|-------------------------------------|---------------------|----------------------|-------------------|------------|-------------------|------------|-------------------|----------|-----------------------------------|
| | | | | | | No. of fields. | No. of holdings. | 1st Grade. | | 2nd Grade. | | 3rd Grade. | | | |
| | | | | | | | | No. | Pay per mensm. | No. | Pay per mensm. | No. | Pay per mensm. | | |
| Former | ... | ... | ... | ... | 101 | 7,568 | 1,050 | 25 | Rs. 13 | 50 | Rs. 11 | 26 | Rs. 10 | Rs. 5 | |
| Now | ... | ... | ... | .. | 117 | 7,079 | 1,973 | 29 | 14 | 58 | 12 | 39 | 10 | 8 | |

There has always been a tendency in Una for Brahmans to absorb a large majority of the patwari posts; this tendency should be borne in mind, when new men are accepted for the candidates' list. In this connection I would note that in event of vacancies in permanent posts, the claims of Una candidates working in the Kangra and other settlements should not be overlooked.

48. The important forests in Una may be classified in three groups.

Forests.

- (1) The reserved Government forests in *tappas* Panjal, Lohara and Dhru; and
- (2) the *shamilat* forests in these three *tappas* adjoining the reserves, and
- (3) the other *shamilat* forest on the Siwaliks and elsewhere. An account of them will be found on pages 129-130 of the Gazetteer. The position as to the first is that the reserves are entirely Government property, soil and trees, and under the control of the Forest Department; that outside them all trees on land paying revenue at the time of Roe's settlement belong to the individual zamindars and that trees on other lands than either of the above are village forests and the property of the zamindars collectively, subject to certain restrictions, as follows:—Government can cut trees on paying half the market value into the *malba*; a zamindar can only cut trees with the *lambardar's* permission for funerals and weddings, and with the Forest Officer's permission for other necessary purposes. In the latter case he has to pay 4 annas to the *malba*. No person can cut wood for selling to traders in the form of timber or charcoal.

During this settlement a number of cases arose, in which the boundaries of the reserves on the ground as shown by the pillars did not tally with the maps and records, these cases were not free from difficulty, but were all eventually decided. It was found that Mr. Duff had in 1872 on *parwana* admitted the rights of grazing of a *gaddi* in Panjal forest, so an entry to that effect was made in the new *wajib-ul-arz*. In regard to the *shamilat* areas, it came to light that the words 'with the previous permission of the Forest Officer' had been omitted entirely from Mr. Roe's *robkar* attached to his *jamabandis* and in their counterparts with the *lambardars*, so that no restriction at all was imposed on the felling of Chil trees in village forests. This, though an obvious clerical error, as is shown by the English version, which went to Government and was published with the *Punjab Gazette* of June 19, 1873, was serious. The omission was rectified in connection with the revision of the *wajib-ul-arz* and this action was not appealed against. The weak point as to Messrs. Roe and Duff's arrangements is that there is no criminal remedy for a breach of their rules, except a prosecution under the Penal Code and that the lower courts have not hitherto invariably grasped the intricacies of the situation. There is in the rules no provision at all to prevent the extension of cultivation or partitioning the waste. But it is discretionary to Assistant Collectors to refuse partition of such common grazing areas and it would not be amiss for the Collector not to allow the partition of any forest land in the Pahar circle, except with his previous sanction. At this settlement I have emphasised the fact that the present *bachh* has in no way affected rights in trees whether belonging to Government, village forests or to individuals, but that these

are determined by areas being shown as assessed in Roe's records or not, by incorporating a *robkar* to that effect with the new *jamabandis* of the hill villages. Also to avoid unnecessary confusion, I have not allowed forest land, not previously included in private holdings, to be assessed in the *bachh*. It was decided in 1912 not to be necessary to make detailed inquiries into rights as to trees and to embody them in the new records as in Kangra. It now seems questionable as to whether this decision was correct and it may be necessary to make such an inquiry in the future, should difficulties arise. In any case, it is essential that with a view to prevent any eventual denudation of these friable hills the Deputy Commissioner should carefully watch the management of these village *shamilat* forests, to which none of the provisions of the Forest Act apply, or probably could be applied, in view of the compromise between the Government and villagers in 1872.

It is now recognised that the ultimate result of Messrs. Roe's and Duff's arrangement in these 3 *tappas* has been far from satisfactory, in that, in securing the reserves entirely for Government, they excluded the remainder and greater portion of the forest area from all possibility of future conservation which might arrest the progress of the deforestation and denudation, that is now, in the opinion of the Forest Officers, visible on all sides.

The above remarks refer only to the forests on the Panjal, Lohara and Dhruvi *tappas*. The position elsewhere in Una is that the Government still retains in all areas, not assessed to land revenue at the time of Roe's operations, its proprietary rights in Chil trees. Before 1872 it under the rules of 1855 declared its right to all Chil and Sal trees, wherever situated. On Mr. Roe's recommendation, the State renounced its right to all trees on all lands, then assessed to land revenue. The same rules for felling as apply to the *shamilat* forest of Panjal, Lohara and Dhruvi are in force here. The north part of the Siwaliks to a few miles south of Gagret alone contains numerous Chil trees, though there are a few other trees, only in one case sufficiently numerous to be of any account, further south in that range, and clumps of Chil trees are to be found elsewhere in Una at low elevations.

49. The following officers received settlement training; 4 Assistant Commissioners, 2 probationary Extra Assistant Commissioners, 5 Naib Tahsildar candidates, 1 Munsiff candidate, 10 Kanungo candidates of other districts and 3 others. These officers were trained in this settlement and not exclusively in Una.

50. Since Mr. Roe had in 1870 drawn up the replies of 13 tribes to a brief list of 22 questions on various points of custom, nothing had been done till this settlement. The replies to 104 questions on points of customary law of the 7 main tribes,—Brahmans, Rajputs, Bahtis, Jats, Hindu and Muhammadan Gujars, and Kanaitis were at this settlement recorded by the Extra Assistant Settlement Officer or by the Tahsildar. These, were in every instance re-attested and often modified by me. As far as possible, the replies have been illustrated with reference to legal or revenue decisions, laboriously culled from the District Record Room and mutation registers. The results have been embodied in a register, that should be carefully preserved in the Deputy Commissioner's Office. It may be noted that the sheets, containing the original replies have been bound separately.

51. Case work has been by no means light, if we include the large number of miscellaneous applications. Appeals in this tahsil alone numbered 282 and partitions, 638. There were 356 rent enhancement cases. The total number of cases came to 5,026, not including cases connected with the *bachh*.

52. The lambardari cess is 5 per cent. and the local rate cess

Cesses and Taluqdari.

Rs. 10-6-8 per cent. Presumably these will be continued. It should be remembered

that in the south half of Una many estates pay *talugdari* to several old Rai or Rana families. In the majority of estates, these dues were at last settlement converted from kind into cash at Rs. 22 per cent. or 16 per cent. of the land revenue. In the first case, only Rs. 15 per cent. in addition to the land revenue is collected, as Government gives the remainder out of the Land Revenue, proper. Where the rate is $16\frac{1}{4}$ per cent., only an additional $11\frac{1}{2}$ is collected. Paragraph 163 of Captain Montgomery's Settlement Report describes the situation. During last year the lambardars of the *talugdari* villages in Una, as in Kangra, petitioned me to the effect that they got no *pachotra* for collecting the *talugdari* levied in addition to the land revenue. The matter was referred to the Financial Commissioner, who held that, as this *talugdari* was not land revenue, the matter could not be decided by order. Generally the taluqdars object to paying any *pachotra* as they have not done so hitherto. It has been pointed to both parties that, as the *talugdari* is not land revenue, it is not legally binding on the lambardars to collect it and, that, if the lambardars refuse, taluqdars will have to make their own arrangements for its collection. So far I have not succeeded in effecting the compromise I had hoped, by which the taluqdars would agree to pay the lambardars for their trouble. It is desirable that a settlement be effected. I was prevented from being successful by the orders only reaching me at the very end of operations.

53. Orders are required on this matter, but they will be given doubtless for the district as a whole.

Term of settlement.

In view of the full development of Una and the great cost to Government and trouble to the people caused by revision of assessment in a fully populated and not over rich hill tract, not less than a term of 30 years can be recommended.

54. Settlement operations may be said to have nominally at least com-

Duration and cost of settlement operations.

menced on October 1st, 1910, and to have closed on October 2nd, 1914. The total cost

has been calculated to be Rs. 1,38,139 but this is only approximate. Of this Rs. 8,744 will be a charge recoverable from land revenue assignees, subject to the orders of the Financial Commissioner. It will be four years, before the cost is met by the khalsa enhancement. While the revision of records especially, has been a long and costly process for the reasons given in Chapter III, and the financial gain to Government of the re-assessment is not considerable, it must be remembered that in Una, as in Kangra, the necessity of incurring large expenditure at this settlement was the direct result of the economy enjoined at last settlement as to the revision of the record.

55. I only mention here officers, who were employed for most of the time in Una and not mainly in the other two Kangra tahsils. The Extra

Notice of Officers.

Assistant Settlement Officer was specially added to the staff on account of the inclusion of this tahsil in the settlement. Malik Zaman Mahdi Khan held this post throughout, though the lateness of his actual arrival was a great handicap to the Settlement Officer. He worked most assiduously and, I think, successfully in the supervision of a very large temporary staff, engaged in the revision of an exceptionally difficult record. When Mr. Connolly had unfortunately to go on operations leave, on account of ill health after getting settlement well under way in all three tahsils, his assistance and advice were of the greatest value in enabling me to pick up the threads. His experience of revenue work was full and his inspections were detailed and thorough.

In respect of its Tahsildars the tahsil was unfortunate. S. Ram Singh, as Settlement Tahsildar for the last few months of operations, despite poor health, did excellently in getting the record completed and showed how much better the settlement would have gone, had he been posted to Una.

earlier. Of the ten incumbents in the post of Mahal Tahsildar, few except M. Dhian Singh in his short stay here, rendered much effective help. Also L. Kirpa Ram gave some help after the Settlement Tahsildar's departure. It was only with the greatest difficulty that the work of the Naib Tahsildar Mahal's circle was completed at all. Of the Naib Tahsildars, M. Mehtab Singh afforded the most valuable services, both in his substantive capacity and as in charge Tahsildar of the north of the tahsil. Among the best of the others were L. Kahan Chand, P. Ganga Ram and M. Muhammad Azim. Some of the Naib Tahsildars were extremely poor and in their circles the quality of the work, as well as the rate of progress, reflected this. One was dismissed and others went on leave or were transferred, but time was taken up in overhauling their faulty work.

Only the minority of the kanungos can be described as efficient. The best were probably S. Kahan Singh, who has been rewarded by his acceptance as a Naib Tahsildar candidate, M. Taj-ud-din and, of district kanungos, Ch. Khushi Ram. The last has been accepted as a Naib Tahsildar candidate and the roll of the second has been sent up. The office kanungo, Ramji Das proved himself exceptionally well fitted for his post and deserves recognition.

As to headquarter staff, L. Parmeshri Das did admirably as S. V. O. throughout and was continuously on tour. Changes in the post of Head Clerk and Nazir were regrettably numerous. In the first post L. Nathu Lal and L. Ram Pershad proved their capability, as did L. Khushi Ram, second clerk, who acted as Head Clerk on several occasions and subsequently made an excellent Nazir. Ch. Nanak Chand also proved himself a competent Nazir.

I also take the opportunity of acknowledging the industry and loyal co-operation of the numerous patwaris and clerks who have done good and strenuous work on often quite meagre pay, as well as of zaildars, lambardars, and others, who have willingly afforded material assistance.

56. Orders are only required as to the term of settlement (paragraph 51.)

HOSHIARPUR :
29th November 1914.

H. L. H. SHUTTLEWORTH,

Settlement Officer.

APPENDICES.

APPENDIX II.

Principal Gazette Notifications.

| No. | Date. | Subject. |
|--------|---------------------|---|
| 2690-S | 29th September 1910 | Under section 49 (1) of the Punjab Land Revenue Act, 1887, notifies that, with the sanction of the Governor-General in Council, a general reassessment of the Land Revenue of the Hoshiarpur district (Una tahsil) is about to be undertaken. |
| 2691-S | Ditto. | Directs that the records of rights of the estates included in the Hoshiarpur district, which require special revision, shall be specially revised. |
| 1348 | 14th November 1910 | All the powers of a collector under the Punjab Land Revenue Act, 1887, the Punjab Tenancy Act, 1887 (with the exception of chapter VI of the former Act) conferred upon Mr. V. Connolly, Settlement Officer. Such powers to be exercised within the local limits of the Una tahsil of the Hoshiarpur district. |
| 812 | 14th June 1911 | Appoints M. Zaman Mehdi Khan, Extra Assistant Commissioner, Ambala, as Extra Assistant Settlement Officer, Dera Hamirpur Una Settlement, with effect from 9th of June 1911 (afternoon). |
| 943 | 15th August 1911 | M. Zaman Mehdi Khan, Extra Assistant Settlement Officer and Assistant Collector, 1st grade, Dera Hamirpur Una Settlement is specially empowered to hear and determine the suits mentioned in the 1st group in sub-section (3) of section 77 of the Punjab Tenancy Act. |
| 660-B | 12th May 1912 | All the power of a Collector under the Punjab Land Revenue Act, 1887, and the Punjab Tenancy Act, 1887 (with the exception of chapter VI of the former Act) conferred upon Mr. H.L.H. Shuttleworth, Officiating Settlement Officer, Dera Hamirpur Una Settlement. |
| 739 | 7th June 1912 | 2 months' privilege leave under article 260 of Civil Service Regulations granted to Mr. V. Connolly, Settlement Officer, from 20th May 1912 (afternoon). |
| 738 | 7th June 1912 | Appoints Mr. H.L.H. Shuttleworth, Assistant Settlement Officer, Ferozepur, Officiating Settlement officer, Dera Hamirpur Una Settlement, with effect from 20th May 1912 (afternoon) <i>vice</i> Mr. V. Connolly proceeding on leave. |
| 940-S | 2nd July 1912 | Mr. V. Connolly is granted 10 months' combined leave in continuation of the privilege leave granted to him in Punjab Government Notification No. 739 referred to above. |
| 1085 | 16th October 1912 | Mr. H.L.H. Shuttleworth, Settlement Officer, is invested with all the powers of a Collector within the limits of the Ambala district for the purpose of defining the limits of such estates as adjoin the riverain boundary between the Una tahsil of the Hoshiarpur district and the Ropar tahsil of the Ambala district. Appeals from orders passed in exercise of such powers shall lie to the Commissioner of Ambala, upon whom the powers specified in sections 13, 15 and 16 of the Punjab Land Revenue Act are conferred to be exercised within the limits of the Una tahsil of the Hoshiarpur district only with regard to such orders. |

APPENDIX III.

Total expenditure of the Settlement operations in the Una tahsil up to 30th September, 1914.

| Major head of service. | Budget heading. | | | | | | | | Total expenditure. |
|-------------------------------------|---|-----|-----|-----|-----|-----|-----|-----|--------------------|
| | | | | | | | | | |
| 3. Land Revenue Settlement charges. | A.—OFFICE ESTABLISHMENT. | | | | | | | | Rs. |
| | Office establishment of clerks and Muharrirs on fixed pay | ... | ... | ... | ... | ... | ... | ... | 635 |
| | Naib Tahsildars employed in office | ... | ... | ... | ... | ... | ... | ... | 4,597 |
| | Office Kanungos | " | " | ... | ... | ... | ... | ... | 3,334 |
| | Menial establishment | " | " | ... | ... | ... | ... | ... | 2,094 |
| | Total office establishment | | | | | | | | 10,660 |
| | B.—FIELD ESTABLISHMENT. | | | | | | | | |
| | Settlement Tahsildars | ... | ... | ... | ... | ... | ... | ... | 6,679 |
| | Settlement Naib Tahsildars | ... | ... | ... | ... | ... | ... | ... | 20,566 |
| | Field Kanungos | ... | ... | ... | ... | ... | ... | ... | 26,698 |
| | Total field establishment | | | | | | | | 53,943 |
| | Temporary establishment including chainmen | ... | ... | ... | ... | ... | ... | ... | 29,259 |
| | C.—ALLOWANCES. | | | | | | | | |
| | Travelling allowance of officers | ... | ... | ... | ... | ... | ... | ... | 5,651 |
| | " Tahsildars | " | " | ... | ... | ... | ... | ... | 3,244 |
| | Establishment including Tahsildars and Naib Tahsildars | | | | | | | | |
| | Rewards to Patwaris | ... | ... | ... | ... | ... | ... | ... | 4,105 |
| | Contingent expenditure except stationery and Lithography | ... | ... | ... | ... | ... | ... | ... | 23,660 |
| | Stationery | ... | ... | ... | ... | ... | ... | ... | 7,126 |
| | Lithography | ... | ... | ... | ... | ... | ... | ... | 491 |
| | Total contingent expenditure | | | | | | | | 31,277 |
| | Grand total | | | | | | | | 1,38,139 |

NOTE.—Of above Rs. 8744 is recoverable from Land Revenue Assignees.

APPENDIX IV.

GLOSSARY OF VERNACULAR TERMS.

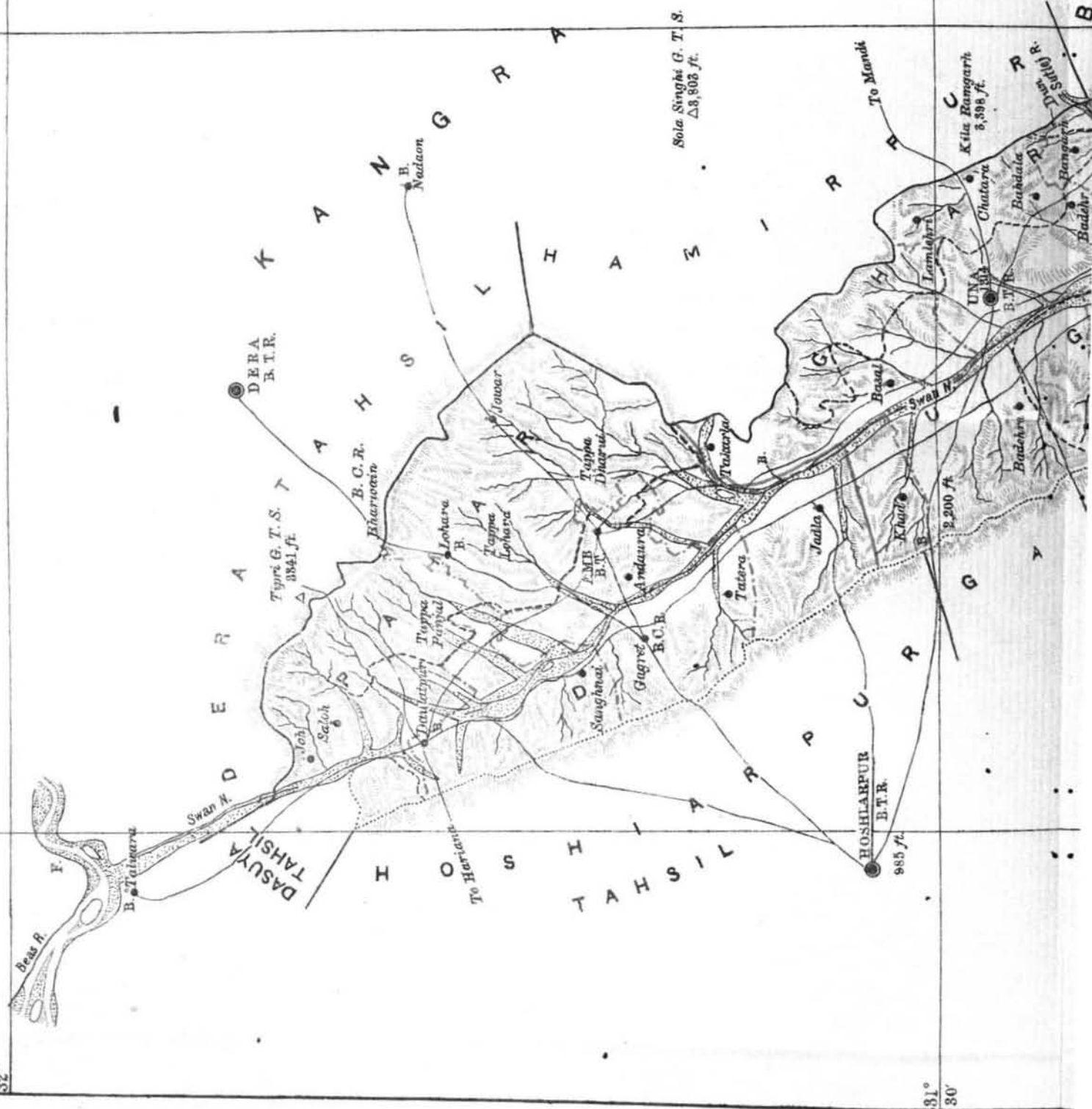
| Vernacular words. | Meaning. |
|-------------------|---|
| Abadi | ... Village site. |
| Abi-nahri | ... Land irrigated by streams. |
| Bachh | ... Distribution of land Revenue of a village over holdings. |
| Bagh | ... Garden or orchard, or land under fruit trees. |
| Banjar | ... Waste land, now uncultivated. |
| Barani | ... Land dependent on rain. |
| Batai | ... Rent paid in kind. |
| Behand banjar... | ... Hill land, usually inferior and stony, only occasionally cultivated. |
| Berar | ... A mixed crop of wheat and gram. |
| Bet | ... Riverain land, usually liable to inundation. |
| Bhaiachara | ... A village tenure, in which possession is the measure of right. |
| Chahi | ... Land or crops irrigated from wells. |
| Changar | ... Dry, ravined sub-montane land. |
| Charas | ... An intoxicating hemp drug. |
| Chari | ... A fodder crop (<i>Sorghum vulgare</i>). |
| Chil | ... A pine tree (<i>Pinus longifolia</i>). |
| Cho | ... A torrent bed, starting from the Siwaliks. |
| Dhar | ... A hill range or ridge. |
| Dhingli | ... A small well, often temporary, worked by hand; or land irrigated therefrom. |
| Doaba | ... The Jullundur, Hoshiarpur and Kapurthala plain country between the Beas and Sutlej. |
| Dofasli | ... Unirrigated land that normally bears two crops a year. |
| Drek | ... <i>Melia Sempervirens</i> . |
| Dun | ... A valley in the hills. |
| Ekfasli | ... Land, which usually produces one crop a year. |
| Gaddi | ... A Shepherd of the higher hills. |
| Garna | ... A small bush (<i>Carissa diffusa</i>). |
| Ghar | ... Dry, cut up land at foot of hills, similar to Changar or Rakkar. |
| Ghi | ... Clarified butter. |
| Girdawari | ... Crop inspection. |
| Gur | ... Crude, uncrystallised sugar. |
| Gurudwara | ... A Sikh shrine. |
| Har | ... Good, level light land by the Swan. |
| Harar | ... A tree (<i>terminalia chebula</i>) with medicinal fruit. |
| Hart | ... A Persian wheel on a well. |
| Ilaqa | ... A tract of country. |
| Inam | ... Honorarium: grant of money. |
| Jagir | ... An assignment of land revenue. |
| Jagirdar | ... The person enjoying the assignment. |
| Jama | ... Land revenue. |
| Jamabandi | ... A detailed village record of rights in land. |
| Jinswar | ... A crop return. |
| Kachcha | ... Land exposed to inundation. Unmetalled, built of sun-baked mud. |
| Kamin | ... A menial or village servant. |
| Kanal | ... About 1-9th of an acre. |
| Kangni | ... A small cereal (<i>Sitaria Italica</i>). |
| Kanungo | ... A revenue official, superior to a patwari. |
| Kankut | ... Appraisement of produce. |
| Khad | ... A hill torrent bed. |
| Khata | ... A holding of land by one or more owners. |
| Kharaba | ... Failed crops. |
| Kharif | ... Autumn crop. |
| Kharetar | ... Hay fields. |
| Khasra girdawari | ... Crop register. |

Vernacular words.

Meaning

| | | | | |
|----------------|-----|-----|-----|---|
| Kharkana | ... | ... | ... | ... A tall grass (<i>Saccharum sara</i> .) |
| Khud-kasht | ... | ... | ... | ... Land cultivated by its owner. |
| Kohla | ... | ... | ... | ... Land, irrigated by a hill-stream. |
| Kuhl | ... | ... | ... | ... An irrigation channel, from a stream. |
| Kulth | ... | ... | ... | ... A pulse, grown in the hills (<i>Dolichos uni- florus</i>). |
| Lahri | ... | ... | ... | ... Manured land by a homestead, elsewhere called niai. |
| Lal Kitab | ... | .. | ... | ... A register of summarised revenue statistics. |
| Lambardar | ... | ... | ... | ... A village headman. |
| Lampet | ... | ... | ... | ... Area extraction by multiplying together the means of opposite sides. |
| Lao | ... | ... | ... | ... Leather bucket and rope used for working wells. |
| Lohar | ... | ... | ... | ... Blacksmith. |
| M'afi | ... | ... | ... | ... Remission of land revenue. |
| Malikana | ... | ... | ... | ... A proprietary due in cash or kind. |
| Mash | ... | ... | ... | ... A pulse (<i>Phaseolus radiatus</i>). |
| Massar | ... | ... | ... | ... A lentil (<i>Ervum lens</i>). |
| Maund | ... | ... | ... | ... A weight of 40 seers, or 80 lbs. |
| Mendar | ... | ... | ... | ... A hill shrub (<i>Dodonea burmanniana</i>). |
| Moth | ... | ... | ... | ... A pulse (<i>Phaseolus aconitifolius</i>). |
| Mung | ... | ... | ... | ... A pulse (<i>Phaseolus mungo</i>). |
| Munsiff | ... | ... | ... | ... A minor Civil Judge. |
| Musavi | ... | ... | ... | ... A mapping sheet. |
| Naddi | ... | ... | ... | ... A large khad or torrent, such as the Swans. |
| Naib Tahsildar | ... | ... | ... | ... A revenue officer, superior to a kanungo. |
| Pahar | ... | ... | ... | ... Hill. |
| Pakka | ... | ... | ... | ... Land not exposed to inundation Metalled. built of stone or brick. |
| Pargana | ... | ... | ... | ... An old revenue division. |
| Pattidari | ... | ... | ... | ... A village tenure according to ancestral shares. |
| Patwari | ... | ... | ... | ... A village revenue accountant. |
| Rabi | ... | ... | ... | ... The spring harvest. |
| Rakkar | ... | ... | ... | ... See Ghar. |
| Ras | ... | ... | ... | ... Sugarcane juice. |
| Riwaj-i-am | ... | ... | ... | ... A statement of social customs. |
| Sailab | ... | ... | ... | ... Cultivated land, moist from river action. |
| Sal | ... | ... | ... | ... A tree (<i>Shorea robusta</i>). |
| Sardar | ... | ... | ... | ... A Sikh Chief. |
| Seer | ... | ... | ... | ... 1-40th of a maund: about 2 lbs. |
| Shamilat | ... | ... | ... | ... Common village land, held jointly. |
| Shisham | ... | ... | ... | ... A tree (<i>Dalbergia sisso</i>). |
| Sufaidposh | ... | ... | ... | ... A lambardar or other man of position, who assists the zaildar. |
| Tahsil | ... | ... | ... | ... A revenue sub-division of a district. |
| Taluqa | ... | ... | ... | ... (A. ta'alluqa.) A small tract, used in old times as a fiscal unit. |
| Takkavi | ... | ... | ... | ... A Government loan to agriculturists. |
| Taluqdar | ... | ... | ... | ... A man of position, often a Rajput chieftain, receiving a percentage on the revenue or of the produce from a taluqa. |
| Tarmim | ... | .. | ... | ... Map correction as opposed to new measure- ment. |
| Tappa | ... | ... | ... | ... A hill fiscal sub-division of the taluqa. |
| Tarkhan | ... | ... | ... | ... A carpenter. |
| Thana | ... | ... | ... | ... A police station. |
| Thekidar | ... | ... | ... | ... An ex-mafidar and non-proprietor, paying the Government revenue. Also known as bandobastdar, muqarraridar, rayat-khvor. |
| Tika | ... | ... | ... | ... A hill hamlet with its land. |
| Udawa | ... | ... | ... | ... A winnower. |
| Wajib-ul-arz | ... | ... | ... | ... Village statement of agricultural custom. |
| Zabti | ... | ... | ... | ... Cash rent for particular kind of crop. |
| Zaildar | ... | ... | ... | ... A local man of position, in charge of a circle of estates. |
| Zamindar | ... | ... | ... | ... A landowner. |
| Zamindari | ... | ... | ... | ... A village tenure, in which one man or one family owns the land. |

Scale--4 Miles = 1 Inch.





REFERENCES

| | |
|--|---|
| District or State Boundary | — |
| Tahsil Boundary | — |
| Boundary of Assessment Circles | — |
| Boundary of old Circles, between Bets Nos. 1, 2 and Changar, where now changed | — |
| Kachcha Road | — |
| Tahsil | ● |
| Village | ● |
| Bungalow, Thana, Police Chauki | ● |
| Ferry | — |
| Rain Gauge | — |
| Boundaries of new Zails | — |
| Thanas | — |
| Hills | — |

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1/12/14.